INFLUENCE OF HOUSEHOLD INCOME DISTRIBUTION ON LOAN REPAYMENT AMONG VOLUNTARY SAVINGS AND CREDIT GROUPS IN RACHUONYO NORTH DISTRICT, KENYA

BY

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DECLARATION

This research project is my original work and has not been presented for any degree award or any other award in any other university or college

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DEDICATION

This work is dedicated to my husband Mr. Abel, my children Daphne, David and Danny and to my beloved mother Mrs. Topher Akoth Akwanyi.

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ABBREVIATIONS AND ACRONYMS

ASCAS - Accumulating Savings and Credit Associations

BRAC - Bangladesh Rural Advancement Committee

COSAMO - Community Savings Mobilization

CRS - Catholic relief Services

DFID - Department for International Development

DFS - Decentralized Financial Services

IFAD - International Fund for Agricultural Development

IGA - Income Generating Activities

MFIs - Micro financial Institutions

MMD -Mata Masu Dubara

NGOs - Non Governmental Organizations

ROSCAS - Rotating Savings and Credit Associations

SGs - Saving Groups

SMEs - Small and Medium Enterprises

SPSS - Statistical Package for Social Sciences

US - United States

VSLA - Voluntary Savings and loan Associations

ABSTRACT

Community based financial institutions provide financial services to the poor who have been marginalized by traditional financial institutions in rural and urban areas. Reaching the poor is harder and less profitable for traditional financial institutions as the poor; lack the ability to borrow and save in amounts that would be profitable for traditional financial institutions, lack the collateral required to borrow finances, and are dispersed and hard to reach. The sustainability and viability of MFIs (Micro Financial Institutions) is important to make sure that MFIs can continually provide financing to MEs (Micro Entreprises) without depending on donors and government. Therefore, financial sustainability is a prerequisite for making micro financial services permanent as well as widely available (ICC, 2001).This study was initiated in order to examine the influence of household income distribution on loan repayment among Voluntary Savings and Credit group members in Rachuonyo District. Itwas guided by the following four objectives; to establish the extent to which household expenditure on food influence loan repayment among voluntary savings and credit group members, to examine the extent to which household expenditure on education influence loan repayment among voluntary savings and credit group members, to assess the extent to which income generating activities within households influence loan repayment among voluntary savings and credit group members and finally to determine the extent to which asset acquisition within households influence loan repayment among voluntary savings and credit group members in Rachuonyo North District. The study adopted a descriptive survey design with qualitative and quantitative approaches to data collection. Using the table of sample size selection by Glenn, D. Israel (1992), a sample size of 191 respondents at 7% precision wasdrawn from a total of 2013 members who are practicing VSL (Voluntary saving and Loaning methodology) within groups in the targeted 4 sub locations. Stratified, purposive and random sampling techniques wereapplied in selecting targeted respondents per sub location.The study further employed in depth interviews to obtain qualitative information to help understand respondents' views and experiences with regard to VSL and loan repayment. The collected data was analyzed using descriptive statistics in the form of frequencies and percentage tables with the aid of SPSS (Statistical Packages for Social Scientists). Findings from both qualitative and quantitative data collection were fed into each other and later triangulated with the findings from review of related documents.The following findings emerged from the analysis of collected information; Majority of VSL group members eat three meals a day, spend heavily on food and depend on the market as their main source of food, a factor that would negatively influence loan repayment among VSL group members.Majority of VSL group members have between 1 – 6 children mainly in primary and secondary schools and therefore spent most of their income on education related expenses. The highest proportion of VSL group members engage in small scale businesses i.e. shop keeping and grocery businesses with most of them acquiring capital from own savings and VSL group loan. The average monthly income from businesses was established to be between sh.1000-10000 for majority of the members which is mostly spent on food.This can be detrimental to the survival of the businesses. Majority of the respondents acquired assets in form of livestock (sheep, goats, chicken), household wares, farming equipment and bicycle using VSL group loan, but did not face challenges in repaying the loans.This is a clear indication that VSL group loans have positively impacted on the lives of its members by empowering them to purchase assets. When loans are associated with an increase in assets, the vulnerability of the very poor is reduced and their poverty situation improves.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The global gap in access and use of financial services continues to remain a challenge. An estimated 2.7 billion working age Adults still lack access to basic formal Financial services, such as savings, credit and insurance (Oguwa, 2012). Microfinance is an important strategy to alleviating poverty in developing countries. It has grown in prominence since Muhammad Yunus started the Grameen Bank Project in 1976 (Cabraal *et al.,* 2006). Globally, 1.1 billion people are extremely poor, surviving on less than a dollar a day and three quarters live in rural areas (IFAD, 2001; World Bank, 2003, 2005). Extremely poor people spend more than half of their income to obtain or produce staple foods, which account for more than two thirds of their caloric intake. Microfinance and microenterprise development services can help families cover basic expenses, ensure the well-being of their children, increase their incomes, and build their savings.

Lending to the poor or lower income group raises many debates among practitioners and academicians. The poor are usually excluded from credit facilities because of many reasons. These include insufficient collateral to support their loans, high transaction costs, unstable income, lower literacy levels and high monitoring costs. However, the existence of microfinance institutions has made it possible for the poor and the lower income group to have access to the much needed credit. According to Roslan and Abd Karim, (2009)and Nawai and Shariff (2010), it is widely recognized by planners and development practitioners all over the world, that access to financial services can play a critical role in helping poor people widen their economic opportunities; increase their asset base and diminish their vulnerability to external shocks (Beck, Kunt and Honohan, 2009). This view is reinforced by Beck *et al., (2009*) who points out that improved access to financial services is one of the pillars supporting poverty alleviation and economic growth worldwide.

In the United States of America, Bhatt and Tang (2002) conducted a study to investigate the determinants of loan repayment in micro credit programmes that applied to group approach where they looked at the borrower's socio economic variables such as gender, educational level, household income and characteristics of the business. In their study, they found that a higher education level was significant and positively related to better repayment performance. Conversely, female borrowers, level of household income, type of business and borrower's experience had no significant effect on repayment behavior. In conclusion, the team indicated that the US microcredit programs are faced with a set of social, economic and institutional environments that are both similar to and different from those faced by their third-world counterparts. More work need to be done to examine if factors other than those investigated may enhance the loan repayment performance of microcredit programs in the Unites States. More systematic and rigorous research is therefore needed to examine the determinants of repayments of microcredit programs in the United States of America. (Bhatt et al., 2002)

Inspired by the microcredit programme in Bangladesh, the same was introduced in Malaysia as part of poverty eradication programmes in the 1987. Despite the need to eradicate poverty, especially among *Bumiputra,* the microcredit programme also hoped to reduce the dependency of poor people on the government by promoting the concept of self-reliance (Roslan, 2006). The poor are given credit to start an income- generating activity. Morduch, (2006); Robinson, (2001) posit that a major criticism of subsidized microfinance system is their high default rates. Roslan and Abd Karim (2009) investigated microcredit loan repayment behaviour in Malaysia. They conducted a study on microcredit loan borrowers from Agro-Bank Malaysia (a commercial institution specializing in loans to borrowers involved in agricultural business, it provides large scale as well as small scale loans to borrowers). In their research they found that male borrowers and borrowers who had a longer duration for repayments had a higher probability of defaulting. Borrowers involved in non-production oriented business activities such as in the service or the support sectors who had training in their particular business and who borrowed higher loans had lower probabilities of defaulting.

Kohansal and Mansoori (2009) investigated the factors affecting loan repayment performance of farmers in Khorasan- Razavi Province of Iran. Results from a logistic model showed that loan interest rate was the most important factor affecting repayment of agricultural loans. Farming experience, and total application cost were the next factors respectively. Chirwa (1997) analyzed the determinants of credit repayment among smallholder farmers in Malawi using a probit model. Results revealed sales of crops, size of group, degree of diversification, income transfer and the quality of information as significant determinants of agricultural credit repayment.

Mashatola and Darroch (2003) analyzed the factors affecting the loan status and repayment scheme of sugarcane farmers who received graduated mortgage loan in Kwazulu-Natal, South Africa. Results identified farm size (proxied by annual gross turnover), access to off-farm income, and average annual gross turnover relative to loan size as criteria in selecting potential farmers for such liquidity to fund future operations and debt repayment.

Bassem (2008) examined the factor vulnerable to affect the repayment performance of group lending in Tunisia. Empirical results from a logistic regression estimation showed that the repayment is influenced positively by the internal rules of conduct, the same business, and the knowledge of the other members of the group before its formation, the peer pressure, the self-selection, gender, the education and the non-financial services. However, the homogeneity, and the marital status had a negative influence on repayment.

In Burkina Faso, Paxton (1996), in his study on group characteristics found out that members of credit groups typically repay for a lagging member for a few weeks before allowing the whole group to default. He further asserted that the trend that is rampant among groups with perfect repayment patterns is that many of them have previously worked in groups. Informal work groups, tontines (ROSCAs), civic groups, and social groups were common in Burkina Faso. Paxton (1996) undertook a study on the determinants of successful group loan repayment in Burkina Faso. Her findings revealed that the longer a micro finance institution operated in a given region, the higher the default rate. This parallels the experience in other countries, and suggests a "matching problem" found over loan cycles. In the first meeting, everyone agrees to the given loan terms and conditions

In Nigeria, Oladeebo and Oladeebo (2008) examined the determinants of loan repayment among smallholder farmers in *Ogbomoso* Agricultural Zone using multiple regression analysis and found that amount of loan obtained by farmers, years of farming experience with credit, level of education, were major factors that positively and significantly influenced loan repayment. According to Onyeagocha *et al*., (2012) MFIs in Nigeria are categorized into; formal, semi-formal and informal institutions. It's worthy to note that the greater balance of the population not served by the formal sector is often served by the semi financial and informal sector which include self-help groups (SHG) such as ROSCAs, farm work groups, family or kin associations.

In a study conducted by Anyango et al., (2005) in Zanzibar; to investigate the performance, sustainability and usefulness of the financial services offered by the VSLAs in the livelihoods of its users, it was established that some members felt that defaults were affecting the amount of profit they received at payout. They said that when members default and their shares cannot cover the balance, the group profit is deducted until such time as a member is able to repay. This had happened in both the *Wema Hauozi* and *Mwano mgumu* groups in the *Charawe* area. The members feared that if this trend continued, they risked wiping out the profits and their shares being used to cover for defaulters. In *Wema Hauozi*, the members were unable to get their savings at the projected time because of arrears and default problems. The unpredictability of the dividend payout was bad for planning and resulted in a less effective utilization of the payout. According to the members, the biggest threat to their savings remains the non-repayment of loans.

In Tanzania, a study undertaken by the Decentralized Financial Services (DFS) Project, Kenya, to examine the performance of VSLA groups after several years of operations independent of supporting organizations revealed that; Community-owned and -managed groups tend to stop functioning as a result of loan default and/or fraud. These problems stem from lack of literacy and numeracy skills, and a lack of these skills can certainly produce failures in book-keeping and compliance with policies. However, problems also arise from unequal power relations within groups which produce failures in governance. For example, a few leaders may be very dominant and influence the allocation of group resources, leading to exploitation of the less powerful, for example by taking loans which are not repaid. Studies of savings and credit groups have rarely examined the actual lending pattern of the groups and there is little information on whether most or only a few people in the groups can access loans (Anyango *et al*., 2007).

According to Moraa (2010) up to 93 per cent of VS&L clients in Kenya, consider the loan amounts available for them as insufficient. However, despite the low loan amounts taken, a total of 77 per cent of respondents confessed having repayment problems. Seventy four per cent of women claim repayment problems. A higher per cent of men claim the same, with 85 per cent of the male clients citing repayment problems. Older people are more likely to face repayment problems. One hundred per cent of those between the ages of 51-60 have faced challenges repaying their loans. The findings indicate that the capacity for households to repay loans is constrained. Others are paying back old loans with new ones. These are tendencies developed by the poor to ensure prompt repayment in order to maintain participation in microfinance programs. These tendencies have been identified in previous studies by Huq (2001 as cited in Lont and Hospes, 2004), Morduch and Haley (2001) and Rahman (1999 as cited in Lont and Hospes, 2004). These are findings according to a research conducted by Moraa Mokaya, for ChildFund Kenya supported VSL groups in Nairobi.

1.2 Statement of the Problem

Shariff (2010) posit that microfinance institutions (MFIs) were established to fill the gap in the financial services sector by providing funds to the poor and lower income group and thus alleviating poverty and enhance their business activities. He further observed that MFIs provide funds for start-up business or for working capital. In addition, some MFIs also provide funds for non-business activities such as for education and emergencies purpose. The sustainability and viability of MFIs is important to make sure that MFIs can continually provide financing to MEs without depending on donors and government. Therefore, financial sustainability is a prerequisite for making micro financial services permanent as well as widely available (ICC, 2001). Llanto et al. (1996) argue that to continue providing financial services to the poor on a sustaining basis, the MFIs themselves must be viable and sustainable and studies show that many of the MFIs are far from attaining these goals.

Although, a vast body of literature supports the view that borrowers' traits and institutional characteristics are highly influential in determining loan repayments in groups, little is known about what determines a household's likelihood of repayment (William et al, 2005, Bates and Servon, 1996). Despite the enthusiasm of the community development organizations especially micro financial institutions in Kenya in replicating models that have worked elsewhere in the world, recent accounts of similar programs in the US reveal mixed reactions (Bates and Servon, 1996; Clark and Kays, 1999; Bhatt, 2002). For instance while some programs have achieved high repayment rates (Else and Clay-Thompson, 1998), some have been characterized by high loan losses (Edgcomb et al., 1996). Furthermore, most accounts of loan repayment performance are anecdotal, and often paint a confusing picture of the factors that might be positively associated with high repayment rates (Buntin,1997).

Equally, no study has systematically interrogated the extent to which distribution of household income among competing household needs influences loan repayment. This study will be in response to the recommendation by Apopa (2010) that there is need to investigate household income distribution as key determinant of loan repayment.

1.3 Purpose of the Study

The purpose of the study was to examine the influence of household income distribution on loan repayment among VS & L group members in Rachuonyo District

1.4 Research Objectives

The study was guided by the following objectives

1. To establish the extent to which household expenditure on food influence loan repayment among VSL group members in Rachuonyo district

2. To examine the extent to which household expenditure on education influence loan repayment among VSL group members in Rachuonyo district

3. To assess the extent to which income generating activities (IGA) within participating households influence loan repayment among VS & L group members in Rachuonyo District

4. To determine the extent to which assets acquired with loans influence loan repayment among VS & L group members in Rachuonyo District

1.5 Research Questions

The study was guided by the following research questions

1. To what extent does household expenditure on food influence loan repayment among VSL group members in Rachuonyo district?

2. To what extent does household expenditure on education and health care influence loan repayment among VSL group members in Rachuonyo district?

3. How does Income generating activities (IGA) within participating households influence loan repayment among VS & L group members in Rachuonyo District

4. What are the common type of assets acquired and what is the relation to loan repayment among VSL group members in Rachuonyo District

1.6 Significance of the study

The researcher hopes that research findings generated will be useful to government policy makers to design policies, strategies and intervention measures for addressing the challenges associated with loan repayment in micro finance. This can also help the government draw a policy to encourage the development of an active informal sector and improve access to financial services in rural Kenya. This is imperative in contributing to pro- poor growth and poverty reduction goals. The researcher also hopes that the research findings will contribute to the body of knowledge of community managed microfinance programmes. The findings may also be relevant to community development funding agencies such as Non-Governmental Organizations

(NGOs) and it will enable such organizations enhance service delivery mechanism and greater decision making at the managerial level.

1.7 Basic Assumptions of the Study

The study was premised on the assumption that VSL groups exist in Rachuonyo district and members will be ready and willing to provide the necessary information relating to area of study without bias. It was also presupposed that household income distribution has a relationship with loan repayments among the VSL group members and what is happening in Rachuonyo District is reflective of what happens elsewhere in VSL groups in Kenya. The study further assumed that the political environment will not affect research activity given that it will be carried out after general elections and there will be enough time to carry out all the research procedures as outlined in the proposal so as to fulfill the intended purpose.

1.8 Limitations of the study

Literature on factors influencing loan repayment performance among financial institutions targeting the poor was very sparse and limited mainly to microfinance experience in low income countries. Certain publications including baseline survey reports were outdated and therefore use of primary data and review of data from other NGOs was done to overcome this.

1.9 Delimitations of the study

The study was conducted in Rachuonyo North District, confined among voluntary savings and loan group members in four sub locations (Kagwa, Kowuor East, Kajiei and Komwuoyo) in Karachuonyo division. The study targeted 191 respondents out of the 2013 voluntary savings and credit group members within the 4 sub locations. The area of study was specifically selected because this is where ChildFund Kenya had been piloting VSL initiatives since 2010 and the researcher worked with the organization thus making it easily accessible and cost effective. The study was also delimited to investigating influence of household income distribution on loan repayment among VSL group members in Rachuonnyo North District.

1.10 Definitions of Significant Terms Used in the Study

Household: A domestic unit consisting of the members of a family who live together along with non-relatives such as servants, if any

Household Expenditure: This refers to the typical goods and services acquired, used or paid for by members of the groups under study, through direct monetary purchases. In this context, payment of school fees (Education), purchase of food, capital for income generating activities and purchase of assets qualify household Expenditure.

Household Income: Consists of all receipts in monetary terms that are received by households under study and their individual members at annual or more frequent intervals i.e. monthly. This includes income from sale of farm products, household assets and/or loans/ shares from group activities

Income Generating Activities: Defined at the household level as small scale activities aimed at generating profit/ income and belongs to the informal sector. This is characterized by few barriers for entry i.e. capital and skill requirements are low, limited access to formal credit and operations are generally outside official rules and regulations

Loan: amount lent at interest. A group member takes a loan with the understanding that it will be paid back after a month with agreed percent interest

Loan Repayment: The act of paying back money previously borrowed from a lender and for this case group. Repayment usually takes the form of periodic payments that normally include part principal plus interest in each payment. The other common method of repayment which applies to the VSL model is a lump sum with interest at maturity.

Micro finance: Applies when NGOs and MFIs supplement the loans with other financial services such as savings, insurance etc. This involves additional noncredit financial services such as savings, insurance, pensions and payment services (Okiocredit, 2005).

Microcredit: Refers to small loans made to clients by banks or microfinance institutions. Micro credit can be extended to an individual or through group guarantee model. The terms of offer are usually tailored and depend on the pricing criteria amongst other things

Voluntary Savings and Loan: A VS & L scheme is a self-selected group of people, (usually unregistered) who pool their money into a fund from which members can borrow. The money is paid back with interest, causing the fund to grow. In the context of this study, voluntary savings and loan groups and voluntary savings and credit groups are used interchangeably to refer to the same model

1.11 Organization of the Study

The study was organized into five chapters; chapter one highlighted information on the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, basic assumptions of the study, limitations of the study, delimitations of the study and definition of significant terms used in the study.

Chapter two provided a review of literature related to the study thematically as per the research objectives, the theoretical frame work, the conceptual framework as well as the summary of literature review.

Chapter three focused on the research methodology discussed under the following sub-headings; research design, target population, sample size, sample selection, research instrument, pilot testing of instrument, validity of research instrument, reliability of research instrument, data collection procedures, data analysis techniques and ethical issues in research.

Chapter four contains data presentation, analysis and interpretation while chapter five highlights a discussion of findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature related to the study thematically as per the study objectives. It covered an overview of savings and credit groups, household expenditure on food and loan repayment, household expenditure on education and loan repayment, income generating activities within households and loan repayment and finally asset acquisition within households and loan repayment. The chapter further covered the theoretical framework, the conceptual framework as well as the summary of literature review.

2.2 An Overview of Savings and Credit Groups

Community based financial institutions provide financial services to the poor who have been marginalized by traditional financial institutions in rural and urban areas. Reaching the poor is harder and less profitable for traditional financial institutions as the poor; (a) lack the ability to borrow and save in amounts that would be profitable for traditional financial institutions, (b) lack the collateral required to borrow finances, and (c) are dispersed and hard to reach (Wright, 2000). The poor have been served in the past by government owned agricultural development banks and non-governmental organizations at subsidized rates with the aim of providing the rural poor with agricultural credit for increased farm productivity, and to increase income and entrepreneurialism amongst the urban poor (Johnson and Rogaly, 1997). These past attempts however failed and implementing organizations either; (a) abandoned these financial social services that they provided to poor communities, or (b) commercialized their services, making them more appropriate for wealthier markets (Adams and Vogel, 1986 as cited in Robinson, 2001; Dutt, 1991 as cited in Bertaux and Crable, 2007).

The exclusion of the poor from formal financial services has consequently limited their ability to borrow for investment and save for life cycle needs and emergencies. According to Apopa (2010), informal actors are mostly individuals, friends, relatives, money lending services, pawn brokers, Rotating Savings and Credit Associations (ROSCAS) or merry- go- rounds and Accumulating savings and Credit Associations (ASCAS) among others (Kimuyu, 1999; Mule and Johnson, 2002) These are quite prominent in both rural and urban areas contributing to both productive and consumption needs.

According to a report by Care 2011, "Closing the Gap, Access Africa the power of financial Services"; Savings Groups (SGs) build directly on a tradition of savings clubs, burial societies, and rotating savings and credit associations (ROSCAs) found in almost all societies and known by such terms as "merry-go-rounds," "susus," and "tontines." Formal SG development programming began in the early 1990s and today multiple agencies are engaged in SG development. Although many of these organizations have developed slightly different SG models and delivery systems, all serve the poor and very poor and all value and promote the underlying principles and attributes of SGs as self-managed, autonomous, highly participatory, community-based, democratic, sustainable and replicable entities.

One of such promising models is the Village Savings and Loan Associations (VSLA), modelled after CARE's project in Niger (commonly referred to as the *Mata Masu Dubara* or the MMD model).CARE has replicated this model in several other countries including Angola, Burundi, Côte.d'Ivoire, Eritrea, Haiti, India, Kenya, Lesotho, Malawi, Mozambique, Rwanda, Tanzania- Zanzibar, Uganda, Zambia and Zimbabwe. Other international NGOs, including Save the Children, Plan International, World Vision, OXFAM, Freedom from Hunger and Catholic

Relief Services (CRS), are also promoting VSLAs, particularly in Africa. The VSLA model has evolved over time. (Anyango *et al*., 2007)

According to Anyango (2007), VSLAs are time-bound accumulating savings and credit associations (ASCAs). ASCAs already exist in most African countries, although the time bound ASCAs are much rarer. Members of a VSLA group of up to 30 persons save regularly and borrow from the group fund. The borrowers must repay the loan with interest, usually after between one and three months. The group is formed for a specific cycle (usually 12 months) and set with a specific objective, such as a religious holiday or the beginning of school. At the end of the cycle the total fund is divided among members based on their savings (shares) contributions. After the fund has been paid out, the groups normally immediately re-form with members having the right to leave and new members enrolled and inducted. The group then starts a new cycle of savings and lending.

According to Apopa (2010), most poor people do not go for financial services to fund investment: they are averse to investing their way out of poverty because they are acutely aware of the risks that this entails; especially bearing in mind their limited experience of market based economic activity. According to Allen (2006), their need is for a service that enables them to manage household cash-flow so that their economic options are broader and less constrained. Table 2.1 illustrates the reason for seeking credit by poverty status in a well –being survey conducted in the country.

Analysis of the table above reveals that, approximately one third of both poor and non-poor households sought credit. The major reason for seeking credit for both categories was subsistence needs, followed by medical and school fees. 1 in 2 poor households compared to 3 in 10 non poor households sought credit for subsistence needs. Access to credit or savings to pay school fees, so that selling a stock of maize at harvest time can be deferred to a time when prices are higher is a typical example: the credit is not used to finance an investment as such but to allow the client to capture a higher proportion of the market price at a time of their choice.

Apopa (2010) further observes that an interesting characteristic of household savings is that they are small in size per unit transaction and short term in frequency. According to Deaton (1989), saving by the household sector in developing countries is of high frequency nature as opposed to low frequency life cycle frequency in developed economies. It's worth noting that small but regular savings by groups have been the basis of operations of many ROSCAs and ASCAs.

2.3 Households Expenditure on Food and Loan Repayment

Credits play a vital role in economic transformation. The need for credit facilities is necessitated by the limitations of self-financing, uncertainty pertaining to the levels of output, and the time lag between inputs and output (Kohansal and Mansoori, 2009). However, its accessibility is imperative for improvement in the quality and quantity of farm products, so as to increase farmer's income and reduce rural-urban drift (Kohansal and Mansoori, 2009). In Nigeria, the acclaimed importance of credits in agribusiness promotion and development, notwithstanding, their acquisition, management and repayment have been burdened with numerous challenges (Oboh and Ekpebu, 2011; Afolabi, 2010), especially for the smallholder farmer (Awoke, 2004). In the case of credit acquisition and management, Rhaji (2000) observed that lack of adequate, accessible and affordable credit is among the major factors responsible for the systemic decline in the contribution of agriculture to the Nigerian economy. With respect to repayment high levels of loan default among borrowers remain a major impediment.

Awoke (2004) reported that the high rate of default arising from poor management procedures, loan diversion and unwillingness to repay loans has been threatening the sustainability of most public credit schemes in Nigeria. In the same vein, Olagunju and Adeyemo (2007) argued succinctly that the problem of default in the repayment of loans invested on food acquisition is one of the factors that have militated against the development of Nigeria, because it dampens the willingness of the financial institutions to increase lending to the savings and credit group members. Whatever the cause, one direct consequence of loan default is that it has caused considerable reduction in the loanable funds to greater majority of loan seekers and also requires substantial amount of administrative cost and time to recover the amount in default. Partly because of the high default rate, most credit institutions are becoming more reluctant to extend loan to smallholder farmers group members who are interested in investing the loan on purely subsistence farming(Udoh, 2008)..

In Kenya, voluntary savings and credit groups have been advocated towards curtailing loan defaults and enhancing loan repayment performance among members. A group is a collection of individuals among whom a set of interdependent relationship exist (Ofuoku and Urang, 2009). Groups are characterized by interaction, shared values and beliefs, common goal, structure and ideology (Ofuoku and Urang, 2009). Cooperatives are forms of groups that have been encouraged among farmers as instruments of social and economic transformation (Ijere, 1992). Under the cooperatives membership model, farmers were encouraged to become members of cooperative associations, which would be registered, have elected officials and be holding regular meetings with documented minutes (Ofuoku and Urang, 2009).

The belief was that working under associations and groups, farmers would be empowered to speak and act with one voice and consequently it became easier for them to process credit through financial institutions. As long as the members of cooperative societies desire to remain in the group, it is expected that they will live up to expectations, norms and values of the group (Ofuoku and Urang, 2009). However, despite the expected appreciable role of cooperative groups in promoting loan repayment of its members, limited studies have tried to investigate the loan repayment competence of cooperative group members in Kenya, an aspect that this study attempts to bridge.

2.4 Households Expenditure on Education and Loan Repayment

The relationships between education and income are complex. In particular, the demand for education depends both on household preferences and on budget constraints that are influenced by income levels. If a sufficiently high marginal value is placed on the education of family members, increases in income will result in higher expenditures in schooling (that is, there is a positive income elasticity of the demand for education). In turn, given the labor-supply potential of children, a low household income increases the opportunity cost of keeping them in school. Therefore, income levels are expected to positively influence the schooling decisions of poor households, while adverse shocks that reduce income are expected to negatively influence these decisions. At the same time, because the higher productivity of better-educated household members may be rewarded in the labor market with higher incomes, prospects about production and employment opportunities will influence those decisions (Duryea and Pagés, 2002).

Human capital formation has been recognized as an effective tool for reducing poverty in the long run (Bils and Klenow, 2000). Particularly in the rural areas of developing countries, however, access to education is limited (Barro and Jong-Wha, 2000). Some concerned observers highlight supply constraints, due to lack of infrastructure and resources (*e.g.*, roads, schools, teachers and materials). Low schooling achievements may also reflect, however, the consequences, on the demand for education, of severe budget constraints and of a competing demand for the youth's labor. Financial services (loans, payments instruments, and deposit facilities) allow rural households to more fully take advantage of their productive opportunities, facilitate consumption smoothing in the presence of unstable and seasonal income flows, and offer tools for risk management when adverse income shocks occur, thereby reducing the vulnerability associated with poverty (Zeller and Sharma, 2002). In turn, higher and particularly more stable income flows positively influence demands for schooling.

Typically, however, information, incentive, and contract enforcement problems severely constrain the access of poor rural households to formal financial markets (Gonzalez-Vega, 2003). Moreover, because human capital cannot be seized and transferred to a lender in the event of default, it cannot be used as collateral; consequently, the poor must fund their educational choices out of their past wealth, retained earnings, or abstention from current productive work or consumption since they cannot repay loans borrowed from credit institutions to educate their children. Because they are poor, the marginal cost of doing so may be prohibitively high (Ray, 1998). In this case, loans borrowed from financial institutions by poor rural households become a thorn in the flesh due to their inability to pay back the loan. The typical shortcomings of credit markets accentuate the joint causation between income and human capital. Combined with increasing returns to investment in education, these shortcomings generate poverty traps (Bardhan and Udry, 1999). Relatively wealthy households, able to invest in human capital, earn high incomes and remain wealthy. In contrast, the poor are unable to invest in human capital, continue to earn low incomes, and remain poor.

To the extent to which it makes it possible to increase the supply of services to some poor segments of the rural population, microfinance offers, however, the potential to break this vicious circle, but its effects on schooling outcomes may be mixed. Through innovations in cost-effective lending technologies, some MFOs have been offering mostly credit and sometimes deposit facilities for savings to segments of the rural population otherwise without access to formal finance (Rodriguez-Meza and Gonzalez-Vega, 2003). These innovations have allowed households without traditional collateral to pledge their reputation in the community and the present value of their relationship with the MFO –based on their future ability to generate income from their microenterprises and on their human capital formation– as a guarantee on their loans. Some observers have hoped that this might be an important mechanism to influence, directly or indirectly, education outcomes. Indeed, microfinance may influence human capital formation through several channels.

First, it is widely recognized that income levels influence schooling (Behrman and Knowles, 1999). To the extent to which microfinance may influence the growth of poor households' incomes, it may influence the demand for schooling (*income effect*). Second, the vulnerability of rural households to adverse exogenous shocks and the volatility of their incomes influence their ability to afford the opportunity costs of education. The absence of usual remedies for risk, such as borrowing and insurance opportunities, results in limited and costly income smoothing strategies (Deaton, 1997). Poor households cope with risk in various ways. They adopt diversified production plans and employment and migration strategies to reduce their exposure to the risk of adverse income shocks, even if this entails lower average incomes (Murdoch, 1995). Access to loans from MFIs; particularly when emergency loans are offered such as those from the internal account of village banks– reduce the probability that children will be withdrawn from school when adverse shocks occur. Jacoby and Skoufias (1997), among others, show that poor households affected by income shocks withdraw their children from school. Access to microfinance may thus improve a household's ability to anticipate and cope with income shocks and may thereby influence the demand for education (*risk-management effect*).

2.5 Income Generation Activities within Households and Loan Repayment

Microfinance is unique among development interventions: it can deliver social benefits on an ongoing, permanent basis and on a large scale". Empirical studies carried out by Littlefield, Murduch and Hashemi (2003) on the role of credit facilities to members reveal that microfinance has played a pivotal role in eradicating poverty, promoting education, improving health and empowering members particularly members who invest such loans in income generating activities (IGA). Studies conducted by Littlefield *et al.*, (2003) posit that members who invest the loans borrowed from the savings and credit facilities in income generating activities find it easier to repay back the borrowed loans because they use the proceeds from the income generating ventures to repay back the loans. Johnson and Rogaly (1997) also refer to examples whereby savings and credit schemes were able to meet the needs of the very poor. They state that microfinance specialists are beginning to view improvements in economic security through investment in income generating projects, rather than income promotion, as the first step in poverty reduction as this reduces beneficiaries' overall vulnerability.

Jan and Hayat conducted a study in Pakistan; to determine the impact of micro credit on rural women empowerment. The findings revealed that a large number of credit transaction (both in terms of number of recipients as well as amount of credit disbursed) was observed in micro enterprise sector. Micro credit is seen as an effective tool for micro enterprises and poverty reduction because of the high recovery rate of credit granted. This reveals that micro enterprise development brings ready in hand cash to the beneficiaries who are used to meet other family expenditures as well as credit repayment at the same time (Inayatula and Saleh, 2001)

Table 2.1:

Sector wise credit disbursement

Sector	Total number of beneficiaries	Total disbursed (Millions PKR)	Recovery rate (%)
Agriculture development	8	0.75	65
Livestock development	10	1.2	60
Enterprise development	25	1.8	84

Source: Field survey 2007-08

The findings further revealed that the monthly income of the families increased due to these small businesses. The average monthly income of the women involved in shop keeping rose to PKR 6000. Women who were involved in vendoring added an average income of PKR 4500 to their family overall income pool. Similarly women involved in other enterprises also contributed enough amount of money to their household income. (Inayatula and Saleh, 2001)

Table 2.2:

Average Credit procurement and monthly income from various Enterprises

Name of Enterprise	**Total no of women involved**	**Average credit procured/ invested(PKR)**	**Average monthly income (PKR)**
Shop keeping	6 (24)	35,000	6000
Tailoring and Embroidery	6 (24)	12,000	1200
Poultry farming	4 (16)	25,000	1700
Bee keeping	2 (08)	8,000	900
Vendoring	7 (28)	10,000	4500
Total	**25 (100)**	**18,000**	**2860**

Note: Percentage in the parenthesis

Source: Field Survey 2007 -08

2.6 Purchase of Assets within Households and Loan repayment

Poverty is more than just a lack of income. Wright (1999) highlights the shortcomings of focusing solely on increased income as a measure of the impact of microfinance on poverty. He states that there is a significant difference between increasing income and reducing poverty (1999). He argues that by increasing the income of the poor, MFIs are not necessarily reducing poverty. It depends on what the poor do with this money, oftentimes it is gambled away or spent on alcohol (1999), so focusing solely on increasing incomes is not enough. The focus needs to be on helping the poor to “sustain a specified level of well-being” (Wright, 1999) by offering them a variety of financial services tailored to their needs so that their net wealth and income security can be improved. It is commonly asserted that MFIs are not reaching the poorest in society.

However, despite some Commentators' skepticism of the impact of microfinance on poverty, studies have shown that microfinance has been successful in many situations.

According to Littlefield, Murduch and Hashemi (2003), credit facilities extended to members through savings and credit institutions facilitate increase in income and assets to members thereby reducing their vulnerability. They refer to projects in India, Indonesia, Zimbabwe, Bangladesh and Uganda which all shows very positive impacts of microfinance in reducing poverty. For instance, a report on a SHARE project in India showed that three-quarters of clients saw "significant improvements in their economic well-being and that half of the clients graduated out of poverty". Dichter (1999) states that microfinance is a tool for poverty reduction and while arguing that the record of MFIs in microfinance is "generally well below expectation" he does concede that some positive impacts do take place. Studies conducted by (Dichter, 1999) on the impact of credit facilities extended to members from financial institutions reveal consumption smoothing effects, signs of redistribution of wealth and influence within the household as the most common impact of MFI programmes.

Hulme and Mosley (1996) in a comprehensive study on the use of microfinance to combat poverty, argue that well-designed programmes can improve the incomes of the poor and can move them out of poverty. They state that "there is clear evidence that the impact of a loan on a borrower's income is related to the level of income" as those with higher incomes have a greater range of investment opportunities and so credit schemes are more likely to benefit the "middle and upper poor". However, they also show that when MFIs such as the Grameen Bank and BRAC provided credit to very poor households, those households were able to raise their incomes and their assets. Hulme and Mosley (1996) show that when loans are associated with an increase in assets, when borrowers are encouraged to invest in low-risk income generating activities and when the very poor are encouraged to save; the vulnerability of the very poor is reduced and their poverty situation improves.

2.7 Theoretical Framework

Theory is a reasoned statement or group of statements, which are supported by evidence, meant to explain phenomena. They are systematic explanations of the relationship among phenomena. This study is hinged on human capital theory propounded by Becker (1964) and Mincer (1974). Human capital theory suggests that education or training raises the productivity of workers by imparting useful knowledge and skills, hence raising workers' future income by increasing their lifetime earnings. Becker (1964) and Mincer (1974) provide an explanation that links investment in training with workers' wages. In particular, their theory draws a crucial distinction between general education and firm-specific training. Over the past thirty years or so, hundreds of studies have been conducted to estimate rates of return to education (RORE); most such studies show that formal schooling is a crucial factor in explaining variations of salary and wages in well developed countries (Cohn & Addison, 1998).

While formal education has expanded rapidly in many countries, a large portion of human capital accumulation in the forms of on-the-job training and other modes for working adults actually take place both inside and outside the workplace. Adult education development in developed countries in recent years has focused on a strengthening of vocational training to meet the needs of skill development across all occupational strata in the global economy (Belanger &Tuijnman, 1997). Studies in some developing countries find that a mix of education and training is available for skill acquisition and there are multiple paths to skill development for a given occupation (Ziderman and Horn, 1995).

Members of voluntary savings and credit groups should be empowered with education and training as emphasized in human capital theory. By empowering members of voluntary savings and credit with education and training, their productivity will increase; they will be in a better position to make informed decisions on where to borrow loans in case of such needs in order to avoid exploitation by financial institutions who charge exorbitant interest rates. By extension, they will be better placed to make wise decisions on where to invest the borrowed money. They will thus avoid investing their money on areas with fewer returns such as food security where loan repayment will be a thorn in the flesh. Instead, they will invest their money on income generating activities (IGA) as well as asset acquisition which have many returns. Such returns will assist them in paying back the loans and thus save them from being loan defaulters.

2.8 Conceptual Framework

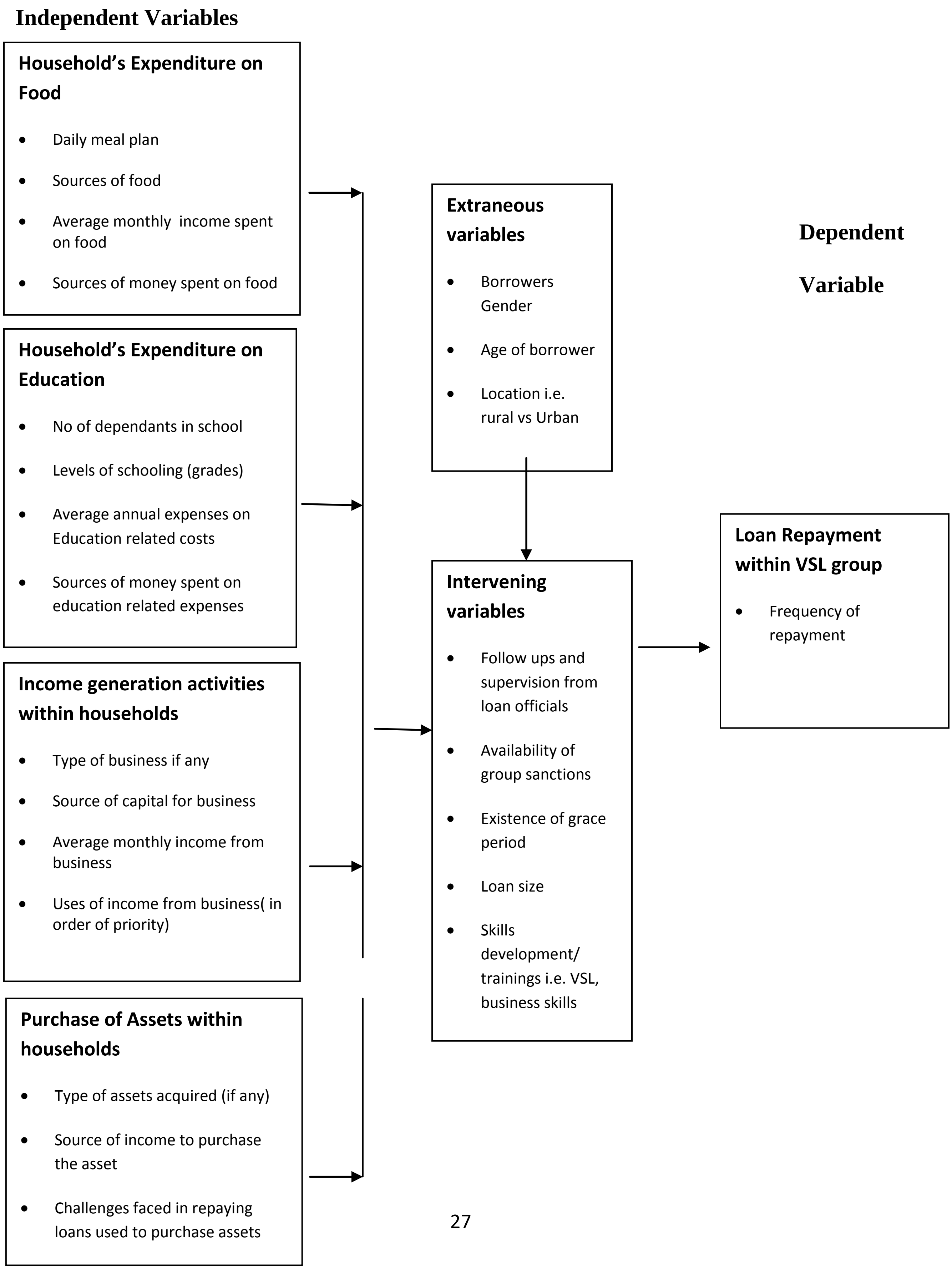

Figure 1: *Conceptual framework; Influence of Household Expenditure on Loan Repayment*

The schematic diagram in figure 1 reflects the concept of Influence of household income distribution on loan repayment among voluntary savings and credit groups. Factors which have been conceptualized as independent variables include; Household Expenses on food which comprises the types of food consumed per day and sources of those particular foods. In this study, expenses on food may interfere with loan repayment as expenditure on food does not generate more income. Thus members who spent their borrowed loans on food items may default paying back the loans due to lack of continuous flow of returns from investment on food. Another independent variable conceptualized in this study is household expenses on education related costs with regard to children/ dependants attending schools. Family size and number of dependants within the household determine the repayment performance of the borrowers. If there are many family members in the household, they need more income in order to cover expenses of their household members. Therefore, the borrower may use the loan directly for their daily consumption and other expense. In this case, the borrower may become a defaulter in loan repayment.

Income generation Activities in this study refers to any activity at the household level aimed at generating profit or income. Loan usage affects repayment rate. If the entire loan is used for the intended activities, then the repayment rate will be enhanced. For instance, by putting the whole loan for running a business, it is possible to generate income and run the business in a better way. Consequently, if the loan is used for unintended purpose like consumption, it will hinder the repayment performance of the clients. Business run by an experienced person has an effect on the loan repayment performance given that the risk of failure is less, than businesses being operated by those who have just started (beginners). Therefore, the more the number of years in a business, the better would be the loan repayment performance (Brehanu & Fufa, 2008). Given that the borrowers have enough experience in the specific business, they already know the potential risks they are likely to face in the business and thus will prepare in advance. Business information refers to information related to a specific business like the demand and supply of the product, the purchasing power of clients etc. If the borrowers are able to get the necessary information, they can produce and sell based on customers need. Moreover, if they have enough information about the market situation of the product, then they may predict the future of the business. Business types are mostly associated to risk i.e. Business risk is uncertainty about the future operations and is determined by uncertainty about supply and demand, output price, and cost and also price sensitivity of the customer (Sadgrove, 2005). Borrowers who have enough experience and knowledge about the risks and risk coping strategies venture into risky business types. Therefore, the type of business that clients engaged in has an impact on the repayment rate of the borrowers. If clients engage in profitable business types, they will earn enough money which will lead to enhancement of the repayment rate of the client.

The last independent variable is acquisition of asset within the house hold with the borrowed money. Investing borrowed money on household asset, just like investing in income generating activities will produce proceeds upon which loan repayment can be made. Family house hold asset include purchase of land, building of permanent commercial house etc. Such investments have the ability of appreciating in value with time. Thus, voluntary savings and credit members who invest their borrowed loans on such assets may not have difficulties in paying back the borrowed money. Extraneous variables and intervening variable also interact the independent variables to enhance or impede loan repayment as depicted in the conceptual framework.

2.9 Summary of Literature Review

From the literature reviewed, Awoke (2004) reported that the high rate of default arising from poor management procedures, loan diversion and unwillingness to repay loans has been threatening the sustainability of most public credit schemes in Nigeria. In the same vein, Olagunju and Adeyemo (2007) argued succinctly that the problem of default in the repayment of loans invested on food acquisition is one of the factors that have militated against the development of Nigeria, because it dampens the willingness of the financial institutions to increase lending to the savings and credit group members. Whatever the cause, one direct consequence of loan default is that it has caused considerable reduction in the loanable funds to greater majority of loan seekers and also requires substantial amount of administrative cost and time to recover the amount in default (Udoh, 2008). Partly because of the high default rate, most credit institutions are becoming more reluctant to extend loan to smallholder farmers group members who are interested in investing the loan on purely subsistence farming.

Typically, however, information, incentive, and contract enforcement problems severely constrain the access of poor rural households to formal financial markets (Gonzalez-Vega, 2003). Moreover, because human capital cannot be seized and transferred to a lender in the event of default, it cannot be used as collateral; consequently, the poor must fund their educational choices out of their past wealth, retained earnings, or abstention from current productive work or consumption since they cannot repay loans borrowed from credit institutions to educate their children. Because they are poor, the marginal cost of doing so may be prohibitively high (Ray, 1998). In this case, loans borrowed from financial institutions by poor rural households to educate their children become a thorn in the flesh due to their inability to pay back the loan. The typical shortcomings of credit markets accentuate the joint causation between income and human capital. Combined with increasing returns to investment in education, these shortcomings generate poverty traps (Bardhan and Udry, 1999). Relatively wealthy households, able to invest in human capital, earn high incomes and remain wealthy. In contrast, the poor are unable to invest in human capital, continue to earn low incomes, and remain poor.

Empirical studies carried out by Littlefield, Murduch and Hashemi (2003) on the role of credit facilities to members reveal that microfinance has played a pivotal role in eradicating poverty, promoting education, improving health and empowering members particularly members who invest such loans in income generating activities (IGA). Studies conducted by Littlefield *et al.,* (2003) posit that members who invest the loans borrowed from the savings and credit facilities in income generating activities find it easier to repay back the borrowed loans because they use the proceeds from the income generating ventures to repay back the loans.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

The methodology elements that were highlighted in this section included the study design that was applied, the actual area of study, target population, the sample size and sampling procedure that was employed, data collection instruments, validity and reliability of the instruments, data collection methods and the data processing and analysis techniques that were used during data collection, analysis interpretation and presentation.

3.2 Research Design

The study adopted descriptive survey design. Descriptive analysis studies the relationship between different variables at a point in time. Descriptive analysis relates to how variables affect each other at the same time and period (http://en.wikipedia.org/wiki/Cross-sectional study). In this study, effort was made to establish the relationship between household income distribution and loan repayment among voluntary savings and credit group members in Rachuonyo North District. Mugenda and Mugenda (1999) points out that surveys seeks to obtain information that describes existing phenomena by asking individuals about their perceptions, attitudes, behaviors or values. They posit that surveys can also be used for explaining or exploring the existing status of two or more variables at a given point in time and are excellent vehicles for measurement of characteristics of large populations. They assert that surveys are probably the best method available to social scientists interested in collecting original data for the purpose of describing large populations. According to Kothari (2004), descriptive research studies are those concerned with describing the characteristics of a particular individual or group. Advantages associated with descriptive survey design include ease of establishment of association between variables and comparison, possibility of administration to many people and anonymous completion of questionnaires.

3.3 Target Population

This study was conducted in Rachuonyo North District. Kowuor East sub location, Kagwa sub location, Kajiei sub location and Komuoyo sub location was earmarked for the study because most VSL members in Rachuonnyo North District are concentrated within these sub locations. The study targeted 191 voluntary savings and credit group members within these 4 sub locations.

3.4. Sample Size and Sample Selection

This section describes the sample size and sample selection that was used in the study.

3.4.1. Sample Size

A sample is a smaller group obtained from the whole population. It is a sub group carefully selected so as to act as a representative of the whole population (Mugenda and Mugenda, 2003). The number of participants (whole population) in the targeted VSL groups for the 4 sub locations totals to 2013(Kowuor East 567, Kagwa 404, Kajiei 592 and Komwoyo 450) According to Glenn (1992), a sample size of 191 respondents at 7% precision is appropriate for a target population of 2013 (Refer to Appendix III).

3.4.2 Sampling Selection

Sample selection is the process of selecting elements from a population in such a way that the elements selected represent the entire population (Orodho, 2003). It is a statistical practice concerned with the selection of individuals intended to yield some knowledge about a population of interest. Sampling is useful in research because one learns some information about a group by studying a few of its members thus saving time and money. Voluntary savings and credit group members were selected using purposive sampling technique from the 4 strata (sub locations) i.e. Kowuor East, Kagwa, Kajiei, Komuoyo. According to Oso and Onen (2009), purposive sampling is a technique whereby the researcher consciously decides who to include in the sample. Voluntary savings and credit group members were selected from each sub location depending on their numerical strength using proportionate method. Under proportionate method, the sample size was obtained by dividing the number of respondents in each sub location by the total target population size and then multiplying the result by the sample size. This is illustrated in table 3.1

Table 3.1

Table for Selecting Sample Size

Sub location	Target Population	Sample Size
Kowuor East	567	54
Kagwa	404	38
Kajiei	592	56
Komwoyo	450	43
Total	**2013**	**191**

Using Community Based Youth Trainers (CBYTs), the researcher accessed the sampled households for the interviews. Community Based Youth Trainers are community volunteers hailing from the same sub locations who train and mentor VSL group members.

3.5. Data Collection Instruments

The study utilized a structured questionnaire to obtain the required information. A questionnaire is a research instrument that is used to gather data over a large sample and diverse regions. It upholds confidentiality, saves time and has no interviewer bias (Tromp and Kombo, 2006). The structured questionnaire had both open-ended and closed ended questions, it was organized into sections intended to extract specific information from respondents. Each section addressed specific objectives and by extension sought to answer specific research questions.

Section A sought to obtain information related to demographic characteristics of respondents; section B addressed questions related to the extent to which household expenditure on food influences loan repayment among VSL members, Section C focused on how household expenditure on education influences loan repayment among VSL members, Section D focused on how household expenditure on income generating activities influences loan repayment among VSL members. Lastly, section E had questions related to the extent to which household expenditure on investment purposes (assets accumulation) influences loan repayment among VSL members in Rachuonyo North District.

3.5.1 Piloting of the Instrument

Mugenda and Mugenda (1999) assert that pilot testing is a very important step in any study. Pilot testing is a trial run of procedures and instruments that one plans to use. Pilot testing may prevent costly mistakes. According to Mugenda and Mugenda (2003), a pre-test sample of a tenth of the total sample with homogeneous characteristics is appropriate for a pilot study. For this study, 19 respondents which is equivalent to 10% of the sample size were interviewed during pilot testing. Voluntary savings and credit group members selected for pilot testing were not included in the sample during the actual data collection phase. The researcher made formal arrangements with relevant authorities on the most appropriate dates of conducting the pilot testing. Relevant questionnaires were administered to respondents during pilot testing then the information gathered during the exercise was used to improve the instruments.

3.5.2 Validity of the Instrument

Validity of research instrument is a measure of the extent to which the instruments measure what they are intended to measure (Kathuri and Pals, 1993). A research instrument is valid if it actually measures what it is supposed to measure and when the data collected through it accurately represents the respondents' opinions (Amin, 2002). Validity of the research instruments was ascertained by conducting a pilot study. This ensured that instructions were clear and all possible responses to a question were captured. Content validity of a measuring instrument is the extent to which it provides adequate coverage of the investigative questions guiding the study (Mugenda and Mugenda. 2003). In this study, content validity was determined by consulting experts in research methods in the school of continuing and Distance learning of the University of Nairobi. These experts looked at every question in the questionnaire and did their own analysis to verify that the questions contained the content of the area under study. Recommendations from the experts were taken into consideration during improvement of the instruments.

3.5.3 Reliability of the Instrument

Reliability is the extent to which results from an instrument is consistent and reliable (Amin, 2005; Kothari, 1990). A reliable instrument is that which yields consistent results after repeated measurements (Cooper and Schindler, 2008). The researcher adopted Split half technique of assessing reliability because it requires only one testing session. The researcher preferred this technique of the test because it eliminates errors due to the subjects ease in remembering responses from the first test. The Split half attempts to overcome this problem by developing one scale for each variable then dividing the scale into two halves (odd and Even) and then calculating the Pearsons correlation coefficient (r) between the two halves of the test. The split half procedure is based on correlation between scores obtained from both halves of the test and is needed to determine reliability of the entire test. The Spearman-Brown Prophesy formula was used to make correlation as follows;

$$Re = \frac{2r}{1+r}$$

Where r is Coefficient of correlation.

The instrument (especially the questionnaire) was deemed to have high degree of reliability since the value of correlation coefficient fell within the range of 0.85 to 1. This was considered sufficient since Mugenda and Mugenda (2003), asserts that any correlation coefficient that fall within 0.65 to 1 is considered to have high degree of reliability.

3.6. Data Collection Procedures

Before commencement of data collection, this study proposal was taken through approval procedures as required by the University of Nairobi. The researcher obtained a letter from the university which he used to obtain a research permit from the National Council of Science and Technology. The researcher also sought permission from ChildFund -Kenya to be allowed to get secondary data from project documents as well as primary data from VSL group members. The researcher employed 5 research assistants who were CBYTs working for ChildFund –Kenya in the same sub locations. The research assistants were trained for two days on correct interpretation of the questions in the instruments, language of interviews and ethical considerations. The researcher also informed the local administration (area chief) and the divisional social services officer about the study before conducting the study in the division.

The researcher personally administered discussion guides to focused group discussion and key informants. This allowed the researcher to gain valuable insights into the factors determining loan repayment among VSL group members in the area. The research assistants interviewed individual household members using structured questionnaires and respondents were assured of strict confidentiality. The researcher collected all completed questionnaires every evening and had daily review meetings with research assistant to evaluate the progress and address emerging issues. Before data entry, questionnaires were checked for completeness and data cleaning was done to enhance data quality.

3.7. Data Analysis Techniques

Data analysis is the process of modeling or manipulating and transforming data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. According to Bryman and Cramer (2008), data analysis seeks to fulfill research objectives and answer research questions. The process involved field editing before to reduce on errors and ensuring that all instruments had all the required information. This was followed by categorization and coding of all open ended data. The next step was data entry into a preset screen, cleaning, transformation and analysis. The statistical package for social sciences IMB SPSS version 18 software was used to run frequency distributions, percentages and means. Qualitative information obtained through open ended sections of the structured questionnaire was summarized into study briefs. This was followed by content analysis and description of the responses to produce interim findings reports. Areas that required additional information were identified and the required data sourced from other data sources. The interim study report was then systematically analyzed and inferences made.

3.8 Ethical Issues in Research

Attention was paid to the principle of voluntary participation and the requirement of informed consent was upheld throughout the study period. Essentially therefore, prospective respondents were fully informed about the purpose of the study and their consent to participate was sought through signed consent forms that were developed by the researcher. Issues of confidentiality of the information generated were dealt with through assurance to the respondents. This was done by identifying information that would not be made available to anyone who was not directly involved in the study. Research assistants were also trained on ethical issues in data collection. They were required to have a basic qualification of Diploma or undergraduate degree with experience in data collection.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study, which have been discussed under thematic and sub thematic areas in line with the study objectives. The thematic areas include: demographic characteristics of respondents, the extent to which household expenditure on food influences loan repayment among VSL members, examine how household expenditure on education influences loan repayment among VSL members, examine how household expenditure on income generating activities influences loan repayment among VSL members and the extent to which household expenditure on investment purposes (assets accumulation) influences loan repayment among VSL members. These results are summarized in the following sub sections.

4.2 Questionnaire Return Rate

Poor response rates reduce sample size, and consequently the precision, and are a potential source of bias, lessening the confidence with which findings can be accepted and generalized. The study targeted 191 VSL group members for interviewing, but only 189 VSL members were available for interview giving a response rate of 99%. The 2 missing sampled respondents were not available in their homes at the scheduled interview time. On subsequent follow up, the enumerator was informed that the respondents had travelled out of the district during the period of data collection exercise. The study managed to achieve this response rate due to good organization and coordination of involved parties after learning from the pilot survey. Most respondents were informed prior to the interview dates through the area assistant chiefs, project officers and community based youth trainers from ChildFund. This return rate was acceptable since it was above the 65% return rate recommended by Amin (2005).

4.3 Demographic Characteristics of the Respondents

Demographic information of the respondents was collected in relation to gender, age, marital status, level of education, number of dependents and children within the households, occupation of the household head, family average income and how many times the respondents have taken loans. The results are presented in the following sub sections.

4.3.1 Distribution of respondents by Gender

Gender refers to socially constructed roles, behavior, activities and attributes that a particular society considers appropriate for men and women. It was necessary to determine the gender balance among VSL group members and relate it to loan repayment. This is because gender type greatly influences participation in VSL group activities, decisions making concerning household expenditure patterns and thus an important link to access to loans and repayment. Gender of the respondents was observed by the researcher and presented in the table below

Table 4.1:

Distribution of respondents by Gender

Gender	Frequency	Percent
Male	90	47.6
Female	99	52.4
Total	189	100.0

n= 189

Table 4.1 shows that out of the 189 VSL group members who participated in the study, 99 (52.4%) were of female gender while 90 (47.6%) respondents were male. The findings show that majority of the VSL group members are female and the views of both genders, on influence of household income distribution on loan repayment were included.

4.3.2 Distribution of respondents by Age

The researcher asked respondents about their ages because this could determine their experience, commitment and level of responsibilities with regard to loan repayment. It was also important to understand VSL group dynamics and establish the relationship between age and loan repayment. The age of the respondent could also influence risk taking on new ideas (income generation activities). This active generation (31- 50 years) is likely to have savings and other asset base which they could use to repay loans compared to younger and older generations. The respondents were asked to state their ages and the results are presented in the table below

Table 4.2

Distribution of respondents by Age

Age group	Frequency	Percent
20-30	25	13.2
31-40	42	22.2
41-50	54	28.6
51-60	32	16.9
61 and above	36	19.0
Total	**189**	**100.0**

n=189

The study found out that out of the 189 VSL group members who were interviewed, 25 (13.2%) which is the least category, were aged 20 -30 years, followed by 32 (16.9%) respondents between the ages of 51- 60 years, 36 (19%) of the members were aged between 61 and above, 42 (22.2%) of the groups' members were aged 31-40 and 54 (28.6%) of the members were aged 41-50 years. The study revealed that there should be high engagement in income generation activities and asset accumulation since the majority ages of between 31- 50 years (50.8) are the most productive ages of any sector. This is a very active and productive age group which can contribute positively to the VSL activities by saving, borrowing and repaying loans effectively. A study by Oladeebo and Oladeebo (2008) on determinants of loan repayment among small scale farmers in Nigeria revealed that age had significant positive effect on loan repayment. Hence, age is hypothesized to have negative effect on loan repayment default.

4.3.3 Distribution of respondents by marital status

It was necessary to determine the marital status of the respondents and relate it to loan repayment as it's a significant determinant since it influences family size, household expenditure patterns and amount of family investment. The respondents were asked to state their marital status and their responses are summarized in table 4.3

Table 4.3

Distribution of respondents by Marital Status

Marital Status	Frequency	Percent
Single	2	1.1
Married	110	58.2
Widowed	77	40.7
Total	**189**	**100.0**

n=189

The study found that of the 189 VSL group members, who participated in the study, majority of the respondents 110 (58.2%) were married, 77 (40.7%) of the respondents were widowed and only 2 (1.1%) were single. This finding could mean that married people participate heavily in VSL activities because they are mature and have responsibilities which make them borrow and repay loans responsibly. This finding concurs with Anyango *et al* (2007) whose study on Village Savings and Loan Associations - experience from Zanzibar found that the majority of VSL members were married (70%) and there was a relatively high proportion (20%) of single members whose mean age was 19 years.

4.3.4 Level of Education of respondents

The study sought to know the level of education of respondents as it is believed that those with higher level of education would have more exposure to emerging opportunities within the microfinance sector resulting into higher levels of investments and asset base which would lead to effective participation in VSL group activities. The level of education would also enable one to understand and assimilate concepts and adopt new technologies within the sector. The respondents were asked to indicate the highest level of education attained and their responses were summarized in table 4.4

Table 4.4

Distribution of Respondents by Level of Education

Level of Education	Frequency	Percent
None	44	23.3
Primary	126	66.7
Secondary	18	9.5
College	1	.5
Total	**189**	**100.0**

n=189

The study found that of the 189 respondents who participated in the study, majority of them 126 (66.7%) had primary education as the highest level of education attained, 18 (9.5%) of the respondents have secondary level of education, 1 (0.5%) of the respondents had college level of education and 44 (23.3%) respondents had no education. The findings also indicate that only 19 VSL group members representing 10% had qualification above secondary level of education. Higher levels of formal education enables borrowers to comprehend more complex information, keep records, conduct basic cash flow analysis and generally speaking, make the right investment decisions. This finding contradicts with the findings of Eze and Ibekwe (2007) in a study done in Nigeria which found out that the educational level of respondents has a negative effect on loan repayment default. Educational level of respondents was specified as number of years spent in school. It is hypothesized that borrowers with higher levels of education are less likely to default in loan repayment.

This finding also differs with findings of Anyango *et. al.* (2007) in a study done in Zanzibar which found out that the membership of VSL groups was relatively well-off and well educated with over half the members having been educated at secondary level which he said was likely to be an important reason why the growth was impressive and ongoing financial performance strong. The findings of Anyango *et al* (2007), Eze and Ibwekwe (2007) differs with the findings in Rachuonyo North district, Nyanza, Kenya in that majority of the respondents 126 (66.7%)had primary education as the highest level while very few of the respondents 19 (10%) had qualification above secondary level of education. This may have a negative effect on the influence of household income distribution on loan repayment among group members.

4.3.5 Number of dependents and dependent children within household

The study sought to know the number of all dependents and dependent children within households to determine the level of responsibilities/ pressure exerted on the household budget and how this influences loan repayment. This determines house hold expenditure in terms of on food, education and other related basic needs which may positively or negatively influence loan repayment. The researcher asked the respondents to state the number of people living within the households and the number of children being supported. The resulted were tabulated in table 4.5 and 4.6 respectively.

Table 4.5

Number of People living within the household

No of dependents	**Frequency**	**Percent**
	3	1.6
Non	3	1.6
1-3	38	20.1
4-6	90	47.6
7-10	44	23.3
10+	11	5.8
Total	**189**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, majority of the respondents 90 (47.6%) have between 4 – 6 dependents, 44 (23.3%) of the respondents had between 7 -10 dependents, 38 (20.1%) of the respondents have between 1- 3 dependents, 11 (5.8%) of the respondents have more than 10 dependents and only 3 (1.6%) do not have dependents. This also means that 134 (70.9%) of the respondents have between 4- 10 dependents. This is an indication that most of the VSL group members have large families to cater for with low income levels. This could be the reason for adopting VSL methodology in order to cope with the increasing pressure on limited households' resources. This finding concurs with the findings of an impact study carried out by CARE Kenya (2010) in Rachuonyo, Nyanza, Vihiga and Nyamira districts which revealed that GSL members are more likely to have larger households and are poorer as compared to other places. This implies that the VSL members have larger households which means high dependency ratio and this may have high household expenditures and affect loan repayment negatively.

Table 4.6

Number of dependent children

No of children	Frequency	Percent
None	9	4.8
1-3	70	37.0
4-6	78	41.3
7-9	28	14.8
10+	2	1.1
Total	**187**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, majority of the respondents 148 (78.3%) have between 1-6 children, 28 (14.8%) of the respondents have between 7 -9 children, 2 (1.1%) of the respondents have more than 10 children while 9 (4.8%) of the respondents do not have children. This indicates that VSL group members support many children with limited resources to provide for the basic needs for all the children. This confirms the findings by Banerjee and Duflo (2006) which indicates that the typical extremely poor family tends to be rather large, at least by the standards of today's rich countries, which can affect household expenditure patterns hence loan repayment

4.3.6 Distribution of Respondents by Occupation

The study sought to know the occupation of the respondents in order to gauge their economic activities which have a great influence on household expenditure patterns, asset base and loan repayment. The respondents were asked to state their sources of livelihoods and the results presented in table 4.7

Table 4.7

Occupation of respondents

Occupation	Frequency	Percent
No occupation	5	2.6
Farmer	62	32.8
Small business	96	50.8
Casual laborer	10	5.3
Self Employed	4	2.1
Employed	2	1.1
Others	10	5.3
Total	**189**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, majority of the respondents 62 (32.8%) practice farming and 96 (50.8%) are engaged in small businesses. 10(5.3%) of the respondents are casual laborers, 4 (2.1%) are self-employed, 2 (1.1%) of the respondents are employed, only 5 (2.6%) of the respondents have no occupation while 10(5.3%) are engaged in other economic activities such as sand harvesting and weaving. This findings imply that majority of the VSL group members 168 (88.9%) are engaged in economic activities which generate income for household expenditure and VSL activities i.e. savings, borrowing and repayment of loans. It underscores the fact that most rural communities engage in subsistence farming and small scale businesses which the VSL group members are not an exception. The results also confirm that the area of residence has a great effect on the type of occupation and income and as expected there of the primary source of income for households in this area is farming and self-employment (Apopa 2010). This study agrees with the findings of a study done by Mule, Sasira and Nthenya (2002) in Uganda which found out that small businesses ranked higher among VSL members. This was attributed to the desire to borrow to support their off farm and farm businesses. This finding further agrees with a study conducted by Oladeebo and Oladeebo (2008) on determinants of loan repayment among small scale farmers in Nigeria, which revealed that some farmers engage in secondary occupation or off-farm income generating activities to supplement their farm income. It is assumed that a farmer who engage in off-farm income generating activities are less likely to default in loan repayment as they may use income from off- farm sources to support loan repayment. This finding in Rachuonyo North district may influence loan repayment positively because members are encouraged to take loans to boost their businesses and repay back from profits and income from the businesses.

4.3.7 Distribution of respondents by Average Family Income

The study sought to know the average family income of the respondents to establish their financial position which has a great influence on household expenditure patterns and hence loan repayment. This is also considered against the households' family size (dependency ratio). The respondents were asked to state their average family monthly income and the results were tabulated in table 4.8

Table 4.8

Distribution of average family monthly income by respondents

Income	**Frequency**	**Percent**
<1000	41	21.7
1001-5000	107	56.6
5001-10000	35	18.5
10001-15000	4	2.1
>15000	1	.5
Total	**188**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, majority of the respondents 107 (56.6%) earn an average monthly income of between kshs 1001-5000, 35 (18.5%) of the respondents earn a monthly income of between kshs 5001-10000 on average, 5 (2.6%) of the respondents earn a monthly income of kshs 10001- 15000 and over and only 41

(21.7%) of the respondents earn a monthly income of less than kshs1000 on average. This finding further indicate that 142 (75.1%) of the respondents earn an average monthly income ranging between 1001-10,000, which is fair compared to the area of residence and target group. This finding is supported by empirical evidence which show that, among the poor, those participating in programs who had access to financial services were able to improve their well-being both at the individual and household level much more than those who did not have access to financial services. Mknelly and Dunford (1999) found that the incomes of two thirds of Credit with Education Program in Bolivia (CRECER) clients had increased after joining the program. For this study therefore, the high number of respondents with fair average monthly income could be as a result of their participation in VSL activities, farming and small businesses.

4.3.8 Access to and Purpose for Loan services from VSL groups

The study sought to verify if VSL group members accessed loans and the reasons for seeking loans. This is because access to financial services allows people to increase their sources of income and diversify small businesses (investments) if any. Access to loan services help safeguard poor households against the extreme vulnerability that characterize their everyday existence (Apopa 2010). To determine whether members' accessed loans in the last 6 months, the respondents were asked to state if they had applied for loan(s) in the last 6 months. The results were illustrated using table 4.9

Table 4.9

VSL members accessing loans in the last 6 months

Loan application	**Frequency**	**Percent**
No	1	.5
YES	188	99.5
Total	**189**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, majority of the respondents 188 (99.5%) have applied and received loans in the last 6 months and only 1 person had not accessed a loan. This implies that group members have access to loans and the only one who had not received could be a new member who joined the group recently or was not prepared to take a loan in the meantime. This study agrees with the findings of a study done by Apopa (2002) in Kenya, Rachuonyo District which found out that out of the 135 respondents interviewed, 110 (81.4%) had contracted at least a loan in the previous 12 months. The fact that a large segment of rural women who used to keep their money under their beds and in merry go rounds, who neither maintained nor had any other household member maintaining a bank account; contracted credit in the previous 12 months is worth noting.

The study further sought to know the reasons for which the loans were sourced and the actual use of the same loans. This information is necessary to help understand the common reasons for which rural households seek credit and determine the actual use of the very loans as this may greatly influence repayment. To determine the reasons for which members' took loan and how they spent the monies, the respondents were asked to state the reasons for which the loan (s) were taken and the actual use for the same. The results were illustrated using table 4.10 and 4.11 respectively

Table 4.10

Loan purpose

Loan purpose	**Frequency**	**Percent**
Food	39	20.6
Education	38	20.1
Health	14	7.4
Business	67	35.4
Farming	9	4.8
Buying livestock	6	3.2
Others	12	6.3
Total	**185**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, 67 (35.4) of the respondents indicated that they took loans for boosting of starting small businesses, 39(20.6%) of the respondents took loans for food, 38(20.1%) took loans for education related expenses, 14 (7.4%)) of the respondents took loans for health related expenses, 15 (8%) took loans for farming and buying livestock and 12 (6.3%) took loans for other reasons such as funeral expenses and repaying other debts. This finding clearly implies that the primary uses of VSL loans are for operating small businesses followed by education and food related expenses. Findings support findings by Apopa (2010) who found out that out of the 110 respondents who had taken loans, majority 46 (41.6%) took loans for boosting/ starting small business, 25 (22.9%) of the respondents took loans for education related reasons while 17 (15.6%) took loans for agricultural/ farming/purchase of livestock reasons. The findings also concur with World Bank Report (1999) which point out that the financial institutions provide small start capital as well as operating expenses to new business. But without very careful management, credit can quickly put you out of business. This therefore implies that these two observations may have either positive or negative influence on loan repayment considering other factors such as management of the businesses; if the businesses are managed well then loan repayment will be sustained but if they are not managed well then loan repayment may be a challenge to the VSL group members. However, this finding contradicts findings by Anyango *et, a.l* (2007), that most rural household take loans majorly for household expenses. It also contradicts the findings of a study conducted by Udoh, 2008 who asserted that because of the high default rate, most credit institutions are becoming more reluctant to extend loan to smallholder farmers group members who are interested in investing the loan on purely subsistence farming.

Table 4.11

Loan not used for intended purpose

Loan not used for intended purpose	Frequency	Percent
Used on intended purpose	167	88.4
Lost/stolen	1	.5
Burial related expenses	1	.5
Paid earlier loan	1	.5
Other	19	10.1
Total	**189**	**100.0**

n=189

The study found that of the 189 respondents who participated in the research, majority of the respondents 167 (88.4%) used the loans on intended purpose and only 22 (11.6%) of the respondents did not use the loan on the intended purpose due to emergencies. For instance only 1 (.5%) respondent used on funeral expenses, another 1 (.5%) respondent used the loan on paying a previous loan from somewhere else and 1 (.5%) more respondent lost the money. This finding implies that majority of the VSL members only take loans that have been planned for and based on actual needs at the household level. This finding contradicts finding by Okorie (1986) who studied the repayment behavior of farmers in one agricultural corporation in Nigeria. The results showed that borrowers who received a loan in kind had higher repayment rates than borrowers who received a cash loan. This was because many borrowers misused the cash, diverting it into personal consumption instead of investing in making their business productive. This finding in Rachuonyo North district may influence loan repayment positively because majority of the members use loans on intended purposes and more so investment reasons such as operating small businesses.

4.4 Household Expenditure on Food and Loan Repayment among VSL Group Members

This section sought to present findings in an effort to establish the extent to which household expenditure on food influence loan repayment among VSL group members in Rachuonyo North District under the following sub themes; daily meal plan, sources of food, average monthly income, sources of money spent on food.

4.4.1 Household Daily Meal Plan

The daily meal plan of VSL group members was sought in order to reveal their power of purchasing different varieties of meals and understand whether they used funds from the VSL loans/ monies to acquire this. This, when measured in relation to loan repayment would reveal the extent to which household expenditure on food influence loan repayment. In this regard, respondents were asked to indicate the frequency of their daily meals, sources of food and sources of income for purchasing food for those who buy. Their responses were as shown in Table 4.12, 4.13 and 4.14.

Table 4.12: Household Daily Meal Plan

Meal plan	Frequency	Percent
Once a day	8	4.2
Twice a day	39	20.6
Thrice a day	142	75.1
Total	**189**	**100.0**

n=189

Out of 189 respondents who participated in the study, majority of the respondents 142(75.1%) take 3 meals a day, 39(20.6%) of the respondents take meals twice a day while only 8(4.2%) of the respondents indicated that they take meals once a day. Based on findings of the study, majority of respondents take 3 meals a day, an indication that most VSL group members spend massively on food daily. This insinuates that if the amount of money spent on food is borrowed, VSL group members may most likely find it difficult to repay such loans since food consumption is not an investment and money spent on it may not be recovered easily. This observation concurs with an empirical study conducted in Nigeria by Olagunju and Adeyemo (2007) which succinctly revealed that the problem of default in the repayment of loans invested on food acquisition is one of the factors that have militated against the development of Nigeria, because it dampens the willingness of the financial institutions to increase lending to the savings and credit group members.

4.4.2 Sources of Food

Food is one of the basic and fundamental human needs besides clothing and shelter which are required by every human being to survive. Information on the sources of food therefore was prudent for the researcher because it would reveal the degree of financial strain to every household participating in VSL group activities. For this reason, respondents were asked to state their source of food. Results were as tabulated in Table 4.13.

Table 4.13: Sources of Daily Food

Sources of food	Frequency	Percent
From farm	48	25.4
From market	140	74.1
Total	**188**	**100.0**

n=189

Out of 189 respondents who took part in the study, 48(25.4%) of respondents asserted that they obtained their food from the farm while majority of the respondents 140(74.10%) indicated that their food is obtained from the market. This means majority of respondents purchase their food from the market. This implies that if the money spent on food could be borrowed; much will be spent without replacement at the expense of other options such as investment, and then in the final end, loan repayment becomes a challenge. Considering occupation of the VSL members, 62 of the respondents (32.8%) practice subsistence farming but only 9 (4.8%) take loans for business purposes, then this findings could also mean that possibly the yields obtained from the farms are normally very low and therefore cannot sustain the needs of the family in terms of food which forces majority of the members relay on buying food from the market

4.4.3 Average Monthly income Spent on Food

The researcher was interested in establishing the average monthly income spent on food by VSL group members, in order to ascertain whether the average amount of money spent on food per month influences loan repayment among VSL group members. To achieve this, respondents were asked to indicate the range of income spent on food per month. Their responses were as stipulated in Table 4.14.

Table 4.14: Average Monthly Income Spent on Food

Income	Frequency	Percent
1000-3000	55	29.1
3001-6000	82	43.4
6001-9000	24	12.7
9001-12000	9	4.8
>12000	4	2.1
Total	**174**	**100.0**

n=189

Out of 189 respondents who participated in the study, majority of the respondents 82(43.4%) spent an average of between kshs 3001-6000 on food per month, 55(29%) of the respondents spent an average of between kshs 1000-3000 on food per month, 24(12.7%) of the respondents spent an average of between kshs 6001-9000 on food per month, 9(4.8%) of the respondents spent an average of between kshs 9001-12000 on food per month while a minority

4(2.1%) of the respondents spent an average of above kshs 12000 on food per month. Findings of the study clearly indicate that majority of respondents 137(72.5%) spent an average of between kshs 1000-6000 per month on food related expenses. This clearly shows that VSL group members spent quite substantial amounts of money of food, an indication that if the money spent was borrowed, then repayment would be a challenge considering that food is a consumable and therefore no income is generated afterwards. This sentiment is also in agreement with Olagunju and Adeyemo (2007) who conducted a study in Nigeria which revealed that the problem of default in the repayment of loans invested on food acquisition is one of the factors that have militated against the development of Nigeria. This also confirms the findings of an impact study of microfinance in Uganda conducted by Kimbombo (2001) which found that microfinance clients invest more in education, health care, nutrition, shelter and care.

4.4.4 Sources of Money Spent on Food

In order to fully establish the extent to which household expenditure on food influenced loan repayment among VSL group members, the researcher decided to find out from the respondents, sources of money spent on food. By so doing, the researcher would ascertain the viability of the source to loan repayment. In view of this, respondents were asked to identify the sources of money they spent on food. The responses were as illustrated in Table 4.15.

Table 4.15: Source of Money Spent on Food

Source of money	Frequency	Percent
Income from small business	73	38.6
own savings	25	13.2
From friends/relatives/well wishers	11	5.8
Loan from VSL	27	14.3
Business &VSL	15	7.9
Business income/own savings	16	8.5
Business income/VSL loan	12	6.3
Business income/own savings/friends	8	4.2
Total	**187**	**100.0**

n=189

Out of 189 respondents who participated in the study, majority of respondents 73(38.6%) indicated that their source of money for food expenses was income from small businesses, 27(20.6%) of the respondents had income from small businesses &VSL as their source of money for food expenses, 27(14.3%) of the respondents relied on loans from VSL as their source of money for food expenses, 25(13.20%) of the respondents had own savings as their source of money for food expenses, 16(8.5%) of the respondents depended on business income/own savings as their source of money for food expenses, ,12(6.3%) of the respondents asserted that their source of money for food expenses was business income/VSL loan, 11(5.8%) of the respondents echoed that their source of money for food expenses was from friends/relatives/well-wishers, while a minority of respondents 8(4.2%) said that their source of money for food expenses was business income/own savings/friends. Findings clearly shows that majority of respondents (VSL group members) depended on income from small business as their source of money for food expenses, an indication that they could sustain their loan payment since proceeds from the business could be used for loan repayment as well as food expenses. However, this factor may have negative impact on the financial position of the small businesses since such income are vulnerable to personal use at the expense of the business. From the findings it further reveals that 27 (14.3%) of the respondents solely rely on VSL loans to purchase food while another 27 (20.6%) of the respondents rely on both VSL loan and income from businesses to purchase food. Therefore a total of 54 (28.5%) of the respondents rely on VSL loans to purchase food. This may not have a great negative influence on loan repayment as the VSL loans obtained is supplemented by income from businesses and therefore loan repayment may be sustained by majority of the members.

4.5 Household Expenditure on Education and Loan Repayment among VSL Group Members

This section sought to present the extent to which household expenditure on education influences loan repayment among VSL group members under the following sub themes: number of dependants in school, levels of schooling (grades), average annual expenses on education related costs and finally, sources of money spent on education related expenses.

4.5.1 Number of Children in Schools

Information on the number of children in school was necessary for the researcher as it supports in establishing the amount of money spent on education related expenses within the households' of VSL group members and how it influences loan repayment. In this regard, respondents were asked to state the number of children in schools. Their responses were as indicated in Table 4.16.

Table 4.16: Number of Children in Schools

No of children attending school	Frequency	Percent
<3	64	33.9
3-5	93	49.2
>5	22	11.6
Total	**179**	**100.0**

n=189

Out of 189 respondents who participated in the study, 64(33.9%) had less than 3 children in school, majority of respondents 93(49.2%) had between 3-5 children in school while 22(11.6%) of the respondents had above 5 children in school. Findings of the study reveal that majority of respondents (VSL group members) had between 3-5 children in school, which is a clear indication that majority of respondents incurred high costs in relation to education of the children, an aspect which could easily exhaust their financial viability particularly if the source of money is not renewable. This observation is in agreement with a study conducted by Ray, (1998) on marginal cost of education which revealed that because human capital cannot be seized and transferred to a lender in the event of default, it cannot be used as collateral. In this case, loans borrowed from financial institutions by poor rural households become a thorn in the flesh due to their inability to pay back the loan.

4.5.2 Levels of Schooling (Grades)

In order to appreciate the extent to which household expenditure on education influence loan repayment, the researcher looked at the levels of schooling (grades) of children within the households as this helps to gauge the costs incurred with regard to education related expenses. As a result, the respondents were asked to indicate the levels of classes of their children. Respondents made various sentiments as summarized in Table 4.17.

Table 4.17: Levels of Schooling (Grades)

Levels of class	Frequency	Percent
Lower primary	27	14.3
Upper primary	30	15.9
Secondary	10	5.3
College	2	1.1
University	2	1.1
Primary/secondary	61	32.3
Lower/upper primary	44	23.3
Total	**176**	**100.0**

n=189

Out of 189 respondents who participated in the study, Majority of the respondents 61 (32.3%) have children in primary and secondary schools, 44(23.3%) of the respondents have children in both lower and upper primary, 30(15.9%) of the respondents have children in upper primary level, 27(14.3%) of the respondents had children in lower primary level, 10(5.3%) of the respondents had children in secondary level, 4(2.2%) of the respondents had children in both college and university level. Based on findings of the study, it can be observed that majority of VSL group members 149 (79%) have children in upper primary, secondary and college/ university. This clearly indicates that most of their income is used on education related expenses of their children which may negatively influence loan repayment if the source of money is majorly VSL loans.

4.5.3 Average Annual Expenses on Education Related Costs

The researcher was interested in establishing the average annual expenses incurred by respondents towards education of their children. By so doing, the researcher would be in a better position to examine the extent to which household expenditure on education influences loan repayment among VSL group members. In view of this, the respondents were asked to indicate how much money (school fees) they had spent on education of their children in the last 16 months. The results obtained were as illustrated in Table 4.18.

Table 4.18: Average Annual Expenses on Education Related Costs

Fees amount	Frequency	Percent
<1000	20	10.6
1001-3000	35	18.5
3001-6000	29	15.3
6001-9000	18	9.5
9001-12000	11	5.8
12001-15000	13	6.9
>15000	44	23.3
Total	**170**	**100.0**

Out of 189 respondents who participated in the study, majority of the respondents 44(23.3%) spent an average of above sh.15000 annually towards education of their children, 35(18.50%) of the respondents spent an average of between kshs.1001-3000 annually on the education of their children, 29(15.3%) of the respondents spent an average of between kshs.3001-6000 per year on the education of their children, 20(10.6%) of the respondents spent less than sh.1000 per year towards the education of their children, 18(9.5%) of the respondents spent an average of between kshs.6001-9000 annually on the education of their children,13(6.9%) of the respondents spent an average of between kshs.12001-15000 towards education of their children while 11(5.8%) of the respondents spent an average of between kshs.9001-12000 per year on the education of their children. This finding indicate that majority of VSL group members spent massively towards the education of their children which could easily throw them into a financial imbalance particularly if the money spent is from an exhaustible source and thus have a negative influence on loan repayment. However, education can be treated as a consumable or an investment considering short term and long term economic implications respectively. This results confirms studies conducted by (Bils and Klenow, (2000) who observed education from an investment point of view and asserted that human capital formation has been recognized as an effective tool for reducing poverty in the long run.

4.5.4 Sources of Money Spent on Education Related Expenses

The researcher was interested in establishing the sources of income spent on education related expenses of the respondents children. By so doing, the researcher would be in a better position to examine the extent to which household expenditure on education influences loan repayment among VSL group members. For this reason, respondents were required to identify the various sources of money spent on education of their children. Respondents made various suggestions as depicted in Table 4.19.

Table 4.19: Sources of Money Spent on Education Related Expenses

Source of Education Related Expenses	Frequency	Percent
Small businesses	45	23.8
Own savings	14	7.4
Friends/relatives	16	8.5
Bursary support	9	4.8
Loan from VSL	48	25.4
Business income/own saving/bursary	11	5.8
Business income/own savings	15	7.9
Business income/friends/bursary	11	5.8
Business/income/friends/loans	2	1.1
Total	**178**	**100.0**

. *n*=189

Out of 189 respondents who participated in the study, majority of the respondents 48(25.4%) depend on VSL loans for education of their children, 45 (33.3%) of the respondents obtain money from small business ventures to support their children education, 22 (10.16%) of the respondents source money for education related expenses from a combination of business income/own saving/bursary/friends 16(8.5%) of the respondents source money for education of their children from friends/relatives, 15(7.9%) of the respondents source for money from both business income/own savings to support their children education, 14(7.4%) of the respondents depend on own savings to support their children education, 9(4.8%) of the respondents depend on bursaries to support the education of their children from, while 2(1.1%) depend on a combination of business income/friends/loans to support their children education. Based on the findings of this study, VSL group members depend majorly on two main sources of income (small scale business ventures 45 (23.8%) and 48(25.4%) loan from VSL) to support their children education.

4.6 Income Generating Activities and Loan Repayment among VSL Group Members

The third objective of the study assessed the extent to which income generating activities (IGA) within participating households influenced loan repayment among VSL group members. This was necessary in order to ascertain whether the repay ability of members could be sustainable if the VSL loan taken by members is invested in income generating activities. This theme has been discussed under various sub-themes including: type of business, source of capital for business, average monthly income from business, uses of income from business (order of priority).

4.6.1 Type of business

Information on the different types of businesses operated by VSL group members placed the researcher in a better position to acknowledge the diversity of businesses being operated by VSL members courtesy of loans from VSL and the viability of the businesses to sustain loan repayment within groups. In order to capture this information, respondents were asked to state the different types of business they engage in. Their responses were as reflected in Table 4.20.

Table 4.20: Type of Business

Business Type	Frequency	Percent
Shop keeping	27	14.3
Charcoal selling	3	1.6
Grocery	46	24.3
Fish mongering	21	11.1
Groceries and cereals	7	3.7
Rope making	21	11.1
Hotel	4	2.1
Cereals	10	5.3
Salon	3	1.6
Farming	12	6.3
Total	**154**	**100.0**

n=189

Out of 189 respondents who participated in the study, majority of the respondents 46(24.3%) engage in grocery business, 27(14.3%) of the respondents engage in shop keeping, 21(11.1%) of the respondents are involved in fish mongering business, another 21 (11.1%) are involved in rope making business, 12(6.3%) of the respondents practice farming, 10(5.3%) of the respondents engage in selling cereals as a business 7(3.7%) of the respondents engage in both groceries and cereals business, 4(2.1%) of the respondents are involved in hotel business, 3(1.6%) of the respondents are engaged in charcoal selling and another 3(1.6%) of the respondents are engaged in saloon business. These findings of the study clearly reveal that the highest proportion of VSL group members are engaged in both shop keeping business 27(14.3%) and grocery business 46(24.3%). This confirms empirical studies carried out by Littlefield, Murduch and Hashemi (2003) on the role of credit facilities to members, which revealed that microfinance plays a pivotal role in eradicating poverty, promoting education, improving health and empowering members particularly members who invest such loans in income generating activities (IGA).

4.6.2 Source of Capital for Income Generating Activities

In order for the researcher to assess the extent to which income generating activities within participating households influence loan repayment among VL group members, respondents were asked to indicate sources of capital for their businesses. Their responses were represented in Table 4.21.

Table 4.21: Sources of Capital for Income Generating Activities

Source of Business Capital	Frequency	Percent
Own savings	47	24.9
Friends/relatives/well-wishers	13	6.9
Loan from VSL	64	33.9
Loan from microfinance	6	3.2
Own savings/friends	9	4.8
Others	17	9.0
Total	**156**	**100.0**

n=189

Out of 189 respondents who participated in the study, 47(24.9%) of the respondents obtained their capital from own savings, 13(6.9%) of the respondents obtained their capital from a combination of friends/relatives/well-wishers, majority of the respondents 64(33.9%) obtained their capital from VSL loan, 6(3.2%) of the respondents obtained their business capital from microfinance loan, 9(4.8%) of the respondents obtained their capital from both own savings and friends. Finally, 17(9.0%) of the respondents mentioned other sources such as income from another existing business as their source of business capital. Based on the tabulated results, business capitalization for VSL group members was mainly through own savings 47(24.9%) and VSL loan 64(33.9%). This finding relates to findings by Kibas (2001) which states that on startup capital, personal savings and money from relatives are normally the least expensive.

However, this factor may have negative impact on the financial position of the personal savings are vulnerable to personal use at the expense of the business. The findings also concur with World Bank Report (1999) which point out that the financial institutions provide small start capital as well as operating expenses to new business. But without very careful management, credit can quickly put you out of business. This therefore implies that these two observations may have either positive or negative influence on loan repayment considering other factors such as management of the businesses; if the businesses are managed well then loan repayment will be sustained but if they are not managed well then loan repayment may be a challenge to the VSL group members.

4.6.3 Average Monthly Income from Income Generating Activities

The researcher was interested in examining the average monthly income from business of respondents in order to establish the financial viability of VSL group members in repaying their loans. In order to get this information, respondents were asked to state their average range of income obtained from their business. Findings are as shown in Table 4.22.

4.22: Average Monthly Income from Income Generating Activities

Average income	Frequency	Percent
1000-5000	111	58.7
5001-10000	37	19.6
10001-15000	6	3.2
>15000	1	.5
Total	**155**	**100.0**

n=189

Out of 189 respondents who participated in the study, majority of the respondents 111(58.7%) obtain an average of kshs.1000-5000 as income from their business, 37(19.6%) of respondents obtain an average of kshs.5001-10000 as income from their business, 6(3.2%) of respondents get an average of kshs.10001-15000 as income from their business while only 1(0.5%) respondent earn an average of kshs.15000 and above as income from business. Based on these findings of the study, majority of VSL group members 148(78.3%) obtain an average of between kshs.1000-10,000 as income from their business. This is a clear indication that VSL group members who invested their income in business are capable of sustaining repayment of their VSL group loans using proceeds from their businesses. This finding concurs with studies conducted by Littlefield *et al.*, (2003) who pointed out that members who invest loans borrowed from the savings and credit facilities in income generating activities find it easier to repay back the borrowed loans because they use the proceeds from the income generating ventures to repay back the loans. Johnson and Rogaly (1997) also refer to examples whereby savings and credit schemes were able to meet the needs of the very poor. They state that microfinance specialists are beginning to view improvements in economic security through investment in income generating projects, rather than income promotion, as the first step in poverty reduction as this reduces beneficiaries' overall vulnerability.

4.6.4 Uses of Income from Income Generating Activities (In Order of Priority)

The researcher examined how respondents used income from their businesses in order to determine whether such uses had any effect on their ability to pay back the VSL group loans. In view of this, respondents were asked to indicate the uses of income from their business in order of priority. Their responses were as tabulated in Table 4.23.

Table 4.23: Priority Area for Spending Income from Income Generating Activities

Area of spending	Frequency	Percent
Buying food	119	63.0
School fees	20	10.6
Expanding business	4	2.1
VSL loan repayment	16	8.5
Total	**159**	**100.0**

n=189

Out of 189 respondents who participated in the study, 119(63.0%) of the respondents used proceeds from the business in buying food, 20(10.6%) of the respondents used income from the business in paying school fees, 4(2.1%) of the respondents used income from the business in expansion of the business, 16 (8.5%) of the respondents used income from the business in re-paying VSL loan. Findings of the study clearly indicate that majority 119(63.0%) of VSL group members used proceeds from their business in buying food while a very small number 4(2.1%) use the proceeds to expand their businesses. This is detrimental to the survival of the businesses since money spent on purchase of food is exhaustible i.e. cannot be recovered back, a move that can easily paralyze the business in the long run. According to Kibas (2001), access to loans enables one to make more profits which are as a result these money is pumped back to improve business stock which in the long run impacts positively on performance of the business. Olagunju and Adeyemo (2007) conducted a study in Nigeria and ratified this observation by revealing that the problem of default in the repayment of loans invested on food acquisition is one of the factors that have militated against the development of Nigeria. It is advisable that proceeds from the business be ploughed back into the business to enable the business establish a wider financial base which can guarantee its financial security and by extension perpetual existence.

4.7 Asset Acquisition and Loan Repayment among VSL Group Members

The last objective of the study was to determine the extent to which assets acquired with loans influence loan repayment among VSL group members. Asset acquisition is one of the indicators of wealth accumulation and therefore information on asset acquisition would enable the researcher be in a position of establishing the relationship between asset acquisition and loan repayment. In order to achieve the above, the following sub themes were considered: types of assets acquired, sources of income to purchase the assets, challenges faced in repaying loans used to purchase the assets.

4.7.1 Types of Assets Acquired

The researcher felt that it was necessary to look at the different types of assets acquired by respondents using VSL group loan. This was prudent because it would enable the researcher to examine whether spending money on asset acquisition by VSL group members eases their ability to repay the loan or not. In view of this, the respondents were asked to indicate the types of assets acquired during their membership in VSL groups. Their responses were as shown in Table 4.24.

Table 4.24: Asset Type Acquired

Asset type	Frequency	Percent
Livestock	89	47.1
Bicycle	1	.5
Farm inputs/equipment	18	9.5
Livestock/farm implement	5	2.6
Households	39	20.6
Total	**152**	**100.0**

n=189

Out of 189 respondents who participated in the study, 89(47.1%) of the respondents acquired livestock (sheep, goats, chicken) using VSL group loan, 39(20.6%) of the respondents acquired household goods such as sofa sets using VSL group loan, 18(9.5%) of the respondents bought a combination of farming inputs and equipment using VSL group loan, 5(2.6%) of the respondents acquired both livestock and farm implements using VSL group loans while only 1(0.5%) of the respondent acquired a bicycle. The tabulated results reveal that majority of respondents 89(47.1%) acquired livestock using loan from VSL group. This can imply that the livestock will grow/ increase in number and as a result, add monetary value with time which by extension can enable VSL group members (who used their loans to purchase livestock) repay their loans with proceeds from sale of livestock without straining. This observation is supported by Hulme and Mosley (1996) study which showed that when loans are associated with an increase in assets, the vulnerability of the very poor is reduced and their poverty situation improves.

4.7.2. Sources of Income Used to Purchase Assets

Understanding the sources of income used to purchase the asset enabled the researcher to gauge the ability of VSL group members to repay the loans. This is because; the type of sources of income used to purchase the asset determines its influence on loan repayment. In order to capture this information, respondents were asked to identify the sources of money used to purchase the assets. The results were as depicted in Table 4.25.

Table 4.25: Sources of Income Used to Purchase Assets

Source of Money	Frequency	Percent
Own savings	17	9.0
Friends/relatives/well-wishers	6	3.2
loan from VSL	96	50.8
Income from Business	25	13.2
Income from microfinance	5	2.6
Total	**149**	**100.0**

Out of 189 respondents who participated in the study, 40 (21.2%) the respondents did not respond to this question, 17(9.0%) of the respondents sourced their money for asset acquisition from own savings, 6(3.2%) of the respondents sourced their money for asset acquisition from friends/relatives/well-wishers, majority of respondents 96 (50.8%) sourced their money for asset acquisition from VSL group loan, 25(13.2%) of the respondents sourced their money for asset acquisition from business income. Finally, 5(2.6%) of the respondents sourced their money from microfinance income. This finding reveal that majority of the respondents source their money for asset acquisition from VL group loan, which can imply that VSL group loans have positively impacted on the lives of its members by empowering them to purchase assets particularly those who are in a position of repaying the loan. This observation is supported by Hulme and Mosley (1996) study which showed that when loans are associated with an increase in assets, the vulnerability of the very poor is reduced and their poverty situation improves.

4.7.3 Challenges Faced in Repaying Loans Used to Purchase Assets

Having realized that majority of VSL group members relied on VSL loans to purchase assets, it was imperative for the researcher to look at challenges faced by VSL group members in repaying loans used in purchasing the assets. For this reason, respondents were asked to identify challenges faced during repaying the VSL loans. Their responses were as reflected in Table 4.26.

Table 4.26: Challenges Faced in Repaying Loans used to Purchase Assets

Type of Challenge	Frequency	Percent
	153	81.0
Inadequate funds	28	14.8
Short time frame	7	3.7
Others	1	.5
Total	**189**	**100.0**

Out of 189 respondents who participated in the study, majority of respondents 153 (81.0%) did not face any challenges in repaying the loans used to purchase assets. 28(14.8%)

cited inadequate funs as major challenge in repaying VSL loans, 7(3.7%) indicated that short time frame was their major challenge in loan repayment while only 1 (0.5%) respondent mentioned other reasons such as unpreparedness as the main un-doing in repaying the SVL loan. Findings of the study reveal that majority of respondents 153 (81.0 %%) did not experience challenges in repaying loans used for purchase of assets. This could be attributed to the fact that the assets could be sold to offset the loan at the appropriate time. This can be supported by the fact that majority of respondents 89(47.1%) acquired livestock using loan from VSL group, which implies that the livestock can grow/ increase in number and as a result, with time add monetary value which by extension can enable VSL group members (who used their loans to purchase livestock) repay their loans with proceeds from sale of livestock without straining. This observation is supported by Hulme and Mosley (1996) study which showed that when loans are associated with an increase in assets, the vulnerability of the very poor is reduced and their poverty situation improves.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains summary of findings, conclusion, recommendations, contributions to the body of knowledge and suggestions for further research.

5.2 Summary of Findings

The study sought to examine the influence of household income distribution on loan repayment among VSL group members in Rachuonyo North District. In this research a total of 189 respondents were subjected to the actual study out of which 99 (52.4%) were female while 90 (47.6%) respondents were male. It was quite clear that women participate more in Village Savings and Loans groups with majority of them 110 (58.2%) being married only 2 (1.1.5) being single. This indicates a sense of maturity and responsibility among members. Anyango *et al* (2007) indicated that majority of VSL members are married (70%) and there was a relatively high proportion (20%) of single members whose mean age was 19 years. In terms of age, 96 (50.8%) of VSL group members are aged between 31-50 years meaning that majority of the members fall within the most economically active age groups who are capable of engaging in income generation activities and asset accumulation. This is a very active and productive age group which can contribute positively to the VSL activities by saving, borrowing and repaying loans effectively. Age had significant positive effect on loan repayment. Hence, age is hypothesized to have negative effect on loan repayment (Oladeebo and Oladeebo, 2008).

Majority of the VSL members 126 (66.7%) have low levels of education with only 1 (0.5%) of the respondents having college/ university level of education. Higher levels of formal education enables borrowers to comprehend more complex information, keep records, conduct basic cash flow analysis and generally speaking, make the right investment decisions. This may have a negative effect on the influence of household income distribution on loan repayment among group members. Majority of the VSL members 134 (70.9%) have high number of dependents within the households, with about 148 (78.3%) supporting between 1- 6 children. This could be the reason for adopting VSL methodology to cushion them against the increasing pressure on limited households' resources. This implies that the VSL members have larger households which means high dependency ratio and this may have high household expenditures and affect loan repayment negatively. The study revealed that majority of the respondents 96 (50.8%) are engaged in small businesses while 62 (32.8%) practice farming. This findings imply that majority of the VSL group members 168 (88.9%) are engaged in economic activities which generate income for household expenditure and VSL activities i.e. savings, borrowing and repayment of loans. It underscores the fact that most rural communities engage in subsistence farming and small scale businesses which the VSL group members are not an exception. The results also confirm that the area of residence has a great effect on the type of occupation and income and as expected there of the primary source of income for households in this area is farming and self-employment (Apopa 2010). It is assumed that a farmer who engage in off-farm income generating activities are less likely to default in loan repayment as they may use income from off- farm sources to support loan repayment. This finding in Rachuonyo North district may influence loan repayment positively because members are encouraged to take loans to boost their businesses and repay back from profits and income from the businesses. This finding further indicate that majority of the respondents 142 (75.1%) earn an average monthly income ranging between 1001-10,000, which is fair compared to the area of residence and target group. This finding is supported by empirical evidence which show that, among the poor, those participating in programs who had access to financial services were able to improve their well-being both at the individual and household level much more than those who did not have access to financial services. For this study therefore, the high number of respondents with fair average monthly income could be as a result of their participation in VSL activities, farming and small businesses. The study further revealed that majority of the respondents 188 (99.5%) have applied and received loans in the last 6 months, with 67 (35.4%) of the respondents indicating that they took loans for boosting or starting small businesses. This finding concur with World Bank Report (1999) which point out that the financial institutions provide small start capital as well as operating expenses to new business. But without very careful management, credit can quickly put you out of business. This therefore implies that these two observations may have either positive or negative influence on loan repayment considering other factors such as management of the businesses; if the businesses are managed well then loan repayment will be sustained but if they are not managed well then loan repayment may be a challenge to the VSL group members. In addition, majority of the respondents 167 (88.4%) used the loans on intended purpose and only 22 (11.6%) of the respondents did not use the loan on the intended purpose due to emergencies. This finding implies that majority of the VSL members only take loans that have been planned for and based on actual needs at the household level. This finding in Rachuonyo North district may influence loan repayment positively because majority of the members use loans on intended purposes and more so investment reasons such as operating small businesses.

The first objective of the study sought to establish the extent to which household expenditure on food influence loan repayment among VSL group members in Rachuonyo North District. Based on household daily meal plan, findings of the study revealed that majority of respondents142 (75.1%) took their meals thrice per day, 39(20.6%) of the respondents take meals twice a day while only 8(4.2%) of the respondents indicated that they take meals once a day. This is an indication that most VSL group members spent massively on food daily. This insinuates that if the amount of money spent on food is borrowed, VSL group members may most likely find it difficult to repay such loans since food consumption is not an investment and money spent on it may not be recovered easily. VSL members interviewed indicated that 48(25.4%) obtain their food from the farm while majority of the respondents 140(74.10%) obtained food from the market. This clearly means majority of respondents purchase food from the market and therefore implies that if the money is borrowed; much will be spent without replacement, which in the final end, loan repayment becomes a challenge. Considering occupation of the VSL members, 62 of the respondents (32.8%) practice subsistence farming but only 9 (4.8%) take loans for business purposes, then this findings could also mean that possibly the yields obtained from the farms are normally very low and therefore cannot sustain the needs of the family in terms of food which forces majority of the members to relay on the market for food. This results confirms the above finding in that considering the average monthly income spent on food, majority of respondents 152(80.4%) spent an average of between kshs 1000-6000 per month. This clearly shows that VSL group members spent colossal amounts of money of food, an indication that if the money spent was borrowed, repayment would be nearly impossible considering the fact that money spent on food is not reversible.

The second objective of the study examined the influence of household expenditure on education related expenses on loan repayment among VSL Group members. Looking at the number of VSL members children in schools, the study indicated that majority of respondents 148 (78.3%) had 1-6 children in school. This is a clear indication that majority of respondents were burdened with responsibility of fees payment for education of their children, an aspect which could easily exhaust their financial viability particularly if the source of money was not renewable. On Levels of Schooling (Grades), the study revealed that majority of respondents 61(32.3%) had children in both primary and secondary levels. Considering the average annual expenses on education related costs, findings of the study revealed that majority of respondents 44(23.3%) spent an average of above sh.15000 annually towards education of their children. This finding indicate that majority of VSL group members spent massively towards the education of their children which could easily throw them into a financial imbalance particularly if the money spent is from an exhaustible source and thus have a negative influence on loan repayment. However, education can be treated as a consumable or an investment considering short term and long term economic implications respectively. This result confirms studies conducted by (Bils and Klenow, (2000) who observed education from an investment point of view and asserted that human capital formation has been recognized as an effective tool for reducing poverty in the long run.

The third objective of the study assessed the extent to which income generating activities (IGA) within participating households influenced loan repayment among VSL group members. Findings of the study revealed that the highest proportion of VSL group members engage in both shop keeping business 27(14.3%) and grocery business 46(24.3%). On sources of capital for business, study finding revealed that own savings 47(24.9%) and VSL loan 64(33.9%) took the lead as sources of capital for VSL group members. Based on this findings, business capitalization for VSL group members was mainly through own savings 47(24.9%) and VSL loan 64(33.9%). This finding relates to findings by Kibas (2001) which states that on startup capital, personal savings and money from relatives are normally the least expensive. However, this factor may have negative impact on the financial position of the personal savings are vulnerable to personal use at the expense of the business. Looking at average monthly income from business, the researcher established that majority of VSL group members 148(78.3%) obtain an average of between kshs.1000-10,000 as income from their businesses. This is a clear indication that VSL group members who invested their income in business are capable of sustaining repayment of their VSL group loans using proceeds from their businesses.

Further considering the uses of income from business in order of priority, majority 119(63.0%) of VSL group members use proceeds from their business in buying food while a very small number 4(2.1%) use the proceeds to expand their businesses. This is detrimental to the survival of the businesses since money spent on purchase of food is exhaustible i.e. cannot be recovered back, a move that can easily paralyze the business in the long run. It is advisable that proceeds from the business be ploughed back into the business to enable the business establish a wider financial base which can guarantee it financial security and by extension perpetual existence.

The last objective of the study was to determine the extent to which assets acquired with loans influence loan repayment among VSL group members. On types of assets acquired by respondents using VSL loan, the study revealed that majority of respondents 89(47.1%) acquired livestock using loan from VSL group. This can imply that the livestock will grow/ increase in number and as a result, add monetary value with time which by extension can enable VSL group members (who used their loans to purchase livestock) repay their loans with proceeds from sale of livestock without straining. On sources of income to purchase the asset, the study highlighted that majority of respondents sourced their money for asset acquisition from VSL group loan, 25(13.2%) while 25 (13.2%) of the respondents sourced their money for asset acquisition from income from small businesses. This finding reveal that majority of the respondents source their money for asset acquisition from VSL group loan, which can imply that VSL group loans have positively impacted on the lives of its members by empowering them to purchase assets particularly those who are in a position of repaying the loan. The researcher finally looked at challenges faced by respondents while repaying the VSL loans. Findings of the study reveal that majority of respondents 153 (81.0 %) did not experience challenges in repaying loans used for purchase of assets. 28(14.8%) cited inadequate funs as major challenge in repaying VSL loans, 7(3.7%) cited short time frame as their major challenge in loan repayment while only 1 (0.5%) respondent mentioned other reasons such as unpreparedness as the main un-doing in repaying the VSL loan. This could be attributed to the fact that the assets could be sold to offset the loan at the appropriate time. This can be supported by the fact that majority of respondents 89(47.1%) acquired livestock using loan from VSL group, which implies that the livestock can grow/ increase in number and as a result, with time add monetary value which by extension can enable VSL group members (who used their loans to purchase livestock) repay their loans with proceeds from sale of livestock without straining.

5.3 Conclusion

Majority of VSL group members spend heavily on food daily because they eat three meals a day and depend on the market as their main source of food. This implies that if the amount of money spent on food is borrowed, then VSL group members may most likely find it difficult to repay such loans since food consumption is not an investment and money spent on it may not be recovered.

Majority of VSL group members have between 1 – 6 children mainly in primary and secondary schools and therefore spent most of their income on education related expenses. This massive household expenditure on education could easily throw them into a financial imbalance particularly if the money spent is from an exhaustible source. This is because; education is both consumption and an investment when looked at from the short term and long term economic lenses respectively.

The study revealed that the highest proportion of VSL group members engage in small scale businesses i.e. shop keeping and grocery businesses with most of them acquiring capital from own savings and VSL group loan. The average monthly income from businesses was established to be between sh.1000-10000 for majority of the members which is mostly spent on food. This can be detrimental to the survival of the businesses since money spent on purchase of food is exhaustible i.e. cannot be recovered back, a move that can easily paralyze the business in the long run.

The study further revealed that majority of the respondents acquired assets in form of livestock (sheep, goats, chicken), household wares, farming equipment and bicycle using VSL group loan, but did not face many challenges in repaying the loans. This is a clear indication that that VSL group loans have positively impacted on the life of its members by empowering them to purchase assets particularly those who are in a position of repaying the loan. When loans are associated with an increase in assets, the vulnerability of the very poor is reduced and their poverty situation improves (Hulme and Mosley, 1996).

5.4 Recommendations

Based on the findings and conclusions drawn above, this study makes the following recommendations:

1. The first objective established the extent to which household expenditure on food influence loan repayment among VSL group members in Rachuonyo district. The study recommends that the food security of the VSL group members should be addressed by the Ministry of Agriculture and other stakeholders working in the area to cushion members against high spending of family income on food. This can be done through active involvement of agricultural extension workers and the current government input subsidy scheme.

2. In the second objective the study examined the extent to which household expenditure on education influence loan repayment among VSL group members in Rachuonyo district. The study recommends massive awareness creation on the available sources of funds for school related expenses and creation of linkages between the VSL group members and sources of money for school related expenses such as CDF, LATIF funds, foundations, corporate organizations like Equity Bank. This will reduce the burden of education related expenses among the VSL group members
3. In the third objective, the study assessed the extent to which income generating activities (IGA) within participating households influence loan repayment among VS & L group members in Rachuonyo District. The study recommends trainings on business management and financial management skills to VSL group members, which will make them spend their income from businesses prudently. It is advisable that proceeds from the business be ploughed back into the business to enable the business establish a wider financial base which can guarantee its financial security and by extension perpetual existence.
4. In the fourth objective, the study determined the extent to which assets acquired with loans influence loan repayment among VS & L group members in Rachuonyo District. The study recommends that this should be encouraged by strengthening the VSL groups' activities for them to be sustainable. This can be done through regular follow ups by staffs, facilitation of linkages with other financial institutions to access more funds to boost their loans portfolio.

5.5 Contribution to the Body of Knowledge

Objectives	Contribution to the Body of Knowledge
1. To establish the extent to which household expenditure on food influence loan repayment among VSL group members in Rachuonyo North District.	Despite the fact that VSL group members know that use of family income especially VSL loan leads to challenges in repayment since food is a consumable, there still exist high expenditure among members due to poor yields from farms and high dependency ratio
2. To examine the extent to which household expenditure on education influence loan repayment among VSL group members in Rachuonyo North District.	Majority of VSL group members spent most of their income on education related expenses because of the many dependent children in primary and secondary schools. This massive household expenditure on education could easily throw them into a financial imbalance particularly given their main source of this income is VSL loans.

3. To assess the extent to which income generating activities (IGA) within participating households influence loan repayment among VS & L group members in Rachuonyo North District.	Majority of VSL group members use VSL loans and own savings to operate small scale businesses i.e. shop keeping and grocery businesses, however majority of them prioritize expenditure on food from the income obtained from business rather than ploughing back the income into the business. This can be detrimental to the survival of the businesses
4. To determine the extent to which assets acquired with loans influence loan repayment among VS & L group members in Rachuonyo District	Majority of VSL group members acquired assets in using VSL group loan, but did not face many challenges in repaying the loans. This is a clear indication that that VSL group loans have positively impacted on the life of its members by empowering them to purchase assets.

5.6 Suggestions for Further Research

Despite the findings by this study, there are some more areas that need further research to be able to understand the problems better;

a) While undertaking the study it was apparent that there are other external factors that influence loan repayment among VSL group members. Such factors include loan size, age of member and time frame for repayment. It is therefore suggested that a similar study be undertaken on these factors to determine their influence on loan repayment among VSL group members.

b) The study suggests that further studies should be carried out to establish the influence of trainings and technical follow ups provided by Child Fund staff on loan repayment among VSL group members.

c) A similar study should be undertaken in the neighboring districts for comparison

This study did not delve into these issues yet such information is necessary for proper planning and implementation of microfinance projects among rural communities.

REFERENCES

Adams, D.W. and Nehman, G.I., (1979). Borrowing costs and the demand for rural credit. *Journal of Development Studies*, 15 (2), 165-176.

Allen, H. (2002). CARE International's VS&L Programme in Africa: Microfinance for the Rural Poor that Works.

Allen, H. and P. Hobane (2004). Impact Evaluation of Kupfuma Ishungu Zimbabwe.

Allen, H. and M. Staehle (2006). Village Savings and Loan Associations. Programme Guide. Field Operations Manual Version 2.0.

Allen, H. and Bekele, F., (2008).*Women's Enterprise Development Project Final evaluation*. Farm Africa and VSL Associates, Addis Ababa, Ethiopia and Solingen, Germany.

Allen, H., (2009). *Impact and Programme Evaluation of Plan and Community Vision's joint VSL Programme in Uganda*. VSL Associates and Plan International, Solingen.

Allen, H. and Panetta, D., (2010). *Savings Groups: What Are They?* The SEEP Network, Washington DC.

Allen, H. and Staehle, M.,(2007), *Programme Guide - Field Operations Manual version 3.1*. VSL Associates, Stuttgarten, downloaded from vsla.net.

Amin, M. (2005) *Social Science research: conception, methodology and analysis.*

Anderson, S. and Baland, J., (2002). The Economics of ROSCAs and Intrahousehold Resource Allocation. *Quarterly Journal of Economics*, 117, 963-995.

Anderson, S., Baland, J., and Moene, K., (2009). Enforcement in informal saving groups. *Journal of Development Economics*, 90 (1), 14-23.

Angrist, J., and Pischke, J., (2009). *Mostly harmless econometrics: an empiricist's companion*. Princeton University Press.

Anyango, E. (2005). CARE Malawi Central Region Livelihood Security Project Impact Assessment Report on Village Savings & Loans Component (VS&L)

Apopa, F. O., (2010). *Influence of women Participation in VSLA schemes on their socio economic status.* A case of CARE Kenya's Program in Kachien Rachuonyo District.

Armendariz de Aghion, B. and Morduch, J.,(2005). *The economics of microfinance*. MIT Press, Cambridge, Mass.

Ashe, J., (2002). A Symposium on Savings-Led Microfinance and the Rural Poor. *Journal of Microfinance*, 4 (2), 129.

Ashraf, N., Karlan, D., and Yin, W., (2010). Female empowerment: Impact of a commitment savings product in the Philippines. *World Development*, 38 (3), 333-344.

Banerjee, A. and Duflo, E., (2009). The Experimental Approach to Development Economics. *Annu. Rev. Econ*, 1, 151-178.

Banerjee, *et a*l., (2009). *The miracle of microfinance? Evidence from a randomized evaluation*. Financial Access Initiative and Innovations for Poverty Action, Working Paper.

Beck, T., Kunt, D. A & Honohan, P., (2009). *Access to Financial Services: Measurement,*

Becker, G. S. (1964). Human capital. New York: Columbia University Press.

Belanger, P. & Tuijnman, A.(1997). The "silent explosion" of adult learning. In: P. Belanger, & A.

Besley, et al., (1993). The economics of rotating savings and credit associations. *The American Economic Review*, 792-810.

Besley, et al., (1994). Rotating savings and credit associations, credit markets and efficiency. *The Review of Economic Studies*, 61 (4), 701-719.

Besley, T. and Coate, S., (1995). Group lending, repayment incentives and social collateral. *Journal of Development Economics*, 46, 1-18.

Bloom, S., (1984). Accounting for no-shows in experimental evaluation designs. *Evaluation Review*, 8 (2), 225.

Bouman, F., (1995). Rotating and accumulating savings and credit associations: A development perspective. *World Development*, 23 (3), 371-384.

Brannen, C., 2010, *An Impact Study of the Village Savings and Loan Association (VSLA) Program in Zanzibar, Tanzania*. BA Thesis, Wesleyan University, Middeltown.

Impact, and Policies. World Bank Research Observer. 2009; 0: 1kn008v1 – 2

Calomiris, W., and Rajaraman, I., (1998). The role of ROSCAs: lumpy durables or event insurance? *Journal of Development Economics*, 56 (1), 207-216.

CARE Kenya, (2000). *Dak Achana End term Evaluation report*. CARE Kenya, Unpublished

CARE Kenya, (2009). *COSAMO – PLUS Evaluation Report.* CARE Kenya, Unpublished

Carter, M.R., (1988). Equilibrium credit rationing of small farm agriculture* Journal *of Development Economics*, 28 (1), 83-103.Methods for assessing community-managed microfinance 34

Carter, R. and Zimmerman, J., (2003). Asset smoothing, consumption smoothing and the reproduction of inequality under risk and subsistence constraints. *Journal of Development Economics*, 71 (2), 233-260.

Chao-Beroff, R. (2003).Rural savings Mobilization in West Africa: Guard against Shocks or Build an Asset Base? Micro Banking Bulletin

Chirwa E. W. (1997), "Econometric Analysis of the Determinants of Agricultural Credit Repayment in Malawi", *African Review of Money, Finance And Banking*, Vol.16 No.2

Coleman, B.E., (1999). The impact of group lending in Northeast Thailand. *Journal of Development Economics*, 60 (1), 105-141.

Collins, et al., (2009). *Portfolios of the Poor: How the World's Poor Live on $2 a Day*. Princeton University Press, Washington DC.

Daley-Harris, S., (2009). *State of the Microcredit Summit Campaign Report 2009*. Microcredit Summit Campaign, Washington DC.

Danida, (2006). *Evaluation Guidelines*. Danish Ministry of Foreign Affairs, Danida, Copenhagen.

Deaton, A., (1992). *Understanding consumption*. Oxford University Press, Oxford.

Deaton, A., 2001. Counting the world's poor: Problems and possible solutions. *WorldBank Research Observer*, 16 (2), 125-147.

Dercon, S., (2002). Risk, Coping Strategies, and Safety Nets. *The World Bank Research Observer*, 17 (2), 141-166.

Doka, D., and Mossige A., (2001). CARE International au Niger Project Proposal prepared for NORAD

Duflo, E., et al., (2006). *Using randomization in development economics research: A toolkit*. National Bureau of Economic Research, Cambridge MA, Technical Working Paper 333.

Dupas, P., and Robinson, J., (2009). Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *NBER working paper*.

Ghatak, M. and Guinnane, T. (1999). The economics of lending with joint liability: theory and practice. *Journal of Development Economics*, 60, 195–228.

Glenn, D.I. (1992), *Determining Sample Size*, IFAS, Florida USA.

Grameen Bank, (2010). *Grameen Bank At A Glance*. Grameen Bank website (grameeninfo.

org), retrieved May 2010, Dhaka.

Grant, W., J and H. Allen (2002). "CARE's Mata Masu Dubara (MMd) program in Niger: Successful financial intermediation in the rural Sahel." Journal of Microfinance **4**(2):

Gugerty, M.K. (2005). *You Can't Save Alone: Commitment in Rotating Savings and Credit Associations in Kenya*. U.S.A., University of Washington.

Gugerty, M.K. (2007). You Can't Save Alone: Commitment in Rotating Savings and Credit Associations in Kenya. *Economic Development & Cultural Change*, 55 (2), 251-282.

Hartley, D. and H. Rijali (2003). Final project review Jozani-Chwaka Bay Conservation Project (KCBCA) phase III Zanzibar Tanzania

Heckman, J.J., (1996). Randomization as an instrumental variable. *The Review of Economics and Statistics*, 78 (2), 336-341.

Hugh A.,(2005).Care's village- based savings and Credit programme: Successful Financial Intermediation in rural Africa. Johannesburg, South Africa.

Jain, P.S., (1996). Managing Credit for the Rural Poor: Lessons from the Grameen Bank. *WorldDevelopment*, 24 (1), 79-89.

Johnson, S., M. Malkamäki, et al. (2006). "Tackling the 'frontiers' of microfinance in Kenya:

Kasomo D. (2006). *Research Methods in Humanities and Education*. Zapf Chancery Eldoret, Kenya

Karlan, D., (2001). Microfinance Impact Assessments: The Perils of using new members as a control group. *Journal of Microfinance*, 3 (2), 75-85.

Karlan, D. and Zinman, J., (2010). Expanding credit access: Using randomized supply decisions to estimate the impacts. *Review of Financial Studies*, 23 (1), 433-464.

Kathuri, N.J. & Pals A.D. (1993). *Introduction to educational research.* Egerton: Egerton University Education Book Service.

Kibaara, B., (2006). *Rural Financial Services in Kenya: What is working and why?* Working Paper No 20/2006, Egerton University, pp3

Kothari C.R. (2004). *Research Methodology. Methods and Techniques.* New Age International (P) Limited, India

Li, Q. S., (1995). Foreign investment on a large scale. In Shenzhen special economic zone yearbook 1995 (pp. 88-91). Shenzhen: Shenzhen Special Economic Zone Publishing House, Shenzhen.

Littlefield, E., Murdoch, J. & Hashemi, S. (2003). *Is microfinance an effective strategy to reach the millennium development goals?* Focus note 24. Consultative Group to Assist the Poorest. www.cgap.org 17/12/2008

Liu, G. G. (1985). Research on development strategies of Shenzhen special economic zone.

Mincer, J. (1974). Schooling, experience, and earnings. New York: Columbia University Press.

MkNelly, B. & Dunford, C. (1999). *Impact of Credit with Education on Mothers and their young Children's Education: CRECER Credit with Education Program in Bolivia*. Freedom from Hunger Research Paper No. 5 (Davis, Calif….. Freedom from Hunger)

Morduch, J., (1995). Income Smoothing and Consumption Smoothing. *The Journal of Economic Perspectives*, 9 (3), 103-114.

Mugenda, O.M. & Mugenda A.G., (1999). *Research Methods. Quantitative and Qualitative Approaches.* Acts Press, Nairobi

Mugenda, O.M.&Mugenda, A. G. (2003), *Research Methods: Quantitative & Qualitative Approaches*, Acts Press, Nairobi Kenya.

Murray, J. and Rosenberg, R., (2006). Community-managed loan funds: which ones work? *Small Enterprise Development*, 17 (3), 13-27.

Mustafa, S. Ara, I. & Banu, D., (1996). *Beacon of Hope: An Impact Assessment of BRAC's Rural Development Program* (Dhaka, Bangladesh; BRAC)

Oguwa, O. S., (2012). Impact of village savings and loans schemes on wellbeing of Orphans and vulnerable children in Kisumu West District, Kenya

Oladeebo JO, Oladeebo OE (2008). Determinants of Loan repayment among smallholder farmers in Ogbomoso Agricultural zone of Oyo State, Nigeria. J. Soc. Sci. 17(1):59-62.

Orodho, A.J. (2003). *Essential of Education and Social Sciences Research Method.*

Nairobi; Masola Publishers.

O so, Y.W& Onen, D. (2009) *A General Guide to Writing a Research Proposal and Report*, Jomo Kenyatta Foundation, Nairobi, Kenya.

Psacharopoulos, G. (1985). Returns to Education: A further international update and implications. Journal of Human Resources 20, 583-604.

Psacharopoulos, G. & Woodhall, M. (1985). Education for development: Analysis of investment choices. New York: Oxford University Press.

Psacharopoulos, G. (1994). Return to investment in education: A global update. World Development 22 (9), 1325-1343.

R. W. Rumberger (Ed.), The future impact of technology on work and education (pp. 194-214). London: The Falmer Press.

Roslan AH, Karim MZA (2009). Determinants of Microcredit Repayment in Malaysia: The case of Agrobank. Hum. Soc. Sci. J. 4(1):45-52.

Schreiner, M., (2011). *A Simple Poverty Scorecard for Malawi*. Microfinance Risk Management, Kansas City.

Stiglitz, J.E. and Weiss, A., (1981). Credit Rationing in Markets with Imperfect Information. *American Economic Review*, 71 (3), 393-419.Methods for assessing community-managed microfinance 35

The Iris Center, (2007). *Manual for the Implementation of USAID Poverty Assessment Tools*. USAID.

Tuijinman (Ed.), New patterns of adult learning: A six-country comparative study (pp. 1-16). Oxford: Pergamon.

Tromp L.A.D. and Kombo K.D. (2006). *Proposal and thesis writing*. An Introduction, Nairobi, Kenyap: Paulines publications Africa.

World Bank (2000). *Rural Finance Services: Implementing the banks Strategy to Reach the Rural Poor*.

Wright, G., 1999. Replication - Regressive Reproduction or Progressive Evolution? *Journal of Microfinance*, 2 (2), 61-82.

Xiao, J. & Tsang, M. C. (1994). Costs and financing of adult education in Shenzhen, China International Journal of Educational Development 14 (1), 55-73.

Xiao, J. (1996a). A study of the relationship between organizational factors and the transfer of training in the electronics industry in Shenzhen, China. Human Resource Development Quarterly 7 (1), 55-73.

Xiao, J. (1996b). Multi-ownership, management and productivity: A case of Shenzhen. Paper presented at the International Conference on Co-ordinated Development Among Regions, in China's Economic Reform and Social Development, Dec. 11-12, 1996, Hong Kong. Available in the conference proceedings (pp. 421-431).

APPENDICES

Appendix I: Letter of Transmittal

Edith Apiyo Akwanyi
University of Nairobi
P.O. Box 584 – 40100
Kisumu
April, 2013

Dear Sir/Madam,

RE: MASTERS RESEARCH PROJECT

I am Edith Apiyo Akwanyi, a student at the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, pursuing Master of Arts Degree in Project Planning and Management. I am currently carrying out a study on Influence of Household Income Distribution on Loan Repayment among Voluntary Savings and Credit groups in Rachuonyo North, District.

You have been selected to participate in this study. The purpose of this letter is to humbly request you to participate in the study by completing the attached questionnaire. Your contribution is crucial and will ensure the success of this study. Any information provided will be treated with utmost confidentiality and will only be used for the purpose of this study.

Your assistance and cooperation is highly appreciated.

Yours sincerely,

Edith Apiyo Akwanyi

Appendix II: Interview Schedule for Key Informants

(Group Leaders/ Officials)

Instructions: Greet the respondents, introduce yourself and explain the purpose of the interview. Explain to the respondent that despite the recording of the interview responses, the information she/ he gives will be kept strictly confidential to protect her/ his identity and will not be disclosed to anyone else. Ask him/ her to provide as honest answers as possible.

1. How would you define Village Savings and Loans
2. How is VSL different from other Microfinance services
3. In your opinion, what are the benefits of being a member of VSL groups
4. What are the most common reasons why members take loans within the VSL groups (List them in order of priority)
5. How do members repay loans within the groups? Do they have challenges in repaying the loans?
6. Have you ever had members not paying loans on time or defaulting (not paying at all)?
7. If Yes in question 6 above, then what are the causes for members to default or not paying loans on time?
8. As a group, how do you handle loan defaulters?
9. How do the affected members (defaulters) handle the situation?
10. What are the general challenges experienced in VSL groups and how have the groups coped with these challenges?
11. In your opinion, what do you think can be done to minimize defaulting or late payments of loans?

Thank you for your time and responses

Appendix III: Interview Schedule for Key Informants

(Local Leaders/ ChildFund Staff/ Relevant Government Officials)

Instructions: Greet the respondents, introduce yourself and explain the purpose of the interview. Explain to the respondent that despite the recording of the interview responses, the information she/ he gives will be kept strictly confidential to protect her/ his identity and will not be disclosed to anyone else. Ask him/ her to provide as honest answers as possible.

1. Are you aware of any Voluntary Savings and Loan groups within Rachuonyo North District
2. Please describe the nature of activities within the VSL groups and the financial services that members have access to? What do you think of these financial services?
3. In your Opinion, what are the benefits that members accrue by participating in VSL groups?
4. What are the most common reasons why members take loans within the VSL groups (List them in order of priority)
5. How do members repay loans within the groups? Do they have challenges in repaying the loans?
6. If Yes in question 6 above, then what are the possible reasons for such challenges and how do the affected members handle the situation?
7. What are the general challenges experienced by VSL group members?
8. How do they cope with these challenges?
9. In your Opinion, What are some of the suggestions/ recommendations that can improve the VSL activities in this community?

Thank you for your time and responses

Appendix IV: Individual Households Questionnaire

Statement to be read before the interview begins:
The information provided during this interview will be treated as highly confidential and is collected for research purposes only. Participation in this study will not affect one's membership or role in the VSLA program. The purpose of this study is simply to gain a better understanding of the influence of income distribution on loan repayment, so that its efforts may be improved so as to better serve its members. Therefore, we ask you to feel at ease and to provide frank and honest answers without fearing any persecution or disclosure. Researchers are only interested in analysis of collective feedback and not individual respondent information.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. **Date of Interview……../……….2013** **day/ month/ year**
2. **Interviewer ID……………………….** **Questionnaire**
3. **Sub location………………………**
4. **Name of VSL group………………………..**

5. Gender of Household head (please tick appropriate box)

   Male ☐

   Female ☐

6. How old are you? (choose and tick the box representing appropriate age bracket)

   15-20 ☐ 20-30 ☐ 31-40 ☐

   31-40 ☐ 41-50 ☐ 51-60 ☐

   61 and above ☐

7. What is your marital status (choose appropriate box)

Single [1] Married [2] Separated [3] Widowed [4]

Divorced [5]

8. What is your highest level of Education? (choose appropriate box)

Non [1] Primary [2] Secondary [3]

University [4] College [5]

9. How many people live within your household (choose appropriate box)?

None [1] 1-3 [2] 4-6 [3] 7-9 [4] 10+ [5]

10. How many children (dependents) do you have (tick appropriate box)?

None [1] 1-3 [2] 4-6 [3] 7-9 [4] 10+ [5]

11. What is your Occupation?(choose appropriate box)

No Occupation [1] Farmer [2] Small business [3] Casual laborer [4]

Self-employed [5] Employed [6] others (specify) [7]

12. What is the family average monthly income? (choose one appropriate box)

Less 1000 [1] 1001- 5000 [2] 5001-10000 [3] 100001-15000 [4]

15001+ [5]

13. Have you ever applied for a loan(s) from the VSL group, in the last 16 months?

Yes [1] No [2]

If the answer to question 16 is 1 (yes), then answer question 17 to 20

14. How many times, how much did you receive, for what purpose and what was the loan used for (indicate as many as possible)?

No of loan	Amount (kshs)	Purpose	Actual use
1.			
2.			
3.			
4.			
5.			

Hint: Loan Purposes (please choose all boxes that apply, multiple responses possible)

- Food 1
- Education related reasons 2
- Health related reasons 3
- Shop-keeping 4
- Farming 5
- Buying livestock 6 (specify)
- Others 7 (Specify)…………………………..

15. If the loan was not used for the purpose requested for, what was the reason for this and how did you manage to repay the loan?

…………………………………………………………………………………………………

…………………………………………………………………………………………………

………………………………………………………………………………………………..

SECTION B: HOUSEHOLD EXPENDITURE ON FOOD

16. What is the household's daily meal plan?

22. What are the sources of daily food?

From the farm [1] purchased from the market/shop [2]

23. If purchased, what is the average monthly income spent on food(please choose one appropriate box)?

1000 – 3000 [1] 3001- 6000 [2] 6001- 9000 [3] 9001 -12000 [4]

12001 and above [5]

24. What are the sources of money spent on food (choose all boxes that apply multiple responses possible)?

- Income from small businesses [1]
- Own savings [2]
- From friends/ relatives/well wishers [3]
- Loan from VSL group [4]

If the response to question 24 above is 4(loan from VSL), then answer question 25

25. Did you comfortably repay the loan? (choose one appropriate box)

Yes [1] No [2]

If the response to question 25 above is 2 (No), then answer question 26

26. , How did you manage the situation?

…………………………………………………………………………………………………

. SECTION C: HOUSEHOLD EXPENDITURE ON EDUCATION

27. How many children within your household attend school?

28. What are the levels of their classes?

29. Do you pay school fees/ levies for the children?

Yes [1] No [2]

If the response is Yes in question 29, then answer question 30

30. How much did you spend on fees (kshs) for the children within your household in the last 16 months (please choose one appropriate box)

Less than 1000 [1] 1001 – 3000 [2] 3001 - 6000 [3] 6001 -9000 [4]

9001 -12000 [5] 12001- 15000 [6] 15000+ [7]

31. Other than school fees/ levies, how much did you spend on other scholastic materials (books, pens, uniforms, school shoes, bags and socks) in the last 16 months?(please choose one appropriate box)

Less than 1000 [1] 1001 – 3000 [2] 3001 - 6000 [3] 6001 -9000 [4]

9001 -12000 [5] 12001 and above [6]

32. What are the sources of money spent on education related expenses? (Please choose all that apply, multiple responses possible)

- Income from small businesses [1]
- Own savings [2]

- From friends/ relatives/well wishers [3]
- Bursary support [4]
- Loan from VSL group [5]

If the response to question 32 is 5 (loan from VSL) then answer question 33

33. Did you comfortably repay the loan?

Yes [1] No [2]

If the response to question 33 is 2 (No) then answer question 34

34. How did you manage the situation?

……………………………………………………………………………………………………

……………………………………………………………………………………………………

SECTION D: HOUSEHOLD INCOME GENERATION ACTIVITIES

35. Are you currently engaged in any income generation activity? (Please choose one appropriate box)

Yes [1] No [2]

If the response in question 35 is 1(Yes), then answer question 36 to 39

37. Which type of business (es) are you engaged in? (Choose all boxes that apply)

Shop keeping [1]

Groceries [2]

Fish mongering [3]

Any other (Specify) [4]

38. What is your average monthly income from business (es)? (Please choose one appropriate box)

1000 -5000 [1] 5001 -10000 [2] 10001 -15000 [3] 15000 and above [4]

39. Where did you get capital for the business? (Please choose all appropriate boxes)

- Own savings [1]
- Friends/ relatives/ friends [2]
- Loan from VSL group [3]
- Loan from microfinance (specify) [4]
- Other sources (specify) [5]

If response in question 39 is 3 (loan from VSL), then answer question 40

40. Did you face any challenges in repaying the loan? (Please choose one appropriate box)

Yes [1] No [2]

If response in question 40 is 1 (Yes), then answer question 41

41. How did you manage the situation?

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………

42. How do you spend the income from your business (es)? Please classify in order of priority

Uses of business income/Scale	**1**	**2**	**3**	**4**	**5**
For buying food					
For paying school fees for the children under my care					
For expanding/ establishing business					
For paying loan especially for VSL					
Others reasons (specify)					

Key: 5 – Strongly agree, 4 – Agree, 3 – Indifferent, 2 – Disagree, 1 – Strongly disagree

SECTION E: HOUSEHOLD ASSETS AND GROUP LOAN

43. Have you bought any assets in the last 16 months? ((Please choose one appropriate box)

Yes 1 No 2

If response in question 43 is 1 (Yes), then answer question 44- 47

44. What type of assets? (Please choose all appropriate boxes)

Land 1

Livestock (Specify) 2

Bicycle 3

Farm implement/equipment (specify) 4

Others (specify) 5

45. What was the source of money used to purchase the asset(s)? (Please choose one appropriate box)

Own savings 1

Friends/ relatives/ well wishers 2

Loan from VSL group 3

Income from family business 4

Income from microcredit (specify) 5

If response in 45 is 3 (loan from VSL,) then answer question 46.

Sources of loan repayment/Scale	1	2	3	4	5
From own savings					
Obtained money from friends/ relatives/ well wishers					
From business income					
Took another loan from somewhere else (micro credit)					
By saling assets					
From other sources (specify)					

Key: 5 – Strongly agree, 4 – Agree, 3 – Indifferent, 2 – Disagree, 1 – Strongly disagree

47. Do you face any challenges repaying loans used to buy assets?

Yes [1] No [2]

If response in 47 is 1 (Yes), then answer question 48

APPENDIX v: Time Schedule

Planned Activities		Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012
1	Problem identification	XXX						
2	Formulating objectives		XXX					
3	Labeling variables			XXX				
4	Review of related literature			XXX				
5	Formulating research design				XXX			
6	Research proposal writing and defense				XXX			
7	Corrections made to research proposal				XXX			
8	Seeking permission from National Council for Science and Technology					XXX		
9	Pilot testing instruments					XXX		
10	Instruments revision					XXX		
11	Data collection exercise					XXX		
12	Data analysis and report writing						XXX	
13	Final defense and final correction							XXX
14	Submission of final report							XXX

APPENDIX vi: Budget

	Activity	Sub-activities	Unit	Unit rate	Amount (KES)
1	Review of related literature	Travel costs	8	500	4000
		Lunches	8	300	2400
		stationery	2	150	300
		Internet costs	20	100	2000
2	Proposal writing	Photocopying	200	3	600
		Printing	20	10	100
		Binding	4	100	400
3	Proposal document corrections	Photocopying	200	3	600
		Printing	200	10	2000
		Binding	4	100	400
4	Enumerators training and instrument language translation	Meals	5	500	2500
		Allowances for enumerators	5	500	2500
5	Data collection instruments pilot testing	Photocopying	120	2	260
		Printing	40	10	400
		Allowances for enumerators	5	500	2500
		Air time for coordination	5	100	500
6	Instrument revision	Photocopying	1300	2	2600
		Printing	6	10	60
7	Data collection	Photocopying	1300	2	2600
		Printing	6	10	60
		Allowances for enumerators	5	2000	10000
		Air time for coordination	6	500	3000
8	Data Analysis and report writing	Meals	4	1000	4000
9	Printing and binding	Travel and accommodation		lump sum	40000
		Printing and binding	4	1500	6000
		TOTAL			**89780**

Appendix vii

Table of Sample Size selection

Size of Population	Sample size (n) Precision (e) of: ± 3%	± 5%	± 7%	± 10%
500	A	222	145	83
600	A	240	152	86
700	A	255	158	88
800	A	267	163	89
900	A	277	166	90
1000	A	286	169	91
2000	714	333	185	95
3000	**811**	**353**	**191**	**97**
4000	870	364	194	98
5000	909	370	196	98
6000	938	375	197	98
7000	959	378	198	99
8000	976	381	199	99
9000	989	383	200	99
10000	1000	385	200	99
15000	1034	390	201	99
20000	1053	392	204	100
25000	1064	394	204	100
50000	1087	397	204	100
100000	1099	398	204	100
>100000	1111	400	204	100

a = assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.

Source: Glenn, D. Israel (1992).

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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secretary@ncst.go.ke

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

Our Ref: **NCST/RCD/14/013/1334**

Date: **22nd July, 2013**

Edith Apiyo Akwanyi
University of Nairobi
P.O.Box 825-40100
Kisumu.

RE: RESEARCH AUTHORIZATION

Following your application dated ***17th July, 2013*** for authority to carry out research on ***"Influence of household income distribution on loan repayment among Voluntary Savings and Credit Groups in Rachuonyo North District, Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Rachuonyo North District** for a period ending **31st December, 2013.**

You are advised to report to **the District Commissioner and the District Education Officer, Rachuonyo North 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.

Hussein

SAID HUSSEIN
FOR: SECRETARY/CEO

Copy to:

The District Commissioner
The District Education Officer
Rachuonyo North District.

"The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development".

PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/Institution
Edith Apiyo Akwanyi
of (Address) University of Nairobi
P.O.Box 825-40100, Kisumu.
has been permitted to conduct research in

Location
Rachuonyo North District
Nyanza Province

on the topic: Influence of household income distribution on loan repayment among Voluntary Savings and Credit Groups in Rachuonyo North District, Kenya.

for a period ending: 31st December, 2013

PAGE 3

Research Permit No. NCST/RCD/14/013/1334
Date of issue 22nd July, 2013
Fee received KSH. 1,000

Applicant's Signature

For Secretary
National Council for
Science & Technology

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

GPK6055t3mt10/2011

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

(CONDITIONS—see back page)