IMPACT OF MICROFINANCE INSTITUTIONS ON POVERTY REDUCTION AMONG SMALLHOLDER FARMERS: CASE OF SELECTED SACCOS IN DODOMA URBAN AND KONGWA DISTRICTS

BY

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ABSTRACT

The study was conducted in Dodoma Rural and Kongwa districts both from Dodoma region in 2007 and the number of respondents was 160. This study aimed at examining the impact of micro finance institutions on poverty reduction among smallholder farmers. The paper focused on SACCOS' beneficiaries to know whether the credit provided have helped them to move out of poverty and the extent to which that has been done. This is because many have hailed microfinance as an effective means of assisting the" poor people" especially farmers by providing them with credit facilities to start economic enterprises as well as improving their livelihoods. However, there are many concerns related to the role of micro finance institutions (MFIs) in poverty reduction. The findings in this study revealed that the micro credits have impacted the activities and lives of beneficiaries in several positive ways as follows; owning valuable assets, household expenditure on basic needs, incomes from farm and off-farm activities, and house ownership, toilets and utilities. The most prominent problems faced by many smallholder farmers in Tanzania to join SACCOS in the study areas were mentioned as low income of household, lack of knowledge, being tied to other financial institutions and constitutional problems. In this study it is argued that the government ought to set favourable environment through subsidising the SACCOS, and educating the community on financial and operations guidelines of SACCOS.

The study concluded that SACCOS play a significant role in improving the conditions of smallholder farmers. This in because they not only help the smallholder farmers accessing financial services and invest in income generating activities but also they enable such individuals to solve fundamental problems in their families. Furthermore, the study recommends that SACCOS need to provide a range of services that cater for needs borrowers who want to serve.

DECLARATION

I ANYELWISYE, BROWN, do hereby declare to the Senate of the Sokoine University of Agriculture that the work represented here is my own work and has not been submitted for a higher degree in any University.

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DEDICATION

To my mother Emmy Namusomba, late beloved father Reuben Zacharia Kajange and Sister Elizabeth Nakajange who died in 1985 and 2002 respectively who laid my foundation.

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LIST OF ABBREVIATION

AMIZ	-	Association of Micro Finance Institutions in Zambia
BoT	-	Bank of Tanzania
CRDB	-	Cooperative Rural Development Bank
FFI	-	Formal Financial Institution
GB	-	Grameen Bank
IFI	-	Informal Financial Institution
IMFs	-	International Monetary Fund
IRDP	-	India’s integrated Rural Development
LDC	-	Less Developed Countries
MAFC	-	Ministry of Agriculture, Food Security and Cooperatives
MBT	-	Micro Bankers Trust
MFIs	-	Micro Finance Institutions
NGOs	-	Non-Governmental Organizations
NMB	-	National Micro-Finance Bank
NSSF	-	National Social and Security Fund
POSB	-	Post Office Savings Bank
PRIDE	-	Promotion of Rural Initiatives and Development Enterprise
RFIs	-	Rural Finance Institutions
SACCOS	-	Savings and Credit Cooperative Societies
SAPs	-	Structural Adjustment Programmes
SEDA	-	Sustainable Economic Development Agency
SFF	-	Semi-Formal Financial
SIDO	-	Small Industries Development Organisation

SSA	-	Sub-Saharan Africa
UMADEP	-	Ulugulu Mountain Agricultural Development Project
UNDP	-	United Nations Development Programme
URT	-	United Republic of Tanzania
USD	-	United States Dollar

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The government of Tanzania embarked on financial sector reforms in 1991, in order to create an effective and efficient financial system. The lynchpin of the reforms consisted in the governments' commitment to permit banking institutions to operate on commercial basis, making their business and management decisions free from outside interventions within the norms of prudential supervision. The principal elements of financial reforms includes liberalization of interest rates, elimination of administrative credit allocation, strengthening of Bank of Tanzania's role in regulating and supervision of financial institutions, restructuring of the state owned financial institutions and allowing entry of local and private banks into the market. These elements of financial sector reform were embodied in the banking and financial institutions Act 1991. The Cooperative Societies of Act of 1991 provided the basis for development of Savings and Credit Cooperative Societies (SACCOS) as privately owned and organised equity based institutions (Bikki *et al.,* 2003).

Despite the progress achieved in the mainstream banking system financial services to the poor and low-income households in the rural and urban areas they have been slow to develop and their access to the large segments of the population of financial service has remained stunted for a long time (Bikki *et al.,* 2003)**.** Thus to overcome this problem the government brought an alternative way of institutionalising financial services with the aim of improving access to credit for the rural poor. However, most of these services have been concentrated in urban areas making it difficult for rural people to access them. Moreover, the conditions attached to credit access in various financial institutions remain an obstacle to the many would be borrowers.

The government and other development agencies regard the formation of SACCOS as an answer to credit access problems and as the best alternative to improving rural productivity. However the usefulness of such micro credit institutions in solving the problems of the rural poor has not been studied extensively. Thus this study aims at investigating and evaluating the impact of credit services to smallholder farmers and how such credit has contributed to poverty alleviation and economic empowerment.

1.2 Problem statement and justification

Micro credit programmes have progressively increased over the last decades in Tanzania. Despite their increase in numbers, there is no evidence regarding the ability of micro credit to sustainably reduce poverty among rural poor. Also it is not clear whether the provision of credit will nod the poor into vicious circle of productivity and prosperity (Omari and Mtatifikolo, 1996). In Tanzania more and more funds are still put into similar micro credit programmes but poverty has remained widespread especially in rural areas. For example the Ulugulu Mountain Agricultural Development Project (UMADEP) has been involved in promoting Savings and Credits Cooperative Societies (SACCOS) parallel to the promotion of improved agricultural innovation but poverty is still persisting in the project area. Therefore this calls for the need to undertake a comprehensive study in order to come up with alternative answers as to the extent to which the smallholder farmers have benefited from linking with SACCOS since their establishment in early 1990s.The findings of this study will contribute to knowledge required by development planners, policy makers, NGOs and other stakeholders in designing appropriate programmes for optimal income generation and poverty reduction among smallholder farmers

1.4 Objectives of the study

1.4.1 General objective

The overall general objective is to assess the impact of micro-credit services on poverty reduction among smallholder farmers in Dodoma urban and Kongwa districts.

1.4.2 Specific objectives

(i) To determine economic activities undertaken by borrowers.

(ii) To assess the impact of micro credit services on poverty reduction among smallholder farmers.

1.4.3 Research questions

(i) What are the socio-economic activities undertaken by smallholder farmers?

(ii) What are the impacts of micro credit on poverty reduction among smallholder farmers?

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Overview

This chapter reviews the literature on the contribution of the microfinance institutions to poverty reduction among the smallholder farmers in Tanzania and other parts of the world. It is divided into eleven sections. The first section reviews the conceptual meaning of poverty, measurements of poverty, poverty in unequal world, poverty alleviation, strategies and policies for poverty alleviation, rural financial institution contribution to poverty reduction, micro finance and types of credit schemes, The effect of micro credit schemes in developing countries experiences of MFIs globally, Long-run effects of access to financial services on the assets accumulation, economic mobility and evaluation of well-being, The impact of micro-credit to class membership, the impact of micro credit to agriculture, Micro credit initiatives for equitable and sustainable development, The importance of institutions to economic development, Empirical evidence of micro credits as poverty reduction tool at different levels and empirical evidence of micro finance as a solution for poor will be discussed in eleventh section.

2.2 The concept of poverty

Poverty is described as the situation that emanates from lack of necessary capabilities and entitlements to satisfy human basic needs. This situation limits a person from acquiring security and assets, or from having power for decision-making (Chambers, 1983). About one –fifth of the world’s population is afflicted by poverty. Poverty can always exist in society where some or all of its members fail to attain a certain level of well-being considered by that society as a reasonable minimum standard of living (Bagachwa, 1994). Poverty is not only a state of existence but also a process with many dimensions and complexities. Usually it is characterized by deprivation, vulnerability (high risk and low capacity to cope) and powerlessness (Lipton and Ravallion, 1995). These characteristics impair people's sense of well-being.

The United Republic of Tanzania defines poverty by using income and non-income indicators including level of education, survival rate, nutritional status, clean and safe drinking water, social well-being and high vulnerability (URT, 1998). In order to understand poverty, it is essential to examine the economic and social context, including the state, markets, communities and household (Sen, 1999). Poverty differences cut across gender, ethnicity, age, residence (rural versus urban) and income sources. In households, children and women often suffer more than men while in the community, the rural poor suffer more than the urban ones. In order to understand poverty relations in rural areas and its effects on different groups, the assets owned by poor and those, which they have access to, should be examined for their links to economy (Jere, 1993).

2.3 Poverty measurements

Measurements of income poverty can be bared on both primary and secondary incomes. Primary incomes accrue in the form of primary claims of resources, which arise directly out of productive process of work and accumulation. This includes the earnings of labour process that is employment (self or hired), returns on rental property and from investments or productive assets (Jazairy *et al.*, 1992). Secondary incomes are the result of the transfer and social actions or interventions, which empower the recipients to actively engage in productive work such as investments in education, health, food security, sanitary facilities and environmental protection (Jazairay *et al.,* 1992). This study has adopted this definition in assessing the impact of micro credit on poverty reduction among smallholder farmers.

2.3.1 Poverty line

The measurements of poverty (magnitude, prevalence, intensity, severity and persistence) are the starting point for any logical step to intervention for purpose of eradication. This starts off with defining a poverty line, which divides the poor, and non- poor. The concept 'poverty line' is elusive and there still exists a significant debate on what this measure should be 'stating' for operational and policy purpose. However, in spite of the rich literature on poverty indices, empirical work has generally used indices, which at most give the aggregate indices and aggregate intensity of poverty (David, 1994; Kigoda and Mwisomba, 1995).

2.3.2 The 'Head count Ratio' index

The 'Head count Ratio' index measuring the incidence is a simple proportion of population whose income is below the poverty threshold or poverty line. This measure makes no distinction between the poor who may be close to the poverty line and those who may have no income at all (the real destitute, paupers and survivalists). This index is very insensitive to a decrease in incomes of poor, to income transfer among the poor and from the poor to the rich, and also to the degree of poverty. The other index uses the notion of the poverty gap. The poverty gap is defined as the average gap between the actual income of the poor and the poverty threshold as a proportion of the threshold (Jazairy *et al.,* 1992).

2.3.3 The Poverty Gap index

The poverty gap index measures the depth of poverty from the poverty line. This is the average gap between the actual income-expenditure of the poor and the poverty threshold. The average gap of the whole of the poor population can be calculated and expressed as a percentage of poverty thresholds that is income gap ratio (David, 1994). This measurement is also insensitive to the income distribution within the group of the poor people.

2.3.4 One composite index

One composite index defined by the simple product of the head count and poverty gap indices, measures incidence and intensity (Kigoda and Mwisomba, 1995). The head count ratio remains the most common used in large scale (national/regional) studies, which lack specific details necessary and relevant for the other indices. Thus using such concept of the World Bank estimates has revealed a worldwide decreases of absolute number of poor people living below poverty line (Under USD-I per day) from 1.4 billion in 1980s to 1.2 billion in 2000s (World Bank, 2001). However the average income in 20 richest countries is 37 times higher than that in the poorest 20, a ratio that doubled in the past 40 years. This ratio doubled because of lack of economic growth in the poorest counties (World Bank, 1993; World Bank 2003).

2.4 Poverty in unequal world

Of the world’s people, 2.8billion (almost half) live on less than two USD per day, and 1.2 billion, which is 20% of the world’s population, live on less than one USD per day. About 44% of those poor people living below one USD per day live in South Asia. In East Asia, the number of people living on less than one USD per day fell from around 420 million to

280 million between 1987 and 1998, despite the data setbacks of the financial crisis (World Bank, 2003). However in Latin America, South Asia and Sub-Saharan Africa (SSA) the number of poor people has been rising. On the other hand, in transition to market economies of Europe and central Asia, the number of people living on less than USD-1 a day increased more than twenty fold (see Fig-1).

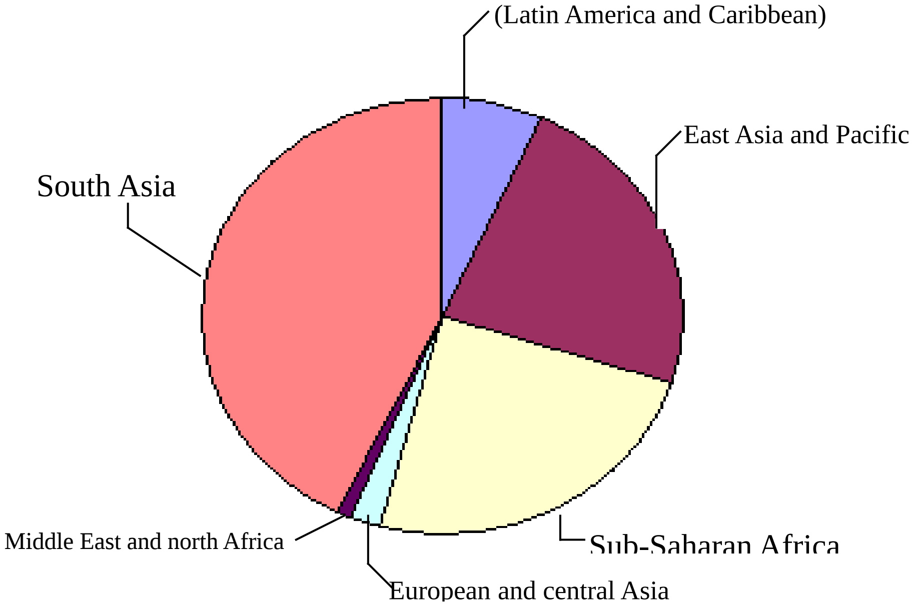

Figure 1: Distribution of population living on less than USD 1 per day, 1998

Source: World Development Report, 2001

2.5 Poverty alleviation

The term poverty alleviation was first conceived as a procedure or process of transforming the poor from one level to the other across a given threshold of income or consumption (Jazairy *et al.*, 1992). Poverty alleviation strategy is one of the means that were considered for adoption in the new paradigm of a sustained development as stipulated in the human development report of 1994 of United Nations Development Programme (UNDP, 1994). The present new paradigm conceives of poverty alleviation as a strategy for achieving a sustained increase in productivity and an integration of the poor into the process of growth (Jazairy *et al.*, 1992).

The strategy has initially received a global attention in order to replace the failed “trickle-down effect” approach for reducing poverty amongst Third World Countries (Mtatifikolo, 1994). This was based on the assumption that governments should concentrate on growth policies; and the result of growth would trickle down to the poor through primary and secondary incomes.

According to Ravallion and Datt (1999), the links among poverty, economic growth and income distribution have been studied quite extensively in recent literature on economic development. Absolute poverty can be alleviated if at least two conditions are met. First, if economic growth and /or mean income rise on a sustained basis. Second, if economic growth is neutral with respect to income distribution or reduce income inequality. Generally, poverty cannot be reduced if economic growth does not occur. However, the persistence of poverty of a substantial population can dampen the prospects for economic growth.

Furthermore, it has been reported that the initial distribution of income and wealth can greatly affect the prospects for economic growth and alleviation of mass poverty (Ravallion and Datty, 1999). There is substantial evidence that a very unequal distribution of income is not conducive for either economic growth or poverty reduction. Current experience of economic growth has shown that if developing countries put in place incentive structures and complementary investments to ensure that better health and education lead to higher incomes, then the poor benefit doubly through increased consumption and higher future incomes.

2.6 Strategies and policies for poverty alleviation

Strategies of poverty alleviation have been attempted and implemented by many organs from the global to the national level. In the early 2000s, the World Bank (2000) proposed a three-branched strategy to reduce poverty. The strategies include the provision of opportunities for poor to reduce poverty by increasing their access to material opportunities that is jobs, credit, roads, electricity, markets for their produce, schools, water sanitation and health services and essential working skills. Facilitating empowerment by states and social structure being accountable to poor people by increasing their access to market opportunities and to public sector services; and also enhancing security by reducing vulnerability to economic shocks, natural disasters, ill health, disability and personal violence to enhance poverty reduction (World Bank, 2000).

Based on these strategies, the World Bank (2001) stipulated seven specific objectives to effect poverty reduction by the year 2015. One among these specific objectives is to reduce by half the proportion of the people living in extreme income of less than USD 1 a day per capita.

In view of the World Bank’s poverty alleviation strategies, the Development Vision of Tanzania is that poverty should be eradicated by 2025. Micro finance sector has been globally emphasized especially at grass root level (World Bank, 2001). The Vision of Tanzania’s national micro finance policy is to provide financial intermediaries without necessarily relying on injections of external donors or government funds (URT, 2000). Also experiences in Indonesia, Germany and some other countries adopted three policies for raising peoples' income, these includes the following:

(i) Creating and strengthening credit schemes to provide credit for poverty eradication activities

(ii) Increasing access of informal sector activities to loans through credit schemes to be established and

(iii) The environment encouraging investment in small-scale mining as part of effort to eradicate poverty.

However, the impact of Structural Adjustment Programme (SAPs) on the macro economic environment in Tanzania is not conducive enough to support the poor especially the smallholder farmers at the grass root level. It is therefore argued that the adoption of SAPs in Africa, which aimed at economic reforms to stabilize developing countries economies through promoting their growth by devaluation, producer price changes, trade liberalization, privatisation, and supporting institutions reforms-has usually occurred in the form of economic crisis (URT, 1998). It has also been revealed that after starting adjustments in the rural areas, trends show greater inequality between those with assets and easy access to inputs, credits and markets, and those without. Therefore this study attempts to examine the contribution of credit to poverty alleviation among smallholder farmers at the household level.

2.7 Rural financial institutions contribution to poverty reduction

At a national level an adequate level of food production is a necessary condition for food security but it is not sufficient to ensure access to food for all people at all times. Access to food is governed by income and purchasing power. This exists for strategies at household levels to cope with food insecurity. Income generation and diversification, savings and dis-saving (in kind and in cash), borrowing and interhousehold gift exchange. The effectiveness of rural microfinance institutions (RFIs) in reducing poverty can be assessed through three criteria. Coverage of the poor and financial needs fair access for disadvantaged group e.g. women and landless, financial viability and long-run sustainability (Zeller *et al.*, 1996a)

Research conducted by India's Integrated Rural Development (IRDP) in India, showed great success in increasing the income of large numbers to disadvantaged households. Hossain (1998) found out that more than 90% of the Grameen Bank (GB) clientele enjoys a living standard that is higher than prior to participation in the Grameen Bank. In the Grameen Bank members had a 40% higher income than comparable population groups in non-Grameen Bank villages (Hulme 1990).

Another financial innovation practised in Zimbabwe by Savings Foundation of Zimbabwe found out collective savings mobilisation and agricultural productivity of its clientele. A part of the group members' accumulated savings is converted into its productive inputs that are bulk-ordered through the foundation. About 97% of the group members are poor rural women. Under the foundation they can acquire new skills, improved housing and become financially more independent (Berger, 1989: World Bank 1990). Improved agriculture productivity and financial liquidity is crucial to enhance food security. Other studies conducted in Mali, Gambia and ACCION international in Latin America had demonstrated the potential contribution of the RFIs in raising the productivity and income of the poor in the rural areas

2.8 Micro-finance and types of credit schemes offering

There are three types of micro-credit, namely Formal Financial Institution (FFI), Informal Financial Institution (IFI) and Semi-Formal Financial (SFF) credit. Formal credit or financial institution is the one that is provided by mainstream financial sector such as banks. The informal credit is the one that is provided by informal moneylenders, rotating savings and credit associations as well as part-time sources of money, including relatives, friends, traders and large-scale farmers. Semi-formal credit is that one which is provided by organizations and agents whose mission is not basically financial service provision, such as NGOs, government departments and religious organizations (Kashuliza *et al.*, 1998).

The formal financial sector in Tanzania consist of; the National Bank of Commerce (NBC) and other financial institutions whose existence is for more specific services although most of them also do offer a number of commercial banking services. These include the National Micro-Finance Bank (NMB), Cooperative and Rural Development Bank (CRDB) specialized in loaning to agriculture, the National Security Fund (NSSF) and the Post Office Savings Bank (POSB) (Ndashau, 2000).

In a number of agriculture-based economies including that of Tanzania, formal financing of smallholder agriculture has been seen as one of the major means of effecting agricultural growth and development (Kashuliza, 1993). Consequently, over the recent decades several of these countries sometimes with support from international communities, have established the specialized credit institutions for the purpose of supplying credit to smallholder farmers, and also for provision of longer term credit for rural development projects (Kashuliza *et al.,* 1998).

The absence of what was perceived as affordable formal credit was also blamed for delaying, if not preventing, a timely adoption of new production technologies and the dissemination of non-labour intensive inputs such as fertilizer, thereby slowing down the growth and development of agricultural sector. Other notions do exist that informal moneylenders exploit small farmer borrowers and the poor by charging them high interest rate through which lenders extract monopoly profits. It was therefore believed that the establishment of informal credit institutions would curb or estimate such exploitative practices (Kashuliza *et al.,* 1998).

Access to bank credit is one of the major constraints hindering the development of small informal business not only in Tanzania but also in other countries (World Bank, 1992; Bagachwa, 1993). Commercial banks have traditionally concentrated their lending to larger formal enterprises which posses collateral and therefore are regarded to be less risky. Even through the magnitude of the problem has not been thoroughly studied, the estimate according to PRIDE (1997) show that by the year 1996, only 1.7% of small business in urban and rural areas had access to credit in Tanzania. In comparison, over 60% of individual who borrowed did so from informal sources such as relatives, neighbours and friends (Kashuliza *et al.,* 1998).

In developing countries, IFIs were viewed as traditional financial institutions in early sociological and anthropological works. Their main role was considered as that of providing loans for only consumption rather than productive investments. The IFIs were considered exploitative to poor who are the only main group that utilize informal loans (Ndashau, 2000).

Use of loan money improves income-generating projects, contributing to the improvement of women economic, social and political positions (Due and Kurwijira 1991). Furthermore, the results indicate that in Southern Highlands of Tanzania over 60% people interviewed, said that they borrowed money from informal sources and did so from relatives, neighbours and friends. This type of credit, which is mostly made in cash, appears to be targeted at specific activities and used by borrower household mainly in meeting consumption demands and social obligations such as in purchasing food items, payment of school fees, hospital bills, etc (Kashuliza *et al.,* 1998).

In some developing countries (especially during the era of structural adjustment and market liberalization) have been utilizing non-formal credit to rural farmer borrowers (Bagachwa, 1993). Also the research conducted by World Bank (1992) stated out the possible ways of improving provision of financial services by up grading informal arrangements and linking them with formal finance. Indeed, there is increasing awareness of the connections between the two forms, which includes the users of formal loans. (Who spend their borrowed funds in formal market group savings that are deposited in banks), formal borrowers who make informal loans and that many people use both formal and informal finances (Adams and Fitter, 1992).

2.9 The effect of micro-credit schemes in developing countries-experience of MFIs globally

Micro- credit schemes have been practiced in many parts of the world for poverty alleviation. According to Sharma (2000), many micro-finance services in Asia and Africa targets women on the assumption that empowering women and targeting service to them leads to better allocation and use of household resources. Several studies in Bangladesh support this assumption, indicating that service directed to women significantly increase assets, incomes and education attainment of children, especially girls (Sharma and Zeller, 1997). Findings from many studies in Africa and Asia also suggest that poor households generally use a combination of savings, credit and increased wage employment to cope with income volatility and unexpected expenditure requirements (Sharma, 2000).

The importance of access to financial services increases with the severity of income downturn. When household confront severe events such as floods or drought that depresses their incomes temporarily, access to financial services, especially in the informal sector, enables them to buy enough food to maintain the nutritional status of their children and finance other important activities such as education (Temu, 1998).

The insurance covers provided by access to credit and savings also has an effect on the efficiency with which household resources is managed. For example, with the insurance cover, poor households may be emboldened to undertake more efficient, albeit riskier, projects to increase household income, such as adoption of new agricultural technology off-farm micro enterprise (Kashuliza *et al.*, 1998).

In Kenya the micro finance sector reaches more than 11% of population of which the market competition is considered not so high to threaten the situation because of the presence of market segmentation. The IMFs outreach to Kenyan community is so high compared to West-African countries, which have an average of 3-5%. There are 1million members and 1.9 million users of SACCOS in Kenya. These SACCOS are relatively concentrated in both urban and rural areas. The Kenyan apart from befitting from SACCOS they also use NGOs to benefit about 7% of the population. These financial NGOs operate exclusively in urban areas. Staple crop and semi-arid zones are virtually without micro-finance programmes (Micro Save-Africa 2000). The micro finance sector in Zambia, on the other hand, is characterized by its relative youth (Micro Save- Africa 2000). The sector emerged in the middle of the 1990s. There are currently about 98 known MFIs of which, 45 are members of the Association of Micro Finance Institutions in Zambia (AMIZ) established in January 1999. In addition, there is a wholesale micro finance lending institution, the Micro Bankers Trust (MBT), established in October 1996. All these MFIs in Zambia put together are reaching less than 1% of the potential clients, suggesting its limited coverage in the country.

In Tanzania the micro finance sector is fairly limited and scope of absence of competition is evident. The demand for financial services in rural area is largely unmet. Recent reforms and market liberalization has led to the withdrawal of banks from rural areas where they were making a loss, and financial NGOs still have limited outreach (Macro-save-Africa, 2000). Furthermore, micro finance in Tanzania seems to be much more embryonic. For example, according to MAFC reports of May, 2006 the number of SACCOS all over the country were 2125 with the following distributions, 1129 SACCOS and 996 SACCOS in urban and rural areas respectively having 1380000 members for both rural and urban. Most of these are concentrated in Kilimanjaro region. On the other hand, NGOs count their clients in thousands (PRIDE, the largest NGOs, has 25000 clients). Total outreach appears to be less than 1% of population. This suggests that whether in terms of geographical scope or outreach, the extent of micro-finance in Tanzania is extremely limited (Micro Save-Africa, 2000).

2.10 Long-run effects of access to financial services on the asset accumulation, economic mobility and evolution of well-being

Financial markets play a great role in the evolution of the people’s well being over time in the agrarian economies. Rural economies in the developing countries are subjected to the market. The imperfection in credit market in particular, results into a number of serious consequences in production and consumption in the short run. Indeed it faces asset accumulation, poverty reduction and evolution of well being in the long-run (Kevane, 1996). For example, credit constraints could obviate the supervision of cost advantage of smallholder farmers that lead them to adopt costly and less efficient insurance substitutes such as low return and low risk crop asset portfolios (Rosenzweig and Binswanger 1993).

This results in an inability to smooth consumption in the face of income shocks. As a result credit constrained farmers may hold portfolio of less risky but less productive assets, affecting their productive performance and income paths overtime

Credit constraint does not limit investments in physical capital alone; if parents, for example, can't borrow to finance their children's health and education they won't be able to invest optimally in their children's human capital with a consequence for the well being of future generations (Becker and Tomes, 1986: Behman Pollak, 1982: Foster, 1995). Credit constraints may also result into behavioural adaptations such as fragmentations of fields immigration of and remittances by family members, gift giving and patron client relationships that are often characterised as being part of peasant rationality (Deininger, 2001 citing Townsend, 1995, Rosenzweig and Stark, 1989; Fatchamps, 1992). Because multiple markets failures are likely in developing countries, it is almost impossible to focus on imperfections in one market without paying attention to its inter linkage with others. In part due to the prevalence of multiple market failure, the welfare implications of credit constraints for poor farmers are deeply interlinked with the structure of agricultural production and particularly with the degree of commercialisation. The production of crops primarily for sale rather than for subsistence generally leads to greater use of marketed inputs and can affect the distribution of land if the optimal farm size differs between the cash and subsistence crops.

In addition, many cash crops are subject to greater production risk than basic food crops. Indeed, the decision to grow semi-subsistence food crops may reflect risk aversion particularly for the poor. These factors affect the sources of demand for credit between the two types of farming. Commercialised farmers are more likely to have a greater demand for credit as a form of insurance and consumption smoothening depends on the relative riskiness of the cash crop. As a result the presence of the credit constraints will have different implications for sale accumulation and welfare of the cash crop and food crop farmers.

2.11 The impact of access to micro credit on class membership

Substantial barriers in the credit markets exist in developing countries that substantially inhibit capital accumulation in the formal sector. Formal lending institutions have lamentable record of channelling the credit to the poor in LDC (World Bank, 1998). The primary reasons are asymmetric information barriers between borrowers and lenders, which give to adverse selection and moral hazard problems in market and the high administrative costs to lenders for small loans (Stiglitz, 1990). This combination of prohibitively high monitoring costs per loan and requirements for loan and for collateral prohibit the vast number of entrepreneur from taking small loans in formal financial markets.

Micro credit that is said to be one of the development institutions have recognised the dire implications of these credit constraints on economic growth. For example in recently years there has been an explosion of credit programs in developing countries, targeting credit at those shut out of the formal markets. However it is almost tautological to argue that, after expanding credit access, we shall observe agents with greater human capital expanding employment within their enterprises at a greater rate than those with lower levels of human capital

There are more easily measurable components of human capital such as years of formal schooling, less measurable components such as technical know how, entrepreneurial drive and personnel management skills. What is almost interesting and relevant in terms of policy implications is to focus on;

(i) More easily measurable component of human capital

(ii) Formal schooling to determine if this component of human capital is observable to micro credit enterprise leading institutes interact with increased access to expand employment creation in informal sector enterprise

(iii) Important implications for micro enterprise leading sector.

(iv) Maximising the demand for labour in the region of which loans could be targeted at those in the informal sector with higher levels of formal education.

2.12 The impact of micro credit on farmers

Credit capitalises farmers and entrepreneurs to take new investments or adopt new technologies, smoothen consumption by providing working capital and reduces poverty in the process when both formal and informal lenders are active in rural credit market (Adams et al, 1982. Aleem, 1990: Ghate, 1992: Hussain et al, 1992 and Udry, 1990). Collateral free lending proximity, timely delivery and flexibility in loan transactions are some of the attractive features of informal credit.

However, informal finance may not be as conducive to development as formal finance because of its being expensive, they are normally focused for short term as well as not large enough to spur investment and growth notwithstanding its limitation. Many governments have attempted in the past to develop alternative financial institutions to develop credit to farmers and other rural producers. Many such attempts have failed not only in delivering credit to target household but also promoting viable credit delivery system due to high covariant risk of agricultural production (Binswanger and Rosenzweig, 1986). The presence of asymmetric information, lack of enforcement of loan contracts (Hoff and Stiglitz, 1990), government imprudent interference in credit markets and rents seeking as a result of credit rationing (Braverman and Guasch 1989) are some of the factors alleged to be responsible for the poor performance of the government- directed credit schemes in many countries.

With the state owned rural finance organisations, Non-governmental micro finance institutions have been growing to meet the credit needs of small producers in many countries. Khandker (1988) reported that credit demand meet 10-12 million people in Africa, Asia and Latin America. Many of these organizations are subsidised not for absorbing high loan default costs but high covering transaction costs associated with group-based lending and other social intermediation costs. If agricultural credit and other targeted schemes are to be supported policy makers must know how much they are subsidised, who receives this subsidy and whether it help the borrower to improve their lives.

2.13 Micro credit initiatives for equitable and sustainable development

The concept of micro credit extension of small amounts of collateral –fee institutional loan jointly liable poor group members for their self-employment and income generation. Over the last two decades the Grameen Bank has pioneered a credit delivery system in rural Bangladesh bringing the banking service to poor villages and focusing primarily on women. The cumulative investment of the Grameen bank in the rural Bangladesh is more than one billion US dollars disbursed among its 2.02 million members, 94% of whom are women (Grameen Bank, 1994)

In 1980s the programmatic success of the micro credit such as Grameen Bank among in rural Bangladesh became a demonstration of a successful equitable and sustainable development initiative. The programmatic success and the accreditation of this success by the large number of impact and academic studies (Chandker 1993, Hossain 1998, Rahman 1986, Mizan 1994, Shehabuddin, 1992) have contributed to the spread of micro credit concept worldwide.

The approach used by Grameen Bank of lending poor women has attracted international interest and made the micro credit approach as a new paradigm for thinking about the economic growth (Morduch, 1997:1). Now there is almost a global consensus that micro lending to the poor that focuses on the achievement of equitable and sustainable gain is the key element for the 21st century's economy and social development. Currently most bilateral development agencies incorporate micro credit into their development projects and are keen to push other multi-sectoral social development- oriented non-government organizations into the function of credit delivery (Wood and Sharif, 1997).

2.14 The importance of rural financial system to economic development

Financial sector development promotes economic growth and is also important to reduce poverty (DFID, 2004a and 2004b). Demirguc Kunt and Levine (2004) conducted a study in over 150 countries and noted that a well-functioning financial system is critical to long-run growth. Empirical evidence from traditional studies confirms the strong, positive link between the national savings (aggregate income less total expenditure) and economic growth (World Bank, 2004). Correlation between the levels of financial savings (Savings held in liquid forms in the formal financial sector) and growth is even stronger (Fry, 1995). Savings are more important as they allow households to maintain precautionary balances against shocks. Households can also build up cash collateral and track record savings will allow them easier accessible deposit facilities and as a consequence, savings are held as cash or assets (e.g. livestock and building materials). Such savings are harder to mobilise and do not increase availability of loanable funds. Rural entrepreneurs therefore find it difficult to access funds and have to rely largely on self-financing when they want to invest.

The need for credit to support development of agricultural based livelihood has been stressed, as the justification for the state and donor supported subsidised credit programs of the 1950s-1970s (World Bank, 2004). However the rural economy is financially very fragile. Lack of credit is significant and sometimes building constraint, limiting investment in productivity, enhancing technology and inputs. Finance is also required for commodity marketing, sometimes through inventory- backed financing, which offers rural producers, traders and processors the opportunity to improve household income through adopting better producer marketing and raw material procurement strategies (Coulter and Onumal, 2002). Access to payment system offered by financial institution allows rural producers and traders to participate in modern efficient commodity training system that offer better prices.

Financial institutions should ideally provide low cost and accessible channels for transfer of remittances (e.g. migrant wages), which are crucial to the copping strategies of many rural households (Orozco, 2003). Rural finance plays a crucial role in household strategies to reduce vulnerability. It assists the poor to smooth the consumption and to build up assets greater than the value of liability (Gonzales-Vega, 2003). This is particularly important for the rural poor, since agricultural incomes and health fluctuate widely and could destabilise consumption if the households have no savings or credit to fall back on (IFAD, 2003 and World Bank 2004). Furthermore, rural households lack sufficient access to formal insurance, relying instead primarily on informal safety nets. Improved access to insurance could reduce the enterprise and household risks and make investment in rural economy more attractive contributing to growth and poverty reduction (Skees, 2003: Von Pischke, 2003).

2.15 Empirical evidence of micro credit as poverty reduction tool at different levels

Alleviating poverty by reaching 100 million of the world's poorest families with micro credit for self-employment by 2005 as stated by the Micro credit summit is a simplistic way of addressing the problem of poverty. Poverty is a multi-dimensional problem that extends beyond the economic, socio-cultural and political situation of an individual or household in society. The poor are a heterogeneous group of individuals with different levels of severity and duration of poverty, and experiencing a number of different dimensions of poverty. Poverty can range from being transient to chronic in nature.

Since micro finance is increasingly being projected as win-win strategy (Morduch, 1999; Hulme, 2000) for poverty alleviation, a critical analysis of the existing evidence from literature on the impact of the micro finance programme at micro-level on income, employment, vulnerability consumption and poverty situation of the household and individuals is important. This should entail looking at issues like income, employment, vulnerability, consumption and poverty situation of the household and individuals. The socio-cultural impact that is offered as an additional benefit of using micro finance as the development strategy for poverty alleviation can also never be overemphasised.

At the micro level, although several micro finance institutions have income and employment generation as their explicit objective but poverty reduction remains their prime goal. Poverty is often judged in terms of the impact of the program participation on the income consumption and net worth of the households. It is also taken into account the effect of the households', vulnerability and the impact on the employment at the enterprise or the household level. In order to capture the additional impact at the micro-level there is a need to focus on the evidence of the vulnerability and the impact of the welfare of the women and children. Khandker *et al.* (1998) reported that, there is evidence that micro credit has a positive impact on income, production and employment particularly in the rural non-farm sector. Some selected micro finance programmes in Bangladesh showed an increase in self –employment income that were sufficient to raise overall household's income in programme village. Khandker (1998) also observed that household headed by women are more likely to participate in micro finance programmes. Moreover, families who own land are more likely to participate, thus raising doubts about the reach of the micro finance programmes in Bangladesh to the poorest of the poor.

Another study by Zeller *et al.* (2001) in Bangladesh shows that credit has significant and strong effect on income generation and food and calorie consumption. Mosley and Hulme (1998) highlight the evidence of a trade off between reaching the very poor and having the substantial impact on household income. They found out that programmes that targeted higher-income households (those near the poverty level) have a greater impact on the household income. Those below the poverty line were not helped much and the very poorest were somewhat negatively affected because the poorest tend to be more averse to risk taking. The later also used loans for taking capital or maintaining consumption levels rather than the fixed capital or improving technology. Since micro credit programmes typically require loan repayment on weekly bases, some critics argue that repayment comes from selling assets rather than from profits of micro enterprises. Khandker's (1998) studied the borrowing actually increase household assets. He found out that for all programmes in Bangladesh that they surveyed household net worth did increase and the impact was much stronger for men than for women.

Also in a study Mosley (1999) in Bolivia, basing on the selection of micro finance institutions and came up with an answer that micro finance make a contribution on poverty reduction. He found out that despite of having the impact on income also on asset level. He postulated further that, the mechanism through which poverty reduction works varies between institutions.

2.16 Empirical evidence of micro finance as solution to poverty

Poor people often have little access to credit and savings service even if they are able to save. They can't provide collateral for credit and are therefore often not even served by informal financial markets. One answer to the problem has been the promotion of the micro finance schemes. Micro finance both serves the savings (consumption and smoothening) and investment objectives of poor borrowers (Johnson and Rogaly, 1997).

Many of these schemes have been successful in terms of both loan recovery rates and increasing output (Hulme and Mosley, 1996), while others have been less successful and often require continuation of government subsidy (World Bank 2000). The Grameen Bank in Bangladesh is usually presented as a model scheme in particular because of its pioneering peer-monitoring approach to overcome the moral hazards problem and because of its emphasise on lending to women, a feature which has been emulated by other scheme (Goetz and Gupta, 1996). These schemes and indeed the other micro finance approach have been subject to critical scrutiny. While micro credit schemes have helped to empower women there is evidence that women have often been forced to borrow on behalf of men (Goetz and Gupta 1996).

A study of 253 loans to women from micro finance agencies in Bangladesh revealed that almost 63% of the women borrowers had partial or very limited or no control over their loans (Goetz and Sen Gupta 1996: 49). Micro finance schemes then have problem in getting the men to repay loans for which the women are responsible. This study raises issues not only about gender but also about the wider question of different individual behaviours within the household and the problems of treating the households limits of the micro finance appear to be recognised by the World Bank in its 2001/ 2002 report and in particular the lack of valuable collateral.

Micro credit risk is covered in micro finance schemes by giving participants the ability to establish a reputation for reliability in the repayment of loans. However, it takes time to establish such reputation and usually means that although the micro finance schemes will lend again, other sources of the credit may still be closed off. Indeed, the World Bank report addresses this issues of proposing movable properly as collateral, by establishing registers of secured interests so that lenders can ensure that collaterals have been advanced against loans and by establishing credit registers run by credit reporting agencies (World Bank 2001: 94-95).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

This chapter covers the following:

- Description of the study areas
- Research design
- Sampling technique
- Data collection and data analysis methods.

3.1 Description of the study area

3.1.1 Location

The study was conducted in two districts namely Dodoma urban and Kongwa districts. The sampled Wards were; Dodoma Municipality, Zoisa, Kongwa, Hombolo and Mlali. The wards were selected because of the increasing number of credit agencies operating in these areas. These districts are among are five districts in Dodoma region, Others are Kondoa, Mpwapwa and Dodoma rural. Dodoma urban district is located centrally in the region. It is surrounded by Dodoma Rural district and lies between Latitude $3^0.5^'$and 7^0 South and Longitude 35^0 East. On the hand, Kongwa district lies in the eastern part of Dodoma region. It is located in the western side of Dodoma Rural district. To the north is Kiteto district of Manyara region, Kilosa district of Morogoro region is to the east and the Southern border is bounded by Mpwapwa district.

Apart from the SACCOS other credit agencies include Small Industries Development organisation (SIDO), FINCA, Promotion of Rural Initiatives and Development Enterprise (PRIDE) and Sustainable Economic Development Agency (SEDA).

3.1.2 Population

According to the 2002 population and the housing census, Dodoma Urban District has a population of 324,347of whom 157469 are males and 166,878 are females. On the other hand, Kongwa district has a population of 249760 of whom 120098 are males and 129662 are females.

3.1.3 Climatic condition

The climatic condition of Dodoma urban district is dry. The environmental temperature is 15.2^0C and the rainfall average is 580mm per annum. Meanwhile, the climatic condition of Kongwa district is dry with rainfall ranges between 500mm and 700mm annual average. The population of this district varied a lot of crudities according to their settlement. The people surrounding the township grow millet, grapes and to some extent paddy in Swaswa swamps in the eastern side of town. Others rear cattle using zero grazing. The economic activities of Kongwa people is agriculture where maize production is the best commercialised crop, other crops include sorghum, bulb rush, millet and cassava

3.2 Impact measurements

Principally there are two ways of measuring impacts. These are;

(i) by employing with and without method of measuring the impact. Data are collected by employing cross-sectional research design. Under this design, data from respondents are collected at a single point without repetition from the representative population

(ii) by employing before and after method of measuring impact. Under this design data are being collected at two different times through repetition from the representative sampled population.

3.3 Research design

This study used cross-sectional research design. Under this design, data from farmers' respondents were collected at a single point in time without repetition from the representative population. The design was chosen because of being economical to conduct in terms of time and it allowed comparison of variables in this case credited and non-credited (Barley, 1997).

3.4 Sampling technique

3.4.1 Sampling size

The sample size was drawn from smallholder farmers who were members and non-members in the SACCOS within the five selected Wards of which 22 villages were visited for data collection. The sample size collected per each Ward was 30 (14 borrowers, 16 non-borrowers), 30 (12 borrowers, 18 non-borrowers), 42 (22 borrowers, 20 non-borrowers), 40 (22 borrowers, 18 non-borrowers) and 18 (10 borrowers, 8 non-borrowers) respondents for Hombolo, Mlali, Kongwa, Dodoma municipal and Zoisa respectively. This made a total of 160 respondents.

3.4.2 Sampling method

Two categories of farmers namely SACCOS borrowers (beneficiaries) and non-borrowers (non- beneficiaries) were selected for the study. The simple randomly sampling method was used to select 160 SACCOS' members and non-members. More specifically, borrowers were drawn from the following SACCO Societies: KIFI, MWASHITA, SEMVIMA, HOZEMO, KAMBARAGE, CHAMBASHO, MAJENGO and MAMI SACCOS.

Similarly, simple random sampling technique was employed to select the control group i.e. non-borrowers from five wards served by the SACCOS. From each ward, two villages were purposely selected to make a total of ten villages. These villages were selected due to easy accessibility and the fact that they have many farmers who were using SACCOS services.

3.5 Data collection

The research developed the main tools to be used in assignment, first in English and then translated into Kiswahili to enhance a clear understanding of the information needed from the respondents.

The tool sought information on the following areas;

- Ownership, governance and management of SACCOS, Outreach and performance of SACCOS and types of service provided
- Assessing different activities undertaken by borrowers

- Assessing the impact through comparing agricultural inputs used, livestock owned, housing assets, household expenditure on basic needs between borrowers and non-borrowers.

3.5.1 Secondary data collection

Secondary data were collected from reports and published documents on surveyed SACCOS in order to examine SACCOS' beneficiaries. SACCOS' records and reports showing monthly, quarterly and annual balance position were used to obtain the desired information. Specifically, the following data were collected in relation to finance, the existing records and reports with information on outstanding loan balance, total number of borrowers served, members' cash shares and total savings balance that were kept by respective SACCOS. Other sources were from the Ministry of Agriculture, Food and Co-operative, Cooperative Audit and Supervision Corporation (COASCO) head office and Internet.

3.5.2 Primary data collection

The questionnaire was designed, pre-tested and administered to targeted group (smallholder farmers) for data collection. Primary data were obtained through personal interviews conducted in both Dodoma Urban and Kongwa districts by using respondents' questionnaire (Appendix 2 and 3). The questionnaire was designed in order to obtain both qualitative and quantitative information from SACCOS' borrowers and non-borrowers respectively. It contained questions on household general characteristics, involvement in off-farm activities, production and input use (labour, farming tools), ownership of assets, expenditure on basic needs and housing quality. Moreover, borrowers' questionnaire included the questions indicating amount of credit disbursed, savings and its use.

Furthermore, a checklist was used to collect data from SACCOS officials (Appendix 1). The checklist for officials aimed at gathering information about bank operations, type of service offered, number of borrowers, source of capital and savings and credit statistics.

3.5.3 Questionnaire pre-test

A pilot survey was conducted prior to the main field to pre-test the questionnaire. It was done in the second week of December/2006. The pre-testing of the questionnaires was necessary as it checks its relevance and comprehensiveness in gathering the required information. The pilot survey covered sample of twenty and two officials from Kibaigwa Financial Service SACCOS (KIFISACCOS) in Kongwa district. The smallholders' composed eighteen borrowers and two non-borrowers. The survey helped to modify some questions on household assets, housing, statistics on savings and household production.

3.6 Data compilation and analysis

3.6.1 Data analysis

Data processing and analysis were done at the Computer Centre of Sokoine University of Agriculture (SUA). Quantitative data were collected, gathered, summarised, coded and analysed by the computer using the Statistical Package for Social Science (SPSS) program. Quantitative data were employed to capture in formations' on socio-economic characteristics, namely education, cultivated farm size, gender and household size. While qualitative data were used to assess the impact of micro finance institutions on expenditure on basic needs, total value assets, children schools status, hired labour and the comparison were made between borrowers and non-borrowers.

The Chi-square method was used to determine if credit was an important factor for improvement of production through using modern agricultural inputs, type of health services, type of livestock owned and household assets ownership between borrowers and non-borrowers. In comparison income status between borrowers and non-borrowers mean comparison analysis was also employed. The comparison was done in order to determine if there was significant difference in income between the borrowers and non-borrowers. The estimated incomes from off-farm and farm activities of these groups were compared. Similarly, the mean difference T-test was employed to test the differences between borrowers and non-borrowers in the number of labourers used in farm, acreage, household size and value of household assets.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Overview

This chapter presents the results of the study. The study aimed at analysing the impact of micro finance institutions on poverty reduction among smallholder farmers to find whether the credit provided has had any impact on the borrowers. Also the study focused on Ownerships, governance & management, credit outreach, general characteristics of SACCOS respondents. Furthermore, the study compared between borrowers and non-borrowers based on four important variables namely asset ownership, children's education status, farm labour used and household expenditure on basic needs

4.2 Ownership, governance and management of SACCOS

Savings and Credit Cooperative Societies (SACCOS) are registered under the Cooperative Societies Act of 2003. The operations are guided by the Cooperative Rules and Registrar Circulars issued pursuant to enactment of the Cooperative Societies Act of 2003. The Ministry of Agriculture, Food Security and Cooperative provide the supervision of the SACCOS through the region and district Cooperative officers. Each SACCOS visited had its by-laws that govern the day to day operations which were regarded as the real driving force behind the achievement of the ultimate goal of development. The visited SACCO by-laws were found to cover areas like objectives of the society, membership, rights and obligations of members, governance and management structure, election of the board, general meetings, executive committees and financial management.

4.2.1 Organisational structure of SACCOS and their responsibilities

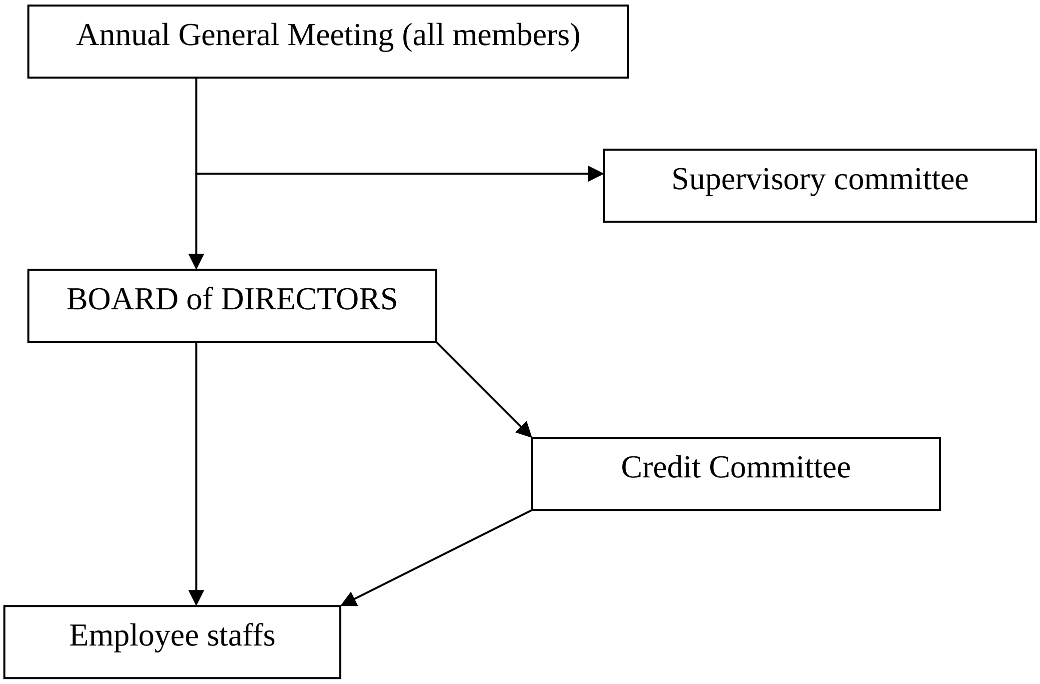

Figure 2: Organisational structure of SACCOS and their responsibilities

(a) The Annual General Meeting (AGM)

The AGM is regarded as the supreme organ that governs the existence and operations of SACCOS and is held once a year. Some of the major activities of the AGM are as follows;

(i) To read and approve the minutes of the previous general meeting

(ii) To discuss the chairman's report regarding the business of the SACCOS for the previous year(s)

(iii) To discuss the accounts prepared by treasurer

(iv) To discuss and approve the auditors report

(v) To carry out elections of the board

(vi) To discuss and approve the distribution of dividends to members

(vii) To make amendments of SACCOS by- laws

(viii) To determine other things like interest rates on loan and share value

(b)The Board of Directors

The board is selected at the Annual General Meeting (AGT). The SACCO Societies board(s) executed their work through board committees. In all the SACCOS visited, two board committees were identified: the credit committee and supervisory committee.

Functions and responsibility of the Board of Directors are as follows;

(i) To oversee all SACCOS activities

(ii) To direct and monitor the affairs of the SACCOS

(iii) To act upon all applications for membership unless a membership officer is appointed to do so.

(iv) To ensure that true and accurate records of society's money are kept and its properties capital reserves, liabilities, income and expenses are recorded.

(v) Decides on the amount and kind of surety bond or other security, which shall be required by board, manager and any other officer or employee having the custody of or handling funds or property of the Society.

(vi) To draft the internal regulations which shall include all matters that have not been taken care of or provided for by the Cooperative Societies Act, Rules and these by-laws, which call for specific enactments to ensure smooth functioning of the SACCOS.

(vii) To review from time to time the interest rates on loans, the maximum maturities and terms of payment of loans to members and the maximum amounts that may be loaned with or without security to any member

(viii) To lay before the general meeting a balance sheet and financial account and budget for the following year

(ix) To recommend to the annual general meeting the dividend rate to be paid on shares

(x) Authorise investments of the society and conveyance of the property

(xi) Reviews monthly delinquency reports and supervise the collection of the loans from members and authorise the write-offs of uncollectible accounts

(xii) Approving business plans

(c) Credit committee

The credit committee had been working under the authority of the board responsibility to consider, and approve or reject loan applications and to follow up on repayment of loans. Hereunder are some of the responsibilities of the credit committee;

(i) To consider all loan applications, which the manager is not authorised to deal with, and ensure that there is a proper bond against every loan. No loan shall be issued without the consent of all the members in the meeting

(ii) To scrutinize every applicants character, financial position in order to assess his ability to repay a loan

(iii) To make follow up on loans to check that they are used for the intended purposes and that they are repaid to the board

(iv) To report regularly matters related SACCOS to the board

(v) To ensure minutes and records related to the loans applications and making follow up on loan repayment

(d) Supervisory committee

The following were stated as the powers and duties of the supervisory committee

(i) Evaluate programmes of the SACCOS

(ii) Check minutes of the Board and General Meeting for policy matters followed the stated objectives

(iii) Ensure the proper interpretation of loan policies, by-laws, Cooperative Societies Act and Rules, Annual General Meeting resolutions, policies of the board and their implementations

(iv) Confirm cash regularly and reconcile it with the records

(v) To check bank accounts monthly and their reconciliations

(vi) Check balance sheets and income and expenses statements to ensure they are correct

(vii) Make passbook audits

(viii) Analyse the expenses of the SACCOS

(ix) Find out if the SACCOS board members and staff carry out the interest of the SACCOS and the members in general

(x) Seek for solutions for weakness in management

(xi) Prepare and present reports to the board and the general meeting.

(xii) Receive the reports of the internal auditor, if any, and take action on the same or recommended for action by the general meetings

(e) Employee staffs

The employed staffs assist the Board. Most of the visited SACCOS have three employed staff-the manager/accountant, clerk and watchmen who are paid on monthly basis for the services they provide in the society. The minimum qualification for the clerk is secondary form four educations with a bias in book keeping and commercial subject. They receive a number of training sessions on book keeping records and more elaborate management techniques, such as developing loan repayment plans, calculating the loan portfolio and audit accounts and even preparing the financial statements at the end of the year (financial year).

All the visited SACCOS enforceability of the administrative procedures and policies are partially done by board member on duty. SACCOS has the system of daily supervision by the rotation whereby there is always a leader on duty who supervises the daily activities. At the end of the day, the member on duty supervises cash accounting and signs the daily cash balance closing book before jointly closing the cash safe. The member on duty usually paid token amount of money as an incentive.

4.3 Outreach performance of SACCOS

The rapid increase in the number of the SACCO Societies over time in the country was used to determine the extent of their services outreach. Establishment of SACCOS is the agenda for top national figures. For example, in April/2007 when was winding up the Parliament session in Dodoma the prime minister asked legislators to go and facilitate the establishment of SACCOS as part of the World Bank of African’s strategy for supporting the millennium development goal of poverty reduction.

Experiences of the World Bank (1998) shows that SACCOS are convenient and affordable instruments for savings, credit, insurance and repayment transfer institution. They are also essential both to cope with the economic fluctuations and risks that make the majority poor, especially vulnerable ones, to take the advantage of opportunities to acquire productive assets and skills that can generate increased income. The figure below show the progress of SACCOS service out reach of the four visited SACCOS from 1999 to 2006.

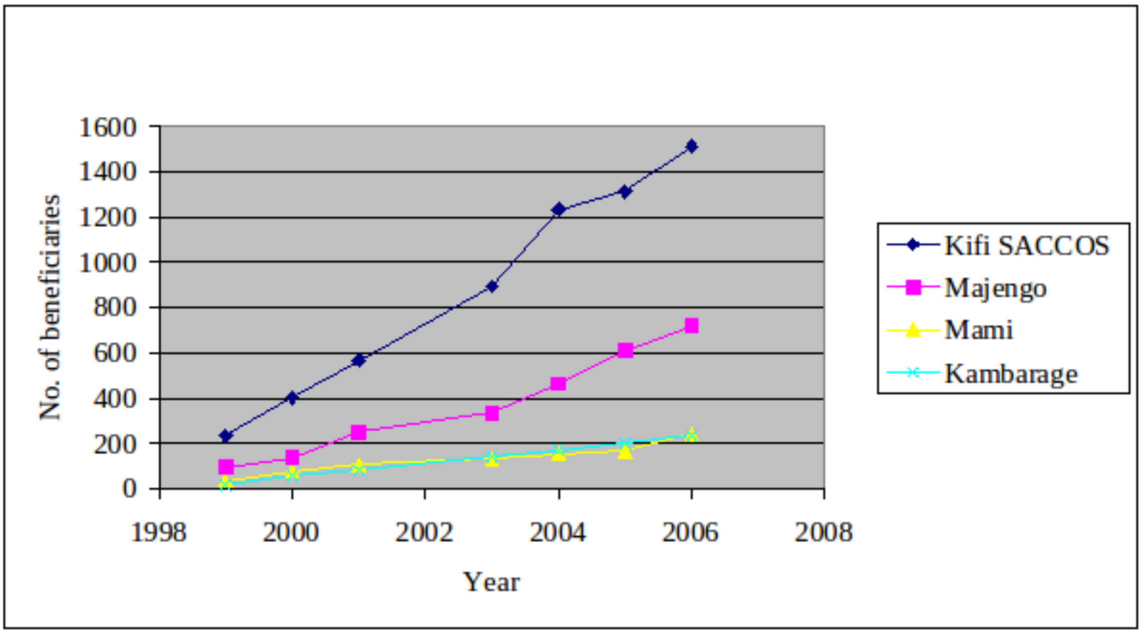

Figure 3: SACCOS beneficiaries (1999-2006)

4.4 Service provided by SACCOS

Most of the SACCOS visited have only two types of loan products. These are normal development and emergency loans. The study also noted development of new services especially among the rural SACCOS that aimed at lending agricultural inputs.

4.5 Reason for joining SACCOS

Some factors either intrinsic or extrinsic are very important aspect to influence an individual to engage in an activity. Borrowers were asked to give the reasons that made them to join the SACCOS. According to Table 1, the majority (65%) were motivated by education offered. Advantages of being in Co-operative attracted 16.3% whereas easier to obtain credit with less interest rate attracted 12.5% while 6.3% borrowers said that they were attracted by bank services. On the other hand, 45% of borrowers mentioned SACCOS associated problems like improper knowledge on banking operation especially in the areas where bank services were not available or started to operate shortly prior to survey. Other problems were the unavailability of money due to various reasons (38.8%). Many SACCOS were constrained with capital because of their dependence on the member's shares. As a result, members were asked to increase shares, savings and loan repayment performances will ensure financial stability among the societies.

Table 1: Reasons for joining SACCOS

Reasons	Count	Percentage
Reasons for joining SACCOS		
Education offered	52	65.0
Advantages of cooperative	13	16.3
Easier to obtain capital with less interest rates	10	12.5
Attracted by bank services	5	6.3
Problems facing SACCOS		
Failure of banks to deliver money in time	7	8.8
Failure of borrowers to repay	6	7.5
Unavailability of money in SACCOS	31	38.8
Improper knowledge on bank operation	36	45.0
Causes of success to loan intended activities		
Proper repayment behaviour	21	26.3
Good education and service offered	28	35.0
Capital to boost from own savings	31	38.8
Was any Cost incurred to obtain loan		
Yes	77	96.3
No	3	3.8
Mention kind of cost incurred		
Application charges	41	51.3
Loan insurance	11	13.8
Entrance fee	28	35.0
Is there noted improvement of life?		
Improved	61	76.3
Not improved	19	23.8
Are you satisfied with SACCOS service		
Satisfied	52	65.0
Not satisfied	28	35.0

4.6 Reasons hindering non-borrowers to join SACCOS

Similarly, non-borrowers were asked to account for the reasons that make them to not join SACCOS. Majority (53.8%) said that low income hindered them to join SACCOS, while 36.3% reported that they were using other financial institutions available in their areas. And only 10% respondents said that they lacked knowledge relating to SACCOS operations table 2. Therefore, education is highly needed to make the people aware of general performance of SACCOS especially in rural areas and use them for their development (Table 2).

Table 2: Reasons hinders non-borrowers to join SACCOS

Reasons	Count	Percentage
Low income	43	53.8
Lack of knowledge of SACCOS operation	8	10.0
Using other financial institutions	29	36.3

4.7 General characteristics of respondents

(i) Age group

The age of an individual has an influence on willingness to participate in certain activities. There is an argument that when an individual grows older, he finds himself to engage in certain economic activities that are uncertain. Kashuliza and Kydd (1996) suggested that an older person is able to take the risk due to experience and security in terms of capital. The youngest respondent in this study was 18 years old while the oldest was 67 years old. About 29% borrowers and 32.5% non-borrowers were between 29-39 years old, while 30% borrowers and 31.3% non-borrowers aged between 40-50 years old. Very few interviewed respondents aged were between were 62-72 for both borrowers and non-borrowers (Table 3).

(ii) Gender

Most of the interviewed respondents were males 75% and 68.8% compared to 25% and 31.3% females for borrowers and non-borrowers respectively (Table 3).

(iii) Education level

In both theoretical and practical situations, education level plays a crucial role in ensuring households access to basic needs such as food, shelter and clothing. Education skills increase working efficiency and productivity making the household able to use and adopt new technologies in different activities, which result into more income earning. This study indicates high level of literacy with a large number of primary school leavers accounting for 63.8 % and 48.8% of borrowers and non-borrowers. Respectively the study also shows that secondary school secondary leavers were 30% and 33.8% for borrowers and non-borrowers respectively. Very few respondents to 3.8% attended higher education. High level of literacy in the study area may be attributed to deliberate efforts of government to expand primary education in the country since independence (Table 3).

Table 3: Household characteristics

Characteristics	Borrowers (n=80)	Non-borrowers (n=80)	Total (n=160)
Gender			
Male	37.5	34.4	71.9
Female	12.5	15.6	28.1
Education level			
Informal education	1.9	1.3	2.5
Adult education	0.0	5.6	5.6
Primary education	31.9	24.4	56.3
Secondary education	15.0	16.9	31.9
Higher education	1.3	2.5	3.8
Age of respondent			
Mean	2.5	2.58	2.54
Std.error	0.21	0.12	0.08
Minimum	1.00	1.00	1.00
Maximum	5.00	5.00	5.00
Schooling children	1.49	1.15	1.31
Private: Mean			
Std.deviation	0.57	0.36	0.51
Public: mean	1.31	1.45	1.38
Std deviation	0.49	0.51	0.46
Age group			
18-28	21.3	16.3	18.8
29-39	28.8	32.5	30.6
51-61	30.0	31.3	30.6
62-72	2.5	2.5	2.5

(iv) Family size

A comparison household size of was made between borrowers and non-borrowers in the study villages. The results show that 62.5% of the sampled households had people between 5-8, while 22.5% and 13.8% had 9-11 and 1-4 members respectively. According to this study majority (63%)of the respondents belonged to the household with 5-8 members (Table 4).

Table 4: Family size

Grouped family composition	Count	Percentage
1-4	22	13.8
5-8	100	62.5
9-12	36	22.5
13-15	2	1.3

4.8 Activities undertaken by borrowers

The results from sampled respondents' shows that majority (91.3%) of the borrowers and 76.3% non-borrowers involved in agriculture, while borrowers (8.8%) and non-borrowers reported (23.8%)business and employment as their primary source of income. On the other hand, with respect to secondary source of income, borrowers (25%) and non-borrowers (13.8%) dealt with kiosk. Further more, borrowers (15%) and non-borrowers (38.8%)were food vendors, 28.8% borrowers and (20.8)% non-borrowers (16.8%) were brewing local beer while 26.3% borrowers and 23.8% non-borrowers 26.3% were making charcoals (Table 5).

Table 5: Source of income and farm labour

Characteristics	Borrowers (n=80)	Non-borrowers (n=80)	Total (n=160)
Primary source of income			
Agriculture	91.3	76.3	83.8
Business	3.8	17.5	10.6
Employment	5.0	6.3	5.6
Secondary source of income			

Kiosk	25.0	13.8	19.4
Food vendor	15.0	28.0	21.9
Making charcoal	23.8	26.3	25.0
Brewing local beer	28.8	16.3	22.5
None	7.5	15.0	11.3

4.8.1 Estimated farm income

During this study respondents were asked to indicate their income per annum in two consecutive seasons. Mean comparison test was used to examine the mean income difference between borrowers and non-borrowers. The results indicated insignificance difference in 2004/05 between borrowers and non-borrowers farmers. The reported reason for this was shortage of rainfall, which caused poor harvest among farmers. However, in the previous year i.e. in the 2005/06-year the income earnings show significant difference at ($p<0.05$) between these two groups. Results indicate that borrowers had higher annual income compared to their counterpart. This can be explained by the fact borrowers were in a good position of accessing credits and other support through their SACCOS which helped them into improvement of their productivity and increase their overall income thus improve their level of well-being and hence poverty reduction (Table 6).

Table 6: Estimated farm incomes

Respondent category	mean farm	std. deviation	T-value
Cash earned 2004/05			
Borrowers	484160.00	752230.49	
Non-borrowers	349435.00	221320.51	1.54
Cash earned 2005/06			
Borrowers	564423.75	1077592.32	
Non-borrowers	314721.25	211207.57	2.03

4.8.2 Estimated income from animal products

The results show that there was a significant difference in estimated income earned from the animal products between borrowers (719721.13) and non-borrowers (196529.75) as observed at T-value (5.418) statistically significant difference at $p<0.01$ (Table 7). Respondents, especially in urban areas, reported to keep livestock for commercial purposes. The available livestock products market and veterinary services in urban areas encouraged farmers to invest in agriculture industry than rural people did hence influenced capital demand. Therefore this meant that, borrowers would be in course to increase their gross returns from livestock and be in position to meet other financial obligations and engage in additional investment than non-borrowers could do.

Table 7: Estimated income from animal products

Respondent category	Means	Std deviation	t-test
Borrowers	719721.13	849060.11	
Non-borrowers	196529.75	158618.33	5.42

4.8.3 Estimated off-farm income

Beside crop production, farmers in the study areas were also involved in off-farm activities. The activities include brewing local beer, making charcoal, food vendors and kiosk. The results presented in the table showed significant mean differences between borrowers and non-borrowers at $p<0.015$ (table 8). This implies that the use of micro financial services had influenced borrowers' involvement in off-farm activities than non-borrowers. The allocation of the capital resources to off-farm activities results into the more gross return to the borrowers than their counterpart.

Table 8: Estimated off-farm income

Respondent category	Means	Std deviation	t-test
Borrowers (n=80)	522980.00	578046.51	
Non-borrowers (n=80)	366162.50	308810.61	3.09

4.9 The impact of credit on poverty reduction

Welfare of an individual means a level of standard of living of an individual and household or community (URT, 1999). Furthermore, welfare can be defined as household command over resources in terms of food, property, health, schooling, working condition, shelter, means of transport and communication and liberty. In this study the impact of the credit poverty reduction was assessed based on;

4.9.1 Housing materials

Respondents were asked to indicate the type of materials used to construct their house(s). Materials used were classified as either poor or good quality depending on the materials used to construct walls, roof and floor**.** Table 9 show that 71.3% of borrowers owned good quality walls compared to 50.1% owned by non-borrowers. The results show that there was significant difference in a type of wall materials used between borrowers and non-borrowers as observed by X^2-value (17.02) at ($p<0.05$). On the other hand, about (44%) borrowers had cemented their houses compared to 23.8% non-borrowers. On the type of roof, borrowers (66.3%) used aluminium sheets as roofing materials used for roofing compared to 43.8% of their counterparts. The results show no significant difference at $p<0.05$ between the materials used for roofing and floors as observed by X^2-value (8.19 and 7.93) between borrowers and non-borrowers respectively.

Table 9: Type of material for housing

Housing material	Borrowers	Non-borrowers	Overall	calc.X^2-value
Type of wall				
Mud, wood and thatch	6.3	22.55	14.4	
Mud, wood and cement	38.8	31.3	35.0	
Mud bricks (non-heated)	15.0	26.3	20.6	
Burt bricks	25.0	15.0	20.0	

Stones/cement bricks	7.5	3.8	5.6	1.70
None	7.5	1.3	4.4	
Type of floor				
Mud floor	47.5	68.8	58.1	
Cemented floor	43.8	23.8	33.8	
None	8.8	7.5	8.1	7.93
Type of roof				
Thatch (mud/grass)	27.5	46.3	36.9	
Aluminium sheets	66.3	43.8	55.0	
None	6.3	10.0	8.1	8.26

4.9.2 Children's education status

Information on education attainment of the children from sampled household was obtained by asking the type, status and number of children schooling in a family as well as in the level of education. There were two categories of school namely, private and public. According to Table 7, the majority (41.3%) borrowers sent children between 2-3 to private school compared to 15% sent by their counterpart. While 3.5% borrowers sent between 4-5 only compared to 0% of their counterpart. The result show significant difference in the number of children attending private schools per family between borrowers and non-borrowers as observed by X^2-value (17.94) at $p<0.01$. This great difference in children education level between borrowers and non-borrowers was brought about by differences in household income and thus the ability to access private schools that requires cash to pay for school fees and maintenance allowances (Table 10). Furthermore, the results showed no significant difference on the number of children sent to public schools as observed by X^2-value (5.30) between borrowers and non-borrowers at $p<0.07$.

Table 10: Children's education status

Children's' range	Borrowers	Non-Borrower	Overall%	calc.X^2
Private range class				
0-1	55.0	85.0	70.0	
2-3	41.3	15.0	28.1	

4-5	3.5	0.0	1.9	17.94
Public range class				
0-2	70.0	55.0	62.5	
3-5	28.0	45.0	39.9	
6-8	1.3.0	0.0	0.6	5.30

4.9.3 Household expenditure on basic needs

An individual is described to be economically stable if he/she can spend a portion of his/her earnings from primary or secondary sources on necessities for its well-being. Respondents were asked to report estimated monthly expenditure on basic needs such as foods, education, clothing and health services. The amount spent on basic needs was compared between borrowers and non-borrowers. Monthly expenditure on basic needs varied from one family to another and sometimes within the family. For example, expenditure on health services was incurred once somebody was sick although there was clinic attendance for pregnancy and nursing women. Consumption on education service was higher at the start of school years and when the children back to school back after holiday. Likewise, quantitative data on monthly food expenditure showed to be relatively higher especially during food shortages. The result shows significant difference in the household expenditure on basic needs consumption. Significant F-value for clothing, food, health and other services were statistically significant at $p<0.01$ and education as found significant at $p<0.05$. These results imply that borrowers were able to spend more in basic needs compared to their counterparts (Table 11).

Table 11: Household expenditure on basic needs

Item	Mean	Std. deviation	calc. F-value
Clothing			
Borrowers	17897.88	1151.675	
Non-borrowers	9351.88	4885.055	3.51
Education			
Borrowers	12407.89	12615.074	

Non-borrowers	8694.00	6223.494	5.58
Food expenditure			
Borrowers	177072.50	82915.522	
Non-borrowers	133225.00	59552.811	1.48
Health services			
Borrowers	14857.63	12759.878	
Non-borrowers	7578.41	3748.996	1.71
Other expenditure			
Borrowers	20748.75	14792.703	
Non-borrowers	13470.38	5415.036	2.40

4.9.4 Farm labour

Availability of the family labour on the smallholder farmers assumes a great significance in the context of Tanzanian agriculture. Reliance on family labour for farm work predominates in study areas. Family labour is used in production operations including land preparation, planting, weeding, harvesting, feeding animals and milking. Respondents were asked to report the type of labour used in farm activities. The use of hired labour in and out of the family especially during peak demand operations depended on the individuals' wealth and daily activities of an individual. Majority (53%) borrowers used hired labour compared to 32.5% non-borrowers. Furthermore, the results show that about 39% non-borrowers were capable of using both hired and family labour compared to 16.3% borrowers Chi-square test results show that there was significant difference in the type of labour employed in farm between these two groups at $p<0.05$ (Table 12).

Table 12: Labour used

Type of labour	Borrowers (%)	Non-borrowers (%)	Total (%)
Family labour	31.3	28.8	30.0
Hired labour	53.0	32.5	42.5
Both hired and family labour	16.3	38.8	27.5

4.9.5 Hired Labour

Economic soundness of an individual is one among the indicators for some one to make a choice of labour force for production. The higher economic stability of an individual with respect to financial situation articulates good performance of certain activities and vice versa. If the financial position of an individual is good, accomplishments of his/her objective become possible due to the resources availability, which can be used to meet the objective. Respondents were asked to indicate the number of labourers they hired in two cropping seasons. The mean comparison T-test presented in the table suggests that whoever decided to use labourers faced high demand for seasonal activities during high field labour demand season. The result show statistically significant difference at $p<0.01$ between borrowers and non-borrowers. Borrowers tend to hire more than their counterpart. The reason is that borrowers had cash to pay for labourers so as to facilitate their activities (Table 13).

Table 13: Hired labourers

Range	Number	Mean	Std deviation	t-test
Borrowers	80	5.75	6.60	
Non-borrowers	80	2.86	2.81	3.66

Significant at $p< 0.01$

4.9.6 Asset ownership

Respondents were asked to mention the type of assets they own. The assets considered were land, farm equipments, livestock kept, household facilities and housing. Assets were used to assess the farmers’ access to resources and their engagement in different poverty reduction strategies. Comparison means between borrowers and non-borrowers were subjected to t-test and the results were used to recommend if there were significant difference or otherwise.

(i) Farm tool

Farm tools were grouped into three categories, small farm tools (hand hoe, machetes, axes sickles and knives), plough and tractor. Results showed statistically significant difference at $p<0.05$ in tools owned between borrowers and non-borrowers. In fact, more borrowers (16.8%) owned plough compared to non-borrowers (5.1%). Although there was a similar demand in farm agricultural tools between these groups, purchasing power differentiates them. Cash availability gives the opportunity for many borrowers to own more advanced farm equipments compared to non-borrowers (Table 14).

Table 14: Farm tools and equipments owned

Farm tools	Borrowers	Non-borrowers	Overall	X^2-Value
Small farm tools	81.3	94.9	81.1	
Plough	16.3	5.1	10.7	
Tractor	2.5	0.0	1.35	7.47

[*] Significant at $P<0.05$

(ii) Livestock owned

Respondents were asked to mention the type of livestock they keep. Chi-square was used to test if there were differences in the type of the livestock owned between borrowers and non-borrowers. The calculated X^2-value (24.67%) was significant at $p<0.05$ (Table 15). This result signifies the differences in livestock owned between these two groups. Farmers in rural areas reported the problem of livestock produce market and poor price received. Sometimes farmers were forced to feed their families, unlike their fellows in urban areas who kept for commercial purposes. Thus, market accessibility influenced farmers to involve in animal keeping (Table 15)

Table 15: Distribution of livestock owned

Livestock type	Borrowers'	Non-borrowers	Total	calc.X^2-value
Local chicken	15.0	3.8	9.4	
Pigs	10.0	7.5	8.8	
Goats	11.3	10.0	10.6	
Local chicken+ goat	13.8	3.8	8.8	
Pigs + goats	10.0	13.8	11.9	
Pigs +chickens	6.3	28.8	17.5	
Pigs + goat + chicken	7.5	11.3	9.0	
Cows + goat + chicken	18.8	13.8	16.3	
None	6.5	6.3	6.9	24.67

*Significance at p 0.05

(iii)Land ownership

Respondents were asked to mention the total area owned. Plots/acres of the land owned were calculated. The results indicated that both groups were similar in acreage terms. Land was reported serious problem in Dodoma urban where people tend to hire, unlike their fellows in Kongwa. In the case of the amount of cultivated acreage the results show significant differences at $p<0.05$ between borrowers and non-borrowers. These results imply that borrowers were in good position of increasing acreage than their counterpart group due to availability of resources (Table 16).

Table 16: House hold land ownerships

Respondents'	Mean	Std deviation	t-value
Land owned			
Borrowers	1.19	0.59	
Non-borrowers	1.15	0.45	0.45
Land in use			
Borrowers	1.19	0.59	
Non-borrowers	1.00	0.000	2.04

(iv) Ownership of other household assets

(a)Transport assets:

Respondents were asked to mention transport assets they own. The results indicated that most (63.1%) of the sampled household owned bicycles. The results indicate that there was no significant different counted in ownership of the transport assets, although more borrowers owned motorbike (15%) compared to non borrowers (10%) owned by same also the results indicate that more borrowers (11%) owned motorcar compared to 5% of their counter part (Table 17).

(b) Communication assets:

Respondents were asked to mention the communication media they own. Majority (60.6%) pointed out that radio was a major means of accessing information. On the other hand, about 10% borrowers owned TV compared to 5% owned by their counterpart. In general, there was significant difference in owning the communication facilities between borrowers and non-borrowers at $p<0.05$ (Table 17).

(c) Furniture

From the table 17, the results show that there was significant difference between borrowers and non-borrowers at $p<0.05$. Borrowers owned valued furniture than non-borrowers with exception on items like tables and chairs. The results indicate that borrowers who owned chairs, tables and sofa sets were 41.3% compared to 30% owned by non-borrowers. Also 30% borrowers owned chairs, tables and wardrobe compared to 18.8% non-borrowers.

(d) Cooking facilities

There was significant difference in ownership of cooking facilities between borrowers and non-borrowers at $p<0.05$. More non-borrowers interviewed were using local stove (38%) compared to (16%) own by borrowers (Table 17).

(e) Types water and toilets used

With the respect of the type of toilets: the results show significant difference on the type of toilets owned between borrowers and non-borrowers at $p<0.05$. More borrowers (65%) had modern type (VIP) of toilets compared to (45%) of non-borrowers. Also there was significant difference observed on the type of water at $p<0.05$ between borrowers and non-borrowers. More (67.5%) borrowers had installed tape water their homes compared to 42.5% of their counterparts (Table 17).

Table 17: Household assets

Assets	Borrowers	Non-borrowers	Total	X^2-value
Transport assets				
Bicycle	51.3	75.0	63.1	
Motorcar	13.8	1.3	7.3	
Motorcycle	16.3	63	11.3	
None	18.8	17.5	18.1	15.498
Communication assets				
Radio	66.3	55.0	60.6	
TV	10.0	5.0	7.5	
Telephone	21.3	21.3	21.3	
None	2.5	18.8	10.6	12.11
Furniture assets				
Chair(s) +table(s)	22.0	43.8	31.9	
Chair(s) +table(s)+sofa set(s)	41.3	30.0	35.6	
Chair(s) +table(s)+hard robe	30.0	18.8	24.4	
Both	8.8	7.5	8.1	10.65
Cooking facilities				
Local stove	16.3	38.8	27.5	
Charcoal stove	26.3	23.3	25.0	
Kerosene stove	25.0	6.3	15.6	
Local stove +charcoal stove	27.5	28.8	28.1	
Local stove +kerosene stove	5.0	2.5	3.8	17.15
Type of water				
Drilled well+ river(s)	32.5	57.0	45.0	

Tape water	67.5	42.5	55.0	10.10
Type of toilets				
Pit hole	35.0	55.0	45.0	
Modern toilet (VIP)	65.0	45.0	55.0	6.5

(v) Total household assets

Household assets are the components of the household physical capital and can be used to measure livelihood improvement. Therefore, determining the household assets was crucial for understanding the household assets owned by sampled respondents. The counted assets were, transport assets, cooking facilities, communication assets, agricultural tools and furniture assets. Assets owned were listed and their estimated value was summed up and subjected to t-value test for comparison. The results from table 18 indicates that there were statically significant difference in estimated mean assets value between borrowers and non borrowers at $p<0.01$.

Table 18: Total values of household assets

Respondents'	Mean	Std. deviation	t-test
Borrowers (n=80)	334800.0	175626.46	
Non-borrowers (n=80)	176587.5	1154914.69	6.68

Significant at p 0.01

(vi) House ownership

Owning house(s) of high value in a certain location indicates individuals' residence status. For very long time a house is taken as insurance that reduces the loss from some disaster and thus accounted to reduce the probability of default among borrowers. Prior to disbursing loan the title of the applicant's house is released to the lender. Most of informal lending institutions do not consider the un-titled houses in un surveyed (squatter) areas, unlike SACCOS that considered as marketable collateral. Individuals owning good houses were in position of accessing lumpsome money not only from SACCOS but also from informal lenders that might help them to make significant profit rather than debt spiral business. According to table 19, results indicates that there was significant difference house ownership between borrowers and non-borrowers at p<0.05. Furthermore the results show that more borrowers (65%) owned houses compared to 50% of their counterpart. Therefore, Table 19 therefore it can be concluded that borrowers were more prone to invest in high risky financial business that might scare their counterparts (Table 19).

Table 19: Owning house (s)

If owning house(s)	Borrowers (n=80)	Non-borrowers (n=80)	Total (n=160)	calc.X^2-value
Yes	65.0	50	61.9	
No	25.3	50	38.1	9.56

Significant p 0.05

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

The major objective of this study was to assess the impact of micro credit to poverty reduction among the smallholder farmers. Specific objectives were (i) to determine economic activities undertaken by borrowers and (ii) to assess the impact of micro-credit to poverty reduction among smallholder farmers. Several findings emerged from this study. This chapter presents the conclusions and recommendations emanating from the major findings of the study.

5.1 Conclusions

5.1.1 Activities undertaken by borrowers

In attempting to determine the activities undertaken by SACCOS' borrowers, it has been found that the main occupation is agriculture. The secondary activities were mentioned as kiosk, brewing local beer, selling charcoal and food vendor. The results show significant difference in cash accrued from estimated farm income and off-farm activities between borrowers and non-borrowers at $p<0.01$. Hence the result foretells us that, provision of credit to farmers has a substantial contribution to improve percentage level of income among smallholder farmer's borrowers.

5.1.2 Assessing the impact of micro-credit to poverty reduction

Although insignificant difference was observed in total farm size owned, transport assets between SACCOS' borrowers and non-borrowers were significant. Furthermore, significant differences between borrowers and non-borrowers were notified with respect to household in income, expenditure on basic needs, total valued assets, children's education and status and type of labour. This was justified by significant results in these variables at $p<0.05$. Borrowers also showed significantly high income from farm, animal products and off-farm activities. The study, a result thus signifies the impact of the micro credit to poverty reduction among smallholder farmers.

5.2 Recommendations

(i) Borrowers are constrained mainly by lack of education on business and credit management. It is therefore recommended that support in terms of training in financial and operations guidelines is highly needed so as to broaden the knowledge among borrowers on how to commit loans into productive activities.

(ii) Inadequate knowledge by members and leaders on SACCOS' operations and micro finance best practices. The capacity to effectively govern and manage SACCOS is yet another factor that impedes the sector's development. In the current arrangement the burden of due diligence is left to SACCOS members who have little capacity to oversee operations of financial institution without strong legislation and official supervision. Therefore the study recommends concerted efforts in building leadership and governance capacity of SACCOS by all the relevant stakeholder.

(iii) In order to ensure sustainability of the SACCOS, continuous monitoring of financial management and performance, adoptive operations, fair loan conditions and procedures are highly recommended. This is because the operational circumstances among beneficiaries are continuously changing. Such changes may involve microeconomic conditions, legal requirements, need of users and the availability of other financial services in the operational area.

(iv) There is need for the government and other relevant stakeholder to increase efforts to empower the SACCOS membership through additional knowledge and skills to members there is no doubt that SACCOS will become sustainable.

(v) There is need to sensitise members on the importance of reviewing By-laws on a regular basis. Preferably this should take place whenever there changes in Society's framework or changes in the law. This exercise should take place in every Annual General Meeting (AGM) purposely because through that SACCO members would build the confidence on their shares. On the other hand, reviewing by-laws will help to break the barriers existing against non-members and attract them to join the Society's in their respective areas hence increasing share volumes.

(v) Timeliness and the volume of cash. From the study many borrowers reported that the disbursement of loans from their respective SACCO Societies takes longer time such that some times funds are released when it is too late to invest in farming, thus it is recommended that processing of loans should take into consideration and prioritise loans based on timing of intended enterprise.

In terms of volume of cash: SACCOS should strive to collect more shares, and improve membership and savings bases. These will improve their lending ability and improve their capacity to generate profit/dividends for their members.

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APPENDICES

Appendix 1: Interview checklist for SACCOS officials

(A) SAVINGS AND CREDIT SOCIETIES GENERAL INFORMATION

1.Date	
2.Name of the SACCOS	
3.Location ward: Village:	
4. Name of the interviewee	
5. Position	
6.Level of the education	

(B) SAVINGS AND CREDIT SOCIETIES OPERATIONS

9. Please may I know the mission of your scheme/society?
………………………………………………………………………………………………

10. What are the society's (SACCOS) objectives…
………………………………………………………………………………………………..

11. When did your SACCOS start to offer credit to smallholder farmers?
………………………………………………………………………………………….

12. Please can we know the total number of beneficiaries in your ward so far? Total Beneficiaries…………………………………………………………………….. …

13. Who is responsible for the overall society's operations?
………………………………………………………………………………………

14. Is there any contract between your SACCOS and customers you have signed?
(1) YES (2) NO

15. If YES, what kind of contracts exists between the SACCOS and the customers? (Explain)
……………………………………………………………………………………...

16. What measures/actions are taken to ensure money safety /security?
……………………………………………………………………………………….

17. Do you have any contract/arrangements with Insurance agencies?
(1)YES (2) NO

18. If YES, name the insurance agency…………………………………………………

19. Mention the contracts/agreements that exists with the insurance agency…………...

(C) CREDIT PROVIDED

21. How many members does the society have?……………………………………..
22. How many non-members do you serve?…………………………………………….
23 How many members do you target to serve?………………………………………
24.How many villages do you serve?…………………………………………………
25. What type of credit services do your SACCOS offer?

(a)…………………………………………
(b)…………………………………………
(c)…………………………………………
(d)…………………………………………

26 Does the SACCOS have any future plans?
(i) YES (ii) NO

27. If YES, what plans do you expect to undertake (explain)
(a)…………………………………..
(b)……………………………………
(c)…………………………………….

28. What technical assistance is to provide to the customers?
……………………………………………………………………..
……………………………………………………………………

(D) CREDIT VIABILITY

29. Mention the source of initial capital investment

	Source	Amount (Tshs)
1		
2		
3		
4		

30. Was there any fund/grant to subsidize the capital investment?
1. YES
2. NO

31. If YES, name the source of funds and amount obtained

	Source	Amount (Tshs)
1		
2		
3		

32. What criteria are used to determine the credit disbursement to the customers?
(a)……………………………………………………………….
(b)……………………………………………………………….
(c)……………………………………………………………….
(d)……………………………………………………………….
(e)………………………………………………………………..

33. What collateral requirements that the borrower must fulfil before securing the credit?
    (a)…………………………………………………………………
    (b)…………………………………………………………………
    (c)…………………………………………………………………
34. Mention the credit repayment modalities used to ensure effective repayments
    (a)………………………………………………………………….
    (b)………………………………………………………………….
    (c)…………………………………………………………………..
    (d)……………………………………………………………………

35. What incentives are used to encourage more savings to the SACCOS?
    (a)………………………………………………………………….
    (b)………………………………………………………………….
    (c)………………………………………………………………….
    (d)………………………………………………………………….

(E) SACCOS RESOURCE MOBILIZATION CAPACITY

38. Indicate interest rates charged for different types of credit.

No	Credit type	Duration and Interest rates Charged in percentage		
		2002/03	2003/04	2004/05
1				
2				
3				
4				
5				

39. Interest paid on savings accounts

NO	Types of savings	Duration and Interest rate paid percentage		
		2002/03	2003/04	2004/05
1				
2				
3				

40. Mention types of deposit accounts and the rate of interest paid

	Types of interest	Duration and Interest paid in percentage		
		2002/03	2003/04	2004/05
1				
2				

41. Was the SACCOS charged any kind of tax? (Explain)………………………………..
42. Do you think your SACCOS can proceed without more donor grants?………………
43. What do you think ought to be improved in the overall operation of savings and credit Societies?……………………………………………………………………………….

Appendix 2: Borrower questionnaire

(A) BASIC INFORMATION

1.Date	2.Ward	3.Village
4.Name	5.Gender (a) M (b) F	5.Age
7.Position in the household (a) House hold head (b) Others (specify)	8. Occupation. …………	9.SACCOS membership (a) YES (b) NO
10. Marital status (a) Single (b) Married (c) Widow (er) (d) Divorced	11.Education level (a) No formal education (b) Adult education (c) Primary education (d) Secondary education (e) Higher education	12.Composition of household members years M F (a) Under-5 ……. ……. (b) Btn 5-10 …….. ……. (c)Above 10 ……. ……..

13. The number of children who go to school presently in your household?
    1. Public schools…………
    2. Private schools ………
14. What is your major source of income?…………………………………
15. Name other sources of income
    (a)………………………………………………………..
    (b)………………………………………………………..
    (c)………………………………………………………..
    (d)………………………………………………………..

(B) PRODUCTION AND INPUT USE

16. Do you own land for agriculture purposes?
    a. YES
    b. NO
17. If NO, how do you get access to land for production purposes?
    ………………………………………………………………...
18. What is your total number of plot/size of farmland you own? ……………………………
19. What is your average size (acres) in use?………………………..
20. What type of labour is employed in the farm work?
    a. Family labour
    b. Hired labour
    c. Both hired and family labours
    d. Other (specify)

21.If you hired labour, how many labourers worked on your farm in the last cropping two? ……………………………………………………………………………………………

22. Indicate the type of crops you grown in the last two seasons and cash earned?

CASH CROPS					**FOOD CROPS**			
S/N	2004/05	Cash	2005/06	Cash	2004/ 05	Cash	2005/06	Cash
1								
2								
3								
5								
6								

23. Indicate income estimates realized from off-farm sources/ activities

	Activities/ or sources	Estimated income (Tsh)
1		
2		
3		

24. Do you keep livestock?
    a. YES
    b. NO

25. If YES, what type of livestock do you keep? (Specify)

……………………………………………………………………………………………

14. Name the livestock produce obtained:

	Livestock	Products	Output	Quantity produced	Quantity sold	Price/unit
1						
2						
3						

(C) HOUSING AND ASSET

1. Housing (tick)

Type of the wall	1. Mud+wood+thatch 2. Wood+mud+cement 3. Bricks (heated bricks) 4. Bricks (non-heated bricks) 5. Stones cement bricks
Type of the floor	1. Mud floor 2. Cemented floor
Type of roof	1. Thatch, thatch mud 2. Aluminium sheets
Type of toilets	1. None 2. Pit hole type 3. Modern type
Water type	1. Drilled well+ rivers 2. Portable (installed)

2.Type of asset present in the household

	Type of asset	Number	Value
Transportation	1.Motorcar 2. Motorbike 3. Bicycle		
News media	1. Radio 2. TV		
House assets	1. Tables 2. Chairs 3. Sofa sets 4. Hard ropes		
Kitchen facilities	1.Local stone stove 2. Charcoal cooker 3. Modern charcoal cooker 4. Electric cooker 5. Refrigerator		
Farm implements	1. Tractor 2. Ox-plough 3. Ox-cats 4. Hand hoe 5. Machetes 6. Bush knives 7. Sickles 8. Axes		

3. Which assets were you able to purchase last season……………………………………
4. Do you think there have been any improvements in your standard of living?………..

5. Do you have access to health services?
   a. YES
   b. NO
6. If YES, mention the type of services
   a. Traditional
   b. Public
   c. Private
   d. Both traditional and public services
   e. Both public and private services

7. What was your estimated expenditure on clothing, education, health services and food Per month?

Items	**Estimated amount (value)**
Clothing	
Education	
Food	
Health services	

Others (specify)	

(D) MEMBERSHIP INFORMATION

1. Membership information.

Name of the credit society:	
Member of the SACCOS:	YES/NO
Membership card number?	

2. Indicate the reasons that make you to be a member of SACCOS
   (i)………………………………………………………
   (ii)………………………………………………………
   (iii)……………………………………………………..

3. Did you apply for credit last season?
   a. YES
   b. NO

4. If YES, were you granted?………………………………..

5. Did you obtain credit from other sources (e.g. Moneylenders or traders) during the last cropping season?
   a. YES
   b. NO

6. If YES, name the other sources…………………………………………………….

7. In total what amount did you obtain in the last cropping system?

Time	Amount received	Amount to be paid

8. Did you experience any delay in loan disbursement?
   a. YES
   b. NO

9. If YES, what was the major problem encountered in obtaining credit from the SACCOS?
………………………………………………………………………………………………
………………………………………………………………………………………………

10. Did you incur any cost in trying to obtain credit from SACCOS?
    a. YES
    b. NO
11. If YES, what costs did you incur?…………………………………………………
12. What amount did you spend for the above costs?………………………………….
13. What was the purpose of the credit?……………………………………………….
14. What benefits did you obtain from credits received in the two last years?
    a. Additional farm production (specify)…………………….
    b. Additional income (specify)………………………………
    c. No achievements (explain)…………………………………

CREDIT INTRODUCTION

15 Did you utilize the credit obtained from SACCOS for the purpose required?
(1) YES (2) NO

16 Did any of the enterprises benefit from the credit you received from the above Purposes?……………………………………………………………………………….

17 Was some portion of the credit used for consumption?……………………………..

18. Did you utilize the credit obtained from the SACCOS for the purpose required?
(1) YES (2) NO

19. If NO, what hindered you from utilizing the credit for the purpose required?
……………………………………………………………………………………….

20. Did you save with the SACCOS? (1) YES (2) NO

21. If NO, mention the reasons for not saving……………………………………

22.If YES, what do you think is the reason for the improvement?
(a)………………………
(b)………………………
(c)………………………
(d)………………………

23. Are you satisfied with the SACCOS services? (1) YES (2) NO

24. If NO, explain,…………………………………………………..

25. What do you think ought to be done to ensure more customer satisfaction?
…………………………………………………………………………
…………………………………………………………………………
…………………………………………………………………………

Appendix 3: Non-recipient questionnaire

(A) GENERAL INFORMATION

1.Date	2. Ward	3.Village
4.Name	5.Gender (1) M (2) F	6. Age
7. Position in the household a. Household head b. Others (specify)	8.Occupation	9.SACCOS membership a. YES b. NO
10. Marital status (a) Single (b) married (c) Widower (d) Divorced	11. Education level (a) No formal education (b) Adult education (c) Primary education (d) Secondary education (e) Higher education	12.Composition of household members years M F (a) Under-5 ….. ….. (b) Btn 5-10 …... …... (c) Above 10 …… …..

13. Number of children who go to school presently
    1. Public schools……………………..
    2. Private schools……………………
14. What is your major source of income?………………
15. Name other sources of income
    (a)……………………………………..
    (b)…………………………………….
    (c)…………….... ……………………….

(B) PRODUCTION AND INPUT USE DATA

1. Do you own land for agricultural purpose?
   a. YES
   b. NO
2. If NO, how do you get access to land for production purposes?
   ………………………………………………………………….
3. What is your total farm size in acres?…………………………..
4. What is your average farm size (acres) in use?…………………
5. What type of labour is employed in the farm work?
   a. Family labour
   b. Hired labour
   c. Other (specify)

6. If you hired labour, how many labourers worked on your farm in the last cropping season? ……………………………………………

7. Indicate what type of crops you grown in the last two seasons and cash earned after selling?

CASH CROPS					FOOD CROPS			
S/N	2004/05	Cash	2005/06	Cash	2004/ 05	Cash	2005/06	Cash
1								
2								
3								
5								

8. Indicate income estimates realized from off-farm sources/ activities

	Activities/ or sources	Estimated income (Tsh)
1		
2		
3		

9. Do you keep livestock?
   a. YES
   b. NO

10. If YES, what type of livestock do you keep? (Specify)
……………………………………………………………………………..

11. Name the livestock produce obtained:

	Livestock	Products	Output	Quantity produced	Quantity sold	Price/unit
1						
2						
3						
4						
5						

(C) HOUSING AND ASSET
1. Housing (tick)

Type of the wall	1 2 3 4 5	Mud+wood+thath Wood+mud+cement Bricks (heated bricks) Bricks (non-heated bricks) Stones cement bricks
Type of the floor	1 2	Mud floor Cemented floor
Type of roof	1 2	Thatch, thatch mud Aluminium sheets
Type of toilets	1 2 3	None Pit hole type Modern type
Water type	1 2	Drilled well+ rivers Portable (installed)

2.Type of asset present in the household

		Type of asset	Number	Value
Transportation	1 2 3	Motorcar Motorbike Bicycle		
News media	1 2	Radio TV		
House assets	1 2 3 4	Tables Chairs Soffer sets Hard ropes		
Kitchen facilities	1 2 3 4 5	Local stone stove Charcoal cooker Modern charcoal cooker Electric cooker Refrigerator		
Farm implements	1 2 3 4 5 6 7 8	Tractor Ox-plough Ox-cats Hand hoe Machetes Bush knives Sickles Axes		

3. Name the assets you were able to purchase seasonally
……………………………………………....
4. Do you think there have been improvements in your standard of living in two years?
(1) YES (2) NO
5. Do you have access to health service?
   1. Traditional services………………..
   2. Public service………………..
   3. Private service……………….

6. What was your estimated expenditure on clothing, education, health services, and food per month?

Items	Estimated amount (value)
Clothing	
Education	
Food	
Health service	
Others (specify)	

8.When did you join SACCOS?……………
9. Have you ever applied the loan from SACCOS?
1. YES
2. NO

10.If YES, how many times have you applied for loan?…………………….
11.What reasons makes you fail to receive the credit from SACCOS?……………….
……………………………………………………………………………………….
12. What do you think ought to be done in order that many people in rural areas to use savings and credit services from SACCOS?