THE FINANCIAL AND SOCIAL IMPACT OF MICROFINANCE LENDING: A CASE STUDY OF K-REP BANK'S *JUHUDI* CREDIT SCHEME IN KAWANGWARE REGION

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DECLARATION:

This Management Research Project is my original work and has not been presented for a degree in any other University.

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This Management Research Project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project to my family; My husband Simon Wambugu who has encouraged and supported me throughout the study and my children Maryanne, Githaiga and Michelle who showed patience as I took time off from minding them to complete this study.

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LIST OF ABBREVIATIONS

BRAC	Bangladesh Rural Advancement Committee
CGAP	Consultative Group to Assist the Poorest
FINCA	Fundacion Integral Campensina
HYV	High-yielding Varieties
K-Rep	Kenya Rural Enterprise Bank
MFI	Microfinance Institution
MDG	Millennium Development Goal
NGO	Non-Government Organization
RoSCA	Rotating Savings and Credit Associations
RDF	Rural Development Fund
SMEs	Small- and Micro- Enterprises
SPSS	Statistical Package for the Social Scientists
SB	Swanirbhar Bangladesh
UN	United Nations
VCFs	Village Credit Funds
Kiwa	Kikudi cha wanachama
Watano	Subgroup of five

ABSTRACT

The purpose of this study was to assess the impact of K-Rep bank's *Juhudi* lending scheme on borrowers. The objectives were twofold, namely, to assess the extent of the financial and social impact of the *Juhudi* Credit scheme on low-income borrowers in Kawangware and to evaluate the challenges faced by the borrowers in complying with the requirements of the scheme.

The conceptual model was the minimalist scheme as epitomized by the Grameen Bank. This is based on the concept of group lending without training. The model requires group members to live in the same village, have similar economic resources and be members of different households. These stipulations ensure that the members of the groups have equal bargaining power and ensure the groups function smoothly. Its loan policy, one of the most quoted pillars of its success, ensures effective peer pressure and makes members more objective in assessing loan requests. Peer pressure ensures that loans are used for purpose intended through group monitoring mechanisms and errant members are easily disciplined or dropped. The impact of microfinance on the poor and the challenges faced in lending to the poor were also reviewed.

The study employed a case study design. The population of study was 1,080 persons out of which 108 respondents were sampled. Data was collected by means of a questionnaire. Data analysis employed descriptive statistics consisting of means and standard deviations. Factor analysis and Spearman Rho correlation was done to effectively analyze the relationship between the dimensions that defined the variables used to assess financial and social impact and demographic variables.

Chapter four presents the data findings and discussions and chapter five presents the summary, conclusions and recommendations. The key finding was that Juhudi scheme has had a positive financial and social impact on the lives of the residents of Kawangware. This is manifest in the increased financial stability and ability to better afford essential services such as education. The scheme still faces challenges to do with the high interest rates charged on borrowings.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

In the 1970s, experimental programs in Bangladesh based on group lending mechanisms extended tiny loans to groups of poor women for investment in micro-businesses (Hassan, 2002). Remenyi (1997) notes that the most famous of these microfinance programs became the Grameen Bank and the Bangladesh Rural Advancement Committee (BRAC), which were both established in the late 1970s as pilot projects. Both were later formalized in the early 1980s, with the Grameen Bank becoming a private sector bank with a limited license, and the BRAC becoming a Non-Government Organization (NGO). These two institutions have had a global influence as there have been many successful attempts at replicating them in other developing countries.

In response to the serious economic crisis and consequent poverty following the collapse of Albania's centralized economy in 1992, the Albanian government developed the Rural Development Fund (RDF) with the objective of establishing rural Village Credit Funds (VCFs) to finance small loans to rural residents for all types of income-generating activities. These Funds are revolving accounts managed by the villages themselves with the assistance of RDF credit officers. The rural credit program design was focused on reaching the very poor, encouraging development of management capacity and achieving high loan repayment. RDF's urban credit program was designed to promote self-employment and the development and integration of micro and small businesses into the formal economy (Ledgerwood, 1999).

In Costa Rica, an NGO called Fundacion Integral Campensina (FINCA) has initiated revolving loan programs of Grameen-type in isolated rural communities. The FINCA program has a two-stage design. It organizes and trains joint liability groups who receive a series of graduated loans ranging from approximately $50 to $400 per person in the first stage and up to $2000 in the second stage. Loan terms are usually a year in the first stage and up to five years in the second stage. Interest rates are subsidized and group members are required to save twenty percent of their total loan amount on a regular basis to insure against loan defaults or to finance group activities (Paxton, 1998).

Charitonenko and Campion (2003) highlight the case of Mali's Freedom from Hunger Project, which targets rural women through its *Credit with Education* group-lending program. Its field agents worked with women's groups to develop their capacity to manage their own Credit Association, to which the Microfinance Institution (MFI) gives a loan. The group is jointly liable to repay the loan, which is generally over 16 weeks. The members divide the large loan into small loans (initially $60-$80) customized to the member's request for investment in her individual micro-enterprise. If the credit association pays its entire loan back to the local organization, on time and with interest, it becomes eligible to immediately receive a new, usually larger loan.

In Kenya, Pederson and Kiiru (1997) observe the formation of the Kenya Rural Enterprise (K-Rep) Bank in 1984 as an intermediary NGO to provide credit and technical assistance to other NGOs. The bank later introduced a Grameen style minimalist direct lending program targeting the poor. This was the *Juhudi* scheme in which potential borrowers confederate into groups that then secure their borrowings through members' savings, insurance funds and peer pressure. Another scheme developed was the *Chikola* scheme through which loans were advanced through existing Rotating Savings and Credit Associations (ROSCA)

1.1.1 Microfinance

One definition of microfinance is the provision of a broad range of financial services such as deposits, loans, payments services, money transfers and insurance to the poor and low-income households and their farm or non-farm micro-enterprises (Charitonenko and Campion, 2003). Microfinance Institutions (MFIs) include banks, cooperatives, credit unions, NGOs or non-bank financial intermediaries. MFIs services include: credit services (allocating small loans against collateral substitutes e.g. group guarantees or compulsory savings; deposit services; insurance products, including insurance against loan default due to misadventure; and financial advisory services (Hassan, 2002).

A main goal of many MFIs, especially rural institutions is to provide sustainable micro-finance facilities to the poor to facilitate income generation and reduce poverty (Baumann, 2001). Poverty is a result of low economic growth, high population growth and unequal distribution of resources. Reducing poverty that results from unemployment requires creating jobs, while poverty due to low productivity and low income requires investing in human and physical capital (Khandker, 1998). Microfinance increases rural income generation through agriculture that contributes to household income and enhances food security, women's empowerment and self-confidence, as well as children's education.

As Ximiya (2000) points out, rural people have an affinity to save their financial benefits by keeping livestock (cattle, goats, sheep, etc) and poor people have an affinity to save their benefits, partly because of the hopelessness of their situation, to provide for the future. Old people, on the other hand, save because of reduced need for spending, while women save to provide for their families.

Khandker (1998) also argues that participation in microfinance programs is funding the construction of new homes, further education for children, creating new savings and new businesses. Microfinance programs could benefit a country's overall society by overcoming the liquidity and unemployment problems associated with highly imperfect credit markets. The social benefits could far exceed the social costs of implementing these programs, even when these programs are not sustainable without government or donor support.

1.1.2 The K-Rep Group

The K-Rep Group started in 1984, as a five-year project to address the financial, management and technical needs of non-governmental organizations involved in the micro and small enterprises development sector. From its humble beginnings in the late 20th century, K-Rep has changed, evolved and developed into a respected multi-functional microfinance enterprise that is poised to meet the challenges of the African microfinance industry in the 21st century. The group's vision is to empower low-income earners and serve as a catalyst for them to increase their participation in the development process and to enhance their quality of life. The K-Rep Group mission is to accomplish this through development of finance interventions that aim at creating institutions and mechanisms, which serve to enable low-income people to better organize their financial lives (K-Rep Group, 2006).

Fowler and Kinyanjui (2004) note that the K-Rep Group is the coordinating arm of the group that oversees the strategic interests of the group. Today the group comprises of three subsidiary companies: K-Rep Development Agency, the research and development arm of the group which develops and pre-tests new microfinance interventions targeted to low income groups; K-Rep Advisory Services Limited, the capacity building arm that provides training and advisory services to Africa's microfinance industry on a fee basis and K-Rep Bank.

Pederson and Kiiru (1997) note that K-Rep Bank is the Groups microfinance bank that provides financial intermediation services to individuals and businesses. It traces its roots to experiments with direct/ retail lending to the community-based enterprises and wholesale lending to other NGOs. Experiences gained over the years supplemented with a study and an exposure visit to the Grameen Bank in Bangladesh, Latin America, India and other countries led to the development of K-Rep's first loan product '*Juhudi*' a Kiswahili term meaning "determination".

Regarding its micro financing objectives, K-Rep group established K-Rep Bank in order to secure a more appropriate and sustainable funding source from the financial markets and to gain financial independence; to acquire a more appropriate institutional form and long-term institutional base, as well an appropriate corporate culture for providing financial services; to influence policy in the finance sector in favour of serving low-income and poor people; to commercialize and integrate microfinance into the mainstream financial markets and to situate micro financing amongst legitimate financial institutions (K-Rep Group, 2006).

1.1.3 '*Juhudi*' Lending Scheme

Juhudi, the first loan product developed by K-Rep, is a Kiswahili term meaning "determination". It is designed after the minimalist group lending methodology of the Grameen Bank in Bangladesh but customized to the Kenyan context. The purpose was to cover the loopholes of the then existing lending methodology by broadening outreach, ensuring self-sustainability and ensuring credibility and professionalism in the delivery of credit (K-Rep Group, 2006).

What made the *Juhudi* scheme appropriate to the poor is its group co-guarantee mechanism and peer pressure that ensures that group members pressurize their colleagues whom they have guaranteed loans to keep up with their repayments not to jeopardize their chances and also ensured that members use loans for purpose intended. Members of any centre that is successful in repaying its enterprise loans can then qualify for house loans. This is further enhanced by the fact that members' savings provide collateral and hence the group members themselves closely monitor potential defaulters.

Fowler and Kinyanjui (2004) note that an intensive learning process through working with NGOs involved the development of micro enterprises in Kenya motivated *Juhudi.* The establishment of *Juhudi* credit Scheme (JCS) was, on the one hand, intended to be a demonstration project for the K-Rep supported NGOs and on the other, to give K-Rep a foothold on the route to sustainability. The demonstration project could indicate how effectively Micro credit worked and how it could reach a wider clientele to generate income and employment opportunities while incorporating elements of sustainability. There was also more pressure to reach more micro entrepreneurs in the context of increasing unemployment and the internal needs of the informal sector.

1.2 Statement of the Research Problem

In 1975, Dr. Muhammad Yunus, a Professor at the University of Chittagong's Department of Economics, in Bangladesh, undertook a study at the nearby village of Jobra. He was seeking to establish why poor people are poor. Also, Dr Yunus was unwilling to accept the general belief that poor people are lazy, uninnovative and unwilling to progress. Through the findings of a survey he organized, it soon became clear that poor people in Jobra were unable to progress due to the high cost of available capital, mainly from moneylenders (Mutua and Mirero, 1985).

In order to find a lasting solution, Dr Yunus decided to formalize the lending process, inventing the group lending minimalist scheme, with a view to making capital accessible to the poor and over a three-year pilot phase, it became obvious that lending to the poor was viable and practical-so long as institutional follow-up measures were implemented, reasonable credit terms set and there was an on-going attempt to learn and realistically address the problems that confront the poor.

According to the Consultative Group to Assist the Poorest [CGAP] (2003), through the 1980s and 1990s, microcredit programs throughout the world improved upon the original methodologies and backed conventional wisdom about financing the poor. First, it showed that poor people, especially women, had excellent repayment rates among the better programs, rates that were better than the formal financial sectors of most developing countries.

Second, the poor were willing and able to pay interest rates that allowed MFIs to cover their costs. These two features-high repayment and cost-recovery interest rates-permitted some MFIs to achieve long-term sustainability and reach large numbers of clients. In fact, the promise of microfinance as a strategy that combines massive outreach, far-reaching impact, and financial sustainability makes it unique among development interventions.

Fowler and Kinyanjui (2004) note that while the integrated lending model-where microcredit was channelled through NGOs whose priority was not microfinance-did not yield much gain for the poor, the minimalist scheme has led to poverty reduction and social development in developing countries such as Bangladesh and Brazil. The *Juhudi* scheme, which borrows a leaf front this approach, can thus contribute a lot to helping Kenya pursue the prime Millennium Development Goal (MDG) of poverty reduction and deserves closer scrutiny. This study seeks to assess any such impact in the Kawangware region.

Plenty of local literature exists focusing on the MFI sector in Kenya, Wanjiru (2000) looked at factors that influence productivity of credit officers in MFIs; Rukwaro (2001) studied credit rationing in MFIs and its influence on Small- and Micro- Enterprises (SMEs) and Kitaka (2001) conducted a survey of the use of financial performance indicators by MFIs in

Kenya. Agala-Mulwa (2002) surveyed the relationship between training and development programmes and job satisfaction in MFIs in Nairobi.

Others (for instance, Kimandi, 2002; Mungumi, 2002; Lengewa, 2003; Mokogi, 2003; Mudiri, 2003; Mutonyi 2003; Ringera 2004; Maru 2004; Ndulu 2004; Mwenda 2005 and Wambundo 2005) have conducted MFI related studies. None of these have studied the impact of K-Reps *Juhudi's* microfinance lending programme on borrowers in Kawangware region of Nairobi. This study intends to add to the literature by assessing the impact of K-Rep bank's *Juhudi* lending scheme on borrowers. Other *Juhudi* schemes exist, for instance in Kibera and Eldoret; the Kibera scheme was the first in Kenya and its success would decide the fate of the scheme as a whole. Kawangware was chosen because it is a poor region where K- Rep has implemented the *Juhudi* Credit scheme. Studying the Kawangware scheme is part of continually documenting the successes and limitations of the *Juhudi* scheme in urbanized social settings in Kenya.

1.3 Objectives of the Research

a. To assess the extent of the financial and social impact of the *Juhudi* Credit scheme on low-income borrowers in Kawangware.

b. To evaluate the challenges faced by the borrowers in complying with the requirements of the scheme

1.4 Importance of the Study

a. The study will be of importance to K-Rep Bank microfinance lending management in helping them understand the impact of the *Juhudi* scheme

b. The research will also be of use to MFIs and other stakeholders or investors in this sector in helping them deduce about the efficacy of microfinance in Kenya

c. The study will add value to the area of research in microfinance for both academics and the business world.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews the importance of credit, informal finance usage in Africa, characteristics of good microfinance programs, the different microfinance lending models and the celebrated Grameen model in particular. This entails studying the administrative structure of Grameen bank, its credit delivery model, why it was such a success and its applicability to the Kenyan context. The review then studies the structure and operations of the K-Rep banks *Juhudi* scheme in Kenya that is modelled along the Grameen model. Finally, the impact of microcredit on the poor and the challenges faced in advancing credit to the poor are looked at

2.2 The Importance of Credit

Selected readings by Professor Yunus, as cited by Gibbons (1992) found that, very much like food, clothing, shelter, education and health, credit is one of the fundamental rights of man. It is through access to credit that he is able to acquire the needed strength to enter the field of vicious economic warfare. It is the sacred duty of government to secure this fundamental human right for all its citizens. Credit will equip a dispossessed person to fight against economic odds around him. Without the support of credit he now gets beaten mercilessly.

The right to work has been recognized as an important human right. Opportunity to work may be created in two ways –either through wage employment or through self-employment. Wage-employment is not a happy road to the reduction of poverty. Providing a job does not necessarily mean the elimination of impoverishment. In many cases the job is merely a means of perpetuating poverty. Such a job is likely to keep a person forever poor if earnings cannot meet his basic needs. The poverty of the vast multitudes in this country will not be eradicated, therefore, through employment of wage labour. Removal or reduction of poverty must be a continuous process of creation of assets, so that the asset base of a poor person becomes stronger at each economic cycle, enabling him to earn more and more. Self- employment, supported by credit has more potential for improving the asset base of the poor. Credit has the capacity to create self-employment for both men and women instantaneously.

According to Yunus (1999), economists have failed to understand the social power of credit. In economic theory, credit is seen merely as a means with which to lubricate the wheels of trade, commerce and industry. In reality, credit creates economic power which quickly translates into social power. When credit institutions make rules that favour a distinct section of the population, that section increases both its economic and social status. In both rich and poor countries alike, credit institutions have favoured the rich and in so doing have pronounced a death sentence on the poor. Why have economists remained silent while banks rejected the poor as unworthy of credit? Nobody can provide a convincing answer. Because of this silence and indifference banks have imposed a financial apartheid and gotten away with it. If economists would only recognize the powerful socioeconomic implications of credit, they might recognize the need to promote credit as a human right.
As a result of this, the poor depend mainly on informal finance.

2.2.1 Informal Finance usage in Africa

Informal finance has been defined as all those financial transactions taking place outside the functional scope of the concerned central monetary authority and other financial sector regulations (Aryeetey, 1995). These include commercial and non-commercial lenders, friends, family and licensed co-operatives or unions. They also include formal and informal groups formed with the aim of raising finance.

Many surveys of enterprise finance in Africa indicate that start-ups of micro businesses in most countries are primarily funded by landlords, neighbours, friends and relations. Bhasin and Akpalu (2001, as cited in RPED, 1993). Moreover, Hyuha et al. (1993) have noted that informal finance through friends and relations in Tanzania was a significant source of agricultural financing.

Atieno (1998) has observed in a survey done in Kenya that about 70% of the respondents got their initial capital from family friends and relatives, while 81% got their operating capital from the same source. In both Ghana and Nigeria, steady growth in the flow of loan applications to informal lenders has been observed, and has been matched by steady increases in the number of loans granted by various informal lenders

Aryeetey (1992) in Ghana has observed that informal finance is rarely used for the expansion of micro-businesses. The finding that hairdressers have used different sources of informal finance for the expansion of their businesses stands in contrast with their findings. Our finding that majority of Hairdressers, Dressmakers, and Wood-processors took loans from their friends/relatives and suppliers/clients is in conformity with the findings of Atieno (1998).

2.2.2 Reasons for the use of informal Finance

Chipeta and Mkandawire (1991) and Aryeetey and Gockel (1991) find that it is only the informal sector that caters for the needs of hairdressers, dressmakers and wood-processors in Cape Coast and Ghana. Respondents indicated that the most important reasons for borrowing are favourable terms of lending, easier formalities and no collateral required. Respondents also indicated that they face credit interruption, get persistent request for repayment and rescheduling whenever they are unable to pay back the loans (Bhasin and Akpalu, 2001).

The generation of self-employment in the small and micro-enterprises requires investment in working capital. However, at low levels of income, the accumulation of such capital may be difficult. Under such circumstances, loans, by increasing family income, can help the poor to accumulate capital and investment in employment generating activities Bhasin and Akpalu (2001, as cited in Hossain, 1988).

Commercial banks and other formal financial institutions, however, fail to cater for the credit needs of self-employed persons mainly due to their lending terms and conditions. They require collateral, which the poor find difficult to provide. The financial institutions prefer handling large loans than the small ones needed by the poor, and their loan application procedures are too cumbersome for the poor. It is mainly such rules and regulations of the formal financial institutions, which have created the myth that the poor are not bankable and since they cannot afford the required collateral, they are not considered credit-worthy (Adera ,1995).

Selected readings by Prof. Yunus as cited by Gibbons(1992) states that to argue that banking cannot be done with the poor because they do not have collateral is the same as arguing that men cannot fly because they do not have wings. Men have the singular distinction among all animals, of being extraordinarily innovative. Now to argue that this innovative animal cannot design a banking system that does not rely on collateral is simply an insult to human ingenuity.

Although informal credit institutions have proved relatively successful in meeting the credit needs of small and micro-enterprises in some countries, their limited resources limit the extent to which they can effectively and sustainably satisfy the credit needs of these entrepreneurs Bhasin and Akpalu (2001, as cited in Nappon and Huddlestone, 1993). This is because as micro-enterprises expand in size, the characteristics of loans they require become increasingly difficult for the informal credit sources to satisfy, yet they remain too small for the formal lenders (Aryeetey, 1996a).

Access to financial services by self-employed persons in small and micro-enterprises is normally seen as one of the constraints limiting their benefits from credit facilities. However, in most cases the access problem is one created by the institutions mainly through their lending policies. This is displayed in the form of prescribed minimum loan amounts, complicated application procedures and restricting credit for specific purposes Bhasin and Akpalu (2001, as cited in Schmidt and Kropp, 1987). For small and micro-enterprises, reliable access to short-term credit and small amounts of credit is more valuable, and emphasizing it may be more appropriate in credit programmes aimed at such enterprises (Adams and Von Pischke, 1992).

Aleke-Dondo (1999) observes that those in absolute poverty are always left out of microfinance programmes. Fowler and Kinyanjui (2004) observe that microfinance development excludes the hardcore poor through the dominant financial systems approach methodology. Those that have benefited from microfinance programmes are the economically active poor who are entrepreneurial and are able to put additional finances into good use. Microfinance programmes using the minimalist approach carefully screen potential clients to ensure high repayment rates as well as high levels of participation in the programmes. Hence, group members and programme staff carefully screen out potentially risky clients. The criteria for group admission tend to exclude the hard-core poor from the schemes.

Fowler and Kinyanjui (2004) further observe that this neglect of the poor may be attributed to the fact that tiny loans required by the poorest people may be too small to generate any significant interest for lenders and are expensive to deliver especially in sparsely populated rural areas. In other instances, the poor exclude themselves from participating, as they feel incapable of handling credit and repayment requirements. High interest rates charged by MFIs sometimes screen out poor entrepreneurs whose projects have low rates of return, whereas those services promoted and provided by the institutions may in some cases be inappropriate to meet the needs of the poor.

Aredo (1993) notes that saving with formal institutions in Ethiopia is not popular mainly because of the low capacity to save. Aryeetey and Gockel (1991) point out similar cases in Ghana. Uncertainty, especially political risk due to Government interference has also contributed to low levels of confidence in the formal financial sector. Kenya is a case example in point where there is a history of political interference in the formal financial sector. Similar instances have been observed in other countries for example Uganda.

Aryeetey and Gockel (1991) note the following reasons cited by urban market women for not saving with banks in Ghana: severe Government interference in the operation of the system; low incomes, suggesting that they expected only those with high incomes to deal with banks;

too much formality in banks, related to paperwork, which led to an unnecessarily extended transaction time and, banks were usually disinterested in too frequent deposits in torn, dirty notes and discourage this.

2.2.3 Types of Savings and Credit Associations in Africa

Savings and credit associations in Africa are broadly divided into rotating and non-rotating with regard to the allocation of collected funds. Seibel (1989) has identified four types of associations in Africa. These are: -

Rotating Savings Associations where each member pays a fixed amount at regular intervals. \In a rotating order, each member receives the total amount collected at a given time. Each cycle terminates when all members have received the full amount at least once and the next cycle begins.

Rotating Savings and Credit Associations. Each member pays a fixed amount at regular intervals. Part of the contribution is allocated to one member at a time, in a rotating order, and the other is put in a general fund for loans, insurance etcetera.

Non-rotating Savings Associations. Each member pays a fixed or variable amount at regular intervals. The contributions are deposited and paid back to the individual member at the end of the stipulated period.

Non-rotating Savings and Credit Associations. Each member pays a fixed or variable amount at regular intervals. The income of the association from sources such as contributions, fees, penalties, joint business etcetera, is put into a fund, which may be used for loans, insurance and social services. The fund may be established for a specified or unspecified period. Contributions may or may not be paid back at the end of a stipulated period. Interest rates tend to be high as they provide an additional source of funds

The main distinction underlying Savings and Credit Associations can be brought out by pointing out Rotating and Savings Credit Associations (or ROSCA's) at one end and Accumulating Savings and Credit Associations (or ASCRA's) at the other. The former periodically rotate the collection of funds among members whilst the latter accumulates funds that are used for various purposes, including lending. Various combinations of theses arrangements can be found in the middle of the continuum.

2.3 Characteristics of Good Micro financing Programs

According to Garson (1998), there are approximately seven guidelines that provide good practices for microfinance management. First, the development and implementation of a microfinance program facilitate organizational and operational systems, such as peer groups, that are set up as a part of the program and which lead to better financial sustainability of the program; second, the success of a microfinance program greatly depends on the degree of networking incorporated into the program, with good networking and information gathering systems resulting in better informed decisions and understanding of market operations and third, they bring the community together and facilitate the development of kinship among the residents which facilitate the implementation and success of MFIs activities. Fourthly, microfinance programs provide residents with appropriate skills and vocational resources in order to aid them in better utilizing their credit; fifth, leadership training programs nurture good community leaders who provide a representative voice for the community; sixth, building trust among the community leaders, borrowers, NGOs and other stakeholders is an important aspect of microfinance programs. Trust building among those involved is important in order to obtain good repayment and recovery schedules. Finally, good microfinance programs provide small business management training and skills to enhance performance.

Yunus (1999 notes that experts on poverty alleviation insist that training is absolutely vital for the poor to move up the economic ladder. But if you go out into the real world, you cannot miss seeing that the poor are not poor because they are untrained or illiterate, but because they cannot retain the returns of their labour. They have no control of capital and it is the ability to control capital that gives people the power to rise out of poverty. Giving the poor access to credit allows them to immediately put into practice the skills they already know – to weave, husk rice paddy, raise cows, and peddle a rickshaw. And the cash they earn is then a tool, a key that unlocks a host of other abilities and allows them to explore their own potential.

2.4 Micro credit Lending Models

There are various microfinance models currently being used by MFIs throughout the world. The most commonly known model is the Grameen model used by K-Rep Bank when designing the *Juhudi* scheme. Other models are as outlined below.

The ***Cooperative Model*** has emerged from the practices of credit cooperatives or credit unions that operate in developing countries. The model is based on owner-managed firms, where all members have an equity interest in the MFI; distribution of benefits through lower-cost member services and higher returns on member deposits; and finally, savings mobilization. Membership is targeted at below poverty line households that cannot access financial services from the banking sector. Cooperatives or credit unions specialize in being a financial intermediary and may offer their members community or personal development programs. Many cooperatives had their beginnings as informal savings clubs or rotating savings and credit associations (RoSCA) that were groups of individuals who come together and made regular contributions to a common fund, which was then given as a lump sum to one member in each cycle (Remenyi, 1997).

The ***Village Bank*** model tends to serve a poor, predominantly female clientele, similar to the Grameen Bank. According to Morduch (1999), the sponsoring agency makes an initial loan to the village bank and its 30–50 members. Loans are then made to members, starting at around $50 with a four month term, with subsequent loan sizes tied to the amount that members have on deposit with the bank. The initial loan from the sponsoring agency is kept in an 'external account', and the interest income is used to cover costs. The aim is to build up internal accounts so that external funding could be withdrawn within three years. The Bank Kredit Desa (BKD) system in rural Indonesia is an example of a successful village bank that has harnessed local information and peer dynamics. Most village banks require subsidies to cover costs because most have been set up in areas that are difficult to serve (Morduch, 1999).

Remenyi (1997) observes that ***the Intermediary model*** of credit lending positions a 'go-between' organization between the lenders and borrowers. The intermediary plays the role of generating credit awareness and education among the borrowers. These activities are geared towards raising the 'credit worthiness' of the borrowers in order to make them attractive to the lenders. The links developed by the intermediaries could cover funding, program links, training and education, and research. Intermediaries could be individual lenders, NGOs, microenterprise/microcredit programs and commercial banks.

Lenders could be government agencies, commercial banks, and international donors. NGOs have played the role of intermediary in various dimensions. NGOs have been active in starting and participating in micro credit programs. This includes creating awareness of the importance of micro credit within the community, as well as various national and international donor agencies. They have developed resources and tools for communities and micro credit organizations to monitor progress and identify good practices. They have also created opportunities to learn about the principles and practice of micro credit through publications, workshops and seminars, and training programs. Examples of some larger NGOs include Save the Children, World Vision, and CARE (Remenyi, 1997).

2.5 The Grameen Model

This is the most acclaimed of the micro financing models developed in 1975 by the founder of Grameen Bank, Dr. Yunus. In order to find a lasting solution to the poverty problem, Dr Yunus decided to formalize the lending process with a view to making capital accessible to the poor. This was done using alternative arrangements and procedures that were tested in the search for the best possible ways of providing credit and setting terms that poor borrowers could meet easily, without additional strain (Khandker, Khalily and Khan, 1995). This model was the basis for the K-Rep funded *Juhudi* and other group based lending products (Kinyanjui and Fowler, 2004) and is discussed in greater detail.

Khandker et al. (1995) further note that over a 3-year pilot phase, it became obvious that lending to the poor was viable and practical-so long as institutional follow-up measures were implemented, reasonable credit terms set and there was an on-going attempt to learn and realistically address the problems that confront the poor. Success of this phase eventually led to institutionalization of the Grameen Bank as a separate institution to lend money to Bangladesh's poor and landless who comprise about 80% of the total population (100 million). The Government had a 60% shareholding in the Bank while Bangladeshi's poor owned 40% of the shares.

2.5.1 Administrative Structure of Grameen Bank

The Grameen bank is comprised of four administrative units: branch offices, area offices, zonal offices and a head office. An average branch has about 10 employees, a manager, a senior assistant and seven bank employees. Each of these branch offices is located in the villages around Bangladesh and serves as field-level operational units. These branch offices have the most contact with the members and are the basic profit-making unit of the bank structure. As such, they are the most important units in the Banks operation. Each branch oversees anywhere from 50 to 60 centers, which are units that are comprised of groups of bank members. These typically cover an area of not more than 30 square miles (Khandker, Khalily and Khan, 1995).

These branch offices report to the area offices. The area offices are located in the towns and typically supervise ten to fifteen branches. The area offices are manned by six employees including an area manager, one program officer and one senior assistant. Several area offices fall under the zonal offices. The zonal office is a mini-head office that makes all administrative decisions except major disciplinary actions against any staff. The zonal and area offices combined are known as the regional offices. Under this structure, the zonal, area and branch offices remain independent from the head office.

Hassan (2002) observes that at the top of the pyramid is the head office that oversees the zonal offices. The head office is the central unit of the Grameen Bank and is operated by a managing director, a deputy managing director, a general manager and a large support staff. Most administrative decisions are done in the zonal offices, allowing the head office to concentrate more on raising external funds and grants and on providing training.

Khandker et. al. (1995) note that the management system of the Grameen Bank is unique. Most of the planning is accomplished on the branch level through active fieldwork. Annual plans are drawn up and submitted to the area offices and are eventually passed to the zonal offices and then on to the head office. As a follow up to the plans, the different offices also submit monthly reports showing what was actually accomplished. In return the head office then supplies the different offices computer printouts of what was planned and actually accomplished. The head office surprisingly does not offer any comments.

2.5.2 Credit Delivery Model of the Grameen bank

The Grameen Bank has several unique features including the concept of group lending, its mandatory savings program and the transparency of transactions. A brief discussion of each of these features is provided in the following sections.

2.5.2.1 Group Lending

Khandker et. al. (1995) points out that the first step, and the foundation of the Grameen Bank process, is the concept of group lending. Group members must live in the same village, have similar economic resources and must be members of different households. These stipulations ensure that the members of the groups have equal bargaining power and ensures the groups function smoothly. Each group has a chairperson responsible for the discipline of the group members. Weekly meetings are conducted by the group members under supervision of bank staff during which members become familiar with and practice the rules of the Grameen Bank.

Soon after group formation, group members are required to make small deposits to the bank. During this time Grameen Bank employees also provide training to the groups. Following this two to three week period, two members of the group are initially issued credit. The group is then observed for a month or two to ensure that the required weekly installments are being paid after which two more members are provided credit.

Hassan (2002) observes that several groups are eventually tied together in what is known as a center. Centers are comprised of five to eight groups and are led by an elected chairperson known as a chief. It is the responsibility of the chief to conduct the center meetings and monitor loan utilization on a daily basis along with the group chairpersons. Individual group members are allowed to choose activities for which the loans will be provided. The selections are then discussed at the group and center meetings where the members can guide one another under the direct supervision of a Grameen Bank employee.

Small individual loans are provided to finance the selected activities. The loans are repayable in weekly installments spread over one year. In order for the other members of the group to become eligible for a subsequent loan, the first loans must be repaid. The ultimate responsibility for repayment of the loans lies with the entire group. This collective borrower responsibility forces the group to closely supervise the credit and places substantial group pressure on the other members to make the scheduled payments.

Grameen style lending is characterized by loans to small groups of borrowers that are jointly liable for the loans granted to each member of their group. The loans are intended for clients who do not meet the wealth requirements of the formal banking system. Since the clients have little material wealth, no collateral requirements exist. The only guarantee on the loan is the joint liability of the group members. The main advantages of group lending are, first, reduction of transaction costs. According to Huppi and Feder (1990), lenders can achieve economies of scale by lowering their per unit transaction costs, as direct costs of lending vary inversely with the size of the loan. Thus, it is more costly to lend small amounts to several individual borrowers than lending a larger amount to a group. Second, poor people prefer to work in groups for financial reasons e.g., access to credit, as well as social reasons i.e., training, and organizational inputs and finally; repayment rates are more favorable in group lending schemes because of homogeneous groups and peer pressure. Also, group lending has been found to offer some "unusual" advantages. For example, Berenbach and Guzman (1993), argue that group lending provides pecuniary returns especially to women i.e., group credit gives women self-esteem, mutual trust, empowerment etc.

2.5.2.2 Mandatory Savings/Collateral Substitutes

Khandker et. al. (1995) observes that group members are required to save through several types of deposits. An employee of the Grameen Bank collects the savings deposit at the group meeting. The initial weekly deposits are used to establish a group fund. The weekly contributions deposited by each member are held in a savings account for that member. This money is fully refundable to the respective customer upon their retirement or if they dropout of the system. In addition to the weekly deposit, each member is also required to contribute 5 percent of his or her loan amount to the group fund. This acts as an insurance fund as well as collateral.

2.5.2.3 Transparency of Transactions

All credit transactions are conducted openly at the centre meetings. Fuglesang and Chandler (1988) argue that the virtue of these open procedures is that they mitigate problems such as the entrenchment of vested interest as well as deterring risky behaviour, such as fraud, by individuals that may put the group at risk

2.5.3 Social Development Program

Khandker et. al. (1995) observes that the Grameen Bank also developed a social development program to help members break the poverty cycle. The various programs, such as the one for social development, were established to ensure that both the borrowers and lenders remain viable. By dealing almost exclusively with the poor, the Grameen bank realized early on the potential problems associated with their imperfect market and the risks involved. To their credit the Grameen Bank realized that receiving credit alone was not enough. Their customers had to receive social benefits as well.

Most of the potential customers for the Grameen Bank start off with a social disadvantage in a competitive society. This social disadvantage stems from the limitations they face in every day life. In order to help their customers overcome the poor housing, health and education conditions in their society, the Grameen Bank promotes social and financial discipline to the rural poor by encouraging their members to adopt certain activities and codes of conduct through their social development program. These activities not only address social concerns but also environmental concerns.

Hassan (2002) documents that the bank encourages members to build homes, grow gardens, plant trees, install sanitary latrines and trains members in areas such as maternal health, nutrition and childcare and provides its members with other social services such as family planning, education, and public health. Through the social development program members are now able to provide adequate education and/or day-care for their children and possess the knowledge necessary to manage their own business. In order to help improve the poor housing conditions, the Grameen Bank has been providing housing credit since 1984 to its creditworthy members with high seniority. By offering lower interest loans with longer repayment periods more rural families have been able to improve their housing conditions.

The Grameen Bank has also been experimenting with programs to address the social problems associated with chronic ill health among the local villages. As previously stated, chronic ill health has been identified as a primary reason for the prevalence of poverty in Bangladesh. In order to assist members with the problems they face due to chronic ill health, the bank will have to rely heavily on foreign donors and the local government. One suggested program will work similar to the Medicare program in the United States. Bank members will be required to pay a yearly premium for their family and then pay a small fee for each visit to a clinic.

2.6 Why the Grameen Model was a Success

Mutua and Mirero (1985), who were part of the K-Rep team sent to Bangladesh to conduct a study on the viability of the Grameen Model with a view to replicating the model in the Kenyan context, have pointed out the following factors that made Grameen Bank a success:

Starting out small: The Grameen project started out as a pilot project over a three-year period and only after learning through trial and error methods did Grameen expand its operations countrywide. As such, the pilot project allowed the identification and resolution of any problems before launching the full-scale project. Thus, by the time of going into full scale operations, the feasibility of the Grameen model as envisioned had already been confirmed;

Choice of Target Group: Grameen bank targeted a significant and needy segment of the Bangladeshi populace. These were people who were very poor but were also willing to do something about it. This implied that they would be committed to the financial and other goals set for them by the bank. The banks success would hinge on this determination and commitment by its clients;

Commitment: Grameen bank was committed to eradicating poverty and bring about widespread socio-economic change. This mutual and reciprocal focus on eradicating poverty between the bank and its clientele would translate to high returns in loan repayments and low default rates would galvanize other interest groups such as the Bangladesh government and donors like the World Bank into creating an enabling environment and availing much needed capital.

Decentralized Structure: Grameen's clients, though unschooled and illiterate, actively make decisions on membership, loans etcetera. Extension officers are relatively autonomous in daily functioning. Braches have to be self-financing, creating ownership of good credit appraisal and effective recovery of loans among the staff. This decentralized structure enables quick decision making to address teething problems and allows effective monitoring and feedback between the bank and its customers.

Loan Policy: This is one of the often-quoted pillars of Grameen's success. It ensures effective peer pressure and makes members more objective in assessing loan requests. Peer pressure ensures that loans are used for purpose intended through group monitoring mechanisms and errant members are easily disciplined or dropped. Consequently, loan repayment rates high.

Group Dynamics and Control: The key element is discipline. Intake procedures make sure that the bank only accepts those members who are very poor and who want to do something about it. Transparency makes it difficult for members and/or groups to conspire to defraud the bank.

Government Support: This has impacted positively on Grameen's success. The Government provides 50% of Grameen's loan portfolio; finances head office expenses and seconds personnel from Government owned institutions to provide much needed skills and expertise.

2.7 The *Juhudi* Credit Scheme (JCS)

The *Juhudi* Credit Scheme in Kenya was established in 1990. The first JCS office was opened in Kibera in 1990. *Juhudi* loans are targeted at informal sector businesses with no more than 10 employees and a capital base of KShs. 250,000 or less. Potential borrowers must be Kenyan citizens holding a national identity card (ID), have assets not exceeding KShs. 300,000, be over 18 years of age, be informal sector entrepreneurs and must be a resident or have a business within *Juhudi's* areas of operation. Borrowers in one group should not have close family ties (K-Rep, 1992). One major difference between the *Juhudi* scheme and the Grameen model is that the latter targeted the hardcore poor while the former targets poor persons who are economically active.

Fowler and Kinyanjui (2004) observe that interested entrepreneurs form groups of 5 known as *watano*. Six *watano* are later confederated into a centre known as a *kiwa* (30 members). The potential clients are inducted and trained on group lending methodology for a minimum of 8 weeks before they are taken into the scheme. In order to enhance the effectiveness and flexibility of the scheme, the size of the *watano* now varies from 4-10 and a *kiwa* can have between 15 and 30 members. Weekly meetings were constituted to build group solidarity.

The *watanos* and *kiwas* stress peer pressure and co-guarantees as collateral. The credit officer facilitates the group's registration with the Government as self-help groups after which the group proceeds to open a savings account on which to deposit their savings contributions.

Savings mobilization is an integral part of group formation and loan application process. Savings are compulsory and a regular weekly savings of KShs. 50 per member is collected and deposited on the account by *kiwa* officials. After 8 weeks of regular savings, 18 members of a given *kiwa* are eligible for the first loans. Loan application procedures are kept simple with loan appraisal informally undertaken by the group, which also takes collective responsibility for repayment (K-Rep, 1992).

Obuya (1995) observes that loans bear a service charge that is a percentage computed on weekly declining balance payable in weekly instalments on each loan repayment. In addition to the service charge, each applicant pays a fee of KShs. 100 along with the loan application. The loans are paid weekly for a period not exceeding 52 weeks from the date of disbursement. Where *kiwa* members fail to collect defaulted amounts in full, the total outstanding amount is deducted from group savings.

Fowler and Kinyanjui (2004) note that initially, the loan tenure was fixed at 52 weeks for all loans. Interest rates charged were set at 35% p.a. on reducing balances, 1.0% application fee, and 0.5% loan insurance fee. Prepayments were however allowed for members capable of meeting more than their weekly instalments. Interest calculations were reviewed to provide options for those who were capable and wished to repay in shorter periods. The loan applicants were given a choice of repaying loans in 13, 17, 26, 39 or 52 weeks. Interest payable on the loan was calculated on the weekly declining balance. Members who choose to repay in less than 52 weeks and apply for repeat loans have to increase their savings to what they would have saved by the end of 52 weeks to maintain equal distribution of risks.

In addition to member's savings, a mechanism for individual borrowers to pledge tangible assets as collateral was encouraged such that these assets would be sold in case of default. This would avoid the need of digging into guarantors' savings. All loan repayments commence after one week. However, different businesses have different turnovers and will require different grace periods e.g. groceries less than a week; carpentry, about one week and manufacturers about a month (K-Rep, 1992).

Fowler and Kinyanjui (2004) note that based on principles of relatively small and manageable loans and wide distribution of credit facilities to a bigger number of small business people, *Juhudi* determined the initial loan size of KShs. 10,000. Repeat loans are increased by KShs. 5,000. The task for appraisal, determining and approving loan amount lay with the *kiwa* members.

To streamline the loan approval process *kiwa* members were educated on the need for serious assessment of loans and field staff were required to conduct simple appraisals to determine business loan capital needs. This created a need to revise the loan savings configuration to ensure that the risk of loan guarantee is evenly distributed since different members obtain different amounts. Also the variance in loan sizes among the group members will have to be kept very small so as to maintain economic homogeneity necessary for *kiwa* group solidarity.

2.8 Impact of Microfinance on the Poor

Many claims made about the efficiency and usefulness of micro lending programs are challengeable, as revealed by the experience of United Nations (UN) agencies working with the NGO community. In particular, actual loan repayment rates are not as high as claimed, while real costs to micro entrepreneurs are usually much higher than reported and publicized. Many people, especially the poorest of the poor, are usually not in a position to undertake economic activity partly because they lack business skills and even the motivation for business (Grameen Dialogue, 1998b).

Ahmed (1997) claims that MFIs may not help the poor to become self-sustainable. Therefore the resulting increase in supply of output due to increased input from micro credit causes the rate of return on loans to be lower than the cost of borrowing. With repeat loans, the net-income per unit of credit decreases. Borrowers often take loans from other sources to pay installments. As a result, the microfinance loan places the borrower in perpetual debt.

Wahid (1994) found out that the loan recovery rates with "graduated borrowers" (those who are engaged in taking second or more loans) is relatively lower than with new borrowers. To explain this Wahid makes the point that in many cases the "graduated borrowers" would have successfully lifted themselves above the poverty line but there is lack of innovative funding that would enables them to move on to more appealing economic activity, hence a sense of disillusionment and subsequent under par performance.

The impact of microlending on the recipient household's income tends to increase, though at decreasing rates, as the recipient's income and asset position improve. This is explained by the greater preference of the poor for consumption loans, their greater vulnerability to asset sales forced by adverse income shocks and their limited range of investment opportunities. Lenders, they argue, can either focus their lending on the poorest and accept a relatively low total impact on household income, or alternatively focus on the not so poor and achieve higher impact (Hulme and Mosely, 1996).

Ebdon (1995) found in the case of the Grameen Bank that most women would simply be given the money by their household to cover the weekly repayments and hence their economic status was not improved. Karim and Osada (1998) found that of those members who dropped out of Grameen Bank groups within their seventh year of membership, 88% did not move out of poverty.

Khandker and Chowdhury (1996) hold the relatively positive view that, for the targeted credit programmes in Bangladesh, it will take, on average, about 5 years for poor programme participants to rise above the poverty line and 8 years to be financially independent. Montgomery et al. (1996), however, found little evidence that BRAC's clientele are altering their structural position within the rural economy, hence their conclusion, that credit may be insufficient and inappropriate for alleviating extreme poverty.

On the positive side, Microfinance interventions have been able to reduce the risks faced by poor households and could also be applied to reduce the impact of natural disasters. In India, Anand et al (2005) observe important attribute of Microfinance in its ability to help households diversify their income sources. Microfinance programs can diversify income in various ways by fostering different types of jobs and capital, generating regular employment throughout the year and providing livelihood opportunities for women to earn money.

Anand Kumar and Newport (2005) also point out that Microfinance helps increase a household's income-earning and asset-building opportunities (often giving women a fuller economic role) and these opportunities that help make households less reliant on a single asset type and consequently able to deal with disasters. In the face of a natural disaster, the value of having a diverse range of jobs (income) depends on the nature of the event. If Microfinance is used for non-agricultural activities and a drought occurs then those activities will not be directly affected. But if a flood occurs it will destroy housing and other assets, as well as disrupt markets.

In Indonesia, Grameen Bank members, who are small-scale farmers, are now allocating a higher percentage of their land for the cultivation of high-yielding varieties (HYV) and have improved their agricultural productivity. Growing HYV is costly requiring the installation of irrigation systems, fertilizers and pesticide inputs, which would be hard without the availability of credit. Also, Grameen Bank members have shown a significant increase in per capita income. In comparison to other contemporary credit programs (i.e. Swanirbhar Bangladesh (SB)), Grameen Bank members showed an increase of 624%, second only to SB. Comparing the effect on women's per capita income alone, Grameen Bank members lead the pack with a return of 737% (Hassan, 2002).

Hassan (2002) further observes that in addition to an increase in per capita income, Grameen Bank members have also shown a significant improvement in housing. Many Grameen Bank housing borrowers were actually building larger houses than what was specified by the bank. In order to do so, borrowers were using additional resources from their previous savings and or working capital.

The diet of Grameen Bank members is also significantly better than it is for non-members. Also, there is evidence that Grameen Bank members not only have more food to eat, but also benefit from higher quality food. Grameen Bank members eat less cereal, more vegetables, more meat and eggs. They also eat more sugar candy, obviously not a healthy food, but evidence of increased discretionary spending.

Mayoux (2000) argues that sustainable micro-finance empowers women because they, as a group, are consistently better in promptness and reliability of repayment of credit. Targeting women as clients of micro-credit programs has also been a very effective method of ensuring that the benefits of increased income accrue to the general welfare of the family and particularly the education of girls in rural Africa. At the same time, women themselves benefit from the higher status they achieve when they are able to provide new income. The reason for targeting women lies in the higher levels of female poverty and women's responsibility for household well being.

There is also the added advantage that targeting women goes a long way towards achieving both gender equality and human rights. Women's control over decision-making is also seen as benefiting men through preventing leakage of household income to unproductive and harmful uses such as beer drinking in the case of rural Africa. Other welfare interventions are advocated in addition to micro-finance, typically nutrition, health and literacy campaigns to further decrease vulnerability and improve women's skills (Mayoux, 2000).

Panganiban (1998) observes that the income of borrowers has risen and their asset base has widened, hence they seek bigger loans the next time round and hope to expand their projects. Many have succeeded beyond their own expectations.

Investments made by loanees appear to have been extremely productive and to have contributed to significant improvement in household output, income and consumption (Ghai, 1984).

Finally, entrepreneurial training organised by MFIs that include awareness seminars, entrepreneurship development programs, working capital management workshops, customer relation seminars, record management workshops, marketing seminars, technical training workshops, industrial visits and book-keeping workshops are now generally seen as a strategy to speed the pace of industrial development in the developing countries. The methods used in these training programmes include interactive lectures, discussions, case studies, group work, role-plays and practical exercises (Bhasin and Akpalu, 2001).

2.9 Challenges of Microlending to the Poor

Khandker (1998) observes that although microfinance programs have improved loan repayment rates and seem to be better than other programs aimed at the poor, they have high transaction costs increasing dependence on subsidized resources for lending and do not break-even at the market cost of these resources. Although many microfinance programs reach the poor and do recover loans, many are unable to fully cover their operational costs. To become fully financially self-sustainable, they would need to charge rates of interest that would be too high for poor borrowers to bear.

Other disadvantages due to microfinance programs being subsidized include donor budgets being limited thereby restricting the scale and size of the MFIs operations, whereby self-sufficient programs can expand more easily to meet demand. Also, in the past, mismanagement of funds has resulted in many subsidies ending up in the hands of wealthy regulators instead of helping poor households and communities (Morduch, 1999).

Adera (1995) argues that commercial banks and other formal financial institutions also fail to cater for the credit needs of self-employed persons mainly due to their lending terms and conditions. They require collateral, which the poor find difficult to provide. The rules and regulations of the formal financial institutions have created the myth that the poor are not bankable and since they cannot afford the required collateral, they are considered not credit-worthy.

Access to financial services by self-employed persons in SMEs is normally seen as one of the constraints limiting their benefits from credit facilities. However, in most cases this problem is one created by the institutions through their lending policies such as prescribed minimum loan amounts, complicated application procedures and restricting credit for specific purposes (Schmidt and Kropp, 1987 as cited in Bhasin and Akpalu, 2001). For SMEs, reliable access to short-term credit and small amounts of credit is more valuable, and emphasizing it may be more appropriate in credit programmes aimed at such enterprises (Adams and Von Pischke, 1992).

In Bangladesh, the impact of microcredit on poverty has been limited, despite its fame. Hashemi (1998) argues that although microcredit in Bangladesh has succeeded in reaching a quarter of all poor rural households, poverty still persists. One major reason for this may be the limitations in effectively targeting all of the poor and specifically, in leaving out large sections of the 'hard core' poor.

For Hulme and Mosley (1996), the main problems worldwide in the practice of microcredit are overemphasis on credit delivery, social exclusion in the delivery system and a professionalization of management under which incentive structures for MFI staff, such as promotion prospects, favour concentration on groups other than the poorest.

Aleke-Dondo (1999) also observes that those in absolute poverty are always left out of microfinance programmes. Fowler and Kinyanjui (2004) observe that those that have benefited from microfinance programmes are the economically active poor who are entrepreneurial and are able to put additional finances into good use. Microfinance programmes using the minimalist approach carefully screen potential clients to ensure high repayment rates as well as high levels of participation in the programmes. The criteria for group admission tend to exclude the hard-core poor from the schemes.

Field workers are under pressure to produce high credit repayment rates to secure their jobs (Rahman 1999). So, they prioritize microcredit at the expense of other activities such as educating borrowers on the technical aspects of their businesses and developing their record keeping skills. This tends to result in tension between borrowers and MFI extension officers. In other instances, credit extended by MFIs is designated solely for income generation; there is no consumption credit. Many borrowers have to devote some of the credit to consumption (e.g. house repair), which makes it difficult for them to generate enough income to repay loans (Ahmad, 2003).

Rutherford (1998) also points out that all micro enterprises have limited growth potential, being constrained both by their inherent nature and by contextual conditions such as market demand. They argue that few clients can improve their economic position through say, agriculture, mainly because they have so little land. Others may show some improvement, but remain dependent on microcredit to retain this position. Poor marketing skills hamper the sustained growth of micro enterprises.

Evans et al. (1999) emphasize the importance of skills training and of adult literacy programmes, as these help the microcredit borrowers to become efficient sellers of their products. They argue that before considering the sustainability of micro enterprises it is important to make provision for the sustainability of the groups and suggest more emphasis on training in literacy and book-keeping, which would enable borrowers to become self-operating.

MFIs are not the magic bullet that will solve all problems of poverty. Credit is an important but not the only constraint on raising incomes of the poor. Other constraints that keep the productivity of labour, hence incomes, low include a lack of human capital, material assets and access to inputs. The poorest people, in particular, have a low demand for credit because they have relatively low capacity to make profitable use of it and their capacity to service debt is virtually nil (United Nations, 1999).

On the issue of inflated repayment rates Elahi and Danopoulos (2004) observe that the performance of microlenders is much better than those of commercial and other specialized banks, no matter what the real repayment rates are. In many developing countries, a few borrowers, who are also the largest defaulters, hold the bulk of commercial loans. Thus, the criticism about microcredit repayment performance is one-sided.

Second, the accusation about the deflated interest rates is also challengeable. It should be noted that these rates are high because the administration costs of these loans are also rather high. However, the interest rates that the microcredit NGOs charges are still much lower than the rates used to prevail in the informal credit markets of many TW countries. These rates were often as high as 200 percent (Aleem, 1990).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The study will employ a case study design. Mugenda and Mugenda (1999) note that a case study is an in-depth investigation of an individual, group, institution or phenomenon whose purpose is to determine factors and their relationship that have been caused by the phenomenon under study. In this study, the researcher is attempting to assess the financial and social impact of K-Rep's *Juhudi* microlending scheme in Kawangware.

3.2 Population

The population is composed of 36 *kiwas* (Appendix 3) that form the backbone of the *Juhudi* Scheme in the Kawangware region. Each *kiwa* has an average of 30 people, bringing the total population of *Juhudi* scheme members in Kawangware to about 1,080 persons. Each *kiwa* has an average of 6 watano sub-groups with between 4 to 10 members.

3.3 Sample and Sampling Design

The research procedure involved interviewing 3 members of each *kiwa*. Thus, there were 108 respondents in total. This sample size was justified by the statistical rule of thumb that a minimum sample size of 30 respondents is representative of any population (Saunders et al., 2003). The 3 respondents were selected from different *watano* groups (making a sample size of 36 *watanos*).

In order to assess financial and social impact in relation to number of years of scheme membership, quota sampling was to be used to ensure that one third of the respondents have been in the scheme for one year or less, another third between one and five years and the final third more than five years. However this was not possible with most groups because some groups did not have these population settings.

3.4 Data Collection

A letter of introduction was sought both from Nairobi University and K-Rep. These facilitated easy interaction with the groups through formal procedures. Data was collected by means of a questionnaire that consisted of open-ended and closed-ended questions. The questionnaire was administered by the researcher with the help of a graduate research assistant on the participants. This was necessary as it was imperative to guide the respondents through the research, some of who were semi-literate.

3.5 Data Analysis

Data analysis involves organizing, accounting for and explaining the data; that is, making sense of the data in terms of respondents' definition of the situation noting patterns, themes, categories and regularities (Gay, 1992). Quantitative data analysis was executed using Statistical Package for the Social Scientists (SPSS) and descriptive statistics consisting of means and standard deviations were generated and used to establish the extent of financial and social impact of the scheme. Content analysis was used to analyze qualitative data inform of respondent specific opinion.

Principal Component Analysis was performed. Davidson (1996) notes that the aim of Principal Component Analysis is data reduction by extracting and grouping together the key variables that operationalize those measures used to assess impact, such as income and consumption. From this, it was possible to analyze effectively the relationship between these underlying groups of factors and personal variables such as age and income. Pearson's correlation was done between personal characteristics e.g. gender, marital status, age, level of education and length of scheme membership on one hand and income and consumption on the other to assess whether these personal characteristics have any influence on the latter two.

CHAPTER FOUR

4.0 DATA ANALYSIS AND DISCUSIONS

4.1 Introduction

This chapter was dedicated to discussing the findings of the research in relation to the research objectives. The objectives of this study were twofold, namely, to assess the extent of the financial and social impact of the *Juhudi* Credit scheme on low-income borrowers in Kawangware and to evaluate the challenges faced by the borrowers in complying with the requirements of the scheme. To achieve this, a case study of the Kawangware *Juhudi* scheme was conducted using a questionnaire as the research instrument. All 108 respondents were successfully interviewed and the response rate was thus 100%. However, some respondents skipped certain questions.

4.2 Profile of the Respondents along Demographic Variables, Dependency ratios and *Juhudi* Scheme Membership

As noted earlier, a total of 108 respondents were surveyed. The basic demographics and characteristics of the sample are shown in table 1. Majority of the surveyed respondents were male, 54.6 percent compared to 43.5 percent female, therefore the Juhudi Credit Scheme cuts across gender. Further 85.2 percent of those sampled were married, 8.3 percent single and the rest widowed.

The sample representation cuts across the age profile however majority, 41.6 percent falls in the 31 -40 years age bracket, therefore 31-40 years seems to be the key target group for Juhudi Credit Scheme although it is open to anybody over 18 years.

Almost half of the respondents have attained secondary school/ high school level of education; over one quarter of the surveyed respondents have attained college/university education. Overall, the respondents have a fair level of education because only one respondent claimed not to have had any education.

Almost two thirds of the respondents have 2 to 5 dependants with 7.4 percent having greater than 9 dependants.

4.2.1 Sample structure

Table 4-1

Total number of respondents	108
Gender	**Percent**
Male	54.6%
Female	43.5%
Marital Status	**Percent**
Single	8.3%
Married	85.2%
Widowed	4.6%
Age in years	**Percent**
Less 30	13%
31-40	41.6%
41-50	29.6%
50 and above	13.9%
Level of education	**Percent**
None	1%
Primary	21.3%
Secondary/ high school	49.1%
College	22.6%
University	4.6%
Number of dependants	**Percent**
Less than 2	10.2%
2 – 5	61.5%
6-9	19.4%
Greater than 9	7.4%

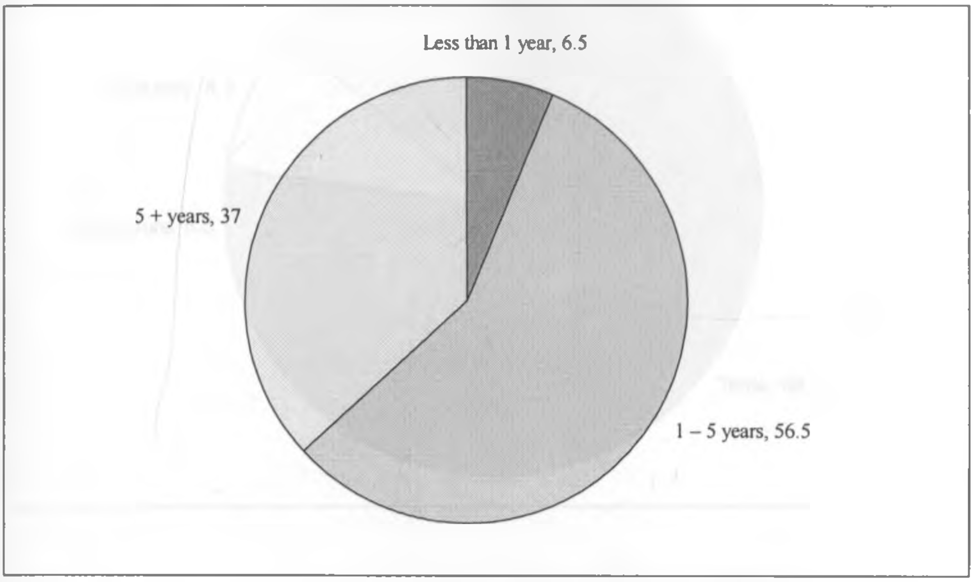
4.2.2 Juhudi scheme membership

Before discussing the most important findings, it is important to elaborate the social economic interaction and duration of the respondents included in this study who make up the sample of the Juhudi credit scheme.

We begin with the duration at Juhudi scheme. It is important to note that more than a third of the respondents have been members of the Juhudi Credit Scheme for more than five years.

6.5% of the members have been with the scheme for a period of less than one year implying that the scheme is continuously recruiting new members. However some groups had not recruited new members for a long time.

Figure 1



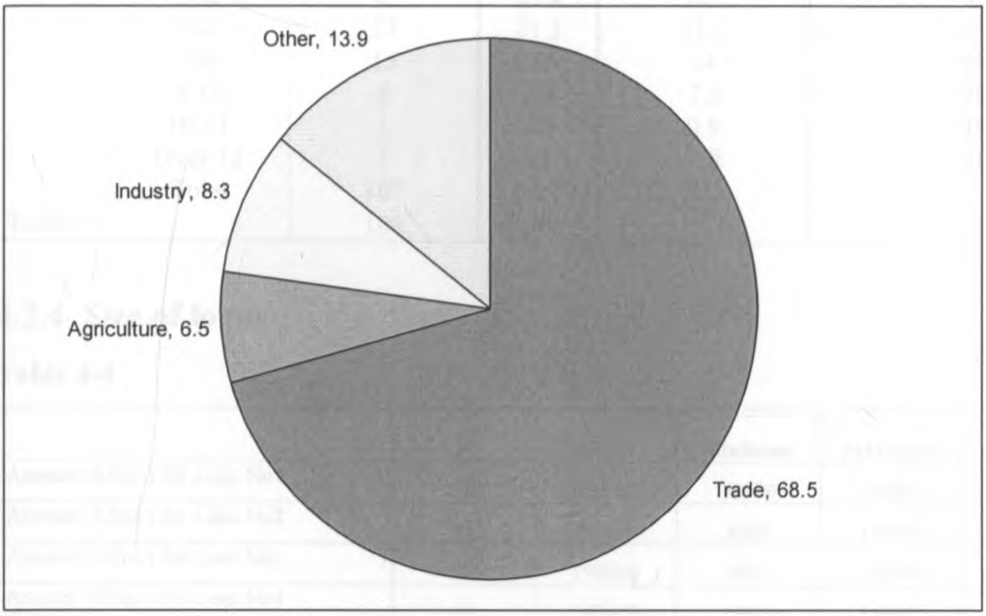
A picture of the respondents' integration into the economy can be derived from the business in which they engage in. When probed on the business engaged in, a majority of the respondents, made up of 68.5 percent were engaged in trade.

Trade can be attributed to small and medium size businesses. 6.5% were engaged in agriculture, 8.3 percent, in industry and the rest, 13.9 other businesses.

Figure 2

Types of businesses respondents are involved in

……



4.2.3 Number of loans

On Average, members have taken about 5 loans since joining the Juhudi scheme. The most number of loans taken so far by a single individual stand at 13 loans. As expected, the members who have been in the scheme for long have taken more loans compared to those ones who have been in the scheme for a shorter duration. Majority of the respondents have taken between 3-4 loans, see table 4-2.

Table 4-2

Mean	**4.69**
Median	4
Mode	3
Std. Deviation	2.70
Minimum	**1**
Maximum	**13**

Table 4-3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2	24	22.2	22.4	22.4
	3-4	35	32.4	**32.7**	55.1
	5-6	23	21.3	21.5	76.6
	7-8	15	13.9	14	90.7
	9-10	8	7.4	7.5	98.1
	10-11	1	0.9	0.9	99.1
	Over 12	1	0.9	0.9	100
	Total	107	99.1	100	
Total		108	100		

4.2.4 Size of loans

Table 4-4

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Amount (KShs.) for Loan No1	107	60000	10000	70000	21,588.79	8649.303
Amount (KShs.) for Loan No2	95	96000	4000	100000	39,778.95	15596.77
Amount (KShs.) for Loan No3	82	194000	6000	200000	58,975.61	27950.56
Amount (KShs.) for Loan No4	62	290000	10000	300000	81,209.68	53666.28
Amount (KShs.) for Loan No5	46	985000	15000	1000000	120,108.70	150836.5
Amount (KShs.) for Loan No6	32	980000	20000	1000000	176,093.75	228408.7
Amount (KShs.) for Loan No7	22	270000	30000	300000	121,136.36	86903.5
Amount (KShs.) for Loan No8	16	260000	40000	300000	162,812.50	93451.75
Amount (KShs.) for Loan No9	10	440000	10000	450000	157,200.00	145993
Amount (KShs.) for Loan No10	8	685000	15000	700000	213,125.00	232731.3

The loans range from as little as KShs 4,000 to a high of 1,000000. However most respondents complained that the loan sizes were too small to have a significant impact on their businesses. The study notes that the first loans range between KShs 10,000 and 20,000

4.2.5 Lateness in loan repayment

When questioned whether they had ever been late in repaying the loans, 29 percent responded in the affirmative. 74.4 percent of these respondents blamed this on business problems while 20.5 percent blamed family obligations.

To assess the impact and level of member involvement in the Juhudi Credit Scheme, members were probed on their opinions on impact on the following:

Changes in levels of income, Change in consumption patterns since joining Juhudi Credit Scheme, Reasons and motivations for joining Juhudi Credit Scheme and Challenges that have affected their business under the Juhudi Credit Scheme

The ratings for the respective categories were based on a 5 point scale; as shown below.

4.3 Assessment of the Financial and Social Impact of the *Juhudi* Credit Scheme on Low-Income Borrowers in Kawangware

Table 4-5

Income Variables	No extent at all	Mild extent	Fairly high extent	High extent	A great extent	Mean	Std. Deviation
Higher business sales	**3.8**	16.2	40	25.7	**14.3**	3.3	1.03
Higher rental income	**48.4**	12.5	26.6	3.1	**9.4**	**2.12**	1.315
Higher residual/disposable income	**10.4**	23.6	33	25.5	**7.5**	2.96	1.103
Improved cash flows	**3.8**	23.6	39.6	22.6	**10.4**	3.12	1.011
Increased number of employees	**39**	25.7	22.9	5.7	**6.7**	**2.15**	1.199
More business profits	**7.5**	28	33.6	20.6	**10.3**	2.98	1.099
More savings	**11.3**	33	30.2	13.2	**12.3**	2.82	1.178
More financial security	**12.1**	29.9	30.8	20.6	**6.5**	2.79	1.105

There is a positive impact on the existing businesses as reported by a majority of the respondents.

A majority of the survey respondents mention that Juhudi Credit Scheme has contributed to 'higher business sales' and 'improved cash flows'. Positive impact on rental income is minimal. This is expected because the scheme caters mainly for low income earners who own SMEs. Most therefore are not in a position to invest in rental buildings

Being owners of SMEs, majority of the people run the businesses themselves so there is very little impact on the 'increased number of employees'.

Across the survey demographics, no significant differences are noted across the gender divide and most of the variables. However concerning 'rental income' more men report a positive impact as compared to women. This is because there are more male respondents involved in rental business than their female counterparts. No significant differences are noted across age.

Respondents with primary level of education express a higher impact on the income variables than other levels of education.

Members who have been in the scheme for 5 years and above report 'higher business sales' more positively than the other groups. This is most likely because they have been in the scheme for longer, received more loans and established stable businesses. It is also noted that the same group reports a more positive impact on the variable "increased number of employees"

Members who have been with Juhudi for less than one year have a higher opinion on the variable 'more financial security' probably because they are now able to handle various financial issues with the help of the loans.

There is a positive impact on the existing businesses because a majority of the respondents report a positive impact on the business variables. This supports Khandker's (1998) observation that microfinance programs support creation of new savings and new businesses.

No significant differences are noted based on the number of dependants.

4.3.1 Income Component Matrix

Table 4-6

	Component		
	1	2	3
Higher business sales	**.768**	-.026	-.202
Higher rental income	.041	**.856**	.373
Higher residual/disposable income	.613	.511	-.486
Improved cash flows	**.780**	-.039	-.311
Increased number of employees	.612	.307	.510
More business profits	**.854**	-.144	-.054
More financial security	**.801**	-.090	.223
More savings	.542	-.538	.433

Extraction Method: Principal Component Analysis. 3 components extracted.

Higher business sales, improved cash, more business profits and financial security are highly intercorrelated in the **income segment**. As seen earlier (Hulme and Mosley, 1996) micro lending has a positive impact on the recipient household. The correlation for higher rental income with other items is comparatively small.

It thus seems there are three independent items reflected in the correlation matrix. One related to (higher business sales, improved cash flows, more business profits), a second one related to higher disposable income, increased number of employees and more savings). The correlation for higher rental income with other items is comparatively small.

4.3.2 Impact of Juhudi Credit Scheme on consumption

Table 4-7

Consumption Variables	No extent at all	Mild extent	Fairly high extent	High extent	A great extent	**Mean**	Std. Deviation
Afford better security	14.8	28.7	31.5	14.8	8.3	2.73	1.151
Afford recreation or entertainment	31.5	25	25.9	8.3	7.4	2.34	1.226
Able to afford better quality medical care	21.3	25	25.9	20.4	6.5	2.65	1.214
Improved diet	8.3	20.4	35.2	23.1	12	**3.1**	1.124
Increased ability to afford school fees	10.2	17.6	27.8	21.3	20.4	**3.25**	1.269
Installed electricity	51.9	9.3	12	9.3	11.1	2.13	1.467
Installed or bought telephone	42.6	9.3	19.4	12	14.8	2.46	1.513
Purchase a vehicle	76.9	1.9	4.6	3.7	7.4	1.55	1.24
Purchased better clothing	16.7	13.9	32.4	20.4	14.8	**3.03**	1.283
Purchased household goods	22.2	10.2	27.8	22.2	16.7	**3.01**	1.384
Renovated or improved housing	44.4	12	19.4	14.8	8.3	2.3	1.389

The survey respondents' express higher opinions to impact on improved diet, increased ability to afford school fees, purchase of clothing and household goods. Low opinion is expressed on impact on purchase of vehicle, electricity installation, improved housing and affordable entertainment. These do not appear to be very important to this group of respondents, a fact attributed to poverty.

The major benefit in the respondent's opinion is provision of basic needs, namely food, clothing, school fees and household goods. This fits in well with Hassan's (2002) observation that Grameen bank members improved their quality of basic life e.g. diet.

No significant differences are noted across gender and marital status.
Respondents who are 50 years and above in age, rate the consumption variables higher than the other age groups. That can be attributed to their stage in life at which most of their dependants are able to take care of themselves. They are also likely to make more informed business decisions due to more business experience. Their businesses have also grown over time.
Those with more than nine dependants have more positive reactions on consumption variables. This could be because they have greater need for credit due to higher financial obligations.
However their opinion is lower on improved diet. This could meaning there are more urgent needs like school fees and medical care that takes priority over improved diet.

Those who have been in the scheme for more than 5 years express higher positive opinions on consumption variables. We can attribute that to the growth of their businesses over time.

4.3.3 Consumption Component Matrix

Table 4-8

	Component	
	1	**2**
Afford better security	**.742**	-.280
Afford recreation or entertainment	**.743**	-.242
Able to afford better quality medical care	**.703**	-.428
Improved diet	**.842**	-.092
Increased ability to afford school fees	**.699**	-.011
Installed electricity	**.628**	.592
Installed or bought telephone	**.629**	.429
Purchase a vehicle	**.428**	-.152
Purchased better clothing	**.853**	-.046
Purchased household goods	**.887**	-.007
Renovated or improved housing	**.554**	.438

Extraction Method: Principal Component Analysis. 2 components extracted.

In the consumption variables there is high inter-correlation of the variables apart from purchase of vehicle and improving/ renovation of housing.

Therefore the consumption on most of the variables is highly correlated, however they can be categorized into four groups. The first set consists of basic needs i.e. improved housing, better clothing and improved diet. Second set consists of better security, recreation and entertainment and medical care. Third set consists of school fees, electricity and purchase of telephone. The last set consists of improved housing and purchase of a vehicle.

4.4 Reasons for joining Juhudi Credit Scheme:

Table 4-9

Reasons Variables

	No extent at all	Mild extent	Fairly high extent	High extent	A great extent	Mean	Std. Deviation
Better loan repayment plan	12.0	19.4	27.8	21.3	17.6	3.1	1.3
Good service	5.6	18.5	26.9	25.9	18.5	3.4	1.2
Quick loan disbursement	10.2	17.6	21.3	24.1	23.1	3.3	1.3
Scheme is near to place of work or home	16.7	2.8	19.4	21.3	37.0	3.6	1.5
Recommendations from peers	**6.5**	**4.6**	**13.0**	**15.7**	**51.9**	**4.1**	**1.2**
Transparent nature of Juhudi transactions	6.5	13.9	30.6	19.4	27.8	3.5	1.2
Allows borrowers to choose investment type	**3.7**	**10.2**	**18.5**	**17.6**	**47.2**	**4.0**	**1.2**
Borrowers can make decisions relating to loans	12.0	17.6	21.3	12.0	34.3	3.4	1.4
Scheme encourages savings	5.6	14.8	23.1	23.1	30.6	3.6	1.2

Recommendation from peers and flexibility when it comes to choosing the type of investment are the key reasons for joining the Juhudi scheme, it is rated high across the various survey demographics. It is important because Juhudi Credit Scheme depends on peer pressure and guarantee.

Respondents with less than one year rate the fact that the scheme encourages savings highly. That can be attributed to the fact that the size of loan a member gets depends on the amount of their savings and the requirement by Juhudi Credit Scheme that new Juhudi members have to save for eight weeks before being eligible for the first loan. The older member's biggest priority is to service the loans and not savings.

As expected, issues to do with borrowing are articulated more positively by survey respondents with more than five years in the scheme. i.e. opinion on loan repayment plan, good services and loan disbursement time.
No significant differences are noted when rating 'transparent nature of Juhudi transactions'. Generally members seem to rate service provision by K-Rep bank positively though with gaps for further improvement.

4.4.1 Reasons component matrix

Table 4-10

	Component		
	1	2	3
Better loan repayment plan	**.517**	.563	.028
Good service	**.623**	.506	.256
Quick loan disbursement	**.381**	.168	.664
Scheme is near to place of work or home	**.399**	-.518	.488
Recommendations from peers	**.659**	-.329	.058
Transparent nature of Juhudi transactions	**.715**	.196	-.095
Allows borrowers to choose investment type	**.672**	-.457	-.243
Borrowers can make decisions relating to loans	**.554**	-.388	-.380
Scheme encourages savings	**.361**	.373	-.604

Extraction Method: Principal Component Analysis. 3 components extracted.

There is a high correlation between good service, recommendation from peers, transparent nature of Juhudi transactions and flexibility in choosing investment type.

There is also an inter-correlation between loan repayment plan and independent decision making relating to loans. The others seem to fall in the same matrix that, is quick loan disbursement, nearness of scheme to place of work and encouragement on savings.

4.5 Challenges faced by the borrowers in complying with the requirements of the scheme

Table 4-11

Challenges Variables	No extent at all	Mild extent	Fairly high extent	High extent	A great extent	Mean	Std. Deviation
Demand fluctuations for goods and services	10.2	20.4	28.7	15.7	22.2	**3.2**	1.296
Helpfulness of K-Rep field staff	37	13.9	23.1	14.8	10.2	2.47	1.389
High interest rates on loans	**7.4**	**11.1**	**18.5**	**17.6**	**41.7**	**3.78**	1.322
Inadequate business skills	38.9	16.7	33.3	3.7	6.5	2.21	1.198
Poor knowledge of money management	39.8	17.6	25.9	8.3	6.5	2.23	1.252
Poor marketing skills of entrepreneurs	37	19.4	26.9	7.4	8.3	2.3	1.275
Small size of loans available from scheme	**26.9**	**11.1**	**19.4**	**11.1**	**29.6**	**3.06**	1.597
Spending loan money on family needs	36.1	18.5	21.3	12	12	2.45	1.397
Time taken to disburse loan	24.1	25.9	21.3	8.3	19.4	2.73	1.431

High interest on loans was ranked as the most important challenge. Mutua and Mirero (1985) point out that high interest rates are necessary to ensure that lenders funds are not run down. Khandker (1998) says that the high transaction costs of micro lending requires that interest rates charged be high.

The small size of loans available from the scheme and demand fluctuations for goods and services are mentioned as other key challenges affecting businesses under the Juhudi Credit Scheme.

4.5.1 Challenges Component Matrix

Table 4-12

	Component		
	1	2	3
Demand fluctuations for goods and services	*.365*	**.626**	-.218
Helpfulness of K-Rep field staff	.042	-.150	**.683**
High interest rates on loans	*.360*	**.452**	-.180
Inadequate business skills	**.775**	-.327	-.002
Poor knowledge of money management	**.838**	-.296	-.015
Poor marketing skills of entrepreneurs	**.790**	-.322	-.133
Small size of loans available from scheme	*.410*	.451	**.471**
Spending loan money on family needs	*.235*	**.629**	-.210
Time taken to disburse loan	.134	.282	**.682**

Extraction Method: Principal Component Analysis. 3 components extracted.

There are 3 types of correlations extracted. Inadequate business skills, poor knowledge of money management and poor marketing skills of entrepreneurs are correlated. It can be attributed to the fact that Juhudi Credit Scheme uses the minimalist model and therefore, does not provide any business training to its members. Rahman (1999) attributes poor business skills to field workers being under pressure to perform, resulting in prioritization of micro credit at the expense of educating borrowers. Rutherford (1998) observed that poor marketing skills hamper sustained growth of micro enterprises.

Demand fluctuations for goods and services, high interest rates on loans, small size of loans available from scheme form the second set of correlation. Thirdly there is an intercorrelation between time taken to disburse loan and helpfulness of K-Rep field staff. This can be expected since they both depend on the service level by K-Rep bank.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings, draws conclusions relevant to the research, and makes recommendations on the same.

5.2 Summary of Findings

The first objective of the research assessed the extent of the financial and social impact of the *Juhudi* Credit scheme on low-income borrowers in Kawangware. Impact was measured using income and consumption as the key variables. The findings supported the notion that membership in the scheme has resulted in positive gains for the members. Along the income variable, this was manifested through higher business sales, improved cash flows, more business profits, higher disposable income and financial security. Factor analysis and Spearman Rho correlation revealed a strong association between financially driven outcomes (higher business sales, higher residual/disposable income, increased number of employees, more business profits, more financial security and more savings) with personal and demographic variables implying that membership to the scheme strongly influenced the members' lives financially.

Consumption witnessed high scores in increased ability to afford school fees, improved diet, better clothing and better household goods. The point here was that scheme members were able to address their basic needs better than before. Purchase of vehicle and installation of electricity did not score highly, a fact attributed to these not being basic needs for the poor.

Majority of scheme members joined on the recommendation by peers, the fact that borrowers were allowed to choose the type of investment they wanted, the fact that the scheme was easily accessible and the fact that membership encouraged savings. These were cited in the literature as characteristics of good microfinance programs. Regarding reasons for joining *Juhudi*, factor analysis generated three factors. Factor analysis revealed a set of factors, namely good service, recommendations from peers, transparent nature of *Juhudi* transactions, allowing borrowers to choose investment type and allowing borrowers to make decisions relating to loans, which can be collectively labelled "service and empowerment" as being the most strongly correlated with respondent demographic characteristics, indicating that these were most responsible for decisions to join.

The second objective evaluated the challenges faced by the borrowers in complying with the requirements of the scheme. High interest rates on loans, demand fluctuations for goods, services and small size of loans available from the scheme were the key challenges identified. Others included inadequate business skills, poor knowledge of money management and poor marketing skills. Business skills appear to be the most pervasive challenge given the positive correlation with all the statements under challenges given the fact that the set of statements isolated through factor analysis were highly correlated with demographic data. These were inadequate business skills, poor knowledge of money management and poor marketing skills of entrepreneurs

5.3 Overall Conclusion

The key conclusion is that the minimalist Juhudi scheme has had a positive financial and social impact on the lives of the residents of Kawangware. This is manifested in the increased financial stability and ability to better afford essential services such as education. The scheme still faces challenges to do with the high interest rates charged on loans.

5.4 Limitations of the Study

Not all the questions posed were answered and quite a number were answered unsatisfactorily. The study may not be generalised across the population as only the Kawangware scheme was investigated and there may be contextual differences amongst the various schemes due to environmental differences.

Notwithstanding the standardized procedures and careful oversight, some factors may have had some effects on the data obtained. These include, language barrier where some respondents could not express themselves in either Kiswahili or English and therefore translation had to be done into vernacular where possible. This may have affected comprehension of the questions. The Juhudi groups were scattered over a large area leading to higher travel related expenses and extra time to carry out the interviews. Fieldwork days were added to cover for the extra time.

As noted earlier, a substantial number of the surveyed respondents had only attained primary level of education and they found it difficult to understand the questionnaire. A lot of explaining had to be done. This might have affected the comprehension of the questions by the respondents.

During the time of the survey, the Juhudi field officers were late for some meetings having been delayed in the previous meetings. This made it impossible to carry out the field study within the time that had been allocated leading to extension of the field study by a few days.

A few respondents were hostile. They were suspicious of the data collection process. In such circumstances, the chairperson of the group gave an alternative interviewee, however this delayed the process.

5.5 Recommendations

From the key findings, the study will recommend increased support for microfinance projects by the government, the private sector, the civil society and donors in order to further increase microfinance outreach to reduce poverty given the positive impact micro lending has on clients.

The Grameen model that Juhudi tries to replicate targets the 'hardcore poor'. However Juhudi's requirements exclude these from its scheme. Micro Finance institutions should come up with products which target the poorest. It comes out clearly that the Juhudi profile of clients are between 31 to 40 years of age, have primary school level of education and are a low income group. Therefore the study recommends that Juhudi needs to concentrate on this target group

The programme does not provide any training to its members. Members feel that lack of business skills hampers the growth of their businesses. The study recommends some form of basic business training to enable the members to run their businesses smoothly.

High interest rates are a major problem and members feel that with lower interest rates the programme would have a greater positive impact. Micro Finance programmes need to find ways of reducing the cost of supporting the programmes so as to reduce the interest rates. K- Rep also needs to improve their level of service to the Juhudi members

5.6 Areas for further Research

Given the debate existing concerning the long term impact of microfinance in reducing poverty (Wahid (1994; Hulme and Mosely, 1996; Ebdon, 1995; Karim and Osada, 1998; Khandker and Chowdhury, 1996), this study will recommend a time series research that seeks to establish the sustainability of the Juhudi scheme in actually moving the poor away from poverty and also how many poor persons tend to drop back into poverty over time and reasons for these state of affairs.

Further inquiry could also be done on ways of reducing the costs of delivering the programme in order to reduce the high transaction costs encountered which in turn result in the very high interest rates payable.

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Appendix 1

Complementary Letter to the Respondents

University of Nairobi

School of Business

P.O. Box 30197

Nairobi, Kenya

Date: 7 November 2007

Telephone: +254 (020) 732160

Telegrams: "Varsity", Nairobi

Telex: 22095 Varsity

==

To Whom It May Concern

The bearer of this letter: ________________________________

Registration Number: ______________ Telephone: ______________

is a Master of Business Administration (MBA) student at the University of Nairobi.

The student is required to submit, as part of the coursework assessment, a research project report on a given management problem. We would like the students to do their projects on real problems affecting firms in Kenya today. We would therefore appreciate if you assist the student collect data in your organization to this end. The results of the report will be used solely for purpose of the research and in no way will your organization be implicated in the research findings. A copy of the report can be availed to the interviewed organization(s) on request.

Thank you,

The Co-ordinator, MBA program

APPENDIX 2

Questionnaire

Part 1

Please indicate your gender: [ ] Male; [ ] Female

Indicate your marital status below.

[ ] Single; [ ] Married;

[ ] Widowed; [ ] Divorced

Indicate your age bracket below

[ ] less than 25; [ ] 26-30; [ ] 31-35; [ ] 36-40;

[ ] 41-45; [ ] 46-50; [ ] above 50

How many dependants do you have?

[ ] less than 2; [ ] 2-5;

[ ] 6-9; [ ] Greater than 9

Indicate below, your level of formal education.

[ ] None; [ ] Primary; [ ] Secondary;

[ ] High School; [ ] College; [ ] University

For how many ***years*** have you been a member of the *Juhudi* scheme?

[ ] less than 1; [ ] 1-5; [ ] 5 and above

Indicate below the type of business you are engaged in

[ ] Trade; [ ] Agriculture;

[ ] Industry; [ ] Other

How many *Juhudi* loans have you taken since joining? _______________

Indicate below the sizes of these loans.

Loan No.	Amount (KShs.)	Loan No.	Amount (KShs.)	Loan No.	Amount (KShs.)	Loan No.	Amount (KShs.)
1		6		11		16	
2		7		12		17	
3		8		13		18	
4		9		14		19	
5		10		15		20	

Have you ever been late in repaying your loan? [ ] Yes; [ ] No

If answer to Q9 is "Yes", indicate below possible reasons for this.

[ ] Family Needs; [ ] Business Problems; [ ] Other

Part 2

On a scale of 1 to 5 where:

1 = no extent at all; 2 = mild extent; 3 = fairly high extent; 4 = high extent; 5 = a great extent,

Indicate below your opinion of the extent to which joining the *Juhudi* scheme has contributed to the following:

Extent

Income Variables	**1** No extent	**2** Mild extent	**3** Fairly high extent	**4** High Extent	**5** Great Extent
Higher business sales					
Higher rental income					
Higher residual/disposable income					
Improved cash flows					
Increased number of employees					
More business profits					
More financial security					
More savings					

On a scale of 1 to 5 where:

1 = no extent at all; 2 = mild extent; 3 = fairly high extent;
4 = high extent; 5 = a great extent,

Indicate below your opinion of the extent to which joining the *Juhudi* scheme has contributed to the following:

Extent

Consumption Variables	**1** **No extent**	**2** **Mild extent**	**3** **Fairly high extent**	**4** **High Extent**	**5** **Great Extent**
Afford better security					
Afford recreation or entertainment					
Able to afford better quality medical care					
Improved diet					
Increased ability to afford school fees					
Installed electricity					
Installed or bought telephone					
Purchase a vehicle					
Purchased better clothing					
Purchased household goods					
Renovated or improved housing					

Were you ever a customer of another Bank? [ ] Yes; [ ] No

If your answer to **Question 14** is **"Yes"**, then on a scale of 1 to 5 where:

1 = no extent at all; 2 = mild extent; 3 = fairly high extent; 4 = high extent; 5 = a great extent,

Indicate below your opinion of the extent the reasons indicated contributed to you joining *Juhudi*

Extent

Reasons	**1** **No extent**	**2** **Mild extent**	**3** **Fairly high extent**	**4** **High Extent**	**5** **Great Extent**
Better loan repayment plan					
Good service					
Quick loan disbursement					
Scheme is near to place of work or home					
Recommendations from peers					
Transparent nature of *Juhudi* transactions					
Allows borrower to choose investment type					
Borrowers can make decisions relating to loans					
Scheme encourages savings					
Other (Indicate & Rank Below):					

On a scale of 1 to 5 where:

1 = no extent at all; 2 = mild extent; 3 = fairly high extent;
4 = high extent; 5 = a great extent,

Indicate below your opinion of the extent to which the challenges outlined below have affected the success of your business under the *Juhudi* scheme:

Extent

Challenges	**1 No extent**	**2 Mild extent**	**3 Fairly high extent**	**4 High Extent**	**5 Great Extent**
Demand fluctuations for goods and services					
Helpfulness of K-Rep field staff					
High interest rates on loans					
Inadequate business skills					
Poor knowledge of money management					
Poor marketing skills of entrepreneurs					
Small size of loans available from scheme					
Spending loan money on family needs					
Time taken to disburse loan					
Other (Indicate & Rank Below)					

Thank You for Completing this Questionnaire

APPENDIX 3

Kawangware *Juhudi* Self Help Groups

Source: K-Rep Bank Head Office - Kawangware

Meeting Day		Kawangware B. U. *Juhudi* Groups	Officer	Meeting Place	Group ID
Monday					
	1	Witikio Self Help Group	Alice	Kikuyu	174909
	2	Kanungaga SHG	Alice	Kawangware	174868
	3	Wamwanjo	Alice	Kikuyu	174907
	4	Cresent	Bernard	Satellite	174838
	5	Faraja	Bernard	Kawangware	174847
	6	Kujiweza SHG	Bernard	Kawangware	174860
	7	Millenium Mpya	Bernard	Kawangware	174877
	8	Utukufu Jamii Self Help Group	Bernard	Kawangware	174902
	9	Neemwambi	Charity	Kawangware	174883
Tuesday					
	10	Kugeria Youth Self Help Group	Alice	Kikuyu	174872
	11	Nuru Kawangware	Charity	Kawangware	174884
Wednesday					
	12	Alpha	Alice	Kawangware	174830
	13	Alpha Omega Self Help Group	Alice	Kawangware	174831
	14	Muteithania	Alice	Kawangware	174880
	15	Bogani East SHG	Bernard	Hardy	174836
	16	Hapa Kwa Hapa	Bernard	Kawangware	174850
	17	Kamugi	Charity	Kikuyu	174858
	18	Riziki	Charity	Dagoretti Market	174893
	19	Wathiomo	Charity	Kikuyu	174908

Meeting Day		Kawangware B. U. *Juhudi* Groups	Officer	Meeting Place	Group ID
Thursday					
	20	Kiwaka Youth SHG	Alice	Kikuyu	174828
	21	Kiore Self Help Group	Alice	Kikuyu	174862
	22	Rafiki Kawangware	Alice	Thogoto	174892
	23	Tenda Kitendo	Alice	Kikuyu	174900
	24	Mwenda Andu Self Help Group	Bernard	Ngong	174881
	25	Tumaini Poverty Eradication Association	Bernard	Kawangware	219332
	26	Dagoretti Corner	Charity	Dagoretti Corner	174841
	27	Kivuli	Charity	Kikuyu	174859
	28	Matawi	Charity	Kawangware	174875
	29	Mzingi	Charity	Dagoretti Corner	174876
Friday					
	30	Bilashaka	Alice	Dagoretti Market	174832
	31	Heshima Self Help Group	Alice	Dagoretti Market	174851
	32	Vitendo	Alice	Dagoretti Market	174904
	33	Judea Self Help Group	Bernard	Waithaka	174856
	34	Bidii Self Help Group	Charity	Kiambu	174837
	35	Jirani SHG	Charity	Kiambu	174855
	36	Mwangaza	Charity	Kiambu	219463

Appendix 4 Non Parametric Correlations before Factor Analysis

Table 1: Personal Char VS Income {* Correlation is significant at the 0.05 level (2-tailed)}.

			Higher business sales	Higher rental income	Higher residual/disposable income	Improve d cash	Increased number of employees	More business profits	More financial security	More savings
Spearman's rho	Gender	Correlation Coefficient	-.054	-.063	.000	.027	-.141	.124	.084	.084
		Sig. (2-tailed)	.586	.629	.997	.786	.154	.207	.394	.395
		N	104	62	104	104	103	105	105	104
	Marital status	Correlation Coefficient	.050	.086	.067	.098	-.019	.152	.131	-.062
		Sig. (2-tailed)	.613	.507	.497	.324	.848	.120	.182	.531
		N	104	62	104	104	103	105	105	104
	Age	Correlation Coefficient	.040	.092	.057	.032	-.013	.005	-.137	**-.206(*)**
		Sig. (2-tailed)	.689	.475	.568	.748	.896	.961	.163	.036
		N	104	62	104	104	103	105	105	104
	No. dependants	Correlation Coefficient	.031	.128	.015	-.090	-.028	-.059	-.009	-.182
		Sig. (2-tailed)	.757	.323	.881	.363	.777	.551	.925	.064
		N	104	62	104	104	103	105	105	104
	Education level	Correlation Coefficient	-.021	-.008	.023	.096	.040	.021	.097	.026
		Sig. (2-tailed)	.836	.952	.820	.334	.688	.832	.325	.793
		N	104	62	104	104	103	105	105	104
	Membership yrs	Correlation Coefficient	.127	.164	.030	.106	.171	.069	-.143	-.069
		Sig. (2-tailed)	.197	.196	.757	.279	.081	.480	.141	.484
		N	105	64	106	106	105	107	107	106
	Business type	Correlation Coefficient	-.075	.083	-.163	.098	-.046	-.033	-.086	.014
		Sig. (2-tailed)	.455	.519	.101	.327	.648	.742	.386	.890
		N	102	63	103	103	102	104	104	103

Table 2: Personal Char vs. Consumption {** Correlation significant at the 0.01 level (2-tailed); * Correlation significant at the 0.05 level (2-tailed)}.

			Afford better security	Afford recreation or entertainment	Abe to afford better quality medical care	Improved diet	Increased ability to afford school fees	Installed electricity	Installed or bought telephone	Purchase a vehicle	Purchased better clothing	Purchased household goods	Renovated or improved housing
Spearman's rho	Gender	Corr. Coefficient	.037	.072	.033	.158	.087	-.053	.065	-.143	**.282(**)**	**.201(*)**	-.064
		Sig. (2-tailed)	.712	.466	.740	.108	.382	.605	.510	.156	.004	.039	.519
		N	104	104	105	105	103	99	104	100	104	105	105
	Marital status	Corr. Coefficient	.026	-.035	.153	.150	.045	-.037	.037	.021	.074	.048	.008
		Sig. (2-tailed)	.790	.726	.120	.127	.653	.714	.708	.836	.456	.628	.938
		N	104	104	105	105	103	99	104	100	104	105	105
	Age	Corr. Coefficient	-.078	-.051	-.047	.020	.106	.049	.024	-.172	.045	.015	.117
		Sig. (2-tailed)	.430	.607	.631	.837	.287	.628	.810	.087	.647	.882	.236
		N	104	104	105	105	103	99	104	100	104	105	105
	No. dependants	Corr. Coefficient	-.101	-.046	-.040	-.091	.074	.008	-.024	**-.200(*)**	.046	.011	-.002
		Sig. (2-tailed)	.307	.645	.685	.358	.456	.940	.808	.046	.643	.913	.984
		N	104	104	105	105	103	99	104	100	104	105	105
	Education level	Corr. Coefficient	.079	.011	.013	-.070	.095	-.182	-.146	.152	-.098	-.061	-.064
		Sig. (2-tailed)	.423	.911	.898	.481	.342	.072	.139	.132	.323	.539	.516
		N	104	104	105	105	103	99	104	100	104	105	105
	Membership yrs	Corr. Coefficient	.114	.016	.101	.091	.190	.106	.114	.059	**.268(**)**	.162	.109
		Sig. (2-tailed)	.244	.869	.301	.349	.052	.289	.245	.554	.005	.096	.266
		N	106	106	107	107	105	101	106	102	106	107	107
	Business type	Corr. Coefficient	-.084	-.051	.084	-.004	-.008	-.111	-.116	**.215(*)**	-.009	-.007	.055
		Sig. (2-tailed)	.398	.612	.399	.965	.933	.276	.243	.033	.930	.944	.578
		N	103	103	104	104	102	98	103	99	103	104	104

Table 3: Personal Char VS Reasons {** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)}.

			Better loan repayment plan	Good service	Quick loan disburse ment	Scheme is near to place of work or home	Recom mendati ons from peers	Transparent nature of *Juhudi* transactions	Allows borrowers to choose investment type	Borrowers can make decisions relating to loans	Scheme encourages savings
Spearman's rho	Gender	Corr. Coefficient	.008	.128	.048	.098	.149	-.069	-.001	.067	-.092
		Sig. (2-tailed)	.936	.201	.632	.321	.145	.485	.992	.500	.354
		N	104	101	102	104	97	104	103	103	103
	Marital status	Corr. Coefficient	-.114	-.066	.190	.148	.021	.004	-.064	-.014	-.182
		Sig. (2-tailed)	.250	.509	.056	.134	.836	.964	.522	.888	.066
		N	104	101	102	104	97	104	103	103	103
	Age	Corr. Coefficient	-.129	.029	.124	.019	.187	.027	-.065	-.036	-.161
		Sig. (2-tailed)	.190	.774	.214	.850	.066	.789	.512	.717	.104
		N	104	101	102	104	97	104	103	103	103
	No. dependants	Corr. Coefficient	-.043	-.068	.035	.040	.121	.094	-.015	.091	-.081
		Sig. (2-tailed)	.662	.497	.725	.683	.237	.343	.880	.362	.415
		N	104	101	102	104	97	104	103	103	103
	Education level	Corr. Coefficient	**-.194(*)**	-.138	-.173	.017	.002	-.128	-.043	-.034	.154
		Sig. (2-tailed)	.049	.170	.082	.864	.986	.196	.663	.735	.121
		N	104	101	102	104	97	104	103	103	103
	Membership yrs	Corr. Coefficient	.012	-.059	-.038	.049	.017	-.011	.074	-.051	-.141
		Sig. (2-tailed)	.901	.557	.701	.621	.865	.910	.453	.603	.152
		N	106	103	104	105	99	106	105	105	105
	Business type	Corr. Coefficient	.024	**-.263(**)**	-.033	**-.198(*)**	-.125	-.092	-.027	-.100	-.018
		Sig. (2-tailed)	.807	.008	.742	.046	.225	.358	.785	.314	.860
		N	103	100	101	102	96	103	102	103	102

Table 4: Personal Char VS Challenges {** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)}.

			Demand fluctuations	Staff helpfulness	High interest	Inadequate skills	Poor money management	Poor marketing	Small loan size	Spending loans	Time taken to disburse loan
Spearman's rho	Gender	Corr. Coeff.	-.032	-.075	.050	-.141	-.003	-.129	-.107	.102	-.088
		Sig. (2-tailed)	.745	.448	.620	.151	.973	.190	.282	.298	.373
		N	103	105	102	105	104	105	104	106	105
	Marital status	Corr. Coeff.	-.043	.046	**-.200(*)**	.155	.119	.096	-.087	-.118	.082
		Sig. (2-tailed)	.664	.643	.044	.116	.230	.330	.381	.227	.408
		N	103	105	102	105	104	105	104	106	105
	Age	Corr. Coeff.	**.309(**)**	-.162	.103	-.083	.025	-.001	.117	.161	-.070
		Sig. (2-tailed)	.002	.099	.304	.399	.799	.992	.238	.100	.479
		N	103	105	102	105	104	105	104	106	105
	No. dependants	Corr. Coeff.	.034	-.009	.015	.029	-.169	.032	-.052	-.008	.092
		Sig. (2-tailed)	.736	.925	.879	.770	.087	.748	.598	.931	.352
		N	103	105	102	105	104	105	104	106	105
	Education level	Corr. Coeff.	-.036	.067	-.043	**-.194(*)**	-.138	-.095	.106	-.040	-.020
		Sig. (2-tailed)	.716	.498	.671	.047	.164	.334	.283	.686	.838
		N	103	105	102	105	104	105	104	106	105
	Membership yrs	Corr. Coeff.	.065	-.071	.074	.059	-.089	-.095	-.062	-.016	.090
		Sig. (2-tailed)	.507	.470	.454	.543	.363	.330	.528	.870	.358
		N	105	107	104	107	106	107	106	108	107
	Business type	Corr. Coeff.	-.169	.055	.068	-.016	-.022	-.034	.037	-.085	.091
		Sig. (2-tailed)	.089	.577	.500	.873	.825	.734	.713	.390	.359
		N	103	104	101	104	103	104	103	105	104

Appendix 5 Factor Analysis

Table 5: Income variables

Component Matrix (a)

	Component		
	1	2	3
Higher business sales	**.768**	-.026	-.202
Higher rental income	.041	**.856**	.373
Higher residual/disposable income	**.613**	.511	-.486
Improved cash	.780	-.039	-.311
Increased number of employees	**.612**	.307	.510
More business profits	**.854**	-.144	-.054
More financial security	**.801**	-.090	.223
More savings	**.542**	-.538	.433

Extraction Method: Principal Component Analysis. (3 components extracted).

Table 6: Consumption Variables

Component Matrix (a)

	Component	
	1	2
Afford better security	**.742**	-.280
Afford recreation or entertainment	**.743**	-.242
Abe to afford better quality medical care	**.703**	-.428
Improved diet	**.842**	-.092
Increased ability to afford school fees	**.699**	-.011
Installed electricity	**.628**	.592
Installed or bought telephone	**.629**	.429
Purchase a vehicle	**.428**	-.152
Purchased better clothing	**.853**	-.046
Purchased household goods	**.887**	-.007
Renovated or improved housing	**.554**	.438

Extraction Method: Principal Component Analysis. (2 components extracted).

Table 7: Reasons

Component Matrix (a)

	Component		
	1	2	3
Better loan repayment plan	.517	**.563**	.028
Good service	**.623**	.506	.256
Quick loan disbursement	.381	.168	**.664**
Scheme is near to place of work or home	.399	**-.518**	.488
Recommendations from peers	**.659**	-.329	.058
Transparent nature of *Juhudi* transactions	**.715**	.196	-.095
Allows borrowers to choose investment type	**.672**	-.457	-.243
Borrowers can make decisions relating to loans	**.554**	-.388	-.380
Scheme encourages savings	.361	.373	**-.604**

Extraction Method: Principal Component Analysis. (3 components extracted).

Table 8: Challenges

Component Matrix(a)

	Component		
	1	2	3
Demand fluctuations for goods and services	.365	**.626**	-.218
Helpfulness of K-Rep field staff	.042	-.150	**.683**
High interest rates on loans	.360	**.452**	-.180
Inadequate business skills	**.775**	-.327	-.002
Poor knowledge of money management	**.838**	-.296	-.015
Poor marketing skills of entrepreneurs	**.790**	-.322	-.133
Small size of loans available from scheme	.410	.451	**.471**
Spending loan money on family needs	.235	**.629**	-.210
Time taken to disburse loan	.134	.282	**.682**

Extraction Method: Principal Component Analysis. (3 components extracted).

Appendix 6: Nonparametric Correlations after Factor Analysis

Table 9: Income Variables

			(Factor 1)	(Factor 2)	(Factor 3)
Spearman's rho	Gender	Correlation Coefficient	.150	-.052	.022
		Sig. (2-tailed)	.264	.699	.869
		N	57	57	57
	Marital status	Correlation Coefficient	.079	.122	.028
		Sig. (2-tailed)	.559	.367	.834
		N	57	57	57
	Age	Correlation Coefficient	.035	.171	-.004
		Sig. (2-tailed)	.794	.203	.974
		N	57	57	57
	No. dependants	Correlation Coefficient	-.079	.122	.022
		Sig. (2-tailed)	.561	.364	.871
		N	57	57	57
	Education level	Correlation Coefficient	-.003	-.043	.158
		Sig. (2-tailed)	.983	.748	.241
		N	57	57	57
	Membership years	Correlation Coefficient	.059	.108	.151
		Sig. (2-tailed)	.663	.419	.256
		N	58	58	58
	Business type	Correlation Coefficient	-.011	-.042	-.010
		Sig. (2-tailed)	.936	.759	.939
		N	57	57	57

Table 10: Consumption variables

			(Factor 1)	(Factor 2)
Spearman's rho	Gender	Correlation Coefficient	.100	-.013
		Sig. (2-tailed)	.355	.901
		N	88	88
	Marital status	Correlation Coefficient	.005	-.091
		Sig. (2-tailed)	.965	.398
		N	88	88
	Age	Correlation Coefficient	-.016	.167
		Sig. (2-tailed)	.883	.121
		N	88	88
	How many dependants do you have	Correlation Coefficient	-.055	.031
		Sig. (2-tailed)	.612	.773
		N	88	88
	Level of formal education	Correlation Coefficient	-.045	-.113
		Sig. (2-tailed)	.679	.296
		N	88	88
	Number of years as a member of the *Juhudi* scheme	Correlation Coefficient	.192	-.015
		Sig. (2-tailed)	.070	.891
		N	90	90
	Type of business you are engaged in	Correlation Coefficient	-.039	-.182
		Sig. (2-tailed)	.719	.091
		N	87	87

Table 11: Reasons

			(Factor 1)	(Factor 2)	(Factor 3)
Spearman's rho	Gender	Correlation Coefficient	.080	-.074	.072
		Sig. (2-tailed)	.464	.495	.506
		N	87	87	87
	Marital status	Correlation Coefficient	.004	-.090	**.243(*)**
		Sig. (2-tailed)	.972	.408	.024
		N	87	87	87
	Age	Correlation Coefficient	.071	-.014	**.220(*)**
		Sig. (2-tailed)	.514	.896	.040
		N	87	87	87
	How many dependants do you have	Correlation Coefficient	.066	-.126	.083
		Sig. (2-tailed)	.545	.246	.446
		N	87	87	87
	Level of formal education	Correlation Coefficient	-.136	-.144	-.136
		Sig. (2-tailed)	.209	.182	.208
		N	87	87	87
	Number of years as a member of the *Juhudi* scheme	Correlation Coefficient	-.067	.032	-.001
		Sig. (2-tailed)	.537	.769	.991
		N	88	88	88
	Type of business you are engaged in	Correlation Coefficient	-.204	.122	-.098
		Sig. (2-tailed)	.059	.263	.371
		N	86	86	86

Table 12: Challenges

			(Factor 1)	(Factor 2)	(Factor 3)
Spearman's rho	Gender	Correlation Coefficient	-.066	.081	-.085
		Sig. (2-tailed)	.525	.436	.414
		N	94	94	94
	Marital status	Correlation Coefficient	.096	**-.204(*)**	.042
		Sig. (2-tailed)	.356	.049	.686
		N	94	94	94
	Age	Correlation Coefficient	.060	**.258(*)**	-.201
		Sig. (2-tailed)	.563	.012	.053
		N	94	94	94
	How many dependants do you have	Correlation Coefficient	-.073	.027	-.064
		Sig. (2-tailed)	.483	.799	.543
		N	94	94	94
	Level of formal education	Correlation Coefficient	**-.220(*)**	.009	.099
		Sig. (2-tailed)	.033	.928	.342
		N	94	94	94
	Number of years as a member of the *Juhudi* scheme	Correlation Coefficient	.017	.125	-.025
		Sig. (2-tailed)	.867	.225	.812
		N	96	96	96
	Type of business you are engaged in	Correlation Coefficient	-.028	-.021	.128
		Sig. (2-tailed)	.789	.843	.218
		N	94	94	94