

Microfinance Interventions and Empowerment of Women Entrepreneurs Rural Constituencies in Kenya

Maru, Loice¹ and Chemjor, Razia²

1. Department of Marketing and Management Science, School of Business and Economics, Moi University, Bazaar Plaza, 4th Floor Biashara Street, P.O. Box 63056, post code 00200, Nairobi, Kenya, Email: lcmaru@yahoo.com
2. Researcher and Alumnus, Master of Business Finance, Department of Accounting and Finance, School of Business and Economics, Moi University, Bazaar Plaza, 4th Floor Biashara Street, P.O. Box 63056, post code 00200, Nairobi, Kenya, Email: rchemjor@gmail.com

Abstract

Microfinance Institutions (MFIs) provide its members with financial and social intermediation services to help improve their businesses. Despite a multitude of studies devoted to the topic, the effect of microfinance intervention on the empowerment of women entrepreneurs in rural constituencies remains largely unexplored in Kenya. This paper seeks to bridge the gap by establishing the effect of microfinance interventions on empowerment of women entrepreneurs in Mogotio Constituency in Kenya. It focused on three specific objectives to: determine the effect of micro credit on empowerment of women entrepreneurs, examine the effect of micro savings on empowerment of women entrepreneurs and, finally establish the effect of training on empowerment of women entrepreneurs. The paper adopts a causal survey research design through which 80 members of microfinance institutions (MFIs) in the study area were selected and data collected from them using a structured questionnaire. Linear multiple regression was used to determine the MFI intervention constructs that affected micro finance intervention. SPSS was used to generate the frequency distribution. Results show that except for microfinance saving, other MFI interventions such as microfinance credit and microfinance training significantly and positively affect empowerment of women entrepreneurs. The study makes policy recommendations to guide development of microfinance interventions that are beneficial to the clients and other stakeholders of the MFI institutions.

Keyword: Microfinance Interventions, Empowerment of Women Entrepreneurs; Constituencies in Kenya.

1. Introduction

1.1 Background of the Study

Women play a crucial role in the economic development of their families and communities but certain obstacles such as poverty, unemployment, low household income and societal discriminations mostly in developing countries have hindered their effective performance of that role. Therefore, most of them embark on entrepreneurial activities to support their families. Studies have shown that women entrepreneurship could be an effective strategy for poverty reduction in a country; since women are the worst hit in such situation (Ekpe *et.al.*, 2010). Empowerment of women is crucial for the emancipation of poverty and meaningful participation of entrepreneurship development. Women continue to remain under represented and their success often remains invisible and unacknowledged. It is assumed that increasing women's access to micro finance will enable women to make a greater contribution to household income and this, together with other interventions to increase household well being, translate into improved well being for women and ability to bring about wider changes in gender inequality (Biswas, 2008).

Access to financial services and the resultant transfer of financial resources to poor women over time have led to women becoming more confident and assertive (CGAP 2011). Access to finance enables poor women to become economic agents of change by increasing their income and productivity, access to markets and information, and decision-making power. However, it has been noted that women entrepreneurs, especially in developing countries, do not have easy access to microfinance support for their entrepreneurial activity and as such have low business performance than their men counterparts. Since their rate of their participation in the informal sector of the economy is higher than that of men microfinance factors could have positive effect on enterprise performance (Ekpe *et.al.*, 2010).

Micro finance institutions target women with the explicit goal of empowering them. Empowerment of women as defined by (Kabeer, 1999) is the process by which those who have been denied the ability to make strategic life choices acquire such ability. In actual effect these micro finance intervene and provide resources which include access to and future claims to both material and social resources. They also provide agency such as the process of decision making, negotiations, deception and manipulation; and achievement that are outcomes of well-being. Mogotio constituency is located in the Koibatek district of the Rift Valley province in Kenya. According to the Population Census report (2010), it has a population of 60,959 people. The constituency suffers from high

unemployment rate just like many parts of Kenya. Opportunities to find salaried employment are few, especially for illiterate or semi illiterate rural women. Therefore, women often seek means of livelihood from the informal sector of the economy. But, in this sector, these women form a majority of clients of micro finance institutions owing to the gender specific constraints that they face and the institutions attempt to provide interventions. Most significant among these constraints is lack of access to credit which is often seen to be a major obstacle to the improvement of women's economic situation (Simojoki, 2003).

Based on the foregoing background, it is evident that in most rural constituencies in Kenya, women constitute a significant number of entrepreneurs and their main challenge is lack of funds. Micro finance institutions have come up to provide interventions that enable women to overcome some of the obstacles such as access to micro credit to fund their new ventures and or expand existing ones. However, generally, the concept of women empowerment has not been effectively addressed as the women entrepreneurs continue to remain under represented and their success continue to remain invisible and unacknowledged. It is expected that increased women access to micro finance would increase their income which would in turn translate to improved well being and a wider change as well as enhance gender equality (Basu, 2006). Management skills and lack of occupational experience in related businesses for many women entrepreneurs has been indicated as a constraint to growth. Kibas (2006) identified lack of opportunities for management training, financial management, marketing and people management, to be limitations faced by most women entrepreneurs. This study sought to establish the effect of interventions provided by micro finance institutions on empowerment of women entrepreneurs in Mogotio constituency by examining changes in financial growth, social status of the women and empowerment effects such as increase in profits, income, increased asset ownership, employment opportunities, food security, savings, housing ownership, fund availability and consumption.

1.2 Objectives and Hypotheses of the Study

The study sought to achieve the following specific objectives:

- (a) To determine the effect of micro credit on empowerment of women entrepreneurs.
- (b) To examine the effect of micro savings on empowerment of women entrepreneurs.
- (c) To establish the effect of training on empowerment of women entrepreneurs.

Further the following three hypotheses were tested:

- Ho₁ There is no significant effect of micro credit on empowerment of women entrepreneurs.
- Ho₂: There is no significant effect of micro savings on empowerment of women entrepreneurs.
- Ho₃: There is no significant effect of micro finance training on empowerment of women entrepreneurs.

1.3 Significance of the Study

This paper adds to the body of knowledge on the contributions of micro finance institutions on empowerment of women in rural constituency in Kenya as reflected by any change in their living standards at individual, household or enterprise level. The results provide a framework for strategic initiatives and innovative ideas that will lead to improvement of microfinance institution's positive impact on the lives of their clientele who are mostly women. The results are also invaluable to the government for determination and establishment of a regulatory legal framework for the microfinance institutions' in Kenya, which will ensure the realisation of the institutions' main objective of poverty eradication and best ways to address the gender specific issues. Furthermore, the paper unveils the underlying factors that lead to economic non-sustainability of clients who already have received micro finance services yet a significant impact is not realised.

2. Literature Review

2.1 The Concepts of Empowerment

Bennett (2002) describes empowerment as the enhancement of assets and capabilities of diverse individuals and groups to engage influence and hold accountable the institutions which affect them. The conception of empowerment is based on the notion of power; empowerment by definition means "enabling", "giving, receiving or obtaining power" or "giving the official or legal authority or the freedom to do something". In addition, empowerment is defined as the equalisation of power and the more efficient use of resources (Claassens, 1993). Power can be defined as control over material assets, intellectual resources and ideology. Material assets can be physical, human or financial; intellectual resources are knowledge, information and ideas; and control over ideology signifying the ability to generate, propagate, sustain and institutionalise specific sets of beliefs, values, attitudes and behaviour (Fernando, 1997). (Batliwala, 1994:129). According to UNIFEM (2000), the important elements of women's empowerment include gaining the ability to generate choices and exercise bargaining power, developing a sense of self-worth, a belief in one's ability to secure desired changes, and the right to control one's life.

Empowerment is about change, choice, and power. It is a process of change by which individuals or groups with

little or no power gain the power and ability to make choices that affect their lives. The structures of power - that has it, what its sources are, and how it is exercised - directly affects the choices that women are able to make in their lives (Mayoux, 2001). The original definition of the term “women’s empowerment”, the so called transformative approach, was meant to give a framework to and facilitate the struggle for social justice and women’s equality through a transformation of economic, social and political structures on the national and international levels (Bisnath *et.al.*, 1999). Empowerment *per se* is not a measurable variable, and there is disagreement whether it can be measured or not. Indicators used for its measurement such as mobility, economic security, the ability to make purchases, involvement in major household decisions, relative freedom from domination within the family, political and legal awareness, and involvement in political campaigning and protests (Ackerly, 1995; Hashemi *et al.*, 1996).

(Basu, 2006) has indicated that empowerment can be categorised into three types, namely:

Economic empowerment: women's access to savings and credit gives them a greater economic role in decision-making through their decision about savings and credit. When women control decisions regarding credit and savings, they will optimize their own and the household's welfare (Mayoux, 2000). The investment in women's economic activities will improve employment opportunities for women and thus have a 'trickle down and out' effect.

Increased well-being: access to savings and credit facilities and women's decision about what is being done with savings and credit strengthens women's say in economic decisions of the household. This enables women to increase expenditure on the well-being of themselves and their children.

Social and political empowerment: a combination of women's increased economic activity and control over income resulting from access to micro-finance with improved women's skills, mobility, access to knowledge and support networks. Status within the community is also enhanced. These changes are reinforced by group formation, leading to wider movements for social and political change (Biswas, 2008).

Women's empowerment needs occur along the following dimensions: economic, socio-cultural, familial/interpersonal, legal, political, and psychological. However, these dimensions are very broad in scope, and within each dimension, there is a range of sub domains within which women may be empowered (Mayoux, 2000).

2.2 Women Entrepreneurs

Women entrepreneurs play a very crucial role in the economic development of their families and their countries at large. Despite these, studies have shown that women entrepreneurs have low business performance compared to their male counterparts yet the rate of women participation in the informal sector of the economy is higher than males (Akanji, 2006). This situation can be attributed to factors that normally affect entrepreneurial performance. These factors include lack of credit, saving, education or training, and social capital (Shane, 2003). Some of the challenges facing women entrepreneurs include acquiring appropriate training (Walker *et.al.*, 1999), obtaining capital (Buttner *et.al.*, 1997; Cater, 2000) and gender discrimination (Kleiman, 1998). Nelson, (1997) asserts that women approach the entrepreneurial experience with disadvantages rooted to education experience and therefore they often lack the knowledge of skills required to develop their business. Lack of capital to start or run business has led women entrepreneurs to request for credits from micro-finance institutions (Ibru, 2009; Kuzilwa, 2005). This is due to poverty, unemployment, low household and business income and inability to save (May, 2009; Otero, 1999; Porter *et.al.*, 2005; Roomi *et.al.*, 2008).

Studies have also shown that women entrepreneurs, mostly in developing countries, lack the ability to save yet savings are needed to protect income, act as a security for loan and could be re-invested in the business (Akanji, 2006). Savings as a micro-finance factor enable people with few assets to save, since they could make weekly savings as well as contribute to group savings, and such savings are mobilized by the micro-finance institutions for further lending to other clients (Mkpado *et.al.*, 2007).

Women entrepreneurs, especially in developing countries also lack training (IFC, 2007) and entrepreneurial process which is a vital source of developing human capital. Training also plays a crucial role in providing learning opportunity for individuals to improve their skills, attitudes and abilities (Brana, 2008). In most literatures, the effect of training on women entrepreneurs’ performance, especially in developing countries, has not been adequately addressed. Studies supports the fact that majority of micro-finance institutions’ clients do not have specialized skills, and so cannot make good use of micro-finance factors (Kamani, 2007), hence they need training. Salaried employment provides prior business experience that is vital for enterprise success, yet women entrepreneurs mostly in developing countries lack this (Brana, 2008). This further strengthens the need for training as a micro-finance factor for the women entrepreneurs.

2.3 MicroFinance Interventions

Microfinance has been defined as the provision of financial services to low-income clients or solidarity lending groups including consumers and the self employed, who traditionally lack access to banking and related services (Ledgerwood, 2010). Microfinance involves offering of financial services for people barred from the time-

honoured system because they cannot offer bank guarantees (Eufin, 2009). Financial services generally include savings and credit; however, some microfinance organisations also provide training, insurance and payment services (Ledgerwood, 2010).

2.4 *Relationship between Microfinance Interventions and Empowerment of Women Entrepreneurs*

The basic theory is that microfinance empowers women by putting capital in their hands and allowing them to earn an independent income and contribute financially to their households and communities. This economic empowerment is expected to generate increased self-esteem, respect, and other forms of empowerment for women beneficiaries. Involvement in successful income-generating activities should translate into greater control and empowerment. Closer examination shows, however, that this equation may not always hold true and that complacency in these assumptions can lead MFIs to overlook both opportunities to empower women more profoundly and failures in empowerment (Cheston and Kuhn, 2006).

The objective of micro-finance is to empower women economically and socially. Providing access to micro-finance for women is considered to be a precondition of poverty alleviation and women's empowerment (Mayoux, 1997). Loans enable women to invest in and expand their business, and in consequence they are able to employ. They are also introduced to the banking system and their productive activity is integrated into the formal financial system. Moreover, loans engage entrepreneurs in making major decisions, such as loan approvals and in improving the products and services produced (Charitoneko *et al.*, 1998). It is argued that micro-finance empowers women by strengthening their economic role, increasing their income and ability to contribute to the family income, increasing their employment and productivity, helping them to establish their identity independent of the family, and giving them experience and self-confidence in the public sphere (Sinha, 1998).

2.4.1 *Micro Credit and Empowerment of Women Entrepreneurs*

Studies have indicated that micro finance brings about increased income due to accessibility of micro credit and training on how to manage it, increased assets which are bought due to availability of funds and also increased welfare in aspects such as food security, housing and health (Mayoux, 2001). Inaccessibility to credit and lack of training has been cited by K-REP (1995) as the major setbacks to women venturing into business. Other research studies report limited purchasing powers, particularly in the rural areas, lack of management skills, physical infrastructure and seed capital (Alila, 1993). Addressing the need for credit is thought to be an effective development tool, but no one is arguing that indebtedness is an effective development tool. Indebtedness is not desirable for entrepreneurs; it creates some liabilities, such as regular repayments and interest. It also makes great demands on business (Ackerly, 1995:56). Women's access to credit and their contribution to family expenses are both seen to be necessary, but not sufficient, for achieving empowerment. These two factors are also mutually reinforcing. (Hashemi *et al.*, 1996 in Kabeer, 2001). Thus it is hypothesized in this study that:

Ho₁: There is no significant effect of micro credit on the empowerment of women entrepreneurs

2.4.2 *Micro Savings and Empowerment of Women Entrepreneurs*

The opportunity to save rather than access to credit would lever the poor out of poverty (Buckley, 1997; Robinson, 1996). Moreover, some of the poor people are willing only to save, not to borrow. The ability and opportunities to save also serve as protection against illness and occasional unemployment (Rhyne and Otero, 1992:1562). It should also be noted that the non-material advantages of saving for low-income micro-entrepreneurs include among others the fact that saving promotes the borrowers' own responsibility and self-help and familiarises them with prompt repayment (Gulli, 1998:66-67). The saving requirement is also testing members' ability and willingness to repay their loans. Näslund *et al.* (1993) show that women who have contributed more to their own savings have a higher repayment level. A possible reason is that those women are already accustomed to accumulating savings or contributing regularly. From the above discussion, it is hypothesized that:

Ho₂: There is no significant effect of micro savings on empowerment of women entrepreneurs.

2.4.3 *Training and Empowerment of Women Entrepreneurs*

Women operating where large proportions of the population live in absolute poverty, face several major constraints. These include their inability to judge the profitability of their operations due to a lack of basic accounting skills, insufficient technical and business management skills as well as socio-cultural constraints (UNIDO, 2003). Taking cognizance of the peculiar situations of most women in developing countries in terms of poverty, low educational levels and other societal discriminations (Porter *et al.*, 2005; Roomi *et al.*, 2008); training is a very important micro-finance factor for women entrepreneurs as it would provide the skills and experience needed for business (Akanji, 2006, Cheston *et al.*, 2002; Kuzilwa, 2005). Women who manage to start business have been cited as having problems at the growth stages such as inadequate working capital, poor technical and managerial skills, lack of marketing techniques, lack of work sites and security and basic infrastructure, hostile business environments, poor project and planning skills and lack of information on the available assistance programmes (Alila, 1993). This led to development of the NGOs training intervention

programmes. However, a gap still exists in empirical literature of effect such programmes have had on the performance of women in enterprises. Some studies confirm that skill training and tertiary education have positive effect on enterprise performance (Akanji, 2006; Kuzilwa, 2005). Therefore it can be hypothesized that:

Ho₃: There is no significant effect of micro finance training on empowerment of women entrepreneurs.

From foregoing review of literature, it is evident that a lot of research on microfinance has concentrated on a broader nationwide perspective, with little or no attention to the rural constituency contexts. Also, although some studies have been done on the resultant of effect of micro finance intervention from a general perspective, no study has attempted to establish the extent of empowerment that arises from these interventions. Hence, this study sought to fill two research gaps.

2.5 Conceptual Framework

In conceptualising this study, two variables were taken into consideration: microfinance interventions (constructs) which include micro credit, micro savings and training; and empowerment of women entrepreneurs representing the independent and the dependent variables respectively (Figure 1).

3. Research Methodology

3.1 Research Design

The study was “*cause-and-effect*” in nature and thus an explanatory cross-sectional survey research design was used which aimed at establishing the effect of microfinance intervention on empowerment of women entrepreneurs. A deductive approach and quantitative measurement of variables was used to describe measure or explain a phenomenon and also to interpret and understand a phenomenon (Patel and Tebelius, 1987). This corresponded with the aim of this study to determine the effect of microfinance intervention on empowerment of women entrepreneurs.

3.2 Target Population

The population of interest consisted of all women entrepreneurs who were members of microfinance institutions within Mogotio constituency, Koibatek District in Kenya. The women who were considered as entrepreneurs, were those who owned and ran business and had a physical presence (shop, workshop, house from where the business operates) with contact details which enabled the researcher to trace them and collect the questionnaires.

3.3 Sampling Design

The study adopted multiple sampling techniques. First, the study took a census of the four microfinance institution (MFI) who participate actively in the constituency. Secondly, stratified random sampling design was used to identify and pick subjects who are clients for each MFI institution to allow for equal representation of the institutions. Quota sampling was then used to select two (2) clients of each MFI from each of the 10 Wards in the constituency, using simple random sampling based on the Clients’ lists as sampling frames.

Table 1

3.4 Data Collection

Diverse types of data were collected and triangulation of methods of data collection was employed at various stages of the study. Both primary and secondary data were used. Primary data was collected using the survey method in order to solicit opinions of the female microfinance clients and enable the capturing of attitudes, knowledge and perceptions. Secondary data was collected from various sources including institution records, archives and libraries to build up the literature review.

A structured questionnaire was used to collect primary data from the women entrepreneurs while discussions with the officials of MFIs were conducted and data captured using an interview guide. Questionnaires were administered by the researchers to the respondents during the monthly visits carried out by the credit officers.

3.5 Validity and Reliability of Research Instruments

To achieve reliability, the database was verified for accuracy and completeness of all the entries. Validity was checked by ensuring a relevant literature was reviewed to understand and correctly measure the concepts under study. In order to ensure that the questions in the questionnaire reliably measured the same latent variable (feeling of safety), the Cronbach's alpha was run using the Statistical Package of Social Science and values ≥ 0.7 were considered acceptable (Hair, *et al.*, 2005).

3.6 Data Analysis and Presentation

The data collected was analyzed by using both descriptive and inferential analysis. Descriptive statistics such as measures of central tendency and percentages were used. The mean was calculated and was preferred because it took into account all (each) score in the distribution therefore the effect of very low or very high was reflected in the mean and was stable. This analysis allowed distinct comparisons of outcomes and conclusions to be made from the findings.

Inferential statistics such as Pearson Product Moment Correlation and Multiple Linear Regression analysis were used. This was achieved through the use of Statistical Package for Social Scientists (SPSS) and Microsoft Excel. The analysis sought to test the hypothesis of the study and explain the associations and dependencies between

the variables. The output was presented in terms of tables. Since the objective of this study was to establish causal relationship between the dependent and the independent variables in the model, the Multiple linear form of the regression was run. Ordinary least square (OLS) technique was used to estimate the parameters of the model. This was because with the normality assumption for e , the OLS estimators were normally distributed and they were said to be best unbiased estimators (BUE) (Gujarati, 1995). The regression analyses was run stepwise using the SPSS package so as to determine the order of importance of the explanatory variables in explaining the variations observed in the dependent variable. The model was specified as follows:

$$Y = \beta_0 + \beta_1 \cdot X_1 + \beta_2 \cdot X_2 + \beta_3 \cdot X_3 + \varepsilon$$

Where: Y = Empowerment of women entrepreneurs; X_1 = Micro credit; X_2 = Micro savings; X_3 = Microfinance

Training; β_0 = Intercept term Empowerment of women entrepreneurs; β_1 = coefficient of Micro credit

β_2 = coefficient of micro savings; β_3 = coefficient of microfinance training.

4. Results

4.1 Descriptive Findings of Micro-Finance Interventions and Empowerment of Women Entrepreneurs

It was deduced from the findings that loan eligibility requirement is easily met as shown by an agreement by 51 (64%) of the respondent. Loan application procedure is also easy as shown from the response rate where 50 (63%) agreed. The design of loan product is deemed to be appropriate since 35 (44%) of the respondents agreed to the statement. However on average, the women entrepreneurs neither agreed nor disagreed as to whether the interest rates charged by the micro finance institutions were appropriate. Generally, the mean score to items measuring the micro credit intervention was more than average (Mean = 3.6097; Standard Deviation = .67180) (Table 2) meaning that the women were more than indifferent in their feelings and tended towards affirming to every aspect.

On savings, the results show that (45, 56%) of the women agreed that there is voluntary saving in the institutions at affordable rates (80%). However, some of the women find the procedure of withdrawing the savings is difficult (47, 49%), also for depositing the institutions are within their proximity (50, 63%). It was generally felt by the women that the institutions observe confidentiality (58, 73%). Results also show that micro savings has very little effect on empowerment of women entrepreneurs. This is because on average, the women felt that the design of the micro saving product was not appropriate, that the procedure for withdrawal of savings was too difficult and, and that the time taken to effect the withdrawal was too. In fact, the mean score to items measuring the microfinance saving was lower than the average (Mean = 3.3875; Standard Deviation = .64836) (Table 2) meaning that the women were indifferent in their feelings and tended towards disaffirming appropriateness of the intervention.

On microfinance training, 61% of the respondents agreed that there is training in the microfinance institutions, while 64% found the training to be appropriate and 85% of them found the venue for training convenient. The topics taught were found to be relevant (68%). This implies that the women are comfortable with the type of training they get from the microfinance institutions and hence is likely to empowerment them. Generally, the mean score to items measuring the micro credit intervention was more than average (Mean = 3.6542 Standard Deviation = .71343) (Table 2) meaning that the women were more than indifferent in their feelings and tended towards affirming to every aspect.

Empowerment of women entrepreneurs was measured by changes in profit, income, ownership of assets, employment opportunities, food security, increased savings, housing ownership, fund availability, increased consumption and decision making power of the women entrepreneurs. Apart from ownership of housing, the mean response of the rest of the indicators tended toward an agreement (Table 2).

Table 2

4.2 Association between Micro-Finance Intervention Constructs and Women Empowerment

The ultimate goal of this analysis was to establish relations between variables. Correlation coefficients measure the extent of these relations. Each such coefficient must lie between -1 and +1, inclusive. A positive coefficient indicates a positive association whereas a negative coefficient indicates a negative association between the variables. Since all r-values are positive, then the relationships of the independent variables with the dependent variable are positive. Results (Table 3) indicate that there is a moderate positive correlation between women empowerment, micro-credit and a strong positive correlation with microfinance training. These correlation coefficients were found to be statistically significant with p-values ($p=0.000<0.05$) at 95% confidence level. Similarly, the correlation between micro-credit, micro-savings and micro-finance training exhibited a moderately weak positive relationships. Their correlation coefficients p-values of $p=0.000<0.05$ and $p=0.001<0.05$ respectively implying that they are statistically significant at the 95% confidence level. Micro-savings and micro-finance training exhibited a moderate and positive correlation. This relationship was found to

be statistically significant at the 95% confidence interval as it had a p-value of $p=0.000<0.05$.

4.3 Relationship between Micro-Finance Interventions and Empowerment of Women Entrepreneurs

Linear Multiple Regression analysis was performed to establish the effect of Micro-Finance Constructs on Empowerment of women entrepreneurs. Multicollinearity, a situation where more than two independent variables are highly correlated and is known to have damaging effect on multiple regression was measured using Variable Inflation Factor (VIF). Large values, usually 10.0 or more, suggest collinearity or multicollinearity. Results (Table 4) however, show that the three predictors of the empowerment of women entrepreneurs, did not suffer from this problem.

From the results of the regression analysis (Table 4), the following regression model is fitted.

$$Y = \frac{0.63}{(0.145)} + \frac{0.271X_1}{(0.007)} + \frac{0.031X_2}{(0.796)} + \frac{0.515X_3}{(0.000)} + 0.436$$

The model implies that all factors held constant, women entrepreneurial empowerment is 63.0%. Similarly, the change in women empowerment is 27.1% for each unit change in micro-credit; 3.1% for each unit change in micro-savings and 51.5% for each unit change in micro-finance training. The parameters of the dependent variables are positive implying that the direction of change is positive, that is as the independent variables increase, the dependent variable increases and vice versa. The p-values, in parenthesis, indicate that the constant, $p=0.145>0.05$ is not statistically significant at the 95% confidence level. Correspondingly, the coefficients' p-value for micro-savings, $p=0.796>0.05$ indicate that the result is not statistically significant at the 95% confidence level. On the contrary, micro-credit, $p=0.007<0.05$ and microfinance training, $p=0.000<0.05$ were found to be statistically significant at the 95% confidence level. The error term was found to be 0.436 implying that other variables not captured by the model influencing women empowerment is 43.6%.

The results imply that since the p value for micro-credit, $p=0.007<0.05$ which is less than the significance level, then the null hypothesis that there is no significant effect of micro credit on empowerment of women entrepreneurs is rejected. Thus the alternative hypothesis is accepted. Secondly, the p value for micro-savings, $p=0.796>0.05$ which is higher than the significance level, then the null hypothesis that there is no significant effect of micro savings on empowerment of women entrepreneurs is accepted. Finally, the p value for micro finance training, $p=0.000<0.05$ which is less than the significance level, then the null hypothesis that there is no significant effect of micro finance training on empowerment of women entrepreneurs is rejected. Thus the alternative hypothesis is accepted.

Table 4

4.2.1 Analysis of Variance

The purpose of analysis of variance was to test differences in means (for variables) for statistical significance. This is accomplished by analyzing the variance; that is, by partitioning the total variance into the component that is due to true random error and the components that are due to differences between means and testing for statistical significance to lead to a conclusion that the means (in the population) are different from each other or not. Results show that for this study, (Table 5) $p=0.000<0.05$, which implies that the means of the independent variables and the dependent variable are statistically different from each other at the 95% significance level.

Table 5

5. Conclusions and Implications

The design of the micro credit product is appropriate and it has empowered women entrepreneurs who are micro finance clients. This is because majority of the women find the loan eligibility requirement easy to meet. They also find loan application procedure as easy. The loan product design is also appropriate to them. This is in agreement with (Charitoneko *et al.*, 1998) who note that loans enable women to invest in and expand their business, and in consequence they are able to employ and that loans engage entrepreneurs in making major decisions, such as loan approvals and in improving the products and services produced. However, the design of the micro saving product is appropriate because the women entrepreneurs felt that the procedure for withdrawing the savings was difficult and took so long, so there should be a research on how to improve on this. The findings of this study differ from those of (Rhyne and Otero, 1992) who report that some of the poor people are willing only to save, not to borrow. This does not hold in the situation in Kenya as the women entrepreneurs found the design of micro savings was inappropriate. It can also be concluded that the women are comfortable with the type of training they get from the micro finance institutions. This is because a majority of them found the venue of training convenient and relevance of the topic taught. There should be a change in the frequency of training since majority of the women felt that it should be increased to enable them learn more. Just like the findings of (Akanji, 2006, Cheston *et al.*, 2002 and Kuzilwa, 2005) this study established that training is a very important micro-finance factor for women entrepreneurs as it would provide the skills and experience needed for business. In summary, the findings of this study are in line with (Mayoux, 2001) who suggests that micro finance institutions brings about increased income due to accessibility of micro credit and training on how to manage it,

increased assets which are bought due to availability of funds and also increased welfare in aspects such as food security, housing and health. Therefore, this study has brought to light the need to improve the design of micro savings in order to suit the needs of the women entrepreneurs.

6. Recommendations

Arising from the conclusions, the following recommendations are made:

- (a) The regulators of micro finance institutions should have a policy that will regulate the rate of interest charged as the women entrepreneurs felt that the interest rates were too high and hence some were reluctant to take loans.
- (b) Micro finance institutions should reduce the cost of training sessions or provide it as a complementary free service for the first year to all their clients in order to allow a larger number of women entrepreneurs to access training and hence get empowered.
- (c) The design of micro savings should be changed so that it can be aligned to the client's needs such that, withdrawal procedures should be made more easy and the time period for consequent withdrawals be reduced.
- (d) Micro finance institutions should embrace the latest technology in order to enable electronic transfer of funds. For example mobile banking will make it easier for clients who are in the interior parts of the region to deposit their savings. Also linking up with and utilizing the *Mpesa* innovation, as a success story by Safaricom mobile phone provider in Kenya would enable rural women entrepreneurs to access credit and savings facilities easily.
- (e) Micro finance institutions should come up with a product geared towards the improvement of the life and enterprises of women entrepreneurs specifically.

6.1 Suggestion for Further Research

This study could be further developed by including more variables as mediating, moderating and or intervening in the regression model with a larger sample size. The results of which should be compared with those of this study so as to establish the relationship between micro finance intervention and empowerment of women entrepreneurs using different micro finance intervention variables. Further, a study should be carried out in other constituencies since this involved Mogotio constituency only. This will establish more factors that are affecting the empowerment of women entrepreneurs in different constituencies of different setting such as rural versus urban based.

7.0 Limitations of the Study

This study assumed the definition of women entrepreneurs to incorporate women who participate in business activities from a known and traceable location. However, the measurement of personal characteristics that often define an entrepreneur was down played. Future studies may use this indicator as a mediating/moderating variable to see whether the results will be different.

References

- Acharya, M. & Lynn Bennett (1981). "Rural Women of Nepal: An Aggregate Analysis and Summary of 8 Village Studies." The Status of Women in Nepal. Volume II, Part 9: Field Studies. Centre for Economic Development and Administration. Kathmandu: Tribhuvan University.
- Ackerley, B. (1995). Testing the Tools of Development: Credit Programmes, Loan Involvement and Women's Empowerment. *World Development*, 26(3), 56-68.
- Ahmed Fehmeen (2010). 8 Micro Finance Lending Models.
- Akanji, O. O. (2006). Microfinance as a strategy for poverty reduction. *Central Bank of Nigeria Economic and Financial Review*, 39 (4).
- Alila, P.O. (1996). "Informed credit and Rural Enterprise Sector Development". In McCormick D. and Pedersen P. O. (1996) Flexibility and networking in an African context. Nairobi: Longhorn
- Batliwala, S. (1994). "The meaning of women's empowerment: New concepts from action. Pp.127-138 in Population Policies Reconsidered: Health, Empowerment and Rights. G. Sen, A. Germain and L.C. Chen, eds. Cambridge: Harvard University Press.
- Basu, J.P. (2006). Microfinance and Women Empowerment: An Empirical Study with special reference to West Bengal.
- Bennett, L. (2002). Using Empowerment and Social Inclusion for Pro-poor Growth: A Theory of Social Change. Working Draft of Background Paper for the Social Development Strategy Paper. Washington, DC: World Bank.
- Bisnath, S. and Diane, E. (1999). Women's Empowerment Revisited. Background paper, Progress of the World's Women. UNIFEM

- Biswas, T. (2008). Women Empowerment Through Micro Finance: A Boon for Development
- Brana, S. (2008). Microcredit in France: Does gender matter? 5th Annual Conference-Nice. European Microfinance Network.
- Buckley, G. (1997). 'Microfinance in Africa: Is it either the problem or the solution?' World Development, vol. 25, no. 7, pp. 1081-1093.
- Buttner H, and Moore D (1997). Women's organizational exodus to entrepreneurship: self-reported motivations and correlates with success, J. Small Bus. Manage. 35(1): 34-47.
- Carter, S. (2000). Improving the numbers and performance of women owned businesses: some implications for training and advisory services, Educ. Train. 42(4/5): 326-34.
- Charitoneko, Stephanie & Fruman, Cecile & Pederson, Glen (1998). Case Studies in Microfinance, Kenya Rural Enterprise Program, August 1998.
- Cherogony, M. (2005). Micro Leasing Experience in Kenya.
- Cheston, S. & Kuhn, L. (2002). Empowering women through microfinance. A case study of Sinapi Aba Trust, Ghana. USA: Opportunity International.
- Claassens, Sylvia (1993). Co-operation Is Power? Women economic groups and cooperatives in Dodoma region - Tanzania. Third World Centre, University of Nijmegen. SAID/G/EG/MD, Management Systems International, Washington, D.C.
- Consultative Group to Assist the Poor (2001). Advancing Financial Access to the world poor: What do we know about Microfinance?
- Fernando, J.L. and A. Heston (eds.) (1997). NGOs: Charity and Empowerment. The Annals of the American Academy of Political and Social Science, 554. London/Thousand Oaks, CA: Sage Publications.
- Ekpe, I., Mat, N.B., Razaq, R.C. (2010) The Effect of Microfinance Factors on Women Entrepreneurs' Performance in Nigeria: A Conceptual Framework
- Eufin.org (2009). Social Affairs and Equal Opportunities. Financed by the European Commission, DG Employment,
- Gujarati, D.N., 1995. Basic econometrics, 3rd edition, New York, McGraw-Hill, Inc., pp: 838. NPC, 1998. 1991 Population census of the Federal Republic of Nigeria: Analytical report at the national level. Abuja- Nigeria. The National Population Commission, pp: 455.
- Gulli, H., (1998). Microfinance and Poverty: Questioning the Conventional Wisdom. Inter-American Development Bank, Washington DC.
- Hashemi, Syed, Schuler S., & Riley A. (1996). Rural Credit Programs and Women's Empowerment in Bangladesh.
- Ibru, C. (2009). Growing microfinance through new technologies. Federal University of Technology, Akure, Nigeria.
- International Finance Corporation (IFC). (2007). Gender entrepreneurship markets, GEM country brief. Afghanistan: GEM
- Kabeer N. (1999). Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment. Development and Change, Vol. 30, No. 3, pp. 435-464.
- Kabeer, N. (2001). Conflicts over credit: re-evaluating the empowerment potential of loans to women in rural Bangladesh, World Development 29 (1), 63-84.
- Karnani, A. (2007). Microfinance misses its mark. Retrieved February 18, 2009, from Stanford Social Innovation Review: <http://www.ssireview.org/articles>.
- Kibas P.B (2006). Women in entrepreneurs: Analysis of factors influencing growth oriented women entrepreneurs in rural Kenya, paper presented at the 3rd International Entrepreneurship Conference Organized by United States International University (USIU), Nairobi.
- Kleiman C. (1998). Women entrepreneurs are a big loss to corporation, St Louis Post, Dispatch, C5.
- Kuzilwa, J. (2005). The role of credit for small business success: A study of the National Entrepreneurship Development Fund in Tanzania. The Journal of Entrepreneurship, 14 (2), 131-161.
- Ledgerwood, J. (2010). Microfinance handbook: An institutional Financial Perspective, Washington D.C
- May, N. (2007). Gender responsive entrepreneurial economy of Nigeria: Enabling women in a disabling environment. Journal of International Women's Studies, 9 (1).
- Mayoux, Linda (1997). The Magic Ingredient? Microfinance & Women's Empowerment. A Briefing Paper prepared for Micro Credit Summit, Washington, February 1997.112
- Mayoux, L. (2000). Jobs, gender, and small enterprises: Getting the policy environment right. Geneva: International Labour Organization (ILO).
- Mayoux L. (2001). Impact assessment of microfinance: Towards a sustainable learning process. Enterprise Development Impact Assessment Service (EDIAS).
- Mkpado, M. & Arene, C. J. (2007). Effects of democratization of group administration on the sustainability of

agricultural microcredit groups in Nigeria. *International Journal of Rural Studies*, 14 (2), 1-9.

Näslund, Emma & Tengfors, Anne Marie (1993). *Credits to Women Entrepreneurs in Third World Countries: The Tanzania Case Study*. University of Linköping.

Nelson, N. (1995). *The Kiambu group: A Successful Women's ROSCA in Mathare Valley, Nairobi (1971 to 1990)*. In Ardener, S & Burman, S (eds.): *Money-go-rounds; The Importance of Rotating Savings and Credit Associations for Women*. Berg

Otero, M. (1999). *Bringing development back into microfinance*. Latin America: ACCION International.

Patel & Tebelis (1987). *Factors and Processes that Shape Group Dynamic Patterns in Work Teams*: UK: Edward Elgar.

Porter, E. G. & Nagarajan, K. V. (2005). *Successful women entrepreneurs as pioneers: Results from a study conducted in Karaikudi, Tamil Nadu, India*. *Journal of Small Business and Entrepreneurship* , 18 (1), 39-52.

Rhyne, Elisabeth & Otero, Maria (1992). *Financial Services for Microenterprises: Principles and Institutions*. *World Development* 20/11.

Roomi, M. A. & Parrot, G. (2008). *Barriers to development and progression of women entrepreneurs in Pakistan*. *The Journal of Entrepreneurship* , 17 (1), 59-72.

Shane, S. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. UK: Edward Elgar.

Simojoki H. (2003). *Empowering credit- more than just money: The socio-economic impact of micro finance on women in Nairobi, Kenya*.

Sinha S. & I. Matin (1998). *Informal Credit Transactions of Micro-Credit Borrowers in Rural Bangladesh*. *IDS Bulletin*, Vol. 29, No 4, pp. 66-81.

Tazul, I. (2007). *Microcredit and poverty alleviation*. Hampshire, England: Ashgate Publishing Limited.

UNIDO, (2003). "A path of poverty: Developing rural women entrepreneurship." *Economy*

UNIFEM (2000). *Progress of the World's Women 2000, Biennial Report*. Environment Employment.

United Nations, (2010). *The millennium development goals report*, United Nations, New York.

Walker, D. & Joyner, B. E. (1999). "Female entrepreneurship and the market process: gender-based public policy considerations", *J. Dev. Entrepreneurship*. 4(2): 95.

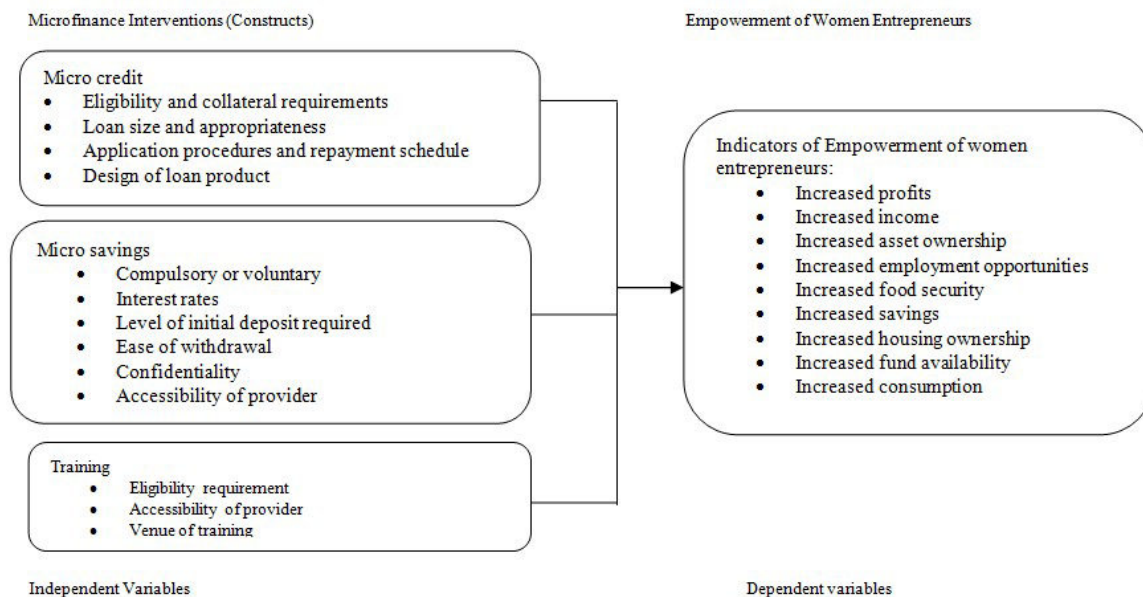


Figure 1: Effect of Microfinance Interventions on Empowerment of Women Entrepreneurs

Table 1: Sampling Design

INSTITUTION WARD	Kenya Women Finance Trust	Baringo Teachers Sacco Ltd	KADET	Faulu Kenya Ltd	Totals
Cheberen	2	2	2	2	8
Emining	2	2	2	2	8
Kakimor	2	2	2	2	8
Rosoga	2	2	2	2	8
Kamar	2	2	2	2	8
Sirwa	2	2	2	2	8
Kisanana	2	2	2	2	8
Lembus Kiptoim	2	2	2	2	8
Lembus Mogotio	2	2	2	2	8
Muguruny	2	2	2	2	8
Total	20	20	20	20	80

Table 2: Descriptive Findings of Micro-Finance Interventions and Empowerment of Women Entrepreneurs

	N	Min	Max,	Mean		Std. Dev.
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Micro Credit - X₁				3.6097		.67180
Loan eligibility requirements	80	2	5	3.86	.100	.896
Collateral requirements	80	1	5	3.76	.104	.931
Size of loan issued	80	1	5	3.54	.126	1.124
Loan application procedure	80	2	5	3.70	.101	.906
Loan repayment schedule	80	1	5	3.64	.122	1.094
Design of loan product	80	1	5	3.55	.122	1.090
Transparency of loan application process	80	1	5	3.82	.102	.911
Interest rates	80	1	5	3.12	.138	1.236
Accessibility of loan provider	80	2	5	3.49	.113	1.006
Micro Savings – X₂				3.3875		.64836
Nature of savings	80	1	5	3.23	.149	1.331
Size of monthly savings	80	2	5	3.80	.095	.848
Initial deposit requirement	80	2	5	3.69	.097	.866
Saving withdrawal procedure	80	1	5	2.63	.151	1.354
Proximity of institution	80	1	5	3.43	.140	1.251
Confidentiality	80	1	5	3.56	.139	1.241
Micro-Finance Training – X₃				3.6542		.71343
Availability of training services	80	1	5	3.96	.109	.974
Frequency of training	80	1	5	3.57	.118	1.053
Accessibility of training	80	1	5	3.37	.131	1.173
Cost of training	80	2	5	3.91	.094	.845
Convenience of training venue	80	1	5	3.55	.108	.967
Relevance of topic trained	80	1	5	3.55	.122	1.090
Empowerment - Y				3.6775		.73087
Profit	80	1	5	3.55	.133	1.190
Income	80	1	5	3.69	.112	1.001
Asset ownership	80	1	5	3.70	.116	1.036
Employment opportunities	80	1	5	3.95	.107	.953
Food security	80	1	5	3.85	.118	1.057
Increased savings	80	1	5	3.61	.117	1.049
Housing ownership	80	1	5	3.39	.155	1.382
Fund availability	80	1	5	3.59	.127	1.133
Increased consumption	80	1	5	3.51	.129	1.158
Decision making power	80	1	5	3.94	.125	1.118

Scale: 1=strongly disagree and 5=strongly agree

Table 3: Correlations between the MFI Interventions and Women Empowerment

		Empowerment of women entrepreneurs (Y)	Micro credit (X ₁)	Micro savings (X ₂)	Micro finance training (X ₃)
Pearson Correlation	Empowerment of women entrepreneurs(Y)	1.000	.449	.389	.605
	Micro credit (X ₁)	.449	1.000	.444	.331
	Micro savings (X ₂)	.389	.444	1.000	.480
	Micro finance training (X ₃)	.605	.331	.480	1.000
Sig. (1-tailed)	Empowerment of women entrepreneurs(Y)		.000	.000	.000
	Micro credit (X ₁)	.000		.000	.001
	Micro savings (X ₂)	.000	.000		.000
	Micro finance training (X ₃)	.000	.001	.000	

Table 4: Regression coefficient

		Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.630	.428		1.472	.145		
	Micro credit(X1)	.294	.106	.271	2.784	.007	.785	1.273
	Micro savings (X2)	.031	.118	.027	.259	.796	.678	1.475
	Micro finance training (X3)	.515	.102	.503	5.061	.000	.752	1.330
Model Summary	R = .660 ^a Adjusted R Square = .414 Std. Error of the Estimate = .55953 R Square Change = .436 Sig. F Change = .000	a. Dependent Variable: Empowerment of Women Entrepreneurs (Y) b. Predictors: Constant), X ₁ , X ₂ , X ₃						

Table 5: ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.406	3	6.135	19.597	.000 ^a
	Residual	23.793	76	.313		
	Total	42.200	79	.000		

a. Predictors: (Constant), X₁, X₂, X₃

b. Dependent Variable: Y

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

