

**EFFECT OF MICROFINANCE CREDIT ON POVERTY ALLEVIATION AT  
HOUSEHOLD LEVEL IN NAKURU COUNTY**

**BY**

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## **DECLARATION**

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

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## **DEDICATION**

To my parents, for your love, encouragement and support that you have given that has brought me this far.

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## **LIST OF ABBREVIATIONS**

<b>BOP</b>	:	Base of the Pyramid
<b>K-REP</b>	:	Kenya Rural Enterprise Programme
<b>MC2</b>	:	Means (M) and the Competences (C) of the Community
<b>MDGs</b>	:	Millennium Development Goals
<b>MFC</b>	:	Micro-finance Credit
<b>MFI</b>	:	Micro Finance Institutions
<b>MSEs</b>	:	Micro and Small Enterprises
<b>NGO</b>	:	Non-Governmental Organisation
<b>ROSCAs</b>	:	Rotating Savings and Credit Association
<b>SACCOS</b>	:	Savings and Credit Co - operative Societies
<b>SHGs</b>	:	Self Help Groups
<b>SMEP</b>	:	Small and Micro Enterprise Programme

## **ABSTRACT**

Poverty reduction has been a major concern for successive governments in Kenya over the years because it is believed to be the universally accepted way of achieving economic growth in the country. The intended purpose is to raise the living standards of the people and improve upon their quality of life. The Kenyan government has been implementing policies to expand financial access to the poor including promoting microfinance credit access to the poor. Despite these programmes, about 48% of Kenyans still live below the poverty line. Microfinance programmes are increasingly publicized as one of the most successful tools for development with the ability to positively affect its participant's economic and social status. However, the effect of access to microfinance credit in Kenya remains unknown. Based on this knowledge, the study sought to find out the effect of microfinance credit on poverty alleviation at household level in Nakuru County. The study employed descriptive research method. The population consisted households accessing microfinance credit in Nakuru County. Purposive sampling was to select households that were studied. The study used questionnaire to collect data which was then summarized, coded and tabulated and analyzed using SPSS version 21. Multivariate regression model was applied to determine the relative importance of each of the six variables (business expansion, housing and shelter, saving, expenditure on education, healthcare and better clothing) with respect to poverty alleviation. The results were tested using F-test, t-test, and ANOVA at 95% confidence level. The study found that microfinance credit access positively contributes to alleviation of poverty at household level in Nakuru County by providing finance access to low income earners, less educated and those in the informal sector which helps in expansion of business, acquisition of better residential places, and acquisition of education, health and improved welfare. The study also found that access to microfinance credit significantly increases household income and provide avenues for people to save. The study recommends that microfinance institutions to continuously improve their outreach to enable them reach more deserving low income earners in all Counties in Kenya and households education on use of finances obtained enhanced.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Microfinance banks in generally the whole world target low-income communities. Most micro finances give loans to borrowers without requiring collateral. They are micro not because of their institutional scale but because of the scale of typical transactions with customers. Loan sizes range from under Ksh 10,000 to roughly Ksh 500,000, and operational scale varies from several hundred customers to several million. The most famous micro bank, Grameen Bank, serves nearly 8 million customers in Bangladesh with an average loan balance of \$79 in 2007 (Dale and Pischke, 1992). Christen, (1997) defines microfinance as the means of providing a variety of financial services to the poor based on market-driven and commercial approaches (Christen, 1997). This definition encompasses provision of other financial services like savings, money transfers, payments, remittances, and insurance, among others. However many microfinance practices today still focus on micro-credit: providing the poor with small credit with the hope of improving their labour productivity and thereby lead to increment in household incomes.

Microfinance is one of those small ideas that turn out to have enormous implications (Argion & Morduck, 2005). When Muhammad Yunus, an economics professor at a Bangladesh university, started making small loans to local villagers in the 1970s, it was unclear where the idea would go. Around the world, scores of state-run banks had already tried to provide loans to poor households, and they left a legacy of inefficiency, corruption, and millions of dollars of squandered subsidies. Today, Muhammad Yunus is recognized as a visionary in a movement that has spread globally, claiming over 65 million customers as at the end of 2002. Microfinance institutions (MFIs) focus on providing credit to the poor who have no access to commercial banks, in order to reduce poverty and to help the poor with setting up their own income generating businesses.

Poverty reduction has been an important development challenge over decades. One of the identified constraints facing the poor is lack of access to formal sector funds to enable

them to take advantage of economic opportunities to increase their level of output, hence move out of poverty. The wide-spread poverty, with all the problems that comes with it, is the greatest challenge of our time. Traditional aid has not helped in solving this problem. One kind of development work, which promotes financial sustainability for poor individuals in the society, is micro finance (Lindvert, 2006). Group liability, a contract feature found in many programs, is a common component in many microfinance programs. Many believe that this feature, because of its purported ability to overcome adverse selection and moral hazard problems, is a key innovation responsible for the rapid growth of the microcredit movement in credit markets for the poor. Also due to the level of poverty among the poor, group liability is seen as a tool to boost the efficiency of loans and encourage them to borrow and pay. Members of the group act as custodians of each other. However the question is as to the efficiency of the microfinance in reducing poverty since poverty is a broad term and is influenced by many factors.

### **1.1.1 Microfinance Credit**

Microfinance is the provision of financial credit to the poor and low income households without access to formal financial institutions. According to Rajasekhar (2004), microfinance is the strategy for providing to the poor in rural and urban areas, especially women with savings and credit facilities to set up or expand business, invest in self-employment activities and increase household security. According to (World Bank, 2007), the term refers to provision of financial services mainly saving and credit to the poor. Micro-finance banks therefore are institutions that are established to provide financial services to the poor. Microfinance institutions can be non-governmental organizations, savings and loan cooperatives, loan unions, government banks, commercial banks, or non-bank financial institutions (Ledgerwood, 2006). The best known activity of MFIs is providing credit for the poorer households and small enterprises (Rajendran and Raya,2010) estimate in a recent study on rural financial markets in the Philippines 70% of rural credit is supplied by informal village lenders. The primary clientele of MFIs credit consists of those who face severe barriers to access financial products from the conventional financial institutions. These barriers comprise mainly high operational costs and risk factors.

### **1.1.2 Poverty Alleviation**

Poverty is a global phenomenon, which affects continents, nations and peoples differently. It afflicts people in various depths and levels, at different times and phases of existence (Oyeranti, 2005). The most commonly way to measure poverty is based on income or consumption line. A person is considered poor if his or her consumption level falls below 1USD per day, a level necessary to meet basic needs. This minimum level is called the poverty line The (World Bank, 2002). Poverty in rural areas is seen to be at a higher level and more recognized. In most countries including Kenya there is urban poverty. Towns and villages around the cities are characterized by high levels of poverty. In the city of Nairobi, people sleep in kiosks, roadsides, lorry stations, petrol stations, and many other unsecured places. The level of slums in the cities really indicates that there is urban poverty. Migration from the villages to the cities in search of jobs has caused congestion in the cities. Many people in the cities live on less than one or two dollars a day because they do not have jobs. Public places of convenience are congested. Even though it is clear that urban dwellers have advantage as compared to their counterparts in the rural settings, it is also obvious that some rural dwellers are better off than their counterparts in the cities.

Poverty therefore is not only a rural phenomenon but also observable in the urban settings in most developing countries, including Kenya, opportunities for wage employment in the formal sector of the economy are extremely limited, and the vast majority of the poor rely on self-employment for their livelihood. Better access to financial services enables the poor to establish and expand micro-enterprises and thereby improve their income levels and create employment. Even in middle income countries such as Botswana and Egypt, where opportunities for wage employment are greater, many poor households rely on self-employment in micro-enterprises for their livelihood (Hashemi, 1997). Narayan et al (2000) systematically defined poverty when he said that “don’t ask me what poverty is because you have met it outside my house. Look at the house and count the number of holes. Look at my utensils and the clothes that I am wearing. Look at everything and write what you see. What you see is poverty”. People living in extreme poverty often lack opportunities to have their basic needs met, meaning access to food, clean water, clothes and decent shelter. Most lack education and are vulnerable to diseases (Lindvert, 2006).

Given this definition it is not surprising at all that in Kenya poverty is mainly a rural phenomena while urban poverty is mainly concentrated in slums and other informal dwellings. About 65 % of Kenyans live in the rural areas deriving their livelihoods mainly from agriculture. However over the years the subsistence agriculture sector has continued to suffer declining productivity. According to Brock and McGee(2002), the dynamics of poverty are complex and mostly not easy to explain only by using economic models such as price equilibrium, perfect competition, and surplus extraction and so on. There are different types of poverty such as income poverty, absolute poverty, relative poverty and consistent poverty. Income poverty is type of poverty that is a result of lack of money or limited income. Absolute poverty is a type of poverty where people are starved, living without proper housing, clothing or medical care- people who struggle to stay alive. Relative poverty is a type of poverty where people are considered to be living substantially less than the general standard of living in the society. Consistent poverty is a type of poverty that is the combination of income poverty and deprivation (Momoh, 2005).

### **1.1.3 Effect of Microfinance Credit on Poverty Alleviation**

There is an ongoing debate concerning the idea of microfinance credit alone or microfinance plus being capable of reducing poverty. There are views that microfinance alone is inadequate to fight poverty. The need for other services is also important in this respect. Microfinance programmes will be more effective where the provision of non-financial services such as education and training enable clients to use their loans more productively (Hashemi, 1997). Such views, although, do not negate the role of microfinance; fail to appreciate the role of microfinance on its own advantage. Latifee (2003) says “nobody says that micro finance alone is cure for all”. Surveys of the literature on financial intermediation and poverty reduction conclude that development of the financial sector contributes to economic growth and thereby to poverty alleviation (Hussien and Hussain, 2003). If poor people have so many financial tools available to them already, does formal microfinance add much?

Informal instruments (e.g., informal savings and loan clubs, or loans from family, friends, or the local moneylender) are usually more flexible than microfinance from formal

providers, so the poor continue to use these informal tools even when they have access to microfinance. But the informal instruments have severe shortcomings, the greatest of which is their unreliability. When poor people need to get a loan, or to “withdraw” money that they have deposited with (i.e., lent to) someone else, that someone else may not have the money on hand, or may be unwilling to provide it for some other reason. A World Bank research looking at cross-cutting evidence substantiates the hypothesis that countries with better-developed financial intermediaries experience faster declines in measures of both poverty and income inequality (Kunt and Levine, 2004).

Arghion and Morduch, (2005), observe that microfinance can make a real difference in the lives of those served, but microfinance is neither a panacea nor a magic bullet against poverty, and it cannot be expected to work everywhere and for everyone. Much as there have been mixed statistical impacts of microfinance, there also has been no widely acclaimed study that robustly shows strong impacts, but many studies suggest the possibility of good welfare impact (Arghion and Morduch, 2005). Most experts and practitioners believe that microfinance plays a vital role as an instrument of intervention for a poor person to discover her potential and to stride for better living. The main objective of microfinance is to reduce poverty. In doing this microfinance provides the opportunity for clients to create wealth. Targeting women in the society who constitute the majority of the poor, microfinance helps to reduce poverty by creating wealth which leads to an increase in the levels of incomes of the vulnerable. Savings services leads to capital accumulation for investment in the short and long terms. With high levels of income women are empowered.

Studies have shown that microfinance has been successful in many situations. According to Little, Morduch and Hashemi, (2003), “various studies on microfinance and poverty reduction have recorded increases in income and assets, and decreases in vulnerability of microfinance clients”. They refer to projects in India, Indonesia, Zimbabwe, Bangladesh, Ethiopia and Uganda which all shows very positive impacts of microfinance in reducing poverty. Majoux, (2011) states that while microfinance has much potential, the main effects on poverty have been: Credit making a significant contribution to increasing incomes of the better-off poor, including women and Microfinance services contributing



to the smoothing out of peaks and troughs in income and expenditure thereby enabling the poor to cope with unpredictable shocks and emergencies. Khandker, (2003) states that it is clear that what microfinance can do for the poor depends on the poor's ability to utilize what microfinance offers them. He further said that microfinance provides a window of opportunity for the poor to access a borrowing and saving facility.

#### **1.1.4 Nakuru County**

Nakuru County constitutes 6 constituencies (Naivasha, Nakuru town, Kuresoi, Molo, Rongai and Subukia) and has a population of about 1.6 Million people with an urban population of 736,000 people. A large number of the population is below 40 years old. Nakuru is an agriculturally-rich county blessed with various tourist attractions such as craters and lakes. Agriculture is the mainstay of Nakuru's economy. Other income generating activities include hired labour, mainly in small towns, selling of charcoal and fire-wood, petty trading, selling of vegetables and food stuff. The county's weather is conducive for large-scale farming, horticulture and dairy farming. The produce is consumed locally and sold to consumers in neighbouring towns and cities. The poverty level by KIHBS (Kenya Integrated Household Budget Survey) data as at 2009 was 40.1% and it ranked 12 compared to other counties. These characteristics make the district good for any experimental poverty reduction intervention (Mukherjee, 2009).

Rural self-employment contributes 8%, wage employment contributes 19%, urban self-employment 23% and other sectors 2% of the income. Agriculture contributes 48% of the income. Given that most of the residents of the county are into self-employment Microfinance credit has been a major source of capital for most people in the county. The level of poverty is still high but more and more people are gaining familiarity with the microfinance credit and giving it a try.

## 1.2 Research Problem

Poverty reduction has been a major concern for successive governments in Kenya over the years because it is believed to be the universally accepted way of achieving economic growth in the country. The intended purpose is to raise the living standards of the people and improve upon their quality of life. Efforts fighting poverty in Kenya can be traced from Independence. The Sessional Paper No 1 of 1965 detailed the Government commitment to alleviate poverty together with ignorance and disease (Government of Kenya, 2001). This policy has been propagated in policy through long-term strategic plans, sessional papers development plans and other policy documents. The Early efforts geared towards poverty reduction included land resettlement programmes, the District Focus for Rural Development Strategy, the social dimensions of development programmes and other targeted initiatives undertaken by NGOs, CBOs, Development Partners and communities (Alemayehu et al. 2001). Poverty reduction and economic growth creation are mutually reinforcing. Economic growth is good for the poor though not a sufficient condition for poverty reduction. Despite these programmes, about 48% of Kenyans still live below the poverty line with household income insufficient for an adequate diet. Microfinance programmes are increasingly publicized as one of the most successful tools for development with the ability to positively affect its participant's economic and social status. Measuring this impact can be difficult and the programmes have been criticized for not reaching the poorest of the poor. Various approaches to credit for micro and small enterprises have been tried in Kenya by different institutions with varying degrees of success or failure. It is important to understand the effect of microfinance credit and its effect in poverty reduction (Mwabu et al, 2000).

Previous studies have not concentrated on the impact of microfinance credit on poverty alleviation in Kenya for example (Wambugu, 2007) for instance did a study on the financial and social impact of microfinance lending: A case study of K-rep Bank's Juhudi credit scheme in Kawangware Region. (Mushimiyimana, 2008) did an analysis of access to the microfinance institutions loans by female entrepreneurs and impact on their business in the Nairobi Business District, (Kamau, 2008) did a study on determinants of profitability of microfinance institutions in Kenya. It is in line with these that the

researcher believed that a study on effect of microfinance on poverty alleviation was necessary. Is there any relationship between microfinance credit and poverty alleviation at household level?

### **1.3 Research Objective**

To determine the effect of microfinance credit on poverty alleviation at household level in Nakuru County

### **1.4 Value of the Study**

**Government:** Poverty reduction and its related issues have been on high priority of the governments in Kenya over the years. In line with this poverty reduction drive this research, if proven that microcredit can reduce poverty, will offer policy makers an opportunity to redesign policies that will use microcredit to reduce the incidence of poverty.

**NGOs and MFIs:** The outcome will also be a guide to non-governmental organizations to prioritize support towards poverty reduction through micro credit. Microfinance institutions can also become more innovative in formulating their products that are in line with their goals and objectives and the overall goal of the society.

**Investors:** Investors may need to know the challenges of financing MFIs and whether the goals are being achieved. This study will help them make this decision and make informed choices.

**Scholars and Academicians:** Other researchers can also use it as reference point in further research in the area of microfinance services.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter discusses summaries of recognized authorities and previous researches done on the effects of microcredit on poverty alleviation. The first part discusses the theories related to microfinance and poverty, the second part discusses the determinants of poverty alleviation and finally the last part discusses the empirical review from both the international perspective and local perspective.

#### **2.2 Theoretical Review**

Several models have been developed to explain the phenomena of microfinance. They include the Grameen Bank Model of Bangladesh, The MC2 Model and the Village Banking Model of FINCA. The minority group theory will be discussed as one of the poverty theories. The three theories of microfinance discussed go a long way to describe the operation of microfinance institutions and also the effectiveness of the strategies used by the microfinance institutions all over the worlds. Most micro finance institutions form their basis from these theories and it is evident in their lending programmes.

The poverty alleviation theory discussed here at its core, relies on a hypothesis of mutual value creation; the greater the value created for those living at the base of the pyramid, the greater the value created for the venture. Depending on the value created on various dimensions of household by accessing micro credit the greater the value on poverty alleviation.

##### **2.2.1 Grameen Bank Model**

The Grameen bank model was developed by Yunus and the Grameen Bank in 1993 in Bangladesh. The Grameen Bank (GB) is based on the voluntary formation of small groups of five people to provide mutual, morally binding group guarantees in lieu of the collateral required by conventional banks. Women were initially given equal access to the schemes, and proved to be not only reliable borrowers but also astute entrepreneurs as well. GB has successfully reversed conventional banking practices by removing collateral

requirements and has developed a banking system based on mutual trust, accountability, participation and creativity.

Group based lending is one of the most novel approaches of lending small amounts of Money to a large number of clients who cannot offer collateral. The size of the group can vary, but most groups have between four to eight members. The group self-selects its Members before acquiring a loan. Loans are granted to selected member(s) of the group first and then to the rest of the members. A percentage of the loan is required to be saved in advance, which points out the ability to make regular payments and serve as collateral. Group members are jointly accountable for the repayment of each other's loans and usually meet weekly to collect repayments. To ensure repayment, peer pressure and joint liability works very well. The entire group will be disqualified and will not be eligible for further loans, even if one member of the group becomes a defaulter.

### **2.2.2 The MC2 Model**

The first MC2 model was developed in Baham by Fokam in 1992. MC2 are rural development micro-banks created and managed by a community in keeping to their local values and customs. The principal promoter of this concept, Dr. Paul K. Fokam drew inspiration from the Einstein's famous formula: Victory over Poverty (VP) is possible if the Means (M) and the Competences (C) of the Community (C) are combined. MC2 are rural development micro-banks created and managed by a community in keeping to their local values and customs. The objectives of the MC2 Micro bank are simple. The first objective of the MC2 micro bank is economic and financial sustainability from the perspective of the micro bank, the individuals and group members. The second objective of MC2 is the social dimension. This involves targeting the poor, micro and small scale activities and consequently restoring dignity to target beneficiaries to see the importance of being masters of their destiny.

### **2.2.3 Village Banking Model**

The village banking model was first developed in Bolivia by Hatch in the 1980s. The village banking institution, Foundation for International Community Assistance (FINCA) implements a village banking model in its effort to create financially-sustainable

solidarity groups. FINCA trains small community groups in a 22-module program to form Community Credit Enterprises (CCE). These small enterprises, or companies, permit members to buy shares as shareholders and generate capital to offer sustainable credit and business models. According to the original model, village banking –FINCA works with groups of 30-60 members, usually all women. As soon as the village bank is inaugurated, it receives its first loan from the implementing agency (the local headquarters of FINCA or its affiliate) for on-lending to the individual members of the village bank. The sponsoring agency spends one to three months in setting up each bank, organizing the election of a management committee and training its members, as well as developing the rules and regulations to govern the village bank. The first individual loan (usually US\$ 50) is repaid on a weekly basis in equal instalments of principal and interest over a four-month period. The village bank collects these payments at regular meetings and, at the end of the 16th week; it repays the entire loan principal plus interest to the implementing agency. The funds circulating back and forth between the implementing agency and the village bank for loans to members constitute the external account. If the village bank repays in full, it is eligible for a second loan. If the village bank is unable to pay the amount due, the implementing agency stops further credit until reimbursement is made.

#### **2.2.4 Base of the Pyramid Approach**

This theory was first developed by Prahalad and Hammond in 2002. The base (or bottom) of the pyramid is a term that represents the population of the world that primarily lives and transacts in an informal market economy. Since its initial articulation a growing number of authors and researchers are using the term BoP in their writings. While much debate and most of the writings on this perspective have centred around who is in the BoP (Hammond, et al, 2007) and how BoP ventures need fundamentally new market entry strategies (Hart, 2005; Hart & London, 2005), a deep exploration of the poverty alleviation implications has lagged (London, 2007). What has not been fully articulated is how this perspective differs from other market-based poverty alleviation approaches, and thus, how its poverty alleviation outcomes may be different. At its core, the BoP perspective relies on a hypothesis of mutual value creation; the greater the value created for those living at the BoP, the greater the value created for the venture. Indeed, BoP

ventures are expected to generate acceptable economic and societal returns to the organization investing in the venture and the local community in which they operate (Hart & Milstein, 2003; London & Hart, 2004; Wheeler et al., 2005). Clearly, this hypothesis, if supported, has implications for both business strategy and poverty alleviation. A BoP venture is a revenue generating enterprise that either sells goods to, or sources products from, those at the base of the pyramid in a way that helps to improve the standard of living of the poor (Prahalad & Hammond, 2002; Prahalad & Hart, 2002).

## **2.3 Determinants of Poverty Alleviation**

There are several factors that cause poverty. Improvement or getting rid of these factors will contribute to poverty alleviation. Some of the factors that contribute to poverty alleviation at household level will be discussed below.

### **2.3.1 Microfinance Credit**

One of the most popular of the new technical tools for economic development and poverty reduction are microloans made famous in 1976 by the Grameen Bank in Bangladesh. The idea is to loan small amounts of money to farmers or villages so these people can obtain the things they need to increase their economic rewards. A small pump costing only \$50 could make a very big difference in a village without the means of irrigation (Yunus, 1992). A specific example is the Thai government's People's Bank which is making loans of \$100 to \$300 to help farmers buy equipment or seeds, help street vendors acquire an inventory to sell, or help others set up small shops. The International Fund for Agricultural Development (IFAD) Vietnam country programme supports operations in 11 poor provinces. Between 2002 and 2010 around 1,000 saving and credit groups (SCGs) were formed, with over 17,000 members; these SCGs increased their access to microcredit for taking up small-scale farm activities (Rajasechar, 2004).

With the large majority in Kenyans lacking any kind of formal banking facilities, micro finance groups such as Msingi Bora fill the gap, providing members with credit they would otherwise not have access to (Brau,2004). In Kibera for instance, while some groups are initiated and established by the slum dwellers on their own, some groups such as Msingi Bora have the backing of National and International organizations that provide

training and psychological support. Care international through a CBO known as the Kibera slum education programme support Msingi Bora and dozens of other such groups by providing training, capacity building, resource mobilization as well as sub granting for projects such as the education and care of orphaned and vulnerable children (Botten et al, 2006).

### **2.3.2 Business Expansion**

Due to lack of finances, most individuals cannot expand beyond certain levels. However, while households have competing needs of funds, they may have to forego the need to expand business temporarily. Those households which have at least the basics covered can thus use the borrowed funds to expand business hence improve their income levels and living conditions (Kiiru, 2007).

### **2.3.3 Housing and Shelter**

Urban poverty is a significant cause of inadequate shelter. Lack of finance requires individuals or households to rent poor quality accommodation or to build informally and sometimes illegally; no other options are affordable to many of those living in Southern towns and cities. For those who build their own homes, consolidation is generally slow due to both an absolute lack of finance, and an inability to spread costs through acquiring loans (World Bank, 2001). The lack of affordable complete housing prevents households from accessing conventional (mortgage) finance. Their financial exclusion is compounded by a preponderance of informal incomes that do not allow them to get loans from formal financial institutions. In this context, housing is primarily financed by savings (World Bank, 2007).

### **2.3.4 Income/ Resource/ Saving**

According to the latest World Bank estimates, the proportion of people in developing countries living on less than \$1 per day declined from 32 per cent in 1990 to 26 per cent in 1998 (World Bank, 2001). The extrapolation of this trend to the year 2015 results in a headcount index of about 17 per cent suggesting that the world is more or less on track for reaching the global goal of halving the proportion of people living in extreme poverty between 1990 and 2015 (Obeng, 2011). However, most of the progress occurred in East



Asia and the Pacific a region where the incidence of income poverty nearly halved during the 1990s, although the impact of the financial crisis of 1997 on income poverty remains to be fully determined. The decline in income poverty was much less dramatic in the other developing regions, where it decreased to 33 per cent in 1998, down from 35 per cent in 1990. It has been calculated that at this pace, poverty will not be halved by 2015, but reduced by a fifth.

### **2.3.5 Expenditure on Education**

Access to, and completion of, quality basic education, including the access of a healthy, effective and protective learning environment is a great contributor to reduction in poverty. Educating children in a family does not go unnoticed in the family. Education greatly contributes to better decisions and thinking of individuals. It removes individual from the traditional view of life and steers development in a society (World Bank, 2001).

### **2.3.6 Healthcare**

Improved health is essential not only for raising income and productivity levels but, most fundamentally, for enhancing the quality of life. Freedom from sickness is vital to reducing poverty. In the West Indies, for example, mass treatment of children infected with whipworm dramatically increased their learning capacity. Country programmes of major organizations aim to empower families and communities to make informed health decisions and to act on them. Health is one of the basic needs on the Maslow hierarchy of needs and achieving it is a step closer to a better life (Latifee, 2003).

## **2.4 Empirical Review**

Several studies have been conducted both internationally and within the country on impact of microfinance on poverty alleviation. Some researchers found a positive relationship others negative relationship and some mixed findings. Some of these empirical studies have been discussed below both from an international perspective and local perspective.

### **2.4.1 International Evidence**

Khandker (1998) in Bangladeshi, in several related studies using statistical method on assessment of impact of microfinance among three Bangladeshi programs found that every additional taka lend to a woman add additional of 0.18 taka to annual household expenditure. Similarly, in an updated study using panel data in Bangladesh (Khandker,2005), found out that each additional 100 taka of credit to women increase total annual household expenditures by more than 20 taka. These studies showed overwhelming benefit of increase in income and reduction of vulnerability.

Obeng (2011) carried out a study on Impact of Microcredit on poverty reduction in rural areas A case study of Jaman North District, Ghana. He used the questionnaire for data collection from programme beneficiaries and microfinance institutions and analyzed the data using tables, percentage and diagrams. The objectives of the study were to assess whether microfinance has engendered positive or negative outcomes in reducing poverty. The findings from the study were that people, especially vulnerable and marginalized were getting access to credit which impacted positively on the poverty levels of the beneficiaries.

Wairanyagania (2011) carried out a study to investigate the determinants of participation in microfinance and its impact on household poverty in Musoma district, Tanzania. Primary data, gathered from 116 households both members and non-members of VICOBA, was applied on a two stage model that evaluates determinants of participation in micro finance and finally the impact of this participation on household incomes. Probit and Heckit models are applied in the first stage (participation) while two stages least square (2-SLS) model is applied to the income equation. Results indicated that characteristics of the household head (gender, years of schooling, marital status and occupation), household characteristics (household size in terms of number of members) and village characteristics (distance to the market centres) affect participation in microfinance. On the other hand, years of schooling, household participation in microfinance, distance of households from main roads and interest rates affect incomes. Of essence, of essence, participation in microfinance was seen to alleviate household poverty. The study recommended policies that promote gender equity, development of

rural infrastructure, development of multiple or strong microfinance institutions in remote village areas, mandatory publication of interest rates by MFI's and a more supportive business climate for microfinance institutions.

#### **2.4.2 Local Evidence**

Kiiru (2007) carried out a study on Impact of microfinance on rural poor households' income and vulnerability to poverty: case study of Makueni District, Kenya. The main objective of the thesis was to analyze the impact of microfinance on household income as well as measure household vulnerability to poverty after access to microfinance. The study is an experimental case of Makueni district where participants in microfinance programmes and non-participant households were studied over time; thus yielding a rich pooled data for analysis. On integrating time dynamics in the analysis, the results indicate a positive and significant impact of microfinance on household income.

Okibo and Makanga (2014) carried out a study on Effects of micro finance institutions on poverty reduction in Kenya, the study focused on PAWDEP located in Kiambu District a case study. It intended to cover credit facilities provided by the MFI and client perception on income improvement and/or reduced poverty levels. The study used descriptive survey design. The target population was 9 staff and 46 clients of PAWDEP. The study employed stratified sampling technique to select staff of the selected MFIs and clients. Both qualitative and quantitative data analysis methods were used. The study established that microfinance is a strategy of poverty reduction and the way credit can reach the poor. If positioned properly, microfinance institutions are useful tools for poverty alleviation.

### **2.5 Summary of Literature Review**

Many studies have shown that micro entrepreneurs below the poverty line experience lower percentage income increases after borrowing than those above the poverty line. Studies have also demonstrated that households below the poverty line tend to use the loans for consumption purposes to a greater extent than households above the poverty line; thus their income should be expected to increase less (Gulli,1998). Research findings that poor households are likely to use micro credit loans for consumption purposes yet their loan repayments rates are higher than repayment rates for the formal

financial institution, which are normally used by the well off in society (Ghatak et al.,1999) is quite intriguing.

From the available data, there is no much study done in the country in reference to the effects of microfinance credit on poverty alleviation. This is necessary since lately there is an increasing trend on the rate at which institutions come up with the aim of reducing poverty but the impact has not yet been felt among the people.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter contains details about the research design, target population, sample and sampling procedure, data validity and reliability, data Presentation. It also includes the method that was used in collecting data and a model for analysing the data in order to come up with answers to the research questions.

#### **3.2 Research Design**

The research design employed in this study is the descriptive research method. The method is ideal because the study involved collecting data from household members of microfinance institutions (MFIs) with a view to determine whether or not microfinance contribute to poverty reduction by increasing their income and welfare.

#### **3.3 Population**

Target population is the larger group to which one hopes to generalize findings (Mugenda and Mugenda, 1999). The population of this study consisted of beneficiary households of MFC in Nakuru County. Nakuru county has a population of about 1.6 million people with an urban population of 736, 000 people and 400, 000 households. The choice of Nakuru County is informed by the high poverty levels and also the fact that it is a major town in the country.

#### **3.4 Sample**

According to Wiersman (1995), a sample is a small proportion of the target population selected using some systematic procedures for study. Sampling is a research procedure that is used for selecting a given number of subjects from a target population as representative of that population. This research study used purposive sampling to select households to be studied. Purposive sampling method is a deliberate non-random method of sampling which aims at selecting a sample of people, setting or events with pre-determined characteristics (Mugenda and Mugenda,1999). A sample of 200 households which have benefited from MFC were selected for this study.

### 3.5 Data Collection

The tool of this study is the questionnaire. The terms and statements embodied in the questionnaire are related to the objectives of the study. The questionnaire had two sections: Section A containing background information of the respondents while Section B measures perception of respondent on effectiveness of microfinance credit on poverty reduction at household level in Nakuru county.

### 3.6 Data Analysis

The data collected was checked for completeness, validity and comprehensibility. Data was summarized, coded and tabulated. Descriptive statistics such as mean, standard deviation and frequency distribution was used to analyze the data. Data was coded and analyzed using SPSS. Summary of the data was done using charts and tables. To determine whether income before obtaining microcredit was significantly different with that of after obtaining the credit, event analysis technique was computed where the cumulative change in income after obtaining microfinance credit was tested using hypothesis testing at 95% confidence level.

#### 3.6.1 Analytical Model

A multivariate regression model was applied to determine the relative importance of each of the six variables (business expansion, housing and shelter, saving, expenditure on education, healthcare and better clothing) with respect to poverty alleviation.

The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

Where;

Y = Poverty alleviation

$\beta_0$  = Constant term

$\beta = 1 \dots 6$  coefficient used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables.

$X_1$  = Microfinance Credit

$X_2$  = Business Expansion

$X_3$  = Housing and Shelter

$X_4$  = Saving

$X_5$  = Expenditure on Education

$X_6$  = Healthcare

$\epsilon$  = is the error term to capture unexplained variations in the model and which is assumed to be normally distributed with mean zero and constant variance.

**Table 3.1: Operationalization of variables**

Variable	Indicator	Measurement scale
Poverty alleviation	Household income	Ratio scale
Microfinance Credit	Uptake of microfinance loans	Ordinal/Nominal scale
Business Expansion	Change in stock levels	Ratio scale
Housing and shelter	Expenditure on rent	Ratio scale
	Relocation to better perceived neighborhoods	Ordinal scale
Savings	Increase in saving	Ratio scale
Expenditure on Education	Enrolment in better rated schools	Ratio scale
Healthcare	Improved sanitation Access to private health facilities	Ordinal/Nominal scale

**Source: Researcher**

### **3.6.2 Test of Significance**

Statistical indicators that were used are the F-test, t-test and level of significance. The significance of each independent variable was tested. F-test was used to test the significance of the overall model at a 5 percent confidence level. The p-value for the F-statistic was applied in determining the robustness of the model. Independent variables (determinants of microfinance credit) with a value of less than 5% were declared to have a significant effect on poverty alleviation



## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents analysis and findings of the study as set out in the research methodology. Data analysis was done in relation to the effect of microfinance credit on poverty alleviation at household level in Nakuru County. Descriptive and inferential statistics were used to discuss the findings of the study.

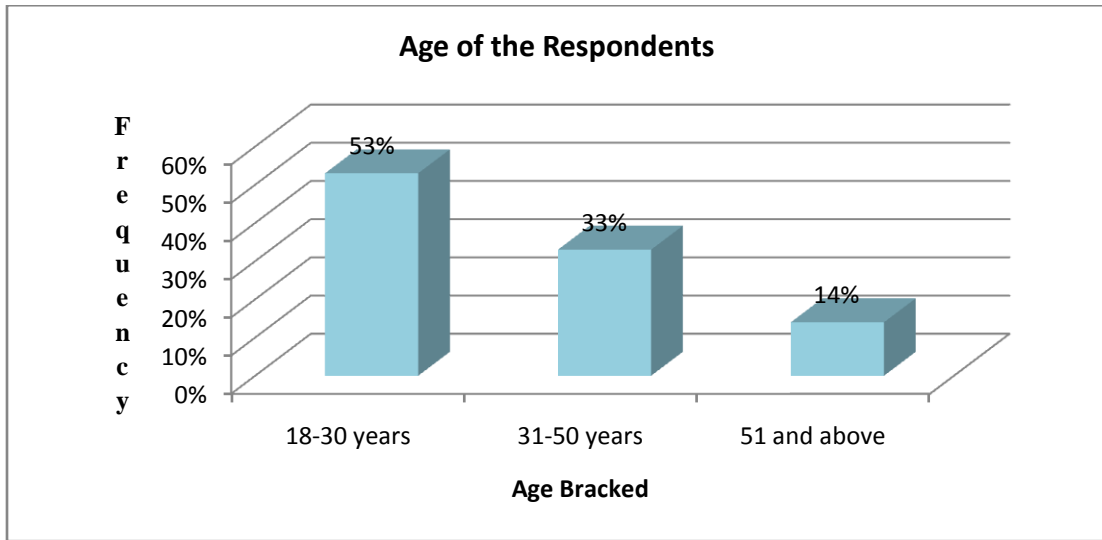
#### **4.2 Descriptive Statistics**

The study targeted a population size of 200 respondents from which all the 200 questionnaires were filled representing a response rate of 100%. This response rate was satisfactory to make conclusions for the study. The high rate was attributed to the approach of administering the questionnaires through interviews and aggressive follow ups on self-administered questionnaires. 100% of the respondents were beneficiaries of microfinance programme and hence provided relevant data required by the study.

##### **4.2.1 Age of the Respondents**

This part sought to establish the background information from which the researcher could understand better in interpretation of the findings. As shown in figure 4.1 below, 53% of the respondents were aged between 18-30 years, 33% aged between 31-50 years and 14% aged above 51 years. This implies that the majority of the respondents were youth which could be explained by the high youth aged population in Kenya.

**Figure 4.1: Age of the Respondents**

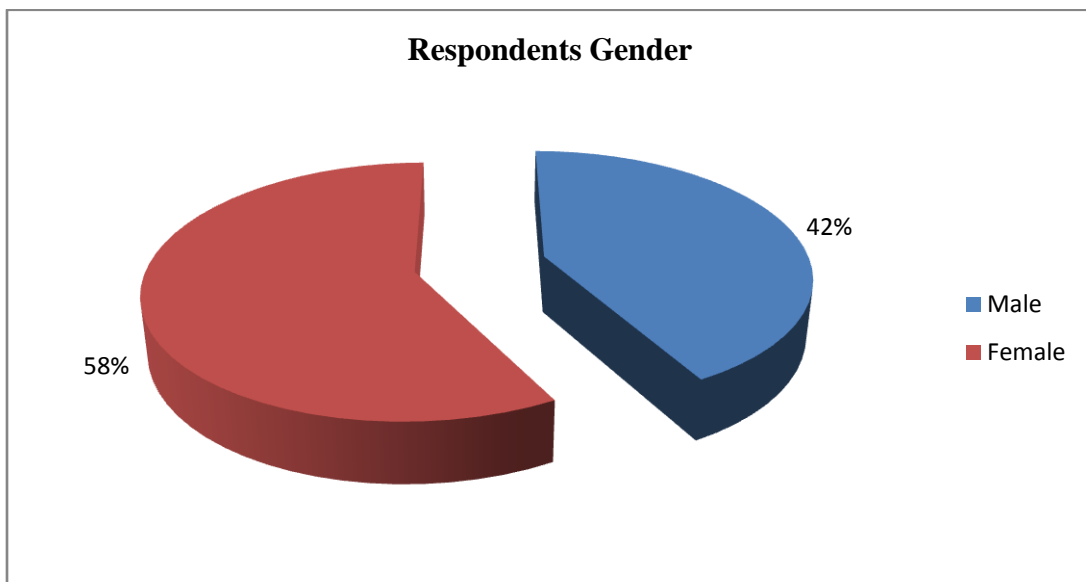


**Source: Research Findings**

#### **4.2.2 Gender of the Respondents**

As shown in figure 4.2 below, 58% of the respondents were female while 42% were male. The majority of the users of microfinance services is normally women and hence could explain the finding.

**Figure 4.2: Respondents Gender**

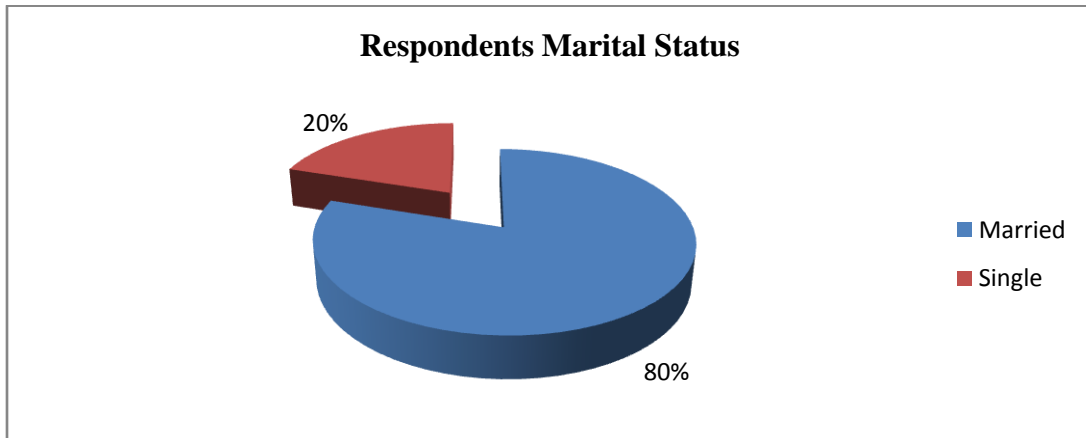


**Source: Research Findings**

### 4.2.3 Marital of the Respondents

The majority of the respondents at 80% were married while 20% of the respondents were single. Determining marital status of the respondents was important in that it affects the level of household incomes.

**Figure 4.3: Respondents Marital Status**

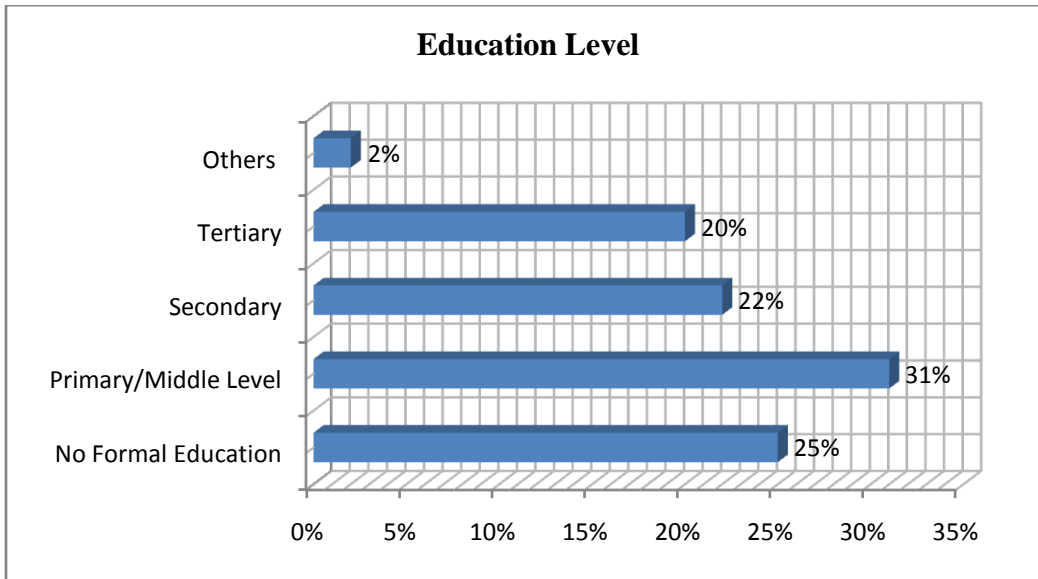


**Source: Research Findings**

### 4.2.4 Education Level of the Respondents

The respondent's education level is shown in figure 4.4 below. The majority of the respondents at 31% had primary/middle level education level, 25% had no formal education, 22% had secondary education, 20% tertiary education while 2% were degree holders (others). This implies that majority of the respondents had low levels of education with 80% having secondary education and below.

**Figure 4.4: Respondents Education Level**

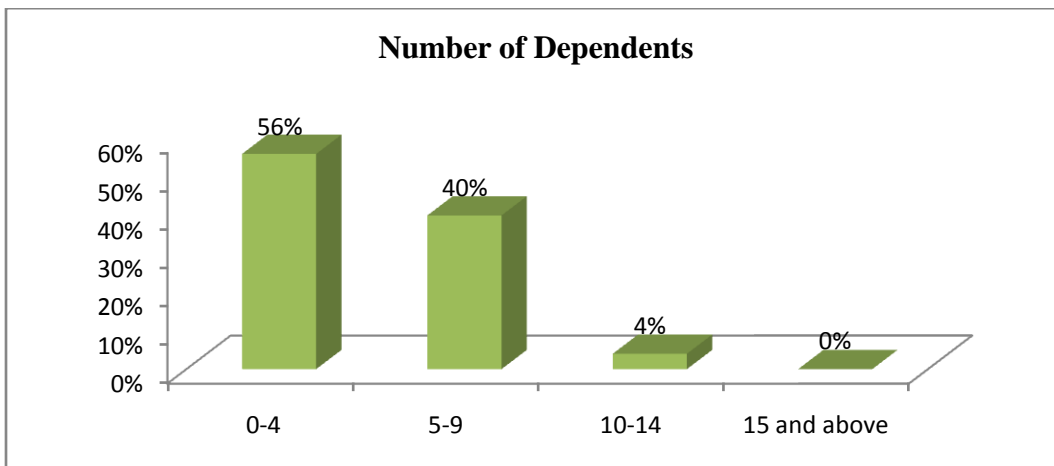


**Source: Research Findings**

#### **4.2.5 Number of Dependents**

This question sought to determine the number of house hold dependents since the incomes and expenditures levels depend on size of the dependents. Majority of the respondents at 56% had between 0 to 4 dependents, 40% had 5 to 9 dependents, 4% had 10 to 14 dependents while 0% had above 15 dependents. The details are shown in figure 4.5 below.

**Figure 4.5: Respondents Number of Dependents**

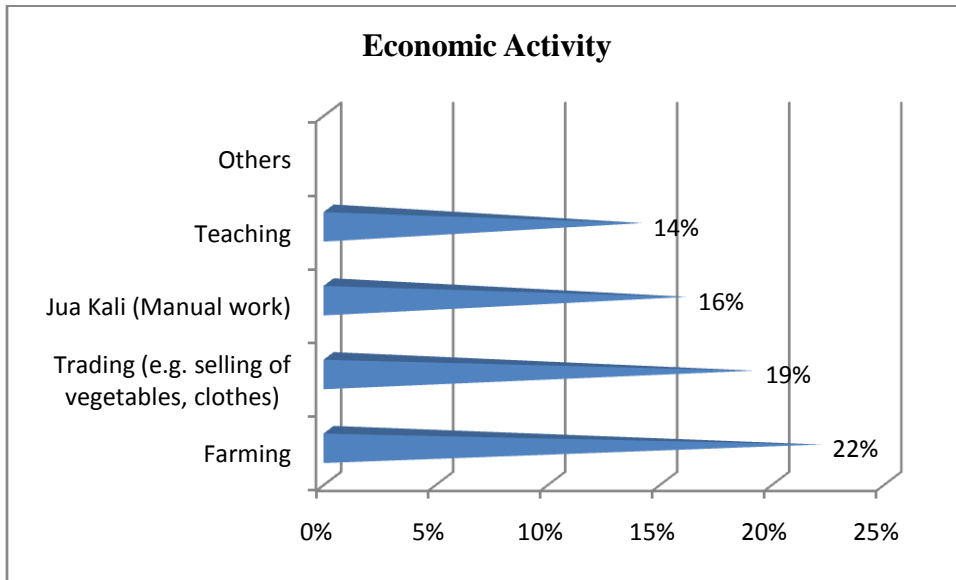


**Source: Research Findings**

#### 4.2.6 Respondents Economic Activity

As shown in figure 4.6 below, majority of the respondents were farmers at 22%, 19% were in trading, 16% in Jua Kali, 14% in teaching while 8% were in other activities which included other formal employments.

**Figure 4.6: Respondents Economic Activity**

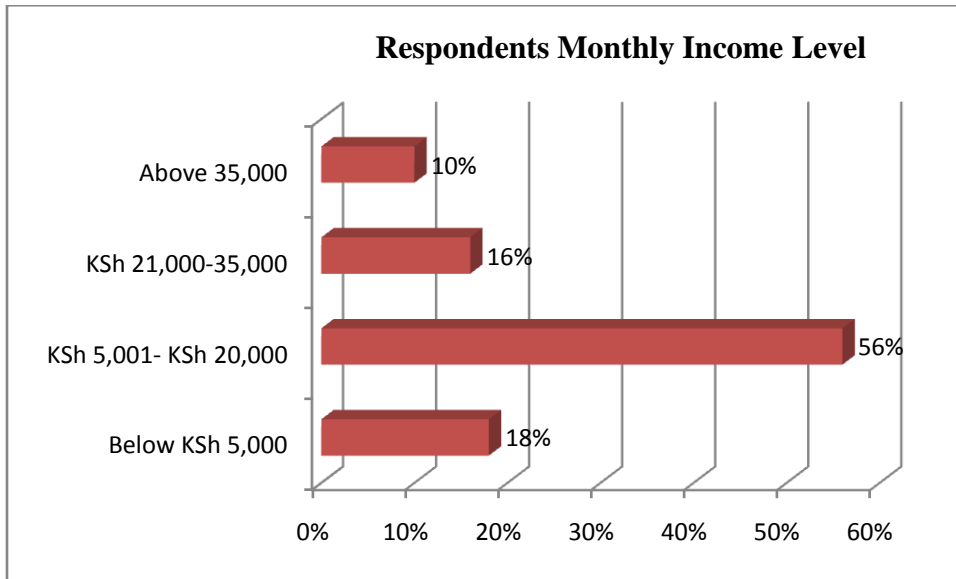


**Source: Research Findings**

#### 4.2.7 Respondents Monthly Income Level Range

Majority of the respondents had monthly income of Ksh. 5,000 to Ksh. 20,000 at 56%. 18% of the respondents had income levels below Ksh. 5,000 per month, 16% had monthly income of Ksh. 21,000 to Ksh. 35,000 while 10% had monthly income above Ksh. 35,000.

**Figure 4.7: Respondents Monthly Income**

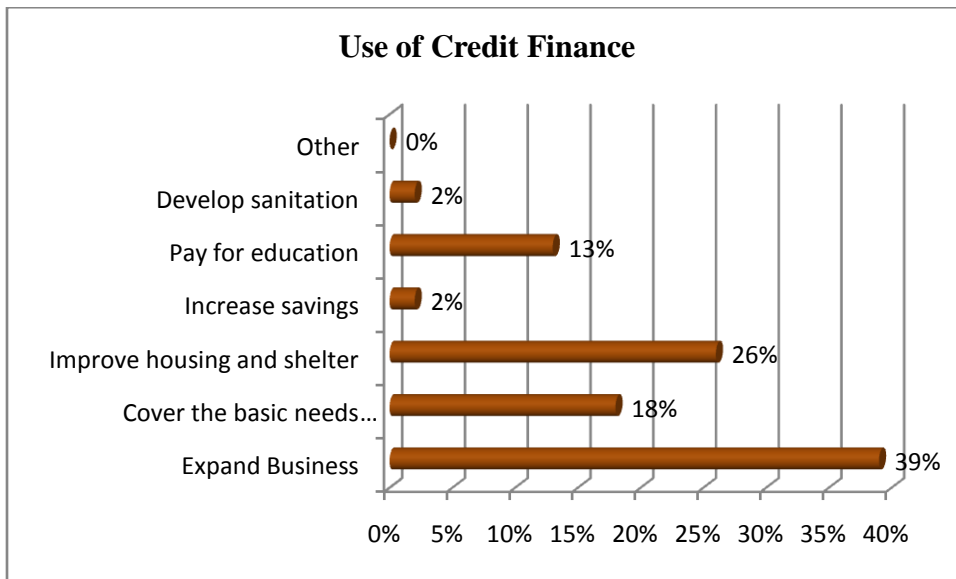


**Source: Research Findings**

#### **4.2.8 Use of Micro credit Finance**

This part sought to determine how the respondents applied the credit finance obtained. 39% used the credit to expand business, 26% to improve housing and shelter, 18% to cover basic needs, 13% to pay school fees, 2% to develop sanitation and savings. It is encouraging to find that majority of the respondents used credit finance to expand business and housing. The details are shown in figure 4.8 below.

**Figure 4.8: Use of Microfinance Credit**

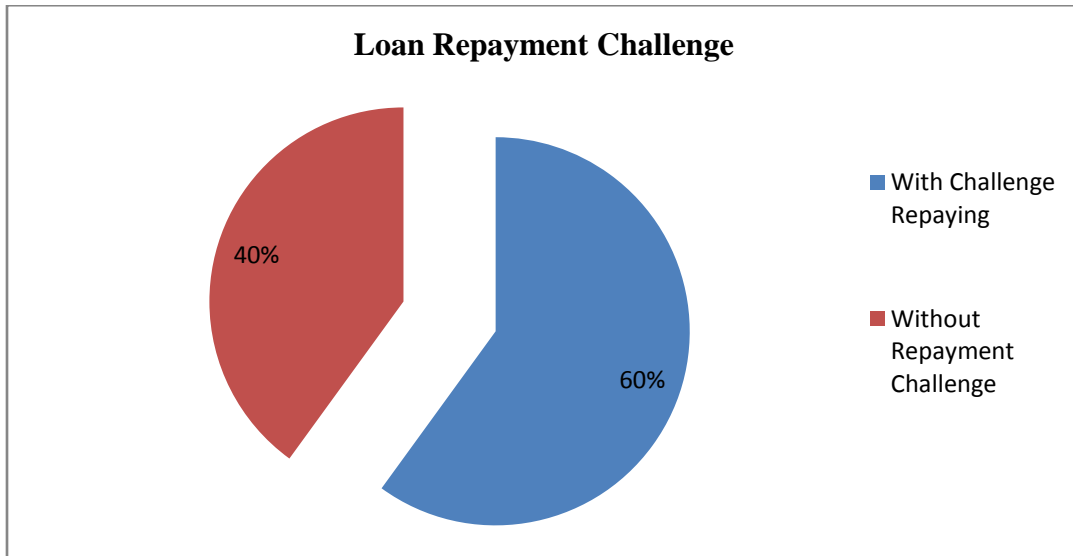


**Source: Research Findings**

#### **4.2.9 Challenges in Repaying Microfinance Loan Obtained**

As shown in figure 4.9 below, 60% of the respondents had challenges in repaying the micro finance loans while 40% had not. This implies that if having challenges could mean that their incomes had increased, then only 40% of the respondents had effect on household incomes. On those who had challenges in repaying the loans obtained explained that it was as a result of lack of source of income to pay from (4%), credit was mainly used for non-income generating activity (18%), diversion of funds from its intended purpose (11%), poor market for produce (6%), due to natural/accidental disaster (16%) and others (7%).

**Figure 4.9: Challenges in repaying microfinance loans**



**Source: Research Findings**

#### **4.2.10 Benefits of Microfinance Loan Obtained**

This part sought to determine the respondents’ assessment of microcredit. 99% of the respondents agreed that microfinance credit access had benefited them with 1% indicated that they never benefited from the credit access. As shown in table 4.1 below, 49% of the respondents indicated that microcredit finance had helped them improve their businesses, 26% indicated that the same enabled development of better housing, 16% were able to access better education as a result, 7% were able to improve sanitation while 2% were benefited in other ways.

**Table 4.1: Benefits of Microfinance**

	Frequency	Percentage
Credit has helped improve my business	97	49%
Credit has facilitated access to quality education	3	16%
Credit has enabled the development of better housing	51	26%
Credit has helped improve sanitation system	14	7%
Other	4	2%
Total	198	100%

**Source: Research Findings**



#### 4.2.11 Use of Microcredit on Business

85% of the respondents were engaging in business from which 44% were using microfinance credit. As shown in table 4.2 below, 33% of the respondents indicated that as a result of use of microcredit, they were able to increase their stock levels, increase products and services offered (9%), expand their business (7%), increase in number of employees (2%) and other forms of growth (5%). This implies that microcredit has positive effect on business growth.

**Table 4.2: Microcredit effect business**

<b>Effect of microfinance credit</b>	<b>Frequency</b>	<b>Percentage</b>
Increase in stock levels	25	33%
Increase in products and services offered	7	9%
Expansion of business to more than one shop	5	7%
Increased number of employees	2	2%
Other	4	5%
<b>Total</b>	<b>42</b>	<b>56%</b>

**Source: Research Findings**

#### 4.2.12 Improvement as a result of Microcredit

To determine the variables where microcredit had bigger effect, five point likert scale was used from 1 to 5 where 1 represented less effect and 5 larger extent. As shown in table 4.3 below, microcredit has to a very large extent effect on education with mean of 5.4267 and standard deviation of 1.4857. This is followed by housing and shelter with mean of 4.6533 and standard deviation of 1.0595, medicine/hospital expenses ability to pay (mean of 4.0667 and standard deviation) and savings increase with a man of 2.8533 and standard deviation of 0.33118.

**Table 4.3: Improvement as result Microcredit**

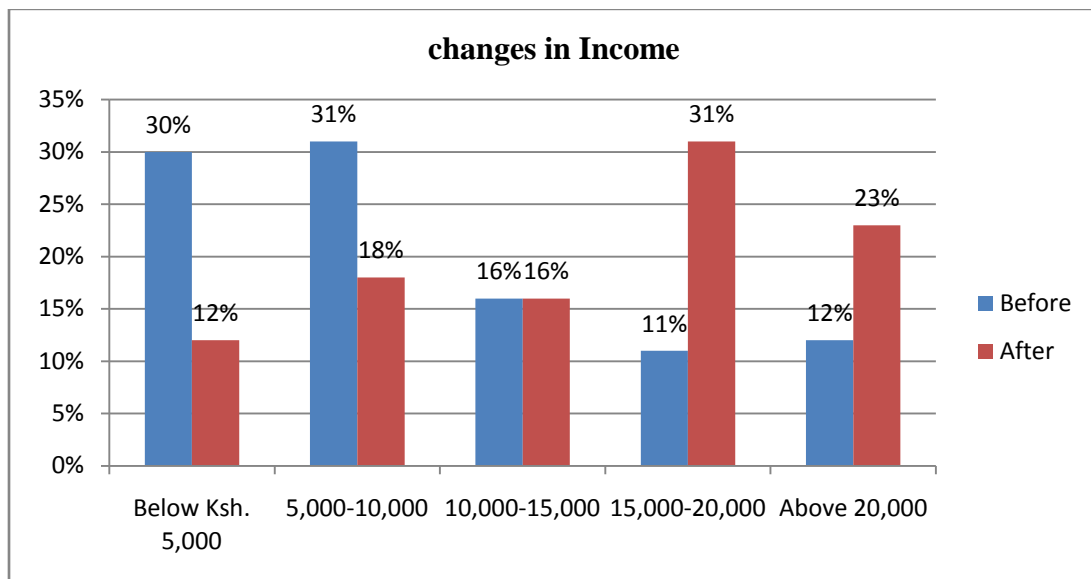
Improvement	Mean	Standard Deviation
Education	5.4267	1.4857
Housing and Shelter	4.6533	1.0595
Medicine/ Hospital	4.0667	0.4706
Savings	2.8533	0.3118

**Source: Research Findings**

#### 4.2.13 Changes in Income Before and After Micro financing

Figure 4.10 below shows the changes in income after and before receiving micro credit financing. As shown in the figure below, after microfinance credit access, number of respondents with monthly incomes below Ksh. 5,000 reduced from 30% to 12%. Respondents with incomes between Ksh. 5,000 to 10,000 reduced from 31% to 18% while those with incomes between Ksh. 10,000-15,000 remained the same. Respondents with increase in incomes between Ksh. 15,000-20,000 and above Ksh. 20,000 increased from 11% to 31% and from 12% to 23% respectively.

**Figure 4.10: Changes in Income**



**Source: Research Findings**

### 4.3 Regression Analysis

The researcher conducted a multiple regression analysis so as to determine the effect of microfinance on effect of microfinance credit on poverty alleviation at household level in Nakuru County. Multiple regressions are a statistical technique that allows us to predict a score of one variable on the basis of their scores on several other variables. The main purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable.

#### 4.3.1 Effect of Microfinance on Household Income

To determine whether income before the adoption of microfinance credit was significant from after adoption of microfinance credit, hypothesis testing between the mean income and before after accessing microfinance credit was conducted at 95%. The Z test obtained was 21.6267 which was bigger than critical  $Z \pm 1.96$  (two tailed test). The null hypothesis that had been developed and reject was there was no difference in the mean before and after microfinance credit access.

Since the Z computed was falling in the rejection area, null hypothesis was rejected and alternative hypothesis accepted. This meant that microfinance credit access had statistically significant effect on household income at 95% confidence interval. The details are shown in table 4.4 below.

**Table 4.4: Improvement as result Microcredit**

Period	Mean Income (Ksh.)	Standard Deviation
Before	203 000	35 942.6627
After	279 500	210 434.0752

**Source: Research Findings**

#### 4.3.2 Analytical Model Regression Analysis

A multivariate regression model was applied to determine the effect of Microfinance credit on poverty alleviation at household level in Nakuru County. As shown in table 4.5 below, there is a strong positive relationship between the poverty alleviation and microfinance credit. This is shown by Spearman coefficient of correlation of 0.72. The coefficient of determination of 0.52 implies that the independent variables account for

52% of changes in independent variables. Therefore, microfinance credit accounts for 52% of changes in house hold income.

**Table 4.5: Regression Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.720	0.519	0.524	0.024

**Source: Research Findings**

The ANOVA results are presented in table 4.6 below. As shown in the table, the p value obtained is 0.0000 which is less than 0.05. This implies that the model developed can be relied for prediction. At 95% confidence level therefore, the relationship between microfinance credit is significant.

**Table 4.6: Analysis of the variance**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	236.7	1	39.448921	1.7521	0.0000
Residual	838.3	198	256.32588		
Total	1 075.0	199			

**Source: Research Findings**

The coefficients of the model developed by the study are presented in table 4.7 below. Notably, all the coefficients obtained are positive implying that amount of microfinance credit obtained, amount spent on business expansion, those spent on housing, saving, education and health care increases household income and hence poverty alleviation. Amount of microfinance credit received have the highest coefficient at 1.21 implying that for every shilling increase in microfinance credit, household income increases by shilling 1.21. The constant of Ksh. 566.77 implies that when microcredit financing is zero and all the other independent variables are zero, households will still have an income of Ksh. 566.77.

The model developed by the study is  $Y=566.77 + 1.2056X_1 + 0.2052X_2 + 0.5101X_3 + 0.4232X_4 + 0.4929X_5 + 0.6872X_6$ ; where Y is poverty alleviation,  $X_1$  is microfinance credit,  $X_2$  is business expansion,  $X_3$  is housing and shelter,  $X_4$  is saving,  $X_5$  is expenditure on education,  $X_6$  is healthcare. All the coefficients are significant since their p values are less than 5%.

**Table 4.7: Regression Model Coefficients**

	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
Constant	566.7710	14.3168		1.1445	0.0001
Microfinance Credit	1.2056	0.0150	0.1376	1.3692	0.0174
Business Expansion	0.2052	0.2285	0.6543	3.5613	0.0006
Housing and Shelter	0.5101	0.2235	0.0733	0.6638	0.0051
Saving	0.4232	0.1908	1.0483	2.6851	0.0086
Expenditure on Education	0.4929	1.3405	0.0123	0.0222	0.0098
Healthcare	0.6872	1.2309	1.0726	2.0893	0.0394

**Source: Research Findings**

#### 4.4 Interpretation of the findings

The study sought to determine the effect of microfinance credit on poverty alleviation at household level in Nakuru County. The study found income after the adoption of microfinance credit was significantly higher than that of before adoption of microfinance credit at 95% confidence level with a Z of 21.6267 which was bigger than critical Z  $\pm$  1.96 (two tailed test).

A multivariate regression model was applied to determine the effect of Microfinance credit on poverty alleviation at household level in Nakuru County. The study found a strong positive relationship between the poverty alleviation and microfinance credit with a Spearman coefficient of correlation of 0.72. The coefficient of determination of 0.52 implied that the microfinance credit accounted for 52% of changes in poverty alleviation. The ANOVA results obtained indicated a p value of 0.0000 which is less than 0.05. This

implied that the model developed could be relied for prediction in addition to the relationship between microfinance credit and poverty alleviation being significant. At 95% confidence level therefore, the relationship between microfinance credit is significant. All the coefficients obtained by the model were positive implying that amount of microfinance credit obtained, amount spent on business expansion, those spent on housing, saving, education and health care increases household income and hence poverty alleviation. Amount of microfinance credit received had the highest coefficient at 1.21 implying that for every shilling increase in microfinance credit, household income increases by shilling 1.21. The constant of Ksh. 566.77 implies that when microcredit financing is zero and all the other independent variables are zero, households will still have an income of Ksh. 566.77.

The model developed by the study was  $Y=566.77 + 1.2056X_1 + 0.2052X_2 + 0.5101X_3 + 0.4232X_4 + 0.4929X_5 + 0.6872X_6$  where Y is poverty alleviation,  $X_1$  is microfinance credit,  $X_2$  is business expansion,  $X_3$  is housing and shelter,  $X_4$  is saving,  $X_5$  is expenditure on education,  $X_6$  is healthcare. All the coefficients are significant since their p values are less than 5%.

The findings are in line with those of Obeng (2011) who found that vulnerable and marginalized households in Ghana were getting access to credit which impacted positively on the poverty levels of the beneficiaries. Locally, the findings are in line with those of Kiiru (2007) who found a positive and significant impact of microfinance on household income; Okibo and Makanga (2014) who established that microfinance if positioned properly, was useful tools for poverty alleviation.

The study also found that majority of microfinance credit users were less educated with 31% having primary/middle level education level, 25% had no formal education, 22% had secondary education, 20% tertiary education while 2% were degree holders (others). Further majority of the respondents at 56% had between 0 to 4 dependents, 40% had 5 to 9 dependents, 4% had 10 to 14 dependents while 0% had above 15% dependents. The study respondents were low income earners with majority of the respondents having monthly income of Ksh. 5,000 to Ksh. 20,000 at 56%. 18% of the respondents had

income levels below Ksh. 5,000 per month, 16% had monthly income of Ksh. 21,000 to Ksh. 35,000 while 10% had monthly income above Ksh. 35,000.

On the usage of microfinance credit obtained, 39% used the credit to expand business, 26% to improve housing and shelter, 18% to cover basic needs, 13% to pay school fees, 2% to develop sanitation and savings. It is encouraging to find that majority of the respondents used credit finance to expand business and housing. 60% of the respondents had challenges in repaying the micro finance loans while 40% had not. Those who had challenges in repaying the loans obtained explained that it was as a result of lack of source of income to pay from (4%), credit was mainly used for non-income generating activity (18%), diversion of funds from its intended purpose (11%), poor market for produce (6%), due to natural/accidental disaster (16%) and others (7%).

Generally, 99% of the respondents agreed that microfinance credit was crucial to them in increasing the level of their incomes with 49% of the respondents indicating that microcredit finance had helped them improve their businesses, 26% had developed better housing, 16% were able to access better education, 7% were able to improve sanitation while 2% were benefited in other ways.

Microfinance credit was found to a very large extent affect education with mean of 5.4267 and standard deviation of 1.4857 followed by housing and shelter with mean of 4.6533 and standard deviation of 1.0595, medicine/hospital expenses ability to pay (mean of 4.0667 and standard deviation) and savings increase with a mean of 2.8533 and standard deviation of 0.33118. Most of the study respondents were the youth with 53% of the respondents were aged between 18-30 years, 33% aged between 31-50 years and 14% aged above 51 years. 58% of the respondents were female while 42% were male.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendations made there to. The conclusions and recommendations drawn were focused on addressing the objective of the study. The researcher had intended to determine the effect of microfinance credit on poverty alleviation at household level in Nakuru County.

#### **5.2 Summary**

The study sought to determine the effect of microfinance credit on poverty alleviation at household level in Nakuru County using primary data collected using questionnaires. The study found that microfinance credit is a very strong tool in poverty alleviation at household level with income after acquiring microfinance credit being found to have significantly increased. The study further found that microfinance credit empowers the poor, enables them to cope with and overcome many of the problems that they face. Additionally, microfinance loans were found to have led to establishment and expansion of businesses, acquisition of shelter, education, access to health care and opening up of opportunities for the poor to improve their living standards including improved sanitation.

A multivariate regression model found a strong, significant and positive relationship between the poverty alleviation and microfinance credit with a Spearman coefficient of correlation of 0.72. The coefficient of determination of 0.52 implied that the microfinance credit accounted for 52% of changes in poverty alleviation. All the coefficients obtained by the model were positive implying that amount of microfinance credit obtained, amount spent on business expansion, those spent on housing, saving, education and health care increases household income and hence poverty alleviation. Amount of microfinance credit received had the highest coefficient at 1.21 implying that for every shilling increase in microfinance credit, household income increases by shilling 1.21. The constant of Ksh. 566.77 implies that when microcredit financing is zero and all



the other independent variables are zero, households will still have an income of Ksh. 566.77. The model developed by the study was  $Y=566.77 + 1.2056X_1 + 0.2052X_2 + 0.5101X_3 + 0.4232X_4 + 0.4929X_5 + 0.6872X_6$  where Y is poverty alleviation, X<sub>1</sub> is microfinance credit, X<sub>2</sub> is business expansion, X<sub>3</sub> is housing and shelter, X<sub>4</sub> is saving, X<sub>5</sub> is expenditure on education, X<sub>6</sub> is healthcare. All the coefficients are significant since their p values are less than 5%.

The study also found that majority of microfinance credit users were less educated with 78% having secondary education and below. Most of the microfinance customers were found to be low income earners with 76% of the respondents having monthly income below Ksh. 20,000 at 56%. On the usage of microfinance credit obtained, the study found that 39% used the credit to expand business, 26% to improve housing and shelter, 18% to cover basic needs, 13% to pay school fees, 2% to develop sanitation and savings. It is encouraging to find that majority of the respondents used credit finance to expand business and housing. 60% of the respondents had challenges in repaying the micro finance loans while 40% had not. Those who had challenges in repaying the loans obtained explained that it was as a result of lack of source of income to pay from (4%), credit was mainly used for non-income generating activity (18%), diversion of funds from its intended purpose (11%), poor market for produce (6%), due to natural/accidental disaster (16%) and others (7%).

### **5.3 Conclusion**

Based on the research findings, the study concludes that microfinance credit plays a crucial role in alleviation of poverty at household level in Nakuru County and Kenya at large. The study also concludes that microfinance credit help in poverty reduction by providing making finance accessible to low income earners, less educated and those in the informal sector which helps in expansion of business, acquisition of better residential places, access to education, health and improved welfare.

The study also concludes that access to microfinance credit significantly increases household income and provide avenues for people to save. All these go a long way to help improve upon the lives of those involved especially low income earners and those in the informal sector. Therefore, microfinance is an effective method of poverty alleviation

since it targets those who earn little. As a result, the study concludes that through a holistic approach to fighting poverty and a recognition of the importance of microfinance credit, the battle against extreme poverty can be fought and won. Finally, the importance of microfinance loans in poverty reduction is of immense benefit to the country as a whole and not only Nakuru County since the County is representative of the situation in the whole country.

#### **5.4 Recommendations for Policy**

From the study it is realized that microfinance loans plays an integral part in the alleviation of poverty in Kenya with household incomes after access to microfinance being found to significantly increase. Various recommendations are therefore made to guide policy makers in developing mechanisms to fight poverty which has remained intense.

First the study recommends that microfinance institutions to continuously improve their outreach to enable them reach more deserving low income earners in all Counties in Kenya. To achieve this, the institutions should effectively market themselves and also fasten on service delivery as in the case of ensuring that loans applied for are disbursed on time. Further microfinance institution should also adjust their interest rates downwards so as to encourage increased borrowing. Microfinance institutions should also design appropriate products reflecting an understanding of the reality of the market they are operating in, lack of customizing products as to the desires of the clients leads to the customers being forced to accept products that in most instances do not answer to their needs, but they have to take it as it is the only product available.

The study also recommends an establishment of more transparent and easily accessible fund to provide the youth and women who constitutes to about a third of the population of Kenya and constitute over half of the unemployed population. This fund should have simple administrative structures and encourage even the less educated to easily access it. The Government further need to put stringent measures to curb vices like corruption that has infiltrated the microfinance programmes.

Finally, the study recommends for household education on importance of microfinance credit and how to use it and ensure that they don't have challenges in repayment. They will reduce the cases found respondents indicated in ability to service microfinance loans due to spending the same on consumption and non-income generating activities. Financial education should go hand in hand with enhanced access to microfinance credit access to households.

## **5.5 Limitations of the Study**

The study was faced by a number of challenges. First, the study only targeted the households in Nakuru County alone. Therefore, the findings may not be representative of other counties or Kenya. This is more so because of the fact of that there are specific features in certain counties which may affect the effect of microfinance credit on poverty. The sample size of 200 households was also not sufficient considering the large number of households using microfinance credit.

Another challenge related to data collection and administration of questionnaires. The attitude of the interviewees and respondents towards the research was quite surprising where most of the respondents could not appreciate the values and benefits of the research and regrettably, some saw the exercise as a waste of time. It involved a lot of explanation and assurance on confidentiality for the respondents to accept to provide the required data. The data provided could not be verified since no much records were available to support the same.

Constraint of the time also denied the researcher an opportunity to return to the respondents to either seek more information and clarification or even pursue the defaulting respondents. Collection of data through interviews was also time consuming in addition to much time spent on convincing respondents to provide information. Due to use of the questionnaire to collect primary data, the inherent weaknesses associated with this technique cannot be ruled out.

## **5.6 Areas for Further Research**

This study sought to establish the effect of microfinance credit on poverty alleviation at household level in Nakuru County. From the limitations faced and the researcher experience on the study, numerous recommendations for further research were observed. First, this study was limited by coverage making generalizations of the findings to be hard. Therefore, further study is recommended on the effect of microfinance credit on poverty alleviation at household level but on other Counties in Kenya or other countries and using a larger sample.

The research has brought to fore the role of microfinance loans on poverty reduction in the country. To enhance this development more of such research should be conducted to bring to on the challenges faced by household in accessing microfinance credit as well as microfinance institutions in extending credit to households.

A similar study is also recommended on the effect of microfinance credit on poverty alleviation at household level but done over period of time. Data should be collected on monthly basis over like five years period. To ensure the accuracy of the information given, the target respondents should be provided with records where they can record all the transactions and trained on filling the same.

## REFERENCES

- Adams, D., & Pischke, J., (1991). Microenterprise Credit Programs: Déja Vu, *World Development Report 20 (10)*, 63–70.
- Adams, D., Douglas, G., & Pischke, J., (1984). *Undermining Rural Development with Cheap Credit*. Boulder, CO: Westview Press.
- Adjei, K., Arum, T., & Hossain, F., (2009). *Micro finance in Asset-Building and Poverty Reduction: the Case of Sinapi Aba Trust of Ghana*, BWPI. The University of Manchester, United Kingdom: World Poverty Institute
- Aghion A., & Morduch, J., (2005). *The Economics of Microfinance*. Cambridge, MA: MIT Press.
- Alemayehu, G., Jong, N., Kimenyi, M., & Mwabu, G., (2001). Determinants of Poverty in Kenya: Household Level Analysis. *KIPPRA Discussion Paper*.
- Alemu, A., (2006). Microfinancing and Poverty Reduction in Ethiopia. (A Paper prepared under the Internship Program of IDRC, ESARO, Nairobi.)
- Anin, S., Rai, A., & Topa, S., (2002). Does Microcredit Reach the Poor and Vulnerable?: Evidence from Eastern Bangladesh. Unpublished
- Babbie, E., (2002). *Survey Research Methods* (2nd ed). Belmont: Woodsworth
- Beck, T., Demirguc, K., & Levine R., (2004), Finance, Inequality, and Poverty: Cross-Country Evidence, *NBER Working Paper No. 10979*
- Brau J., & Woller G., (2004). Microfinance: A comprehensive review of the existing literature. *Journal of entrepreneurial Finance and Business Ventures*, Vol. 9(1), 1-26
- Brock, T., & McGee, R., (2002). *Knowing Poverty: Critical Reflections on Participatory Research and Policy*. London: Earthscan Publication.
- Chreiner, M., & Colombet, H., (2001). From Urban to Rural: Lessons for Microfinance for Argentina, *Development Policy Review*, 19(3): 339-354.

- Christen, P., Jayadeva, V., & Rosenberg R., (2004). Financial Institutions with a Double Bottom Line: Implications for the Future of Microfinance. *CGAP Occasional Paper 8, Consultative Group to Assist the Poorest, Washington DC.*
- Coleman, E., (1999). The Impact of Group Lending in Northeast Thailand. *Journal of Development Economics* , 60, 105-141.
- Deaton, A., & Angus, C., (2005). Measuring Poverty in a Growing World (or Measuring Growth in a Poor World). *Review of Economics and Statistics* 87 (1): 1–19.
- Development project service centre (DEPROSC) and Ledgerwood J. (1997). “Critical issues in Nepal’s Microfinance Circumstances,”. University of Maryland at college Park, Institutional Reform and the Informal Sector, College Park, Md
- Ghatak C., Maithreesh K., and Guinnane T., (1999). The Economics of Lending with Joint Liability: Theory and Practice. *Journal of Development Economics* 60 (1): 195–228.
- Goldberg A., Nathanael G., and Karlan D., (2005). “The Impact of Microfinance: A Review of Methodological Issues.” Yale University, Department of Economics, New Haven, C T.
- Gulli H. (1998). Microfinance and Poverty. Inter-American Development Bank: Washington, DC.
- Hashemi S. M., (1997). Those left behind: a note on targeting the hard core poor. In Who Needs Credit? Poverty and Finance in Bangladesh, Wood G, Sharif. University Press: Dhaka; 248–257.
- Hossain, M., (1998). Credit for alleviation of Rural Poverty: the Grameen Bank in Bangladesh. Washington D C: International Food Policy Research Institutes
- Hulme, D. (2000). Impact Assessment Methodologies for Microfinance: Theory, Experience and Better Practices . *World Development Programme.*
- Hulme, D. and Mosley, P. (1996). Finance Against Poverty, Volume I. London: Routledge.
- Hussien, M. and Hussain, S. (2003). “The Impact of Microfinance on Poverty and Gender Equity: Approaches and Evidence from Pakistan”. *Pakistan Gender Report Document.*

- International Monetary Fund (2005). "Poverty Reduction Strategy Paper Progress Report", Retrieved on 2/9/2010 from [www.imf.org/external/pubs/ft/scr/2005/cro5405.pdf](http://www.imf.org/external/pubs/ft/scr/2005/cro5405.pdf)
- Khandker, Shahidur R. (1998). Microfinance and Poverty: Evidence Using Panel Data from Bangladesh" *Policy Research Working Paper 2945, World Bank, Washington, DC*
- Kiiru J. M., (2007). Does participant in microfinance program improve household incomes: Empirical evidence from Makueni District, Kenya, Centre for development Research, Bonn University, pp. 405-410.
- Kiriti T.,(2005). Institutions and gender inequality: a case study of the Constituency Development Fund in Kenya, Addis Ababa, Ethiopia : Organisation for Social Science Research in Eastern and Southern Africa (OSSREA)
- Kunt D.and Levine R. (2004). Regulations, Market Structure, Institutions, and the Cost of Financial Intermediation.*Journal of Money, Credit, and Banking* 36 (3): 593–622.
- Latifee, H.I., (2003). Microcredit and Poverty Reduction. A Paper presented at the International Conference on Poverty Reduction through Microfinance, held at Ceylan Intercontinental Hotel, Taksim, Turkey from June 9-10
- Ledgerwood, J. (2006), Sustainable Banking with the poor. Microfinance handbook.An institution and financial perspective.The World Bank.Washington D. C. 20433. USA
- Lindvert, M. (2006). "Sustainable Development Work and Micro Finance: A Case Study of how ECLOF Ghana is Working towards Financial Sustainability". (Thesis submitted to the Department of Social Sciences, Mid Sweden University).
- Majoux, L. (2001). Women Empowerment or Feminization of Debts? Towards a new agenda for African Microfinance: Discussion paper for One World action Conference, (United Kingdom Department for Industrial Development), London, 2002
- Mohammed, Dahiru A. and Zubair H. (2008), Microfinance in Nigeria and the prospects of introducing its Islamic version there in the light of selected Muslim countries' experience, *International Institute of Islamic Economics, International Islamic University, Islamabad.*

- Momoh J., (2005). The Role of Microfinance in Rural Poverty Reduction in Developing Countries.
- Morduch J., and Hashemi S. (2003). Is Microfinance an Effective Strategy to Reach the Millennium Development Goals. *CGAP Focus Note 24. Consultative Group to Assist the Poorest, Washington, DC*
- Morduch, J. (1999), The Microfinance Promise. *Journal of Economics Literature* .
- Mugenda O.M & Mugenda A.G (1999) Research Methods Quantitative Qualitative Approaches, Acts Press, Nairobi
- Mukherjee, C., H. White and M. Wuyts, (1998), Econometrics and Data Analysis for Developing Countries. London: Routledge.
- Mwabu, Germano, Wafula Masai, Gesami R. , Kirimi G., Ndeng'e G, Kiriti T., Munene F. , Chemngich M. and Mariara J., (2000), Poverty in Kenya: Profile and Determinants, Nairobi: University of Nairobi and Ministry of Finance and Planning.
- Narayan, Deepa with Raj P., Schafft K., Rademacher A. and Schulte K. S., (2000). Voices of the Poor: Can Anyone Hear Us? World Bank Series. Oxford: Oxford University Press.
- Obeng C .K. (2011) The impact of micro-credit on poverty reduction in rural areas- a case study of jaman north district, GHANA, (MBA thesis)
- Okibo B. W. and Makanga N., (2014), Effects of micro finance institutions on poverty reduction in Kenya, *International Journal of current research and Academic Review, Vol. 2(2) pp. 76-95*
- Orodho, J.A (2004), Elements of Education and Social Science Research Methods. Nairobi :Masola Publishers.
- Oyeranti, O. and Olayiwola, K., (2005). Policies and Programmes for Poverty Reduction in Rural Nigeria. Interim Research Report Submitted to the African Economic Research Consortium (AERC) Nairobi for the Second Phase Collaborative Poverty Research Project.



- Patten, H. P., (1991). The Development of Rural Banking in Indonesia. International Centre for Economic Growth and the Harvard Institute for International Development.
- Rajasechar, D., (2004). "Microfinance, Poverty Alleviation and Empowerment of Women: A Study of two NGOs from Andhra and Pradesh".
- Rajendran K. and Raya R.P., (2010), "Impact of microfinance- An empirical study on the attitude of SHG leaders in Vellore District (Tamil Nadu India)". Global Journal of Finance and Management, 2(1), 59-68.
- Retrieved from Emerald Database July 18, 2014
- Robinson, T. (1999), Critical success factors for various strategies in the banking industry. *International Journal of International Bank Marketing*, 17/2 pp. 83-91
- Simanowitz, A. and Brody A. (2004). Realizing the Potential of Microfinance, *Insight*: 51: 1-2
- United Nations Capital Development Fund.(1997). Microfinance and Antipoverty Strategies, A Donor Perspective. United Nations
- Wainyragania K. A., (2009), the impact of participation in microfinance Programmes on poverty alleviation in Tanzania; An empirical analysis: the case of VICOBA, masters of arts in economics, Thesis submitted to the Department of Economics, University of Nairobi
- Wiersman (1995) Research Methods in Education; An introduction 2nd edition
- World Bank. (2001). Finance for Growth. Policy Choices in a Volatile World. Washington, DC.
- Yunus M. (Access site on 6<sup>th</sup> July 2014). Grameen Bank. <http://grameen-info.org>
- Zaman, H. (2000), Assessing the impact of microcredit on poverty and vulnerability in Bangladesh. Policy Research Working Paper No. 2145. Washington, DC: The World Bank.

Zeller M., and Bastelaer V., (2006). Achieving the microcredit summit and millennium development goals of reducing extreme poverty: What is the cutting edge on cost-effectively measuring movement across the \$1/Day threshold?

## **APPENDIX I: QUESTIONNAIRE**

This questionnaire aims at eliciting your views about the effects of Micro-finance credit in poverty alleviation a case study in Nakuru County. This is purely an academic exercise and in partial fulfilment of the requirement for the award of Masters in Business administration by The University of Nairobi.

Please read each statement carefully and answer them as frankly as you can. Your responses will be accorded the utmost confidentiality they need. Your maximum cooperation is highly solicited.

Please tick where appropriate and supply information where necessary.

### **SECTION 1**

#### **PERSONAL DATA**

##### **1. Age**

18-30 years ( )

31-50 years ( )

51 and above ( )

##### **2. Gender**

Male ( )

Female ( )

##### **3. Marital Status**

Married ( )

Single ( )

**4. Educational Background**

- A. No Formal Education ( )
- B. Primary/Middle Level ( )
- C. Secondary ( )
- D. Tertiary ( )
- E. Others (please specify) ( ) .....

**5. How many people depend on you for their daily bread? (No. of dependants)**

- A. 0-4 ( )
- B. 5- 9 ( )
- C. 10- 14 ( )
- D. 15 and above ( )

**6. What do you do for a living?**

- A. Farming ( )
- B. Trading (e.g. selling of vegetables, clothes) ( )
- C. Jua Kali (Manual work) ( )
- D. Teaching ( )
- E. Others (Please specify below)

.....

## SECTION 2

### DATA RELATED TO MICROFINANCE

1. Are you a beneficiary of any microfinance programme?

Yes ( )

No ( )

2. What is your salary/ income range?

A. Below KSh 5,000 ( )

B. KSh 5,001- KSh 20,000 ( )

C. KSh 21,000-35,000 ( )

D. Above 35,000 ( )

3. What is the purpose of your credit?

A. Expand Business ( )

B. Cover the basic needs (housing, food, clothing) ( )

C. Improve housing and shelter ( )

D. Increase savings ( )

E. Pay for education ( )

F. Develop sanitation ( )

G. Other, Please specify below.

.....

4. Do you have problems in paying your loans?

Yes ( )

No ( )

**5. If your response is yes above, why?**

- A. No source of income to pay ( )
- B. Credit is mainly used for non-income generating activity ( )
- C. Diversion of funds from its intended purpose ( )
- D. Poor market for produce ( )
- E. Natural/Accidental disaster ( )
- F. Other, Please specify below.

.....

**6. Has access to credit been beneficial?**

- Yes ( )
- No ( )

**7. If yes to the above question why?**

- A. Credit has helped improve my business ( )
- B. Credit has facilitated access to quality education ( )
- C. Credit has enabled the development of better housing ( )
- D. Credit has helped improve sanitation system ( )
- E. Other, Please specify below. ( )

**8. What was your income before uptake of microfinance credit (KSH)?**

- A. Below Ksh 5,000 ( )
- B. 5,001- 10,000 ( )
- C. 10,001- 15,000 ( )
- D. 15,001- 20,000 ( )

E. More than Ksh 20,000 ( )

**9. What is your household income after uptake of microfinance credit?**

A. Below Ksh 5,000 ( )

B. 5,001- 10,000 ( )

C. 10,001- 15,000 ( )

D. 15,001- 20,000 ( )

E. More than Ksh 20,000 ( )

**10. Are you engaged in any form of business?**

Yes ( )

No ( )

**11. If yes to the above question, were you running the business before uptake of credit?**

Yes ( )

No ( )

**12. If yes to the above question how has your business change after uptake of microfinance credit?**

A. Increase in stock levels ( )

B. Increase in products and services offered ( )

C. Expansion of business to more than one shop ( )

D. Increased number of employees ( )

E. Other, Please specify below.

.....

**13. Kindly indicate to what extent the following has improved as a result of MFI programs. (Rating is in the range of 1-5 where 1 is least extent and 5 most extent)**

ITEM	1	2	3	4	5
Housing and Shelter					
Savings					
Education					
Medicine/ Hospital					

**14. Kindly indicate the how much you spent on the following before and after uptake of credit (on a monthly basis)**

Item	Before (KSH)	After (KSH)
Business		
Housing rent		
Savings		
Education		

**15. Kindly indicate the how average credit you received from Microfinance institutions for the last five years**

Year	2013	2012	2011	2010	2009

*Thank you for taking your time to fill this questionnaire.*



## APPENDIX II: SUMMARY OF DATA

Income	Microfinance Loan	Business Expansion	Housing and Shelter	Saving	Expenditure on Education	Healthcare
38000	102350	1.095	3	0.44	2	3.8
37500	104550	1.095	3	0.44	2	3.8
20000	106000	1.0951	2	0.44	2	3.8375
18000	106350	1.0952	2	0.45	2	3.85
17000	107800	1.0952	2	0.48	2.022	3.85
20000	108000	1.0954	4	0.5	2.025	3.85
6500	109400	1.0954	2	0.5	2.0275	3.85
6500	110000	1.0955	2	0.5	2.05	3.85
6500	110000	1.0955	2	0.5	2.05	3.857
5000	110000	1.0956	2	0.5	2.1	3.9
5000	116700	1.0957	2	0.5	2.15	3.9
5000	71800	1.0957	2	0.5	2.16	3.9
5000	72000	1.0958	2	0.5	2.2	3.9
4800	73000	5	2	0.5	2.217	3.91
4780	73200	5	2	0.5	2.25	3.925
4700	74400	5	2	0.5	2.25	3.95
4600	74600	5	2	0.52	2.305	3.985
4600	75500	5.86	5	0.55	2.3735	3.985
4500	77186	5.875	2	0.55	2.3895	3.985
4500	77500	5.975	2	0.55	2.4	4
3950	77550	6	2	0.55	2.405	4
3900	78000	6	2	0.55	2.45	4
3800	78000	6	2	0.55	2.5	4
3800	79600	6	2	0.55	2.5	4
16000	80000	6	2	0.55	2.5	4
15000	80000	6.05	2	0.6	2.5	4
15000	80000	6.078	2	0.6	2.5	4
15000	80000	6.1	2	0.6	2.5	4
15000	80000	6.1	2	0.6	2.5	4
11000	80000	6.105	2	0.65	2.5	4
11000	80000	6.15	2	0.65	2.5	4
11000	80000	6.1925	2	0.65	2.5	4
10900	80000	6.2105	2	0.65	2.5	4
10800	80000	6.25	2	0.65	2.5	4
10800	80000	6.25	2	0.75	2.5	4
10500	80000	6.4385	3	0.8	2.5	4
10500	80000	6.475	2	0.8	2.5	4

10250	80000	6.5	2	0.8	2.5	4
10000	80000	6.65	2	0.88	2.5	4
10000	80000	7	4	0.9	2.5	4
10000	80000	7	4	0.95	2.5	4
9000	80000	7	4	0.96	2.5	4
9000	80000	7	4	0.96	2.5	4
9000	80000	7	4	1	2.5	4
9000	80000	7	4	1	2.5275	4
9000	82000	7	4	1	2.5275	4
9000	83000	7	5	1	2.55	4
9000	84700	7	5	1	2.55	4
7600	85000	7.35	5	1	2.55	4
7550	85000	7.5	5	1	2.6	4
7500	86500	7.5	3	1	2.75	4.01
7500	87000	7.5	2	1	2.75	4.045
7500	88000	7.5	4	1	2.763	4.05
7500	90000	7.55	1	1	2.8	4.05
7300	90000	7.5825	3	1.012	2.8	4.05
6870	90000	7.665	5	1.1	2.8	4.05
8600	90000	7.675	2	1.1	2.8255	4.1
8600	90000	7.7	2	1.1	2.9	4.3
8500	90100	7.7	2	1.1	2.9295	4.45
8500	92200	7.75	2	1.1	2.95	4.48
8500	94000	7.85	2	1.1	3	4.5
8500	95000	1.0986	2	1.1	3	4.668
8500	95100	1.0986	2	1.1	3	4.75
8500	100000	1.0987	2	1.1	3	4.8
8500	100000	1.0988	2	1.1	3	4.8
8500	100000	1.0988	2	1.1	3	4.94
8500	100000	1.0989	2	1.125	3	4.975
8500	100000	1.0989	3	1.2	3	4.975
8500	100000	1.099	2	1.2	3	5
8000	100000	1.0991	2	1.2	3	5
8000	121850	1.0991	2	1.2	3	5
8000	130500	1.0992	4	1.25	3.033	5
8000	132950	1.0992	4	1.25	3.033	5
9000	147000	1.0993	4	1.25	3.075	5
9000	158000	1.0994	4	1.3	3.0775	5
9000	160000	1.0994	4	1.3	3.0775	5
9000	250000	1.0995	4	1.3	3.0825	5
9000	300000	1.0996	4	1.3975	3.1	5

9000	350000	1.0996	5	1.44	3.1	5
8800	101000	1.0997	5	1.45	3.2	5
8800	66000	1.0998	5	1.45	3.25	5
6700	67500	1.0999	5	1.5	3.25	5
19850	67700	1.1	3	1.5	3.25	5
19500	68000	1.1001	2	1.5	3.3	5
19000	68000	1.1002	4	1.5	3.3085	5
19000	70000	1.1003	1	1.5	3.375	5
19000	70000	1.1003	3	1.57	3.4385	5
19000	70000	1.1004	5	1.61	3.44	5.01
19000	70000	1.1004	2	1.675	3.5	5.05
18500	70000	1.1006	4	1.819	3.5	5.11
20000	71600	1.1007	5	1.9	3.5	5.2
20000	100000	1.1007	2	1.9	3.5	5.25
17000	100000	1.1008	3	1.95	3.504	5.33
17000	100000	1.1008	5	1.975	3.525	5.5
16600	100000	1.101	2	2	3.525	5.5
16600	100000	1.1011	5	2	3.7	5.6
16500	100000	1.1012	2	2	3.725	5.61
16500	100000	1.1012	4	2	3.75	5.7565
16200	100000	1.1013	5	2	3.775	5.775
16100	100000	1.1013	3	2	3.8	5.775

**Source: Research Findings**

**APPENDIX III:LIST OF LICENCED MICROFINANCE  
INSTITUTIONS IN NAKURU AS AT 1<sup>st</sup> MARCH 2014**

1. Faulu Kenya DTM Limited
2. Kenya Women Finance Trust DTM Limited
3. SMEP Deposit Taking Microfinance Limited
4. Rafiki Deposit Taking Microfinance
5. Umoja Entrepreneur Credit (K) Ltd, Nakuru
6. Micro-Kenya, Nakuru
7. Ebony Capital Ltd, Nakuru
8. Jitegemee Trust Limited

**Source: Central Bank of Kenya**