INFLUENCE OF SELF - HELP GROUPS' OPERATIONS ON INCOME GENERATION IN KENYA: A CASE OF MICHII MIKURU LOCATION, MERU COUNTY

MELCHIZEDEK OUMA MAKORA

THE RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTERS OF ART IN PROJECT PLANNING AND MANAGEMENT OF UNIVERSITY OF NAIROBI.

2014

DECLARATION

This research project report is my original work and has not been presented for any academic award at the University of Nairobi or any other academic institution.

MELCHIZEDEK OUMA MAKORA (L50/61401/2013)

…… …….……

Signature Date

This research project report has been submitted for defense with our approval as the university supervisors

Dr. CECILIA RITHO

Lecturer

Department of Agricultural Economics

University of Nairobi

…… …….……

Signature Date

Dr.CHANDI. J. RUGENDO

Lecturer

School of Continuing and Distance Education

University of Nairobi

……. ……..

Signature Date

DEDICATION

I dedicate this work to my wife Beatrice and my son Jonathan who have always been there for me. Their support and understanding during the many times I have had to spend away from them while doing this study has been motivating. I also dedicate this work to my mother, Mary Adhiambo who has been my pillar and a great source of inspiration throughout my education.

ACKNOWLEDGEMENT

My sincere gratitude to Dr. Cecilia Ritho and Dr. Chandi J. Rugendo for their unwavering support and contribution towards making this study focused and objective. Their quick responses to my emails and the very helpful comments are highly appreciated. I would like to thank the University of Nairobi, Meru Extra Mural Centre and all my lecturers for their untiring support and the professional guidance throughout my course work. The knowledge and skills acquired from the course work made it easy to successfully carry out this study. I particularly want to acknowledge the contribution of Dr. Wanjohi and Dr. Luketero whose units have been directly applicable in doing this study. I immensely thank my classmates Mr. Dancun Lenairoshi, Mr. Kana Roba, Ms. Farajah Mugira, Mr. Chege Mwangi and Justice James Makau and indeed all my classmates whose support during the course work and this study provided the necessary energy for remaining resolute on the ultimate goal. I also sincerely thank Dr. Joshua Orungo for finding time to proof read my work at the early stages and his invaluable input in the descriptive and the statistical analysis of the data. Last but not least, I thank the management and staff of the National Library, Meru branch, the management and staff of the University of Nairobi Library, Main Campus and the Kikuyu Campus branch for their professional guidance.

TABLE OF CONTENTS

DECLARATION……...….ii
DEDICATION……iii
ACKNOWLEDGEMENT…….iv
TABLE OF CONTENTS……...v
LIST OF TABLES……..vii
LIST OF FIGURES……ix
ABBREVIATIONS……x
ABSTRACT……xi
CHAPTER ONE: INTRODUCTION……...1
1.1. Background of the study……....1
1.2. Statement of the problem……...3
1.3. Purpose of the study.……...……...4
1.4. Research objectives……4
1.5. Research questions…….5
1.6. Significance of the study……....5
1.7. Delimitation of the study ……...6
1.8. Limitations of the study…….…….6
1.9. Basic assumptions of the study…….……..6
1.10. Definition of significant terms…….…...7
1.11. Organization of the study……...…8
CHAPTER TWO: LITERATURE REVIEW…….…..…9
2.1. Introduction…….9
2.2. Income generation by self-help group members…..…….……...……...…....9
2.3. Training of self-help group members on business skills…….....10
2.4. Income generating projects of self-help group members……..…….…….....12

2.5. Credit access by self-help group member……..…….…….....14
2.6. Conflict resolution within self-help groups……..…...…….……...…....16
2.7. Theoretical framework…….…….…...17
2.8. Conceptual Framework…….....19
2.9. Explanations of relationship of variables in the conceptual framework…….….20
2.10. Summary of Literature and research gaps....……..…….……...21
CHAPTER THREE: RESEARCH METHODOLOGY…….…….....22
3.1. Introduction……....…….…….……...……...…....22
3.2. Research design……....….....22
3.3. Target population……..…..…….…23
3.4. Sampling procedure……..……..…….....23
3.5. Sample size……..…….....25
3.6. Instruments of data collection……..26
3.7. Reliability of the research instruments…….....26
3.8. Validity of the research instruments….....…….....….....27
3.9. Data collection procedure…….…….…..….28
3.10. Methods of data analysis…….……..…….…….…...28
3.11. Ethical issues in the study…….…….……....29
3.12. Operational definition of the variables……..…….…….……...…29
CHAPTER 4: DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION…….…...….....32
4.1. Introduction…….…….....….32
4.2. Response rate…….....…...32
4.3. Demographic characteristics of the respondents……....……..32
4.4. Training of the self – help group members……...…….....34
4.5. Income generating projects of self – help group members……...…...…...37
4.6. Credit access by the self – help group members……....…….....41
4.7. Conflict resolution within the self – help group members……....……..……....44

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS…….…….....47

5.1. Introduction……..…47

5.2. Summary of the findings…….……47

5.3. Discussion of finding……...49

5.3. Conclusion……..…….51

5.4. Recommendations for policy actions……....…….……..52

5.5. Suggestions for further study…….…….53

5.6. Contribution to the body of knowledge…….…….....53

REFERENCES……..……..….54

APPENDICES……..…....…....61

Appendix 1: Letter of transmittal……...…...… 61

Appendix 2: Questionnaire…….....62

Appendix 3: Interview guide for key informant……..…….....70

Appendix 4: Krejcie and Morgan sample size table……72

Appendix 5: The Chi square formula used in this study……..73

Appendix 6: Permission to collect data……..….....74

LIST OF TABLES

Page

Table 2.1: Research gaps……..…23

Table 3.1: Target population……...25

Table 3.2: Sampling matrix…….....26

Table 3.3: Percentage sample size for groups and group members……27

Table 3.4: Operationalization of variables…….….30

Table 4.1: Level of education of the respondents……...33

Table 4.2: Year when a respondent became a member of a self – help group……...33

Table 4.3: Business skills covered by the self – help groups through training……..34

Table 4.4: Methods used by the Disability Community Centre to train the SHGs……....35

Table 4.5: Training of the SHGs by other agencies……...36

Table 4.6: The number of SHG members with business post training against income….37

Table 4.7: SHG members with projects before and after joining a group…….48

Table 4.8: Reasons given by SHG members for starting a business…….39

Table 4.9: The number of SHG members with IGPs against income generated……...40

Table 4.10: Other sources of credit for SHG members…….41

Table 4.11: Reasons for borrowing given by the SHG members…….42

Table 4.12: Money borrowed by SHG members against income generated…..……43

Table 4.13: Causes of conflicts in self – help groups…….....44

Table 4.14: Methods of conflict resolution used by the groups…… ……...45

LIST OF FIGURES **Page**

Figure 1. The Conceptual framework……19

LIST OF ABBREVIATIONS AND ACRONYMS

APMAS	Andhra Pradesh Mahila Abhivruddhi Society
CLA	Cluster Level Association
DCC	Disability Community Centre
ETC	Emerging Technologies and Corporate Strategies
GDP	Gross Domestic Product
GOK	Government of Kenya
IGA	Income Generating Activity
IGP	Income Generating Project
IMF	International Monetary Fund
MCK	Methodist Church in Kenya
NABARD	National Bank for Rural Development
NCAER	National Council of Applied Economic Research
NCCK	National Council of Churches of Kenya
PRADAN	Professional Assistance for Development Action
PRSP	Poverty Reduction Strategy Paper
SMART	Survey Management Analysis and Reporting Tool
SHG	Self Help Group
UNDP	United Nations Development Programme
WB	World Bank

ABSTRACT

A growing number of people in various parts of Kenya belong to self-help groups. Through these groups, members actively engage in savings and credit, income generating activities, natural resource management, child care, nutrition and literacy and even collective bargaining for rights and priviledges.The aim of this study was to determine the influence of self-help groups operations' on income generation in Kenya by studying self-help groups in Michii Mikuru location, Tigania East Sub County, Meru. The study was based on four independent variables and one dependent variable. The study was founded on four main objectives as follows: to determine the influence of business skills training on income generation by the self-help group members at Michii Mikuru location, to describe the contribution of income generating projects on income generation by self-help group members at Michii Mikuru location, to evaluate the influence of credit access by the self-help group members at Michii Mikuru location on income generation, and to assess the influence of intragroup conflict resolution on income generation by the self-help group members at Michii Mikuru location. An overview of literature review was centred on the variables which are training of self – help groups on business skills, credit access by members of self-help groups, ownership of income generating projects by groups and individuals, intragroup conflict resolution, and income generation by the group members. The key theme of the literature review was how the operations of the self-help groups presented as the independent variables, influence income generation by the self-help group members. In this study, descriptive survey design was applied. The study was descriptive in nature and aimed to explain the relationship of the variables using both qualitative and quantitative paradigms. Therefore, data collected was both qualitative and quantitative in nature. The target population were the self-help group members that belonged to groups that were formed between May 2009 and May 2012 at Michii Mikuru location in Tigania East Sub County. Based on this criteria, the total number of groups targeted were 64, each with an average of 20 members, making a total of 1,280 self-help group members. Probability sampling methods were used for getting 15 self – help groups and 48 self-help group members as the representative samples for this study. The key aspect of reliability that applied in this study was stability. Data was collected using the structured interview method and the questionnaire. Data analysis was done using descriptive analysis techniques and inferential statistics. The estimation of Spearman's correlation between the independent variables and the dependent variables and testing of the z statistic revealed negative correlation between training of the self – help groups on business skills and income generation, positive correlation between ownership of income generating projects and income generation and lastly, a negative correlation between access to credit and income generation. The study recommends that the organization promoting the formation of groups at Michii Mikuru location should enhance its networking and collaboration with the local national and county government agencies so that they (the agencies) play an active role in capacity building of the groups. This will also ensure sustainability.

CHAPTER ONE

INTRODUCTION

1.1.Background of the study

The World Bank Report (2008) notes that more than one billion people in the world live on less than one dollar a day. Another 2.7 billion people struggle to survive on less than two dollars per day. International Monetary Fund (2010) emphasizes that income remains the single most important factor that influences our economic circumstances. International Monetary Fund (2012) further document that middle income and high income people amass significant financial assets overtime. These assets provide a cushion against short time financial problems. They are also able to acquire loans from financial institutions using their financial assets as collateral. Low income people on the other hand rarely accumulate the same types of assets. As a result, majority of the low income people are vulnerable to financial setbacks and thus remain trapped in the cycle of poverty. The International Monetary Fund Kenya country report (2012) indicate that the incidence of poverty stood at 45.9% in 2006 down from 52.3% in 1997. The report also showed that poverty was higher in rural areas (49.1%) compared to urban areas (33.7%).

A reduction in poverty is a central goal of many development programs. It is high in the agenda of policy makers in Kenya and is the key objective of Vision 2030. Kenya's development efforts since independence have emphasized poverty reduction through economic growth, employment creation and the provision of basic social services (Kimalu *et al*. 2002). However, even though the basic commitment to fight poverty has remained strong, these efforts have not for the most parts yielded the hoped for results (Kabubo & Mariara, 2007). More than half of Kenya's population remains in absolute poverty, with women and rural dwellers being particularly affected (GOK, 2007). The 2009 estimates show Kenya with a GDP per capita of US$ 1,600. (CIA, 2010). The gap

between the rich and poor in Kenya is significant with an estimated Gini coefficient of 0.477 (UNDP, 2009). Kiiru (2007) viewed microcredit in Kenya as having a role in improving the household incomes of the rural poor. This could explain why a growing number of people in various parts of Kenya are forming self-help groups and are actively engaging in savings and credit as well as other activities such as income generating activities, natural resource management, child care, nutrition and literacy as reported by Republic of Kenya (2009).

Ramanathan (2007) defines a self-help group (SHG) as a small economically homogenous affinity group of 10 to 20 persons who come together to save small amounts of money regularly, mutually agree to contribute to a common fund, have collective decision making, or resolve conflicts through collective leadership and mutual discussion. The Republic of Kenya (2009) notes that the activities of these self-help groups include: business support and economic empowerment, socio-economic welfare, property investment, agri-business, merry go round, sales and marketing, finance mobilization and revolving fund.

Tigania East is a sub county of the Meru County. The 2009 census reported that the total population of this county is 137,550 people. Survey Management Analysis and Reporting Tool - SMART survey report (2012) notes that in this sub county, as other sub counties of Meru County, income sources are not diversified and therefore there is over reliance on farm produce both as an income source and family food. Poverty has also made it difficult to access food from markets due to insufficient financial resources. The self-help group approach in Tigania East is promoted by Ripples International at Athwana location and by the Methodist Church in Kenya, Disability Community Centre at Michii Mikuru location.

1.2. Statement of the problem

Self-help groups are often formed by people who decide to come together for mutual assistance in satisfying a common need or solving a common problem. Heyer (1976) noted that Kenya has a long history of formal co-operative movements involving small holder farmers. A recent study by Place *et al*. (2004) also describes a wide variety of other less formal self – help groups that have recently emerged in rural sites of the Kenyan Highlands. These groups are numerically dominated by women and they undertake many activities that include income generation, asset building, commodity marketing and social and cultural functions. The Gender Data Sheet (2008) reported that there was a remarkable growth of women's groups in Kenya from a total of 97,317 registered groups in 1998 to 138,753 registered groups in 2007. In Tigania East Sub County, the concept of self-help group approach is promoted by Ripples International and the Methodist Church in Kenya, Disability Community Centre. At Michii Mikuru location alone, 97 self-help groups had been formed as at December 2013 with the support of the Methodist Church in Kenya, Disability Community Centre.

The role of these groups in promoting income generation by members has been studied by various scholars. Fafchamps & La Ferrara (2011) for example conducted a study in the poor neighbourhoods of Nairobi to examine the incomes of individuals who had joined self-help groups.

The Republic of Kenya (2009) suggests that one way of reducing poverty is by enabling people to increase their income through employment, starting of income generating projects and businesses. A major assumption on which self-help group approach is based is that participatory groups provide members with the space to develop skills and confidence and also to mobilize resources that promote the economic empowerment of the group members (Kindernothilfe, 2005). This study sought to determine the influence of the operations of the self-help groups at Michii Mikuru

location on the income generation by group members through activities such as credit access, income generating projects and training in business startup and management skills and intragroup conflict resolution.

1.3. Purpose of the study

The purpose of this study was to determine the influence that the operations of self-help groups have on income generation by the group members at Michii Mikuru location, Tigania East Sub County, Meru County, Kenya.

1.4. Research objectives

The study was guided by the following objectives:

1. To determine the influence of business skills training on income generation by the self-help group members at Michii Mikuru location.
2. To describe the contribution of income generating projects on income generation by self-help group members at Michii Mikuru location.
3. To evaluate the influence of credit access by the self-help group members at Michii Mikuru location on income generation.
4. To assess the influence of intragroup conflict resolution methods on income generation by the self-help group members at Michii Mikuru location.

1.5 Research questions

The study was guided by the following research questions:

1. To what extent does training of the self-help group members at Michii Mikuru location on business skills influence income generation?
2. How does income generating projects contribute to income generation by the self-help group members at Michii Mikuru location?
3. To what extent does access to credit by the self-help group members at Michii Mikuru location influence income generation?
4. How does intragroup conflict resolution methods influence income generation by the self-help group members at Michii – Mikuru location?

1.6. Significance of the study

Increasing the ability of the poor people to raise their income and improving the quality of life of the poor are some of the key objectives of Kenya's Vision 2030 and the Poverty Reduction Strategy Papers. The poverty reduction strategy papers also appreciates that the vast majority of the poor people are located in the rural areas and that female – headed households constitute a significant proportion of the poor. With this background, it is hoped that the findings of this study will convince the Government of Kenya and other policy makers at the national and county level to consider promoting the activities of self-help group as a key poverty reduction strategy in the country. Non-Governmental Organizations and researchers will also benefit from the findings when developing poverty reduction strategies such that the targeted community reap maximum benefits from development projects funded by them (Non-Governmental Organizations). In addition, it is hoped that group members will discover their potential and thus do more to make

use of the resources at their disposal in order to improve their income levels and hence their living standards.

1.7. Delimitations of the study

The study was delimited to the self-help groups that were formed between May 2009 and May 2012 at Michii Mikuru location of the Tigania East Subcounty, Meru County. There are currently 97 self - help groups existing at the study site. Each self - help group has an average membership of 20. 64 self-help groups were formed between May 2009 and May 2012.

1.8. Limitations of the study

This study was limited by the research design that was used (the descriptive survey design). The design has the limitation of subjectivity since the questions are predetermined. Error due to the biasness of the researcher was also a limitation due to the chosen design. This error was reduced through reliability test of the questionnaire. This study was also be constrained by the unavailability of the group members individually for the interview and the filling of the questionnaires due to their nature of work. This constraint was overcome by administering the questionnaires during group meetings. Possible misrepresentation of the group members' answers by the research assistants was another limitation since the research assistants were writing the respondents' answers. This limitation was overcome by training the research assistants. This study was also limited by the scarcity of finances and inadequate time available for research. These two resources were prudently managed to overcome their limitations.

1.9. Assumptions of the study

During this study, the following assumptions were made. It was assumed that the respondents would co-operate with the research assistants during the data collection exercise.

This assumption was achieved since all the questionnaires were returned and were all usable. It was also assumed that the research assistants would record the responses as accurately as possible without any bias. The assumption was correct since all the questionnaires returned were usable.

1.10. Definition of significant terms

Access to credit. In this research project report, access to credit refers to the ability of self - help group members to get a loan from their group based on rules and regulations specific to the group.

Conflict resolution. This is used in this research project report to refer to the methods applied by the self-help group members to resolve intragroup conflicts that occur in their groups.

Income Generating Project. In this research project report, income generating project refers to small scale projects or business enterprises that create an income source to the individual members of the self-help group or the group as a whole.

Income generation in this research project report refers to the capacity gained by the self-help group members to increase or maintain their incomes as a result of belonging to a group by choice.

Poverty. In this research project report, income poverty applies. This is based on the World Bank "absolute" poverty level defined as the minimum income needed for basic necessities in a number of low-income developing countries. It is equivalent to 1.25 USD per day or KShs 106. .

Self - Help Group (SHG). In this research project report, a self-help group is a group of individual members who by free association come together for a common collective purpose. In practice self-help group comprise individual members known to each other, come from the same village, community and even marketing neighborhood. That is, they are homogeneous and have certain pre group social binding factors.

Self - Help Group Operation. In this research project report, self-help group operations refers to the dynamics of the self-help groups such as intragroup conflict resolution, saving and loaning among group members, and social welfare of group members

Training on business skills. In this research project report, training on business skills refers to organized activities by the organizations promoting the formation of self-help groups or by the self-help groups themselves and is aimed at giving information and/or instructions to improve the group members' performance and to help them acquire a level of knowledge or skill.

1.11. Organization of the study.

This research project report is organized into five chapters. Chapter one introduces the key aspects of the report. These include the research objectives and the research questions. The independent and the dependent variables are also outlined. The background of the study discusses the key concepts that formed the core of this report, that is, the concept of the self-help groups operations and the concept of income generation. Literature relevant to the independent and independent variables was reviewed and a conceptual framework showing the relationship between the variables also included in chapter two. Chapter two also contains the theoretical framework upon which this report is grounded. Chapter three highlights the research design, sampling and sampling procedure, the sample size, aspects of reliability and validity of the data collection instruments, methods of data collection and data analysis techniques. In chapter four, organization and analysis of data is done and the results of the analysis presented in tables and frequencies and through other relevant statistical analysis parameters. The study is concluded with chapter five in which the results of data analysis are summarized and relevant inferences made. Conclusions and recommendations are also outlined

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter presents a review of related literature on the influence of self-help groups' operations on income generation by group members. The literature review covers four independent variables namely; training of self-help group members on business skills, credit access by the group members, income generating projects, and intragroup conflict resolution. The independent variable is income generation by the self-help group members. A conceptual frame work showing the relationship between the independent variables and the dependent variable is also included. In this section, various materials have been cited and they include books, journals, papers, and reports.

2.2. Income generation by self-help group members

Coppock *et al.* (2005) studied 16 women groups in Moyale and Marsabit districts in northern Kenya in early 2005. The study purposively selected 16 women's groups from key locations that were readily accessible to data collectors. Interview questions were open ended. The group used ranking methods in some cases. Questionnaires were administered to the representatives of the 16 groups. In their findings, they reported that the overall goal of group formation was to improve the living standards for the members. Major objectives across all groups prominently included reduction of poverty by increasing incomes through micro – enterprise development and livelihood diversification. Findings by Anand (2004) asserts that the ability of self-help group members to save and access loans gives them an economic role within the household through an increase in the level of income of the group members. The National Bank for Agriculture and Rural Development - NABARD (2008) also emphasizes that credit is one of the accelerators for any development program and particularly important for rural development. NABARD (2008) further

stresses that through credit, community members can increase agricultural productivity and other livelihood opportunities and thus improve their living standards.

It has been acknowledged that beyond the asset creation and accumulation, programs that target the poor should seek to mobilize them as a group in order to transform the social relationships among them. The programs should include the very poor as subjects in the process of transforming and recreating the institutions that regulates the distribution and redistribution of assets and contribute to the development of social capital and the transformation of the social relations between excluded groups and society at large (Godinot *et al*, 2006). Coleman (2006) conducted a study to investigate the impact of group lending program in Northeast Thailand, addressing the issue of self-selection and endogenous program placement. The results showed that the impact was significant and positive on women's high-interest debt because a number of members had fallen into a vicious circle of debt from money lenders in order to repay their village bank loans. Consequently, most of the group members were borrowing money to settle their debts instead of investing and generating income for themselves. Based on the above literature, training on business skills, income generating projects, access to credit and conflict resolution are important group operations. It was therefore, important to establish the extent to which they influence income generation by self-help groups members at Michii Mikuru location in Tigania East Sub County.

2.3. Training of self - help groups on business skills

Kathleen & Gale (2009) says that learning within groups play a key role in the delivery of effective training since they provide a structure that enables members to share training information, collectively press for better training, save, and support each other in applying new techniques and technologies. Groups are also important in facilitating access to training. Karlan & Valdivia (2009) conducted a study using the popular randomization method with data from the Philippines, and

found that training improved business practices and revenues. They also found that this increased knowledge led to greater repayments of loans and client retention. Indeed, according to Stevenson & St-Onge (2005), training is a vital tool to an individual since it gives the necessary skills required to run a business. This is because, proper accounting in any enterprise helps one to know what is going on as far as the business is concerned.

In a study done by the National Council of Applied Economic Research - NCAER (2008) to assess the impact and sustainability of the SHG bank linkage program on 4,600 households from six states in India, it was found that training improved uptake of loans since group members were confident on making good use of the borrowed money. They concluded that due to the training, the self-help group - Bank Linkage program had emerged as a dominant, relevant and effective program in terms of borrowers and loans outstanding in India. Jivetti & Edwards (2009) also recommend that self-help groups should be provided with training in the development of business plans and guidance on how best to avoid redundancy or undue duplication of income generating activities and projects. A study done by Wanjohi (2012) emphasizes the need for the introduction of more work-based learning and linking trainees with mentors to gain experience of a specific trade like integrated business, self-employment and entrepreneurial concepts into training activities.

Gadenne & Vasudevan (2007) through a study done to investigate how women in mature self-help groups save and invest their money reported that the majority of women who utilize training are literate. The study found that 44% of members interviewed had attended training offered by a nongovernmental organization but only 31% of those members were illiterate. The study concluded that there is a strong demand for more business oriented training with nearly all members who expressed a desire for a specific type of training indicating that they wanted to learn

a trade, especially some small scale home industry which can be started without significant startup cost. Kiiru & Mburu (2007) avers that small and micro-enterprises in Kenya are characterized with activities that are survivalist in nature as they are performed mostly by people who have been unable to find a job or get into an economic sector of their choice. The income generated from these activities usually fall short of the minimum income standard with little capital invested, no skills training in the particular field and limited opportunities for growth into a viable business. Kindernothilfe (2008) emphasizes that training and capacity building should be provided to members of self-help groups to enhance their capacity. The capacity building is functional and should be centered on individuals and group activities. This study therefore sought to establish the role played by training of group members on business skills on influencing income generation at Micii Mikuru location.

2.4. Income generating projects of self-help group members

Suguna (2006) confirms that participation in self-help groups has been instrumental in micro enterprise development such as income generating activities. He reports that some group members have used the loan to start businesses; to scale up the existing business, and to add a new business. Loans have also enabled members to own assets as recorded in World Bank report (2008) which indicated that for every 10% increase in lending to self-help group members by the Grameen bank in Bangladesh, non-land assets owned by borrowers increased by 2%. Vetrivel & Mohanasundari (2011) also noted that the loans from self-help groups enabled the members to purchase paddy, start cow rearing, start small scale businesses, purchase van, open tea shop, leased land, and also take up collective projects. Jayachandra & Naidu (2006) conducted a study on impact of dairy cooperatives on income, employment and creation of assets of marginal and small farmers. The study revealed that there was an increase in income from dairying by 25.5% in the case of marginal

farmers and 22.98% in the case of small farmers per annum. More women belonging to self-help groups in the families of both the categories of farmers took up dairying as a part time and full time employment. Mavi *et al.* (2006) conducted a study on impact of self-employment program on dairy farming in Fatehgarh Sahib District of Punjab. The study revealed that there is significant increase in total income in Rupees (1, 09,751 to 1, 88,011), dairy income in Rupees (23,434 to 1, 03,948), herd size (4.4 to 15.5) of the group of farmers after participation in the program.

Emerging Technologies and Corporate Strategies - ETC (2004) in its report indicated that income generation program launched through SHGs in all the watersheds have been able to make good impact on the income levels of the landless and the marginal farmers. Training in entrepreneurial activities has been able to increase the income level and bring out the entrepreneurial abilities of women. Fafchamps (2012) examined the incomes of individuals who had joined self-help groups in poor neighbourhoods of Nairobi. The study found that incomes are indeed more correlated among individuals in the same group than among individuals who belong to different groups. This is consistent with the Republic of Kenya (2009) which reported self-help groups help to improve their member's income earning abilities while addressing community based problems. Ochanda (2011), in a study to establish the contribution of the grassroots organizations to economic empowerment of communities and individuals in Kenya reports that economic and entrepreneurial activities are as follows: business support and economic empowerment, socio-economic welfare, property investment, agri-business, merry go round, sales and marketing, finance mobilization and revolving fund. A problem highlighted by Ochanda (2011) is that the self-help groups are limited finance wise and also lack vital and needful human resource. He asserts that access to finance would be vital to break the vicious cycle of poverty. Indeed Arch (2005) cites lack of startup capital as one of the leading barriers to entrepreneurial activity among would-be entrepreneurs in

developing economies. A study conducted by Sharma & Chakra (2012) on potential of self-help groups on entrepreneurship showed that in addition to the women engaging in entrepreneurial activities they also found that there was a boost in the entrepreneurial qualities such as confidence, innovation, risk taking, and financial independence. Active participation during meetings of self-help groups was also noted. Based on the reviewed literature, income generating projects seems to play key role in influencing income generation by self-help group members. Therefore, it was imperative to find the extent to which this variable influences income generation by group members at Michii – Mikuru location in Tigania East Sub County.

2.5. Credit Access by the Self Help Group members

Jothi (2010) notes that the saving culture, regular meeting and training are the key pillars advocated by self-help group approach. This in turn has enabled its members' access loan which has enabled them start entrepreneurial activities. A study conducted by Chepchirchir (2013) found that participation in self-help groups enhanced respondents' access to formal loan and an increase in loan amount. Chepchirchir (2013) further reported that before joining a self-help group, only 4.7% of the respondents had taken bank loan which were all below 50,000 and after joining self-help groups, the number increased to 86.7% with most respondent (58.4%) having loans between 50,000-150,000. The study also found that before joining self-help groups, only 6.7% of the respondent had accessed women enterprise funds while after joining self-help groups the number of respondents increased to 7.3 %. The average number of respondents' loans before joining self-help groups was one loan, and after joining self-help groups, majority (79.3%) of respondents had two loans. Those with one loan were 13.3% while those with three loans were 7.4%. Respondents' reasons for taking loans were income generating activities as their number one reason at 99.7%,

followed by asset creation at 98.8 % and then non-entrepreneurial activities at 97.9%. Other studies by Jothi (2010) and Sharma & Chakra (2012) have shown that majority of women who join self-help groups without any business due to lack of capital are able to start their own business after joining the groups.

Kabeer & Noponen (2005) studied the social and economic impact of PRADAN (Professional Assistance for Development Action), a self-help group microfinance in Jarkhand, India and found that access to financial services and the strengthening of participant's agricultural activities is associated with less vulnerability in terms of higher savings, less onerous debt and less crises related borrowing and more investment in productive activities and fewer months of seasonal migration. The case study provided by Kindernothilfe (2012) describes how a self-help group member was able to get capital for starting her business. The case study reported that Faith Mutheu, a single mother struggling to raise her 5-year old daughter in Pumwani slums in Nairobi, worked as a casual laborer in the industrial area. After joining a self-help group in April 2006, she started saving regularly. She first borrowed KShs. 1000 from the group and bought some utensils which she used to start a catering business, operating mainly from her house. Later, Faith went ahead to put up a temporary kiosk by the roadside covered by plastic sheets. She took a second and a third loan and procured the basic items for the kiosk. On a good day she earned a net profit of KShs 400 to KShs 500. When business was not so good, her profit sometimes dipped to KShs 200. Mohummed *et al* (2013) studied about access to micro-credit for rural poor and its impact on their poverty situation and relevant factors related to income of the micro-credit recipients in Bangladesh and found that positive impact was found on income, assets endowment, standard of living and poverty reduction. According to the study, utilization of credit appeared to be major

factor for credit recipients raising income compared to their control group. This showed that micro-credit was an important factor in the generation of household income for self-help group members.

2.6. Conflict resolution within the self – help groups

Ramanathan (2007) defines a self-help group (SHG) as a small economically homogenous affinity group of 10 to 20 persons who come together to save small amounts of money regularly, mutually agree to contribute to a common fund, have collective decision making, and resolve conflicts through collective leadership and mutual discussion. Republic of Kenya (2009) reports that self-help groups exemplify a form of community organization amongst the grassroots in Kenya. The report further says the groups help to improve their member's income earning abilities while addressing community based problems. The report emphasizes that self-help groups are considered to be the biggest group of the community service organizations and the most important grassroots actors in Kenya. Abrams *et al*. (2003) enunciates that just as people who are friends are joined in friendship, people in a group are said to be linked by their membership. The perception of themselves as members of the same group creates a sense of "we" and "us" as well as a sense of "they". Harris (2006) reports that groups whose members have well defined, accepted and complementary roles are better able to manage scarce resources.

Tyler (2005) says that intragroup orientations reflex a complex, often mixed motives involving self – interest and moral justice based concerns. David (2006) sees conflict as the pursuit of incompatible interests and goals by different groups or group members. Ndunge (2010) conducted a study on intragroup conflicts in self-help groups in Starehe division, Nairobi and found that conflicts are caused by lack of transparency and accountability leading to financial mismanagement, poor communication, poor leadership skills, tribalism and political interference. These conflicts affect groups both positively and negatively. Another study done by Kalpana

(2011) revealed that situations leading to intragroup conflicts were inability to receive loans regularly, partiality shown while being given micro – credit, violating the group rules, micro groups within the self-help groups and difference of opinion with the office bearers. Kalpana (2011) also established that the following methods of conflict resolution applied: dialogue and discussion among the group members, advice and counseling, and compromise. Andhra Pradesh Mahila Abhivruddhi Society - APMAS (2005) also reported that self-help groups that are well managed provide inspiration, provide financial inclusion for all group members and empower them politically and even economically. Findings by Amsavalli & Pragadeeswaran (2013) showed that language, information and communication are very essential in promoting, preventing and resolving conflict situations in women self-help groups in the Cuddalore districts, India. They emphasized that negotiation or dialogue can only take place where exchanging and sharing of information is possible. Guwahati (2011) concludes that even though the access to credit has been seen as a motivational factor behind the formation of self-help groups, these groups have a potential that goes beyond mere economics of loan management and generating income through income generating projects. self-help groups are involved in various social activities which are very much important in their empowerment process.

2.7. Theoretical framework

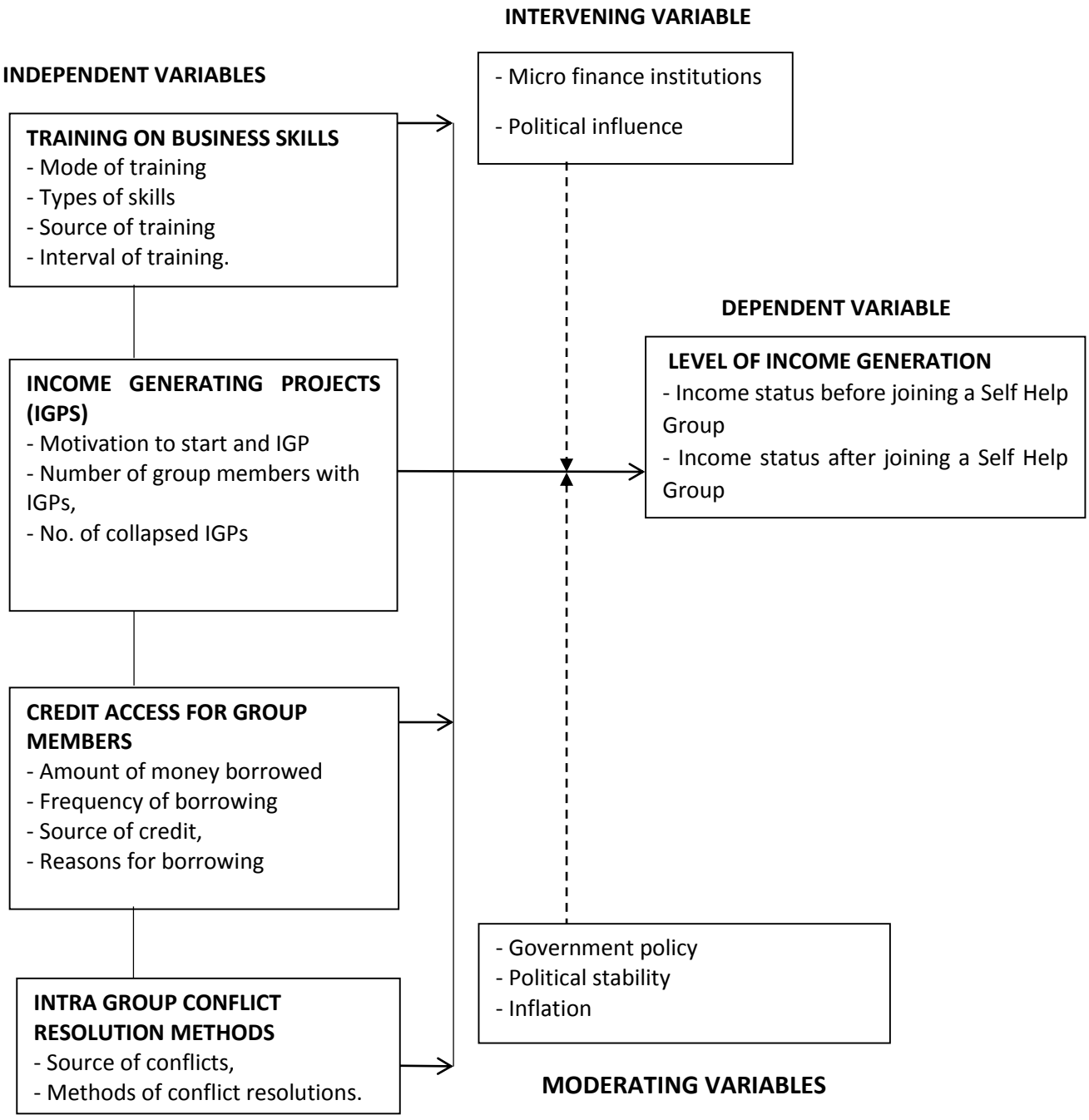
Smith (1937) theorized that when you have got a little, it is often easy to get more. The greater difficulty is to get that little. For the very poor, it becomes very difficult to get small working capital from the formal banking system usually because they lack collateral required by the financial institutions. A theory developed by Kaboski *et al* (2013) shows that membership fees could actually improve performance of self-help groups. Their studies show that sustainable entrepreneurs emerge from well-organized self-help groups. The logic of this theory is that

individual effort is too inadequate to improve their fate. This brings about the necessity for organizing the individuals in a group by which they get the benefit of collective perception, collective decision and collective implementation of programs for common benefit. In other words, mature self-help groups develop their own frameworks in which problems are identified, conceptualized, and solved. Antze (1979) stated that each self-help group claims a certain wisdom concerning the problems it treats. Each has a specialized system of operations and internal management mechanisms.

2.8. The Conceptual Framework

The Conceptual framework represents the key concepts and the variables which forms the basis of this research project. It graphically explains the dependent variable, the independent variable, and the moderating and the intervening variables. It also shows the key indicators that were measured for the dependent and the independent variables. The use of arrows indicates the presumed relationship among the variables.

Figure 2.1. Conceptual framework showing the relationship between the independent and dependent variables



2.9. Relationship of the variables in the conceptual framework

In the conceptual framework, training on business skills, income generating projects, access to credit and conflict resolution represents key operations of self-help groups that influence income generation by the self-help group members. Training of the group members on business skills influences business decisions of the members and hence the diversity of income generating projects. Owning an income generating project is an important motivation in joining the self-help groups. When people join the self-help groups, they save money, borrow money from the pool, start businesses and income generating projects and as a result increase their level of income. The self-help group members also learn from one another and also receive training from other organizations, consequently boosting their business management skills. Access to credit is made easy by belonging to the self-help group. It is one of the key operations of the groups. Group members borrow loans to start businesses or to finance existing businesses and hence increasing the income generation capacity of the group members. Within the groups, members are able to manage their conflicts guided by their own rules and regulations. With less conflicts in the groups, more time and effort is devoted to income generation by the group members.

2.10. Summary of literature review and gaps

Four independent variables and one dependent variable form the basis of the literature review. Attempt has been made to explore the existing literature relevant to the study. It is clear that a lot of work has been done on the role played by self-help groups in fighting poverty. For instance, Coleman (2006) investigated the impact of group lending programme using the quasi experimental methodology. The findings come close to relating loan uptake to income generation. Impact on economic empowerment through income generation is alluded to indirectly by relating loan uptake to acquisition of physical assets, changes in savings, production, sales, productive expenses,

among others. A study by Chepchirchir (2013) comes close to showing the influence of the operations of the self-help groups on income generation by showing how participation in self-help groups motivated members to take loans for enterprise development. The study clearly reveals respondent's reasons for taking loans as income generating activities, asset creation and other entrepreneurial activities.

Table 2.0: Summary of literature review and research gaps

Author	Summary and research gap
Chepchirchir (2013)	Reveals respondent's reasons for taking loans as income generating activities, asset creation and other entrepreneurial activities. However, her study does not address income generating activities as a key group operation
Coleman (2006)	Relates loan uptake to income generation by group members. Impact on economic empowerment through income generation is alluded to indirectly by relating loan uptake to acquisition of physical assets, changes in savings, production, sales, productive expenses, among others. However, the literature does not directly discuss access to credit as a group operation.

From the literature review, it is clear that there have been a number of valuable studies on the contribution of the self-help groups to the socio – economic empowerment of the poor members of the society. These studies bring out the social and economic benefits that the group members gain by belonging and participating in the operations of the self-help groups. A recurrent theme in these studies is the emphasis on the easily available credit to the members with less standards as compared to other lending institutions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter presents the research methodology that was used in the study. The chapter is structured into research design, target population, sampling procedure and sample size. The research instrument, pilot testing, reliability and validity of research instrument are also explained. The data collection procedures and analysis as well as ethical consideration are elaborated in this chapter. The chapter ends with the operationalization of the variables in the form of a conceptualization table.

3.2. Research design

Descriptive survey was used in this study. Descriptive survey design was applicable to this study since it is used to collect data at a particular point in time with the intention of describing the nature of existing conditions, or determining the relationships that exist between specific events, phenomena and situations (Ahuja 2003). The design was also applicable to this study as it provides qualitative and quantitative description of the variables of the study. Gay *et al* (2009) explains that this design involves collection of standardized, quantifiable information from all members of a population or a selected sample. It is carried out in a population at one point in time. Lastly, the design was applicable in this study because it allows the collection of descriptive, inferential and explanatory information through the use of closed and open ended questionnaires (Cohen *et al*, 2000), interviews (Ahuja, 2003) and documentary review. This design presents information about specific populations and from this information; generalization to other populations of similar characteristics can be made (Dickinson & Blunt, 2005).

3.3. Target population

The target population for the study were 1280 members of 64 self – help groups found in five villages (Kirigwa, Iroone, Kigucwa, Irindiro and Kieni) of Michii Mikuru location of Tigania East Sub County. Each group consisted of an average of 20 members. Eight to ten groups form a Cluster Level Association (CLA). The CLA is then registered with the Sub County Social Development office. Ngechu (2004) explains that a population is a well-defined set of people, services, elements, and events, groups of things or household that is being investigated. Table 3.1 presents the target population of the study.

Table 3.1: Target population (members of Self Help Groups)

Village	No. of groups	Number of group members
Kigucwa	15	300
Iroone	18	360
Irindiro	10	200
Kirigwa	13	260
Kieni	8	160
TOTAL	64	1,280

Source: Disability Community Centre, Maua. Year 2013

3.4. Sampling Procedure

The sampling frame consisted of the 64 self-help groups that existed from the year 2009 to 2012. From the sample frame consisting of 64 self-help groups, 15 groups were sampled for the study using simple random sampling. The respondents were drawn randomly from each of the 64 groups. Simple Random Sampling was done by allowing each group member in each village to pick at random a paper written selected and not selected. Members who picked a paper written selected represented groups that were selected to participate in the study. As shown in table 3.1 above, the

groups are situated in 5 villages. Three groups were randomly selected from each village using simple random sampling. Systematic random sampling was used to sample 48 group members.

Using Yamane's formula to get the number of self-help group members to participate in the study,

$$n = \frac{N}{1 + N (p)^2}$$

Where n is the sample size, N is the population size and p is the level of precision. At 95% confidence level, p = 0.475 which is approximately 0.5. This is because a 95% degree confidence corresponds to $\alpha = 0.05$. Assuming normal distribution, $\underline{Z}_{\alpha}$ is to the left of the normal distribution curve and to the right: $\underline{Z}_{\alpha} = 0.5 - 0.025 = 0.475$.

Therefore, using the formula

$$n = \frac{N}{1 + N (p)^2}$$ Where N = 1280 and p = 0.5

$$n = \frac{1280}{1+ 1280 (0.5)^2} = 47.67$$ which is approximately 48

In order to get the sampling interval (SI) which is $= \frac{\underline{N}}{n} = \frac{\underline{300}}{48} = 6.25$, approximately 6.

Since the sampling interval was 6, it meant that from the 1st group member within the 300 self-help group members, the K^{th} group member was number 6. Table 3.2 (on page 25) summarizes the procedure used in obtaining the 15 self-help groups and 48 self-help group members that participated in the study.

Table 3.2 presents a summary of procedure used in obtaining the 15 self-help groups and 48 self-help group members that participated in the study.

Table 3.2: Sampling matrix

Category	Target population	Sample size	% Sample size	Sampling technique
Self Help Groups	64	15	23%	Simple Random Sampling
Self Help Group members	300	48	16%	Systematic Random Sampling

3.5. Sample size

In this study, the self – help group was considered as the unit of analysis and therefore the variables were the key activities that sustained all the groups. Using the Krejcie vs. Morgan (1970) sampling table (appendix 7), the sample size of this study was 48 group members out of 300 group members.

In addition, a formula provided by Yamane (1967) also yields a sample size of 48 as follows.

$$n = \frac{N}{1 + N (p)^2}$$

Where n is the sample size, N is the population size and p is the level of precision. At 95% confidence level, p = 0.475 which is approximately 0.5. This is because a 95% degree confidence corresponds to $\alpha = 0.05$. Assuming normal distribution, $\underline{Z}_{\alpha}$ is to the left of the normal distribution curve and to the right: $\underline{Z}_{\alpha} = 0.5 - 0.025 = 0.475$.

Therefore, using the formula

$$n = \frac{N}{1 + N (p)^2}$$ Where N = 1280 and p = 0.5

$$n = \frac{1280}{1+ 1280 (0.5)^2} = 47.67$$

Table 3.3 presents the percentage sample size for self-help group members per village.

Table 3.3. Percentage sample size for self-help groups and self-help group members

Village (Cluster)	n@ 23% sample size (SHGs)	n@ 16% sample size (group members)
Kigucwa	3	9
Iroone	3	9
Irindiro	3	9
Kirigwa	3	9
Kieni	3	9
TOTAL	15	45± 3

3.6. Instruments of Data Collection

In this study, two research instruments were used to collect data as follows; a questionnaire with open and close ended questions for the sampled group members. The closed and open ended questionnaire were used to collect data on the main variables of the study i.e. training on business skills, credit access, income generating projects, intragroup conflict resolution, and the level of income generation. The closed ended questions are important for collecting quantitative data while open ended questions were used for collecting qualitative data. The first section of the questionnaire dealt with the general information about the respondents, while the second section dealt with the variables of the study. Structured interview schedule was used to collect information from one key informant who is the SHG Project Officer.

3.7. Reliability of the research instruments

Reliability of the questionnaire was achieved through a test-retest procedure that involved administering the questionnaire and the structured interview schedule to the first 30 randomly selected group members from the total population of 300 followed by a retest on the second 30 group members. The Spearman's rank correlation coefficient (r) was analyzed for the two scores.

The coefficient obtained was then converted into an appropriate correlation for the entire test using Spearman Brown prophecy formula. To ascertain reliability of results, alternate form method was used. A Pearson product correlation was run to test the coefficient of results obtained from questionnaires and those obtained in pilot questionnaires. All the questions were divided into two equal halves taking the odd numbered items against the even numbered items and a split half correlation coefficient calculated using the following formula.

$$r\ (\text{split half}) = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}}$$

The self-correlation of the whole test was estimated by the use of the Spearman Brown prophecy formula:

$$\mathbf{r_s} = \frac{\mathbf{2\ r_h}}{\mathbf{1 + r_h}}$$

Whereby, r_s = split-half reliability

r_h = correlation between the two halves of the test

Pearson product

$$r = \frac{\sum XY - \frac{(\sum X)(\sum Y)}{n}}{\sqrt{(\sum X^2 - (\sum X)^2)(\sum Y^2 - \frac{(\sum Y)^2}{n})}}$$

A correlation coefficient of 0.6610 was obtained. According to Mugenda and Mugenda (1999) correlation coefficient of 0.6 and above for the two halves is considered high enough to judge the reliability of the instrument. Therefore, the questionnaire was reliable.

3.8. Validity of the research instruments

Content - related validity was ensured by making sure that the questions contained in the data collection instruments were relevant to the research topic and the research objectives. According to Kothari (2004) content validity pertains to the degree to which the questionnaire and the

structured interview schedule will fully measure the construct of interests and thus produce valid results that could be used to describe the relationship of the variables. Content validity for this study was thus ensured by enhancing the appropriateness of the instruments for the purpose of the study.

3.9. Data collection procedure

A letter requesting for a permission to collect data was sent to the Methodist Church in Kenya, Disability Community Centre before collecting data. The chairlady of the management sent a reply (appendix 6) permitting the collection of data. Once the instruments of data collection had been prepared and tested for validity and reliability, a one day training was organized for the research assistants. This was followed by delivery of the data collection instruments to the research assistants. The research assistants collected the data by reading each question and interpreting it to the respondent in the local language and writing the answers of the respondents in English language. The data collection period lasted four weeks beginning 1.6.14 to 29.6.2014. The filled data collection instruments were collected and handed over to the leader of the research assistants. They were collected for collation and analysis on 30th June 2014 by the researcher.

3.10. Methods of data analysis

Information gathered through the structured interview schedule and the questionnaires were edited, coded and then classified according to particular attributes and according to an appropriate class interval. This was followed by tabulation. Two methods of data analysis have been used in this project report. The first method is descriptive analysis. This is because there are more than two variables. Descriptive analysis involved the use of frequency tables and percentages to establish the relationship between different variables of the study. Inferential statistics is the second method

of data analysis that has been used in this study. The inferential statistics method involved the use of the Spearman's rank correlation and the test of significance using the z statistic test. Chi square test was also used to analyze the various response categories

3.11. Ethical issues

The following ethical practices formed integral part of this proposed study. The participants in the study were informed in advance about the nature of the study and their informed consent was sought before data collection commenced. Permission to research on the groups was be sought from the MCK Disability Community Centre, the organization promoting the formation of self – help groups in the area. Confidentiality was ensured by making sure that the questionnaire did not contain the name of the respondent. The data collected was used for academic purposes only.

3.12. Operational definition of variables

The table specifies how the concept of self – help group operations and the concept of income generation was measured and the data analyzed. The table also shows the specification of variables and the indicators composing them. The two levels of measurement that were used in the study were nominal and ordinal scales.

3.12. Operationalization of the variables

Table 3.4: Operationalization of variables

Research objective	Variable	Indicators to be measured	Measurement scale	Data collection	Instruments	Data analysis methods
1.To determine the influence of business skills training on the level of income generation by the self – help group members at Micii Mikru location	Training on business skills	-Types of business skills -Method of training -Source of training	Nominal and Ordinal Scale	Structured interview for one key informant and questionnaires to be administered to group members by research assistants	Structured interview form and questionnaire	Chi square and Spearman's rank correlation
2. To describe the contribution of Income Generating Projects to the level of income generation by self-help group members at Micii Mikuru location	Income Generating Projects	-Number of group members with IGPs - Motivation to start an IGP -Number of collapsed IGPs	Nominal and Ordinal Scale	Structured interview for one key informant and questionnaires was administered to group members by research assistants	Structured interview form and questionnaire	Chi square and Spearman's rank correlation

3. To evaluate the influence of credit access by the self – help group members at Micii Mikuru location on their level of income generation.	Credit access	- Reasons for borrowing -Amount of credit -Source of credit -Payment period	Nominal and Ordinal	Structured interview for one key informant and questionnaires was administered to group members by research assistants	Structured interview form and questionnaire	Chi square and Spearman's rank correlation
4. To assess the influence of intragroup conflict resolution to the level of income generation by the self-help group members at Micii Mikuru location.	Conflict resolution	-Causes of conflict -Conflict resolution methods	Nominal and Ordinal	Structured interview for one key informant and questionnaires was administered to group members by research assistants	Structured interview form and questionnaire	Chi square.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1. Introduction

This chapter presents the data that was generated based on the four research objectives of the study. The data was collected mainly through a questionnaire with open and close ended questions. Key informant interview was also done to get in-depth information regarding the variables of study. Analysis of the data is presented in tabular form showing frequency and percentages and also through inferential statistics. The data analysis is based on the four research objectives and the research questions outlined in chapter one.

4.2. Response rate

In this study, 48 questionnaires were distributed to 48 respondents in five villages of Michii Mikuru Location in Tigania East Sub County. The questionnaires were administered to the randomly selected respondents by four research assistants. The response rate was 100% and all the questionnaires were usable. This can be attributed to the idea of administering the questionnaires with the help of the research assistants.

4.3. Demographic characteristics of the respondents

The personal characteristics of interest in this study were the gender of the respondents, their level of education and the year a respondent became a member of a self-help group. One hundred percent (100%) of the self-help group members surveyed were all women.

Table 4.1 shows the different levels of education of the respondents surveyed in the study.

Table 4.1: Different levels of education of the self-help group members

Level of education	Frequency	Percentage
No formal education	3	6
Primary School	35	73
Secondary School	8	17
Tertiary level	2	4
TOTAL	48	100

Table 4.1 shows that seventy three (73%) of the respondents had attained primary education, 17% had attained secondary education while only 4% of the respondents attained tertiary education. Six (6%) percent of the respondents had no formal education. The study targeted group members who had belonged to a self-help group from May 2009 and May 2012. Table 4.2 presents membership of the respondents to self-help groups from May 2009 to May 2012.

Table 4.2: Membership to self – help groups

Year of joining an SHG	Frequency	Percentage
2009	22	46
2010	9	19
2011	11	23
2012	6	13
TOTAL	48	100

Table 4.2 shows that fourty six percent (46%) of the respondents became members of self-help groups in 2009. Only 13% of the respondents had joined self-help groups in 2012. The respondents are therefore group members who had experienced the various dynamics of the self-help groups.

4.4. Training of self-help groups members on business skills

The first objective of this study was to determine the influence of business skills training on income generation by the self-help group members at Michii Mikuru location. Respondents were randomly selected members of self-help groups. Table 4.3 presents the types of business skills imparted to the self-help group members through training.

Table 4.3: Business skills covered by the self – help groups through training.

Business skills covered when training the self – help group members	Covered in the training	Not covered in the training	χ^2 Square value
Business start – up skills			
o	34	8	
e	21	21	
$(o-e)^2/e$	8.0	8.0	16
Business management skills			
o	16	26	
e	21	21	
$(o-e)^2/e$	1.2	1.2	2.4
Financial management skills			
o	13	29	
e	21	21	
$(o-e)^2/e$	5.8	3.0	8.8

Critical $\chi 2$ (with DF = 1 at 5% level of significance) = 3.841, where DF is Degrees of freedom = n – 1 where n is the number of categories.

The respondents who had received training were asked to point out the particular business skills covered by the training. Table 4.3 shows the calculated Chi square value for business start - up skills of 16, and Chi square value for business management skills of 8.8. Both of these values are greater than the Critical $\chi 2$ value of 3.841 with degree of freedom = 1 at 5% level of significance.

This indicates that business start – up skills and business management skills were the main skills imparted to the self – help group members through training.

Table 4.4 presents the methods of training used by MCK Disability Community Centre for training the groups

Table 4.4: methods of training used by MCK Disability Community Centre for training the groups

Methods of training of the self – help groups used by the MCK Disability Community Centre	Has not been used	Seldom used	Often used	χ^2 Square value
Onsite training through seminar/ workshop				
o	13	12	17	
e	14	14	14	
$(o-e)^2/ e$	0.1	0.3	0.6	1.0
Onsite training by community facilitator				
o	8	12	22	
e	14	14	14	
$(o-e)^2/ e$	2.6	0.3	4.6	7.5
Onsite training by a group member				
o	6	5	31	
e	14	14	14	
$(o-e)^2/ e$	4.6	5.8	20.6	31

Critical $\chi 2$ (with DF = 2 at 5% level of significance) = 5.991, where DF is Degrees of freedom = n – 1 where n is the number of categories.

Table 4.4 shows the calculated Chi value of 7.5 for onsite training by a community facilitator and 31 for onsite training by a group member.

These calculated Chi square values are greater than the Critical $\chi 2$ value of 5.991 with degrees of freedom of 2 at 5% level of significance. This indicates that the most common methods used by the MCK

Disability Community Centre to train the self-help groups are onsite training by a community facilitator and onsite training by a group member.

In addition to the training offered by the organizations that promote community development through the self-help group approach, the groups are sometimes trained by government agencies and other interested organizations.

Table 4.5 presents the other sources of training available for the self – help groups other the MCK Disability Community Centre

Table 4.5: Other sources of training other than the MCK Disability Community Centre

Other sources of training other than the MCK Disability Community Centre	Has been trained by other agencies.	Has not been trained by other agencies	χ^2 Square value
Government of Kenya agency			
o	19	23	
e	21	21	
$(o-e)^2/ e$	0.2	0.2	0.4
Microfinance institutions			
o	20	22	
e	21	21	
$(o-e)^2/ e$	0.05	0.05	0.1
Non-governmental organizations			
o	18	24	
e	21	21	
$(o-e)^2/ e$	0.4	0.4	0.8

Critical $\chi 2$ (with DF = 1 at 5% level of significance) = 3.841, where DF is Degrees of freedom = n – 1 where n is the number of categories

Table 4.5 shows the calculated Chi value of 0.4 for government of Kenya agency, 0.1 for microfinance institutions and 0.8 for non – governmental organizations. These calculated Chi square values are all less than the Critical $\chi 2$ value of 3.841 with degrees of freedom of 1 at 5% level

of significance. This indicates that the training received by the self – help groups at Michii Mikuru from other sources other than the MCK Disability Community Centre was insignificant.

After training, it is expected that the self-help groups would start a project and generate income. Spearman rank correlation was estimated between the training of the self – help group members on business skills and the average income generated. Table 4.6 present the analysis of the influence of training the self-help group members on business skills on income generation using the Spearman's rank correlation (r^s) and the test for z statistic.

Table 4.6: The number of self-help group members who started a project after being trained on business skills against income generated.

Year	No of members trained	Average Income generated
2009	7	6,500
2010	5	10,500
2011	21	2,500
2012	9	18,500
Total	42	38,000

The resulting value was $r^s = -56$, indicating a negative correlation between the two variables. To test the null hypothesis of no correlation between the two variables in the population against the alternative of positive correlation, the test statistic $z = r^s\sqrt{(n-1)}$ was used. The resulting $z = -3.8$ does not exist within the areas of standard normal distribution at 5% level of significance, indicating that the negative correlation was statistically insignificant at higher than 5% level. This supported the conclusion that the training of the self – help group members on business skills did not result in an increase in income generated and therefore did not influence income generation.

4.5. Income generating projects of self – help group members

The second objective of this study was to describe the contribution of income generating projects on income generation by self-help group members at Michii Mikuru location. The study sought to

establish if membership to a self-help group contributed to owning of businesses and income generating projects by group members and hence influencing their income generation. The study thus sought to know if self-help group members owned projects before and after joining a group. Table 4.7 presents ownership of income generating projects before and after joining a self-help group.

Table 4.7 shows the number of respondents who owned a business or project before joining a group and those who did not own a project.

Ownership of projects by group members before and after joining a self – help group	Before joining a self – help group	After joining a self – help group	χ^2 Square value
Owned project			
o	18	30	
e	24	24	
$(o-e)^2/ e$	1.5	1.5	3.0
Did not own project			
o	39	9	
e	24	24	
$(o-e)^2/ e$	9.4	9.4	18.8

Critical $\chi 2$ (with DF = 1 at 5% level of significance) = 3.841, where DF is Degrees of freedom = n – 1 where n is the number of categories

Table 4.7 shows the calculated Chi value of 3.0 < Critical $\chi 2$ 3.841 for the group members who owned projects and 18.8 > Critical $\chi 2$ 3.841 with degrees of freedom = 1 at 5% level of significance for the members who did not own project. This indicated that joining a self-help group positively influenced ownership of income generating projects by the self-help group members.

The respondents were asked to rate the reasons for starting an income generating project after joining a self-help group. Table 4.8 presents the rating of the reasons given by the respondents for starting an income generating project after joining a self – help group.

Table 4.8: Reasons given by the respondents for starting a project after joining a self – help group.

Reasons given by the respondents for starting a project after joining a self – help group.	SD	D	SA	A	χ^2 Square value
Training on business skills offered to groups					
o	7	5	28	8	
e	12	12	12	12	
$(o-e)^2/ e$	2.1	4.1	21.3	1.3	28.8
Learning from the success of fellow group members					
o	5	5	31	7	
e	12	12	12	12	
$(o-e)^2/ e$	4.1	4.1	30.1	2.1	40.5
Easy availability of credit from the group					
o	11	17	10	10	
e	12	12	12	12	
$(o-e)^2/ e$	0.1	2.1	0.3	0.3	2.8

Critical $\chi 2$ (with DF = 3 at 5% level of significance) = 7.815, where DF is Degrees of freedom = n – 1 where n is the number of categories

SD – Strongly disagree, D – Disagree, SA – Strongly Agree, A - Agree

Table 4.8 shows the calculated Chi square value of 28.8 for training on business skills offered to groups, and Chi square value of 40.5 for learning from the success of fellow group members. Both of these values are greater than the Critical $\chi 2$ value of 7.815 with degree of freedom = 3 at 5% level of significance. It was therefore concluded that training of the group members on business skills and learning from fellow group members significantly influenced the group

members to start income generating projects after joining a self-help group. Even though saving and loaning are key activities of the self-help groups, table 4.8 gives the calculated Chi square value of 2.8 < Critical $\chi 2$ value of 7.815 with degree of freedom = 3 at 5% level of significance for easy access to credit available from the group savings. Therefore, the easy availability of credit for the group members from their savings did not significantly motivate them to start income generating projects.

Table 4.9 presents the number of respondents with income generating projects against average income generated per year.

Table 4.9: The number of respondents with income generating projects against average income generated per year

Year	No of respondents with projects	Average income generated
2009	12	6500
2010	18	10,500
2011	8	2500
2012	10	18500
TOTAL	48	38,000

Spearman rank correlation was estimated between the ownership of income generating projects by the self – help group members and the average income generated. The resulting value was $r^s = 0.18$ indicating a positive correlation between the two variables. To test the null hypothesis of no correlation between the two variables in the population against the alternative of positive correlation, the test statistic $z = r^s\sqrt{(n - 1)}$ was used. The resulting z = 1.24 with a table value of 0.3925 within the areas of standard normal distribution at 5% level of significance. This indicated

that the positive correlation was statistically significant at higher than 5% level of significance. This supported the conclusion that ownership of income generating projects by the self – help group members resulted in an increase in income generation.

4.6. Credit Access by the self-help group members

The third objective of the study was to evaluate the influence of credit access by the self-help group members at Michii Mikuru location on income generation. One hundred percent (100%) of the respondents confirmed that they had been able to borrow money from their group since they became members. Table 4.10 presents the rating of other sources of credit for self – help group members other than group savings.

Table 4.10: Other sources of credit for self – help group members other than group savings.

Other sources of credit for the self – help group members other than group savings	SD	D	SA	A	χ^2 Square value
Commercial banks					
o	13	15	9	10	
e	12	12	12	12	
$(o-e)^2/ e$	0.1	0.8	0.8	0.3	2
Microfinance institutions					
o	14	16	6	12	
e	12	12	12	12	
$(o-e)^2/ e$	0.3	1.3	3	0	4.6
Friends and relatives					
o	5	5	32	6	
e	12	12	12	12	
$(o-e)^2/ e$	4.1	4.1	33.3	3	44.5

Critical $\chi 2$ (with DF = 3 at 5% level of significance) = 7.815, where DF is Degrees of freedom = n – 1 where n is the number of categories

SD – Strongly disagree, D – Disagree, SA – Strongly Agree, A – Agree

Table 4.10 shows the calculated Chi square value of 2 < Critical $\chi 2$ =7.815 for commercial banks, and Chi square value of 4.6 < Critical $\chi 2$ =7.815 for microfinance institutions. Both of these values are less than the Critical $\chi 2$ value of 7.815 with degree of freedom = 3 at 5% level of significance, indicating that other than friends and relatives with a calculated Chi square value of 44.5> Critical $\chi 2$ =7.815 with degree of freedom = 3 at 5% level of significance as a significant source of credit for group members, group savings remain the key source of credit for the self-help group members. Self-help group members borrow money for various reasons. The respondents were asked to rate the reasons for borrowing money from their savings on a Likert scale of 1 to 4. Table 4.11 presents the Chi square analysis of the reasons for borrowing given by the respondents

Table 4.11: Chi square analysis of the reasons for borrowing given by the respondents

Reasons for borrowing money as given by the self – help group members	SD	D	SA	A	χ^2 Square value
Domestic use					
o	10	11	16	11	
e	12	12	12	12	
$(o-e)^2/ e$	0.3	0.1	1.3	0.1	1.8
Starting business					
o	6	5	20	17	
e	12	12	12	12	
$(o-e)^2/ e$	3	4.1	5.3	2.1	14.5
Supporting existing business					
o	9	11	17	11	
e	12	12	12	12	
$(o-e)^2/ e$	0.8	0.1	2.1	0.1	3.1

Critical $\chi 2$ (with DF = 3 at 5% level of significance) = 7.815, where DF is Degrees of freedom = n – 1 where n is the number of categories

SD – Strongly disagree, D – Disagree, SA – Strongly Agree, A – Agree

Table 4.11 shows the calculated Chi square value of 14 > Critical $\chi 2$ =7.815 (with degrees of freedom = 3 at 5% level of significance) for starting business as the reason for borrowing given by the respondents. The calculated Chi square value for domestic use and supporting existing business

are $1.8 < \text{Critical } \chi 2 = 7.815$ and $3.1 < \text{Critical } \chi 2 = 7.815$ respectively. This indicated that the significant reason for borrowing money given by the self-help group members is that of borrowing to start a business

After borrowing money from the group, it is expected that the self-help groups would start a project and generate income. Table 4.12 present the amount of money borrowed against income generation. Analysis was done using the Spearman's rank correlation (r^s) and the test for z statistic.

Table 4.12. Amount of money borrowed by self-help group members from their groups from 2009 to 2012 against income generated

Money borrowed in KShs.	Income generated	Frequency	Percentage
900 – 4000	52,000	2	4
5000 – 10,000	123,500	13	27
11,000 – 16,000	42,500	17	35
17,000 – 22,000	29,000	10	21
23,000 – 28,000	37,000	5	11
29,000 – 34,000	5000	1	2
TOTAL		48	100

Spearman rank correlation was estimated between amount of money borrowed by the self – help group members and the average income generated. The resulting value was $r^s = -0.03$, indicating a negative correlation between the two variables. To test the null hypothesis of no correlation between the two variables in the population against the alternative of positive correlation, the test statistic $z = r^s\sqrt{(n-1)}$ was used. The resulting $z = -0.207$ does not exist within the areas of standard normal distribution at 5% level of significance indicating that the negative correlation was statistically insignificant at higher than 5% level of significance. This supported the conclusion that access to credit by the self – help group members on did not result in an increase in income generated and therefore did not influence income generation.

4.7. Conflict Resolution within the self – help groups

This study also sought to assess the influence of intragroup conflict resolution on income generation by the self-help group members at Michii Mikuru location. Seventy nine percent (79%) of the respondents surveyed indicated that their groups had experienced conflicts with only 21% saying that they had never experienced conflicts in their group. Table 4.13 presents different causes of intragroup conflicts rated on a Likert of 1 to 3

Table 4.13: Causes of intragroup conflicts

Causes of intragroup conflict	SD	D	SA	χ^2 Square value
Lack of transparency				
o	20	19	9	
e	16	16	16	
$(o-e)^2/ e$	1.0	0.6	3.1	4.7
Inability to get a loan				
o	23	17	9	
e	16	16	16	
$(o-e)^2/ e$	3.1	0.1	3.1	6.3
Loan repayment default				
o	6	18	24	
e	16	16	16	
$(o-e)^2/ e$	6.3	0.3	4	10.6
Breaking of group rules and regulations				
o	5	6	37	
e	16	16	16	
$(o-e)^2/ e$	7.6	6.3	27.6	41.2

Critical $\chi 2$ (with DF = 2 at 5% level of significance) = 5.991, where DF is Degrees of freedom = n – 1 where n is the number of categories.

SD – Strongly Disagree, D – Disagree, SA – Strongly Agree.

In table 4.13, inability to get a loan had a calculated Chi square value of 6.3 > Critical $\chi 2$ 5.991.

Defaulting loan repayment had a calculated Chi square value of 10.6 > Critical $\chi 2$ 5.991, while breaking of rules and regulations had a calculated Chi square value of 41.2 > Critical $\chi 2$ 5.991 with DF = 3 at 5% level of significance. It was therefore concluded that the significant causes of intragroup conflicts in self – help groups at Michii Mikuru location were inability of the group members to get a loan when they need it, failing to pay back loan on time and breaking of rules and regulations. Conflict resolution is an important activity of the self-help groups. It enables the group members to resolve their disagreements and therefore focus more energy on developing themselves. The study sought to find out the methods of conflict resolution used by the self-help groups in resolving their conflicts. Table 4.14 presents the methods of conflict resolution rated on a Likert scale of 1 to 4.

Table: 4.14: Methods of intragroup conflict resolution methods

Methods of conflict resolution used by the groups to resolve intragroup conflict	SD	D	A	SA	χ^2 Square value
Dialogue					
o	5	7	20	26	
e	12	12	12	12	
$(o-e)^2/ e$	4.1	2.1	5.3	16.3	27.8
Mediation					
o	7	15	16	10	
e	12	12	12	12	
$(o-e)^2/ e$	2.1	0.8	1.3	0.3	4.5
Punishment					
o	17	19	7	5	
e	12	12	12	12	
$(o-e)^2/ e$	2.1	4.9	2.1	4.1	13.2

Critical $\chi 2$ (with DF = 3 at 5% level of significance) = 7.815, where DF is Degrees of freedom = n – 1 where n is the number of categories

SD – Strongly disagree, D – Disagree, SA – Strongly Agree, A – Agree

Table 4.14 shows that dialogue had a calculated Chi square value of 27.8 > Critical $\chi 2$ = 7.815 while punishment has a Chi square value of 13.2 > Critical $\chi 2$ = 7.815 with degrees of freedom = 3 at 5% level of significance. Mediation had a calculated Chi square value of 4.5 < Critical $\chi 2$ = 7.815. Since dialogue and punishment as methods of intragroup conflict resolution both have calculated Chi square value greater than the< Critical $\chi 2$ = 7.815, it was concluded that the self-help groups at Michii Mikuru location use dialogue and punishment as the main methods of resolving conflicts. The use of mediation in resolving intragroup conflicts at Michii Mikuru location was insignificant since its calculated Chi square value of 4.5 was less than Critical $\chi 2$ = 7.815. It is also important to note that only 17% of the respondents surveyed indicated that their self-help groups had lost members as a result of unresolved conflicts.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter presents a summary of the findings of the study, and conclusions and recommendations based on the findings. Areas for further research are also outlined at the end of the chapter.

5.2. Summary of the findings

The purpose of this study was to determine the influence that the operations of self-help groups have on income generation by the self-help group members at Michii Mikuru location in Meru County. The summary of findings is based on the four research objectives.

The first research objective of this study was to determine the influence of business skills training on income generation by the self-help group members at Michii Mikuru location. The analysis of the influence of training the self-help group members on business skills on income generation was done using the Spearman's rank correlation (r^s) and the test for z statistic. The resulting value was $r^s = -56$, indicating a negative correlation between the two variables. To test the null hypothesis of no correlation between the two variables in the population against the alternative of positive correlation, the test statistic $z = r^s\sqrt{(n - 1)}$ was used. The resulting z = - 3.8 does not exist within the areas of standard normal distribution at 5% level of significance. This indicated that the negative correlation was statistically insignificant at higher than 5% level of significance. This supported the conclusion that the training of the self – help group members on business skills did not result in an increase in income generated and therefore did not influence income generation.

The calculated Chi square values were all less than the Critical $\chi 2$ value of 3.841 for other possible sources of training. This indicated that the training received by the self – help groups at Michii Mikuru was provided mainly by the MCK Disability Community Centre.

The study also sought to establish the influence of income generating projects on income generation by self-help group members at Michii Mikuru location. The study found that there was positive correlation which was statistically significant at higher than 5% level of significance. This supported the conclusion that ownership of income generating projects by the self – help group members resulted in an increase in income generation. Spearman rank correlation was estimated between the ownership of income generating projects by the self – help group members and the average income generated. The resulting value was $r^s = 0.18$ indicating a positive correlation between the two variables. To test the null hypothesis of no correlation between the two variables in the population against the alternative of positive correlation, the test statistic $z = r^s\sqrt{(n-1)}$ was used. The resulting $z = 1.24$ with a table value of 0.3925 within the areas of standard normal distribution at 5% level of significance.

The influence of credit access by the self-help group members at Michii Mikuru location on income generation was also investigated through the study. It was found that the main reason for borrowing given by the respondents was for starting business with calculated Chi square value of $14 >$ Critical $\chi 2$ =7.815. Spearman rank correlation was estimated between the ownership of income generating projects by the self – help group members and the average income generated. The resulting value was $r^s = 0.18$ indicating a positive correlation between the two variables. To test the null hypothesis of no correlation between the two variables in the population against the alternative of positive correlation, the test statistic $z = r^s\sqrt{(n-1)}$ was used. The resulting $z = 1.24$

with a table value of 0.3925 within the areas of standard normal distribution at 5% level of significance. This indicated that the positive correlation was statistically significant at higher than 1% level. This supported the conclusion that ownership of income generating projects by the self – help group members resulted in an increase in income generation.

Regarding the influence of intragroup conflict resolution methods on income generation by the self-help group members at Michii Mikuru location, the study found that the significant causes of intragroup conflicts in self – help groups at Michii Mikuru location were inability of the group members to get a loan when they need it, failing to pay back loan on time and breaking of rules and regulations. Dialogue and punishment as methods of intragroup conflict resolution both had calculated Chi square value greater than the< Critical $\chi 2$ = 7.815, it was concluded that the self-help groups at Michii Mikuru location use dialogue and punishment as the main methods of resolving conflicts. Only 17% of the respondents surveyed indicated that their self-help groups had lost members as a result of unresolved conflicts. The study found that successful intragroup conflict resolution enabled the group members to remain in the group and continue pursuing income generation activities. . However, the study showed no statistically significant correlation of successful intragroup conflict resolution with income generation

5.3. Discussion of findings

The study was based on four independent variables which were: business skills training, the contribution of income generating projects on income generation, credit access by the self-help group members, and the influence of intragroup conflict resolution on income generation

5.3.1. Influence of business skills training on income generation by the self – help groups.

In this study, inferential statistical analysis using Spearman's rank correlation and the test statistic z showed no significant relationship between training of the groups on business skills

and income generation. A study conducted by Stevenson & St-Onge (2005) found that training is a vital tool to an individual since it gives the necessary skills required to run a business. A study conducted by Jivetti & Edwards (2009) did not find any significant relationship of training and income generation. However, they recommended that self-help groups should be provided with training in the development of business plans and guidance on how best to avoid redundancy or undue duplication of income generating activities and projects.

5.3.2. Influence of income generating projects on income generation.

There was a positive correlation of income generating projects with income generation. This correlation was found to be statistically significant at higher than 5% level of significance using the Spearman's correlation and test on z statistic. This supported the conclusion that ownership of income generating projects by the self – help group members resulted in an increase in income generation. This finding corroborates the results of a study conducted by Fafchamps (2012) who examined the incomes of individuals who had joined self-help groups in poor neighbourhoods of Nairobi. The study found that incomes are indeed more correlated to ownership of income generating projects by self – help group members. Suguna (2006) also reported that participation in self-help groups is instrumental in micro enterprise development such as income generating activities which lead to increased income for the self-help group members.

5.3.3. Access to credit by the self – help group members

The study found no statistically significant correlation of access to credit by the self-help group members with income generation. This was further confirmed by the finding that easy availability of credit from the group savings was not a significant motivator for the self – help group members to start an income generating project. A study conducted by Chepchirchir (2013) found that

participation in self-help groups enhanced self – help group member's access to formal loan and an increase in loan amount. However, this did not significantly translate to an increase in income generated. Studies by Jothi (2010) and Sharma & Chakra (2012) showed that majority of women who join self-help groups without any business due to lack of capital are able to start their own business after joining the groups. However, the influence of easy availability of credit for the self-help group members on income generation has not been shown to be statistically significant.

5.3.4. Influence of intragroup conflict resolution on income generation

The study found that the significant causes of intragroup conflicts in self – help groups at Michii Mikuru location were inability of the group members to get a loan when they need it, failing to pay back loan on time and breaking of rules and regulations. This agrees with the findings of study done by Kalpana (2011) which revealed that situations leading to intragroup conflicts were inability to receive loans regularly, partiality shown while being given micro – credit, violating the group rules, micro groups within the self-help groups and difference of opinion with the office bearers. Another finding was that the self-help groups at Michii Mikuru location use dialogue and punishment as the main methods of resolving conflicts. Consequently, only 17% of the respondents surveyed indicated that their self-help groups had lost members as a result of unresolved conflicts. It was therefore concluded that successful intragroup conflict resolution enabled the group members to remain in the group and continue operating income generation activities and hence generating income. However, the study showed no statistically significant correlation of successful intragroup conflict resolution with income generation

5.3. Conclusion

It is notable that all the self – help group members surveyed in this study indicated that they had been able to borrow money from their respective self-help groups. Whether for domestic use or

for starting businesses or projects, easy availability of credit for the group members is a clear indication that saving and loaning is an activity that holds the groups together. It is also noteworthy that training plays a big role in influencing the decision making by the group members especially when deciding on what business or project to start. The study also revealed that group members learn a lot from one another especially in regard to starting a business or a project. The fact that the self-help group members are able to resolve conflicts in their groups indicates that their common interests are more important to them than their differences. This is confirmed by the finding that only 17% of the surveyed respondents indicated that their self-help groups had lost members due to conflicts. Additionally, the main purpose of borrowing given by the Self Help Group members was starting a business or an income generating project. However, inferential statistical analysis revealed that apart from ownership of income generating projects by the self-help, access to credit, training on business skills and conflict resolution did not significantly influence income generation by the members of the self – help groups at Michii Mikuru location.

5.4. Recommendations for policy actions

1. The study recommends that the organization promoting the formation of groups at Michii Mikuru location should enhance its networking and collaboration with the local national and county government agencies so that they (the agencies) play an active role in capacity building of the groups. This will also ensure sustainability.

2. The group members at Michii Mikuru should work together to explore new markets for their goods and services as this could enhance their incomes.

3. Group members that are successful with their projects or businesses should be encouraged to train other members. Diversification of business activities should also be encouraged.

5.5. Suggestions for further study.

1. The influence of the level of education of self – help group members on choice of business/projects.

2. The influence of self – help groups operations on poverty reduction at the grass - root level.

5.6. Contribution to the body of knowledge

The findings of this study, though specific to Micii Mikuru location of Tigania East Subcounty in Kenya are an important addition to the body of knowledge since through these findings, we are able to generalize the important development and empowerment role of the self – help groups to the marginalized community members in the rural areas.

REFERENCES

Abrams, D., Rutland, A., & Cameron, L. (2003). The development of subjective group dynamics: Children's judgments of normative and deviant in-group and out-group individuals. *Child Development, Vol. 74, pp. 184–1856.*

Ahuja, R. (2003). Research Methods. New Delhi: Prem Rawat for Rawat Publications

Amsavalli, P & Pragadeeswaran, S (2013) Conflict management practices and women's role in SHG - Cuddalore Districts of Tamil Nadu. *Golden Research Thoughts, Volume 2, Issue. 11, pp 2-6*

Anand, J. (2004) Self- help groups in empowering poor women. Some experience from Kerala, India. In:Alleviating Poverty: Case Studies of Local Level Linkages and Processing in Developing World. *Eds: V. Menon, P.G. Nair and K.N. Nair. Rainbow Publishers, Noida, pp. 285-309.*

Antze, P. (1979). Role of ideologies in peer psychotherapy groups. In M. A.Lieberman & L. D. Borman (Eds.), *Self-help groups for coping with crisis: Origins, members, processes, and impact* (pp. 272-304). San Francisco:Jossey-Bass.

Andhra Pradesh Mahila Abhivruddhi Society - APMAS. (2005). A Study on Self Help Group (SHG) - Bank Linkage in Andhra Pradesh in *APMAS, A Study on Self Help Group (SHG) - Bank Linkage in Andhra Pradesh*. Hyderabad: APMAS.

Arch, G. (2005). "Microfinance and development: Risk and return from a policy outcome *perspective." Journal of Banking Regulation 6(3): pp. 227-245.*

Chepchirchir, S. (2013) Impact of Women Participation in Self Help Groups on Economic Empowerment in Nakuru County. *Interdisciplinary Journal of Contemporary Research in Business, vol. 5 pp. 385 – 403*

Chune, N. (2003) Highlights of current labor market conditions in Kenya. Available at http://www.GlobalPolicyNetwork.org

CIA (2010) Central Intelligence Agency, Kenya fact book**.**

Cohen, L. & Morrison, K. (2000). Research Methods in Education. 5th Edition, London: Routledge Falmer, Great Britain.

Coleman, B. (2006) Microfinance in North East Thailand: Who benefits and how much. World Development Publications

Collett, K. & Gale, C., (2009). Training for Rural Development: Agricultural and Enterprise Skills for Women, London: City & Guilds Centre for Skills Development.

Cooper, D. % Schindler, P. (2008) Business Research Methods. Boston, McGraw – Hill

Coppock, D, Desta, S & Wako, A (2005), Women's groups in Arid Northern Kenya: Origins, Governance and Roles in Poverty Reduction. Pastoral Risk Management.

Corbetta, P. (2003), The qualitative interview in social research; Theory, Methods and Techniques. Sage Publications, Carlifornia.

David, D. (2006) Trends and New Initiatives, Dispute Resolution Service (DRS) at FSCO.

Denyer, D. & Tranfield, D. (2009) Producing a systematic review. The sage handbook of organizational research methods, pp. 671 – 689. Sage Publications Ltd, London.

Donald, H. & James, M. (1980) Introductory Statistical Analysis, 2nd Ed. Addison-Wesley.

Emerging Technologies and Corporate Strategies E.T.C (2004) Report on environmental impact assessment of KAWAD watersheds. ETC consultants India Pvt. Ltd., Bangalore.

Fafchamps, M. (2011) Development, social norms, and assignment to task. Department of Economics, University of Oxford, Oxford OX1 3UQ, United Kingdom. *Proceedings of the National Academy of Sciences (Impact Factor: 9.74). 12/2011; 108*

Fafchamps, M, & La Ferrara, E. (2012*)* Self-help groups and mutual assistance: Evidence from Urban Kenya. *Economic Development and Cultural Change, 60 (4). pp. 707-733.*

Gadenne, L. & Vasudevan, V. (2007) How do women in mature SHGs save and invest their money? Institute for Financial Management and Research Centre for Micro Finance Working Paper Series No. 18

Garikipatis, S. (2012) Microcredit and Women's Empowerment through the lens of time. (Data from rural India). *Journal Development and Change, Vol. 43, pp. 719 -750*

Godinot, X, Heyberger, C, Heyberger, P, Ugarte, M. and Ugarte, R. (2007) Resisting extreme poverty: learning from families in Burkina Faso and Peru. *Moving out of poverty, vol. 1 pp. 273 – 306.*

Government of Kenya (2000) Interim Poverty Reduction Strategy Paper 2000 – 2005.

Government of Kenya (2005) Development of Micro and Small Enterprises for Wealth and Employment Creation for poverty reduction. *Sessional paper number 2*

Government of Kenya (2007), Kenya Vision 2030, A Globally Competitive and Prosperous Kenya, Republic of Kenya

Government of Kenya (2007). Interim Poverty Reduction Strategy Paper, Government Printers, Nairobi. International Journal of Educational Reform, 6(4), 420-427.

Government of Kenya (2008) First Medium Term Plan 2008 – 2012, Ministry of State for Planning, National Development and Vision 2030, Nairobi, Kenya.

Grootaert, C. (2001) Does Social Capital help the poor? A synthesis of findings from the local level institution studies in Bolivia, Burkina Faso, and Indonesia, *World Bank local institutions working paper no. 10. Washington DC.*

Guwahati, K. (2011) Management of Self Help Groups State Institute of Rural Development (SIRD) G.S. Road, 22 April 2011).

Harris, T. (2006). Between-group contest competition for food in a highly folivorous population of black and white colobus monkeys (Colobus guereza). *Behavioral Ecology and Sociobiology, 61, 317–329.*

Heyer, H. (1976) Achievements, problems and prospects in the Agricultural Sector, Agricultural Development in Kenya, an Economic Assessment Groups", *MARGIN, Vol.32, No.4, July-September*. pp. 1 – 32

International Monetary Fund and World Bank (2002) Financing for Development – Implementing the Monetary Consensus. IMF, Washington DC

International Monetary Fund Country report (2012), Kenya; The Poverty Reduction Strategy Paper. IMF, Washington DC.

Jayachandra, K. and Gurappa, N, (2006), Impact of dairy cooperatives on income, employment and creation of assets of marginal and small farmers- *A case study. Indian Cooperative Review, 43 (4) pp. 719-724.*

Jivetti, A. & Edwards, C (2009). Selected Factors Affecting the Performance of Women's Self-Help Groups in Western Kenya. *Proceedings of the 25th Annual Meeting, Inter Continental* San Juan Resort, Puerto Rico, 273-281

Jothi (2010) Socio Economic Impact: Microfinance of Self Help Groups. *Journal of Indian Management, Vol. 7 pp. 93 – 103.*

Kabeer, N. and Noponen, H. (2005). Social economic impact of PRADAN's self-help group microfinance and livelihoods promotion program analysis from Jarkhand, India. The Institute of Development Studies

Kaboski, P. Greaney, B, Van Lemput E (2013) Can Self – Help Groups really be "Self Help. Federal Reserve Bank of St. Louis.

Kabubo – Maria, J (2007) Poverty and Policy in Kenya: *Proceedings of a National Workshop. University of Nairobi Press, Nairobi Kenya.*

Kaldor, M (2008) Responsible Intervention: *Journal of global politics and strategy, vol. 50 pp 191 - 200*

Kaliappa, K & Kanhaiya, S (2012) Self Help Group – Banking – Poverty Reduction nexus, a Case Study of Uttarakland State, India

Kalpana, R (2011) Conflicts and Conflicts resolution among women of Self – Help Groups in Dindigul – *India Journal of Adult Education Vol. 72, No 4, pp 61 - 77*

Karlan, D. And Valdivia, M. 2009. Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions. *Working Paper*, Yale University.

Karuti, K & Njagi S. (2007) The Non – Profit Sector in Kenya, Size, Scope and Financing. University of Nairobi. Kenya

Kenya Central Bureau of Statistics (2005) Poverty data by Districts and Constituency. Nairobi, Kenya.

Kiiru & Mburu (2007): User Costs of Joint Liability Borrowing and their Effects on Livelihood Assets for Rural Poor Households. *International Journal of Women, Social Justice and Human Rights 2, NO.2, pp* 87-*100*.

Kiiru, J. (2007). The Impact of Microfinance Rural Poor Households' Income and Vulnerability to Poverty: A case study of Makueni District, Kenya. (PhD Dissertation, Bonn University, Faculty of Agriculture).

Kimalu, P, Nafula, N, Manda, D, Mwabu G, Kaimenyi, M (2007) A situational analysis of poverty in Kenya. *Kenya Institute of Public Policy Research Working Paper No. 6.* Kippra, Nairobi Kenya.

Kindernothilfe (2008). The Self Help Group Approach. Prajwala Enterprises, Hyderabad, India

Kindernothilfe (2005) Evaluation of Impact and potential of the Kindernothilfe supported Self Help Group Approach as Implemented in Ethiopia, Rwanda, South Africa and Swaziland. KNH, Germany.

Kindernothilfe (2012) The Self Help Approach, Unleashing human potential. Available at http://www.self-help-approach.com/CaseStudies.aspx

Kothari, C. (2004) Research Methodology – Methods and Techniques. New Age International Publishers Limited. New Delhi.

Mavi, K.S., Chauhan, J.P.S. and Das, B.C., (2006), *Impact of Self Employment Program on Dairy Farming.* Rural India, Vol. 70 (3): pp. 47-49.

Mohummed, S, Ullah M, & Lu W, (2013) Micro-credit and poverty reduction: a case of Bangladesh RAGUE ECONOMIC PAPERS, 2013

Mugenda and Mugenda ,(2003)Research Methods ,Quantitative and Qualitative Approaches

African Centre for Technology Studies (ACTS), Nairobi ,Kenya .

NABARD (2008). Impact and Sustainability of SHG Bank Linkage Programme. Working Paper

National Council of Churches of Kenya (2005) Decentralized Funds Manual. NCCK, Nairobi.

Ndunge, M. (2010) Intragroup conflicts in self – help groups: causes, effects and possible solutions. Case Study of Starehe Division, Nairobi North District. University of Nairobi, Kenya.

Ngechu M (2004). Understanding the Research Process and Methods: An Introduction to Research Methods Nairobi, Acts Press.

Ochanda, M. (2011) The Contribution of the grassroots organizations to Economic Empowerment of Communities and Individuals: *Case Study of Self Help Groups of Kenya, 3rd EMES International Research Conference on Social Enterprise*. Roskilde, Denmark

Place, F, Kristjanson, P, Makauki, A, Kariuki, G, and Wangila, J (2004) Assessing the factors underlying differences in achievements of farmer groups. Methodological issues and empirical findings from the highlands of Central Kenya. *Agricultural Systems Vol. 82 pp. 157 – 272*

Ramanathan, A (2007) Financial Inclusion in India through SHG-Bank Linkage Programme and Other Finance Initiatives by NABARD, *Issues Paper presented at Financial Globalization Conference 22-23 Nov, 2007, India.*

Republic of Kenya (2009) Draft Policy on Community Development. Nairobi. Ministry of Gender, Children and Social Development.

Sharma, R & Chakra, V (2012) Potential of Self Help Groups as an entrepreneur: A case study from Uttar Dinajpur District of West Bengal. *Journal of Social Science, Vol. 30, pp. 83 – 87.*

Shelke, R. (2009) Self Help Groups, a key to technology dissemination. Mittal publication.

Survey Management Analysis and Reporting Tool - SMART (2012), Report on integrated health and nutrition survey in larger Meru North County. Final Report. International Medical Corps

Smith**,** A**. (**1937)**.** An Inquiry into the Nature and Causes of the Wealth of Nations. New York: Random House.

Smith, L & Karuga S. (2004) Agriculture in Kenya: What shapes the policy environment? report to Department for international Development, Oxford Policy Management.

Society for International Development (2010) Kenya's Vision 2030: Kenya's Vision 2030: An Audit from an Income and Gender Inequalities Perspective. Society for International Development Regional Office for Eastern Africa

Stevenson, L., and St-Onge, A. (2005). Support for Growth-Oriented Women Enterprises in Kenya.

Suguna, B. (2006) Empowerment of Rural Women through Self Help Groups. Discovery Publishing House.

The Gender Data Sheet (2008), Ministry of Gender, Children and Social Development. Republic of Kenya.

The United Nations (2013) The Millenium Development Goals Report. New York, 2013.

Tyler, T. (2005). Managing conflicts of interest within organizations: Does activating social values change the impact of self-interest on behavior? *In D. A. Moore, D. M. Cain, G. Loewenstein, & M. H. Bazerman (Eds.), Conflicts of interest: Challenges and solutions in business, law, medicine, and public policy pp. 13–35*. New York: Cambridge University Press.

UNDP (2009) Human Development Report – Overcoming barriers: Human mobility and development. United Nations

Vetrivel, S. & Mohanasundari, M (2011) Self Help Groups: Women Empowerment and Social Security in Tamil Nadu. *Journal of Advances in Management, Vol. 4 pp. 55- 59*

Wanjohi, P (2012) Influence of vocational training in initiation of entrepreneurial projects by trained women; a case of women empowerment project in Kilifi district available at http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/7116. A Research Project Report, University of Nairobi.

World Bank (2008) World Development Indicators database. World Bank, Washington DC

Yin, R (2009) Case Study Research: Design and Methods: Sage Publications, London.

Yunus, M (1989) "Grameen Bank: Organization and Operation" Intermediate Technology Publications.

APPENDICES

Appendix 1: Letter of transmittal

Melchizedek Ouma Makora
P.O. Box 47633-00100
Nairobi. Kenya

22nd April 2014

The Chairlady,
MCK DCC Management board
P.O. Box 749, 60600
MAUA,

Dear Madam,

Re: Permission to collect data from the self – help group members at Micii Mikuru Location

I am writing to request for permission to collect data from the self – help group members based at Micii Mikuru Self – Help Group approach project site.

I am a student at the University of Nairobi pursuing a Masters of Arts degree in Project Planning and Management. In order to successfully complete this course, I am required to carry out research and submit a report of the same. My research topic is: **The influence of self-help groups operations on the level of income generation by members: a case of Micii Mikuru location in Tigania East Sub County.** The data collected for this study will be treated with utmost confidentiality and will be used for academic purposes only.

The findings of this study will eventually be shared with your organization upon completion of the research. I have planned to commence data collection on 21st April 2014.

Thanking you in advance for your support

Yours Faithfully,

Melchizedek Ouma Makora

Appendix 2: **Questionnaire**

I am a post graduate student at the School of Continuing and Distance Education, University of Nairobi. I am carrying out a study on the influence of self-help groups operations on level of income generation by members: A case of Micii Mikuru location in Tigania East Sub County. Thank you for finding time to participate in this study. Do not write your name anywhere on this paper. The information that you will give will be treated with utmost confidentiality and will be used for academic purposes only. Fill in your responses in the **SPACES PROVIDED** for each question or by **TICKING INSIDE** the appropriate box.

SECTION A: BACKGROUND INFORMATION

1. What is the name of your group?_____

2. When did you join this group? _____

3. When was this group formed?_____

4. Is the group registered with the government? YES ☐ NO ☐

5. How many members are you in the group? _____

6. What is your gender? Male ☐ Female ☐

7. What is your level of your education? Primary ☐ Secondary ☐ Tertiary ☐

8. In which village is the group located? _____

9. How many times does your group meet per month?_____

10. What do you do during the meeting(s)?_____

_____

_____

_____

_____

_____

_____

SECTION B: INFORMATION ABOUT TRAINING ON BUSINESS SKILLS

11. Has your group been trained on business skills since its formation? YES ☐ NO ☐

If YES, did the training cover any of the following skills?

A. Business startup skills, YES ☐ NO ☐

B. Business management skills, YES ☐ NO ☐

C. Financial management skills, YES ☐ NO ☐

D. Other areas covered _____

_____

_____

12. What are/were the method(s) of training used for training your group?

A. Seminar/workshop method: Common ☐ Very common ☐

B. Onsite training by a community facilitator and project officer: Common ☐ Very common ☐

C. Onsite training by a group member: Common ☐ Very Common ☐

13**.** Has your group received training from any of the following?

A. Government of Kenya agency YES ☐ NO ☐ (If YES), Frequency_____

B. Microfinance Institution YES ☐ NO ☐ (If YES), Frequency_____

C. Nongovernmental organization YES ☐ NO ☐ (If YES), Frequency_____

D. Other sources _____

_____

14**.** If the answer is yes for any or all the options in question 3, please briefly outline the subject(s) covered by the training(s): _____

_____

_____

_____

SECTION C: INFORMATION ABOUT CREDIT ACCESS

15**.** Have you received credit from your group since its formation? YES ☐ NO ☐

16. If YES, how many times have you borrowed money from your group?

A. 1 – 5 times ☐

B. 6 – 10 times ☐

C. 10 – 15 times ☐

D. Any other _____

17. What are/were the reasons for borrowing money from the group?

A. For domestic use ☐ Frequency _____

B. For starting a business ☐ Frequency _____

C. For supporting an existing business ☐ Frequency _____

D. All of the above i.e. A, B, and C ☐

E. Other reasons for borrowing_____

_____

_____

18**.** What is the highest amount of loan you have borrowed from the group?

A. KShs 5000 – 10,000 ☐

B. KShs 11,000 – 15,000 ☐

C. KShs. 16,000 – 20,000 ☐

D. KShs 21,000 – 25,000 ☐

E. KShs 26,000 – 30,000 ☐

F. Any other amount _____

19. What is/ was the repayment period? 1 month ☐ 2 months ☐ 3months ☐

Any other period _____

_____

20. Have you ever failed to repay your loan within the stipulated period? YES ☐ NO ☐

21. If the answer is YES in number 20 above, what were the reasons?_____

_____

_____

_____

22. Have you ever asked for credit from your group and denied? YES ☐ NO ☐

Frequency _____

23. If the answer is YES to question number 20 above, please briefly explained how this affected your plans. _____

_____

_____

24. Apart from your group, have you borrowed money from any of the following sources to finance your business/project since you became a member of your self – help group?

A. Banks ☐

B. Savings and Credit Co-operative Society ☐

C. Micro Finance Institutions ☐

D. Friends and Relatives ☐

E. Any other source_____

SECTION D: INFORMATION ON INCOME GENERATING PROJECTS

25**.** Did you own a business/project before joining your self-help group? YES ☐ NO ☐

26. If your answer to question 25 above is YES, please briefly describe your business/project____

_____

_____

27**.** Is the business/project still running? YES ☐ NO ☐

28**.** Did you start a business/project after joining the self – help group? YE ☐ NO ☐

29**.** If your answer to question 27 above is YES, when did you start the business/project?

A. Year 2009 ☐

B. Year 2010 ☐

C. Year 2011 ☐

D. Year 2012 ☐

30**.** If your answer to question 27 above is YES, what motivated you to start your business/project?

A. Training on business skills offered to the group ☐

B. Learning from the success of fellow group members ☐

C. Easy access to credit from the group ☐

D. Any other reason_____

_____

_____

_____

SECTION E: INFORMATION ON CONFLICT RESOLUTION

31. Do you experience conflicts in your group? YES ☐ NO ☐

32. If the answer is YES in number 31 above, what are the common causes of conflicts in your group?

	STRONGLY AGREE	AGREE	DISAGREE
A. Lack of transparency	☐	☐	☐
B. Inability to get a loan	☐	☐	☐
C. Breaking of rules/regulations	☐	☐	☐
D. Disagreement with moderator	☐	☐	☐

E. Other causes of disagreements _____

_____

_____

33. What are the methods used for solving conflicts in your group?

A. Dialogue ☐

B. Mediation ☐

C. Punishment ☐

D. What are other methods of conflict resolution used by your group? _____

_____

_____

34. Has your group lost members because of unresolved conflicts? YES ☐ NO ☐

SECTION F: LEVEL OF INCOME GENERATION BY GROUP MEMBERS

35. How did you earn your living before joining the self-help group?

A. Retail business ☐

B. Casual labour ☐

C. Selling my farm produce ☐

D. How much income do you earn per day? KShs _____

36**.** Did your source of income change after joining the self-help group? YES ☐ NO ☐

How much income do you earn per day after you joined the self – help group KShs _____

37**.** If your answer is YES in number **36 above**, how did this change occur?

A. I Borrowed money to support my business/ project ☐

B. I Borrowed money to start a business/project ☐

C. I Borrowed money to support family business ☐

D. I have not owned any business/ project since I joined the self-help group ☐

38. After how long did this change occur? After

A. One year in the group ☐

B. Two years in the group ☐

C. Three years in the group ☐

D. Four years in the group ☐ E. NO change has occurred ☐

39. If you borrowed money to support an income generating project or a business, how has this improved your business/project?

A. Increased profit. ☐

B. Increased stock but profit has not changed. ☐

C. Changed business/project location. The business/project is growing. ☐

D. The business/project collapsed. ☐

E. I have never borrowed money to support a business or project. ☐

40**.** If you borrowed money to start an income generating project/business, what progress have you made?

A. The project/ business is growing but I am yet to start earning income from it. ☐

B. The project/business has grown and this has increased my income ☐

C. I have never borrowed money to start an income generating project or business ☐

41 If your income has increased due to improved project/business or a new project/business, how has this changed your life?_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

THANK YOU VERY MUCH

Appendix 3: **Interview guide for key informant**

I am a post graduate student at the School of Continuing and Distance Education, University of Nairobi. I am carrying out a study on the influence of self-help groups operations on level of income generation by members: A case of Micii Mikuru location in Tigania East Sub County. Thank you for finding time to participate in this study. The information that you will give will be treated with utmost confidentiality and will be used for academic purposes only. Fill in your responses in the **SPACES PROVIDED** for each question.

1. Date of interview: _____

2. Name of respondent: _____

3. Organization: _____

4. Designation: _____

5. What was the total number of self – help groups formed since May 2009 to May 2012?

_____

6. What was the total number of members in all the self – help groups formed in this period?

_____

7. What was the average amount of saving per member during this period?

_____

8. What were the main sources of savings?

_____

9. Have these sources changed? YES ☐ NO ☐

10. If YES, please describe the changes_____

_____

_____

11. What is total amount of capital in all the self – help groups formed between May 2009 and May 2012? _____

12. In addition to member's savings, what are the other sources of capital for these self – help groups? _____

_____

_____

13. What is the total amount of money loaned out to all the self – help groups from May 2009 to May 2012? _____

14. What is the total number of loans?_____

_____

15. What was the savings to loaning ratio for this self – help groups _____

16. What are the main reasons self – help group members give for borrowing money?_____

_____

_____

17. Among the groups formed from May 2009 to May 2012, how many self – help groups have income generating projects? _____

18. What was the loan repayment default in this period? (May 2009 to May 2012) _____

19. What are the main causes of conflicts in the self – help groups? _____

_____

20. How are these conflicts resolved?_____

_____

THANK YOU VERY MUCH

Appendix 4: Krejcie and Morgan sample size table.

Table for Determining Sample Size for a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970

Appendix 5: The Chi square formula used in the study

Chi Square value $X^2 = \sum\left\{\frac{(o-e)^2}{e}\right\}$

Where o is the observed frequency in each category

e - is the expected frequency in the corresponding category

$\sum$ is sum of

DF is the "degrees of freedom" (n-1)

Appendix 6: Permission to collect data

MCK Meru North Disability Community Centre, P.O.Box 749, Maua, Meru North; phone: (064) 21059; e-mail: info@dccmckmaua.org

15.5.2014

Dear Mr. Ouma,

RE: YOUR REQUEST FOR PERMISION TO COLLECT DATA

We are receipt of your letter requesting for permission to collect data.

Thats Okay, you may go ahead and collect the information, however make sure you share the findings with us.

Kind Regards,

Oliver Kirimi
PROGRAM DIRECTOR
METHODIST CHURCH IN KENYA
DISABILITY COMMUNITY CENTRE (DCC)
P.O. BOX 749-60600
MAUA, KENYA
TEL. (254) 706685034