

MICRO-CREDIT AND POVERTY REDUCTION AMONG SELF HELP GROUPS WITHIN KISUMU COUNTY, KENYA

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Abstract

Purpose: *Micro-credit is an informal source of revenue that was established to bridge the gap between Commercial banks and Formal Micro-finance institutions with an objective of providing small loans to the poor who were discriminated against due to their economic conditions. The aim of this study was to evaluate the relationship between micro-credit and poverty reduction among self-help groups in Kisumu County.*

Methodology: *The research was mainly anchored on Grameen model which focused on funding the poor without collateral and vicious cycle of poverty theory which view poor people as vulnerable hence need to be supported to come out of poverty that is heavily grounded. The study relied on primary data collected using semi-structured questionnaire and observation check with the help of research assistants drawn from Organization staff and group officials. The data collected was analyzed by both quantitative and qualitative methods with the help of SPSS version 20 and excel package.*

Findings: *The findings portray mixed results since micro-credit reduces poverty to a certain level beyond which it starts raising again as measured by changes in the annual income before and after loan acquisition. The impact of loan was moderate on both the living standard and business expansion despite of the majority attending trainings related to micro-credit and poverty reduction.*

Implication: *The researchers recommend frequent training to enhance their intellectual capacity since most have only attained basic education. Training is perceived to be essential for them to enhance their earning potential by minimizing risks related to book keeping, business management and financial management. The study used cross-sectional method and only focused on credit recipients attached to a specific organization thus the findings may lead to subjective biasness. The researchers therefore recommend further study on the topic using longitudinal method to achieve significant results over a period of time especially in Kisumu County.*

Value: *The finding will help in enhance microfinance models that can add value to both the clients and the financial institutions. The micro-credit and market linkages, micro-credit and capacity building programs on the economic performance of SHG members should be treated as a priority in poverty reduction among the disadvantaged groups.*

Key-words: *micro credit, poverty reduction, self-help groups*

Background of the Study

Poverty is perceived to be a global epidemic despite of establishing numerous poverty reduction programs for a long time and across regions (Waliaula, 2013, Abdin, 2016). Worldwide, each country has experienced poverty in one way or another including developed countries like United States of America where ability to meet basic needs of life such food, shelter, clothing, health care, basic education, clean water and sanitation has been a challenge among those living in extreme poverty (Bichanga and Njage, 2016). According to World Bank report (2018) poverty level is measured in both monetary and non-monetary terms such as consumption level and human development. Poverty line on the other hand is termed as a threshold below which people are deemed to be poor and estimated poverty line according to the international poverty line is US \$1.90 per day which is equivalent to sh 190 per day or sh5700 monthly (Ochieng,2018). Globally the poverty index is between 1.2 to 1.5 billion and children who are malnourished are 162 million (United Nations Development Program, 2016) in addition Kenya is ranked 8th globally and 6th in Africa among countries with the highest number of people living in extreme poverty (29% of 49,684,304) according to world poverty clock microcredit was established to bridge the gap between the formal and informal financial sector in the mid 1970's by Yunus targeting the poor who were isolated due to lack collateral to secure bank loans. Through microcredit services which entail provision of loans and other services such as savings, business training on better utilization of credit acquired and business management their income levels have improved and also living standards especially the women who for a long time been financially vulnerable due to cultural believes (Kemunto, 2015).

Major theories upon which the research is anchored on in relation to micro-credit are micro-credit theory (Muhammad Yunus, 1998) which emphasizes on credit providers to take into consideration the welfare of the borrowers to avoid exploiting them with high interest rate, liquidity theory that advocates for external borrowings by the firms with internal credit limitation (Jaffee and Rusell, 1976, Stiglitz and Weiss, 1981 and Emery, 1984) and credit risk theory which discusses the hazards related to borrowed funds that financial institutions should be conversant with to avoid dangers associated with information asymmetry (Baydas et al, 1998). Other theories related to poverty reduction include Marxian theory of poverty which deems poor people as victims of circumstances due to lay off (Manjoro, 2018).

Cultural theory of poverty developed by Lewis (1968) as an enhancement of Marxian theory where poor people regroup themselves especially in urban slums to comfort each other thus in the long run passing on the traits to their generations leading to constant poverty. Grameen Model on the other was targeting the poor in credit provision advanced by Yunus 1976, Vicious circle of poverty by Lewis 1968. All these findings can be reduced through education and training to the poor who are laid off and cultural transformation to those who had believes to be naturally poor coupled with credit provision to embrace change and adapt to new working conditions (Winch, 1987).

Self-Help groups are small informal associations created to support members make savings which are pooled together to enable them access credit for income generating activities based on trust amongst themselves as a collateral (Mutuku, 2016). NABARD (2009) on the other hand defines SHGs as community based association with certain number of people who come together to deal with challenges in their lives. In Kisumu County some registered SHGs are 2843 which are found in different sub-counties such as Kisumu West-918, Kisumu East-1025, Seme-200 and Nyakach-600 (Okello, 2017). The group based strategy besides savings and accessing credit internally has made members to acquire formal loans due to improved income levels (Shylendra, 1998). Other services offered to members include training on entrepreneurship skills to improve their skills development since most of them are either illiterate or semi-illiterate (Das, 2012).

Micro-Credit

Kalaiselvi (2008) defines Micro-credit as the provision of small loans to the poor in both rural and urban settings to support them run their income generating initiatives and also improve their living standards. Micro-credit as a source of finance to the poor and vulnerable in the society has enabled them to fight various forms of poverty which portray it in different dimensions such as economic and social among other forms. Some of the benefits of microcredit include improved income, business expansion, food security, good education and health among others (Kalaiselvi, 2008). It is only through lending and borrowing that microcredit industry can expand to enable beneficiaries access formal funding to supplement the limited capital at hand. Hence its sustainability has locked out formal financial institutions (Jayaraman, 2005).

Major Micro-credit source of funding according to Susan and Rogaly (1999) include members savings in self-help groups (Grameen group lending), village banking, Rotating savings and credit co-operative association (ROSCA) commonly known as merry go round in Kenya, Accumulated savings and credit association (ASCA), traditional money lenders among others. They are informal sources of funding which are neither regulated nor subsidized (Kairu, 2009).

Some of the microcredit interventions advanced in this study towards poverty reduction are loan provision, education, trainings and adoption of modern technology. Lending to the poor enhances accumulation of capital for investment purposes leading to high production which in the long run lead to increased income, savings and investment hence reducing poverty level among the poor. The variable is expressed as a ratio of gross domestic product (Bichanga et al, 2014). Training on the other hand is an avenue where entrepreneurship and financial management skills are enhanced empowering the poor to run their business ventures in a productive way leading to poverty reduction. The variable is measured in terms of the level of education and number of trainings SHGs has attended (Barno-Leedatabase, 2013). Modern technology in the 21st century is deemed to be instrumental in improving productivity through modernization of credit access and business operation worldwide hence reducing poverty index (Soto, 2009). It is measured in terms of technology in place to run the business and geographical coverage.

Poverty Reduction

Poverty is defined as the inability to meet the basic needs due to insufficient funds yet they are deemed to be necessary based on shared values of human dignity (Kemunto, 2015, Hulme et al, 1997). It is a condition caused by internal factors such as economic, environmental, political and socio-cultural and external like international trade, debt burden of heavy borrowings and immigrants staying in refugee camps (Bichanga et al, 2014). Poverty alleviation is the first of 17 sustainable Development Goals set by the United Nations since worldwide between 1.2 billion to 1.5 billion people are affected with extreme poverty and 162 million children are malnourished the figure UN is strongly against (United Nations development Programme, 2016). Poverty in Kenya manifest itself inform of hunger,

malnutrition, illiteracy, lack of housing and inability to access key essential services such as basic medical services, education, water and sanitation (Republic of Kenya sessional paper No.3 1999 and Kenya Vision 2030). Thus developing strategies to minimize the above indicators of poverty is essential for poverty reduction. Major indicators of poverty reduction include change in the living standards among the poor through consumption level, ability to access essential services such as basic education, healthcare, clean water and sanitation, better housing, formal financial institutions loans as a result of business growth and expansion, job creation among others (Quibria, 2012, Muhammed et al, 2013).

Relationship Between Micro-Credit and Poverty Reduction

Poverty reduction involves efforts to minimize the indicators of poverty and improving them so as to better their living conditions and accessibility to essential basic services (Kemunto, 2015, Gitobu, 2015). Provision of credit to the poor is believed to be essential in accelerating poverty reduction (Waliaula, 2013, Yunus, 2013). Credit enables the poor to improve their living standards in terms consumption, job creation, access to formal health care and good education for their children (Siakwah, 2010). It also enhances saving culture resulting to greater investments (Bichanga, 2014, Mutuku, 2016).

Besides credit training and education is key for human development in order to improve their business management skills (World Bank report, 2018). Training helps the lenders to reduce transaction related risks and enhance asset management in a productive way. Education on the other hand is viewed as the key weapon against poverty in relation to Millennium Development goals (Masood et al, 2011). Education and experience are the key drivers in developing intellectual capacity of an individual enhancing better utilization of credit to improve economic conditions which reduces poverty levels among the poor. Education leads to increased income as a direct benefit while human development is an indirect benefit.

According to Banerjee (2017), micro-finance may be a recipe for increasing levels of indebtedness among the poor and vulnerable in the society leading to economic, social and environmental vulnerability. Other findings provide mixed results where some are successful, others partially and some are unable to improve their living standards through credit access. In conclusion it is clear that microcredit does not serve as an end in itself but requires other

factors such as basic education, trainings and monitoring applicants activities and repayment to reduce poverty level among the poor (Siakwah, 2010).

Registered Self-Help Groups within Kisumu County

Mutuku (2016) defines Self-help groups as informal associations created with the sole objective of enabling the poor to pool their resources together through savings to enable them access credit for income generating activities based on trust as the main collateral. NABARD (2009) further defines SHGs as community based organizations meant to enable members deal with challenges within their lives. Major self -help groups in Kenya include financial, investment clubs and welfare (Kitetu, 2013). In Kisumu County there are 2843 registered SHGs by the Ministry of Gender and Social Services located in different sub-counties namely Kisumu East-1025, Kisumu West-918, Nyakach-600 and Seme-200 (Okello, 2017). Through savings and access to credit beneficiaries seem to be able to improve their economic conditions thus enabling them to access bank loans and other services to better their living standards leading to poverty reduction (Shylendra, 1998).

Despite of the benefits stated above in relation to self-help groups a good number of beneficiaries in reality deviate loan acquired to other household activities making them to fall into greater indebtedness. This makes many to doubt the effectiveness of Microcredit on poverty reduction since most have lost everything to credit providers. Self-help groups which undergo different development stages were chosen as a center stage of research since most poor people who lack collateral come together and accumulate resources in a pool to enable them access small loans without many conditions imposed by formal financial institutions (Okello, 2017). They are also wide spread in remote regions where banks coverage is limited. SHGs Microcredit has become a nerve center for the poor to access capital for rural development and to get the community participate in development programs since majority of them are found in rural areas.

Motivation of the Study

Despite of the benefits anticipated through provision of Micro-Credit to the SHGs members the findings from empirical studies portray mixed results. Banerjee et al (2017) in his study of the role of Microfinance on poverty reduction in Bangladesh found Microfinance to be the main contributor to high indebtedness among the extreme poor in the society using

ethnographic study. The findings were echoed by Siakwah (2010) in his study of Micro-credit as a poverty reduction strategy in Ghana. Locally most studies carried out on Micro-credit and Poverty reduction focused more on women empowerment and not men in other counties besides Kisumu such as Vihiga, Kisii, Nairobi, Kiambu and West Pokot (Anyona, 2006, Mary, 2010, Gitobu, 2011, Mong'eri, 2014) yet poverty is a condition that affects all people living below poverty line irrespective of gender. Furthermore other Micro-Credit variables such as education and training besides credit provision have not been adversely considered in previous research hence a gap exists for further study as recommended by Gitobu (2011) in her study of the effect of Micro-Credit to women empowerment in Nairobi county and Mary (2010) in her study of the influence of Micro-Credit finance on the growth of small scale women entrepreneurs in Kenya.

Kisumu County has 2843 Self-help groups distributed randomly in its seven Sub-Counties namely Nyakach, Nyando, Muhoroni, Kisumu East, Kisumu West, Kisumu Central and Seme (Okello, 2017). Participation in groups is viewed as an avenue to improve food security and asset ownership in some counties but Kisumu County despite of high growth of SHGs it is deemed to have the highest poverty index of 53.4% compared to 8.4 % in Nairobi (Atieno, 2016). Most self-help group members are struggling to meet the basic needs of life such as food, shelter, water, health care among others despite of accessing microcredit to fund their business operations. The studies in relation to SHGs within Kisumu County focused on household assets and food security using various research designs such as stratified random sampling, simple random sampling among others (Okello, 2016) but business growth, education have been overlooked yet they are part of the indicators of poverty reduction.

In conclusion the gap exists in that previous researchers focused on women empowerment forgetting male segment in other counties in relation to Micro-Credit and Poverty Reduction besides Kisumu though the findings lacked consensus. Furthermore different research methodologies have been used but exploratory research design, multistage random sampling and inductive approach have not been extensively applied. With the County having the highest (53.4 %) population living below poverty line compared to other counties in the country despite of large number of SHGs among other things peg the question, "Does Micro-Credit lead to Poverty Reduction among SHGs.

Empirical Literature Review

Various studies have been established by researchers both globally and locally to address the effects of microcredit on poverty reduction which have gained full support despite of variations in methodology and findings. Other researches carried out consider microcredit as a means towards poverty reduction and not an end in itself thus training and education are also considered to be critical elements towards poverty reduction. The review is further done below:

Relationship Between Micro-Credit and Poverty Reduction

Poverty according to Ismail (2000) is a very complex situation since its cause and impact cannot be fully comprehended thus micro-credit provision can only be used as a tool towards poverty reduction. Poverty reduction involves efforts to minimize the indicators of poverty and improvement of general conditions for betterment of lives (Kemunto, 2015). Yunus (2013) believes poverty can only be reduced by offering credit to the poor without collateral to initiate IGAs.

Anyona (2006) carried out a study to assess the Government conduct towards poverty reduction in Vihiga District. The findings advocate for the provision of affordable loans and proper targeting to achieve maximum benefit. Also training of poor lenders, monitoring loan repayment and investment of the lenders activities was considered paramount towards poverty reduction.

According to Westover (2008) the value of Micro-credit on the wellbeing of the poor is still questionable while Morduch et al (2009) in their study of Micro-credit found no reasonable evidence on its impact on the living standards of the poor beneficiaries in measurable terms.

Mary (2010) in her study of the influence of microcredit finance on the growth of small scale women entrepreneurs in Kisii central found many entrepreneurs to be untrained hence unable to manage their businesses successfully. She recommends establishment of training centers to empower the poor with basic business skills which is important towards growth of small enterprises (Mong'eri , 2014). Chowdhury (2008) in their study of the role of microcredit on

poverty reduction among borrowing households further found decline in poverty level as duration of being a member increases and the loan size.

Gitobu (2011) in his study of the effect of Micro-credit to women empowerment in Nairobi recommends further study on other Micro-credit services to be carried out besides asset ownership, decision making, and women mobility to have a conclusive report on the value of Micro-credit in relation to empowerment. The methods applied include survey and regression analysis.

Quibria (2012) in his study was of the opinion that Micro-credit is a very critical tool in poverty reduction globally especially among the women by focusing on labour market, technology, product demand and entrepreneurship as key variables using household model. His findings were echoed by Waliaula (2013) whose study was based on correlation research design, descriptive and inferential statistics and Muhammed (2013) whose outcome found positive effect on household income.

Waliaula (2013) in her study to find the relationship between Micro-credit and the growth of SMEs in Kenya found that Micro-credit has both positive and negative impact on the poor where some had to dispose of their assets to repay the loans in critical financial crisis. This was supported by Rono et al(2015) .While in other circumstances Micro-credit programs has generally improved the wellbeing of the poor in the society by developing access networks and worldwide markets for their products (Mayoux, 2017).

Bichanga et al (2014) in his study on the effects of Micro-finance institutions on poverty reduction in Kiambu county concluded that giving out credit at low interest rates, expanding organization geographical coverage to accommodate larger population, having better security against loans acquired, trainings and acquiring of additional funds from external sources will be the best strategies to enhance poverty reduction. He also found out that poor people convert business loans to household consumption forgetting that the amount will have to be repaid back plus interest charged.

Rono et al (2015) in their study of the effect of Non-bank credit on poverty reduction found it to have negative impact on the poor living below poverty line. Hence they proposed

channeling of credit through private sector to improve the status of the poor. The results were realized through application of autoregressive distributed lag model in their research.

Kemunto (2015) in her study of the role of Non-governmental organizations in poverty reduction in Kisumu East sub-county found NGOs to be critical towards poverty reduction and recommends more public private participation in issues that deal with poverty reduction.

Mutuku (2016) findings in Kathian Constituency confirms that through group operation members have been able to be agents of each other in their informal groups as a security thus setting them free from the traps of formal financial institutions enhancing their credit access capacity and also being in a position to be mentored by the colleagues leading to better loan recoveries.

Besides the positive results some findings produced negative results. Banerjee (2017) in his study of the relationship between Micro-finance and Poverty reduction using ethnographic study of three villages in Bangladesh found Micro-credit to be the major source of indebtedness among the poor who range between 1.2 and 1.5 billion globally. Siakwah (2010) on the other hand conducted a study on Micro-credit as a strategy towards poverty reduction in Ghana found mixed results on the beneficiaries based on individual discipline and environmental factors. He proposed implementation of right mechanisms and structures to enable the target population overcome extreme poverty effects.

Relationship Between Education and Poverty Reduction

Masood et al (2011) described poverty as the main deterrent to economic development in their study on the effect of education on poverty level in Pakistan. Education on the other hand is viewed as the primary weapon against poverty in order to achieve millennium development goals. Education and experience is essential in developing intellectual capacity of an individual which in the long run enhances better utilization of credit to improve their economic conditions through increased income as a direct benefit while intellectual capacity development as an indirect benefit. The findings reflect experience and education achievement as negatively related with the poverty incidence over the period under consideration. The findings were highly supported by Chege et al (2015) who view education as both a means to and an end to development. Pervez (2014) emphasizes on reforms in the

management of education sector via curriculum reviews and policy development to reduce poverty prevalence in the country.

Relationship Between Training and Poverty Reduction

Training is very important since it helps lenders to reduce transaction related risks and improving asset and business management skills in a productive way (Bichanga et al, 2014). Skills gained through training enhance earning potential of the members leading to poverty reduction as a result of minimized risks associated with business management and utilization of credit received.

Factors Affecting Poverty Reduction

Some of the challenges affecting the rural poor to transform their lives from poverty include socio-cultural factors, regulatory policy, low credit access, long procedures to acquire credit, misdirecting funds to consumption needs and lack of business skills among others. The management skills include poor governance structure, lack of strategic plans to achieve their set goals, lack of financial management policy and poor monitoring and evaluation tools. The technical skills include poor marketing skills, accounting and financial planning skills (Kampen, 2009 and Waliaula, 2013).

Summary of the Literature Review and Knowledge Gap

Based on the empirical studies carried out by many scholars in relation to Micro-credit and Poverty reduction, the findings provide mixed results where some portray positive results while some negative. Quibria (2012) in his study of Micro-credit and Poverty reduction using household model found positive results in relation to women empowerment. These findings were echoed by Wencong et al (2013) while carrying out research in Bangladesh in relation to the same concepts with the help of field survey. On the other hand Banerjee (2017) in his study found contrary results where Micro-credit as a strategy towards Poverty reduction led beneficiaries to high indebtedness. Siakwah (2010) came up with mixed results where some were successful, others partially and some highly indebted. Furthermore the findings by Kenya National Bureau of Statistics (2014) display the County to have the highest poverty index of 39.9% which is slightly below the national poverty index. All these varying results

by different scholars form the basis of my study to find out more on how Micro-credit can be used as a tool towards Poverty reduction among Self-Help groups within Kisumu County.

Conceptual Framework

The section deals with analyzing the relationship between variables upon which the whole research is anchored on. The independent variable (micro credit) may be manipulated in a certain way through credit provision, trainings and education to affect the results of the dependent variable (poverty reduction) which is measured in terms of increased income leading to better living standard, access to quality education and healthcare, better sanitation and business growth. Hence the poverty reduction index will be highly dependent on how microcredit variables are manipulated to transform the living standards of those languishing in extreme poverty. The possible variables are as illustrated below in the diagram.

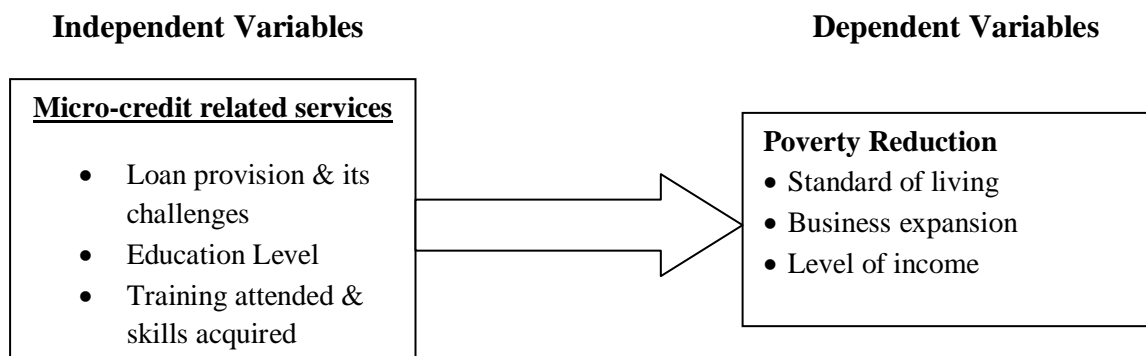


Figure1: Conceptual Model

Source: Wafula and Omoro (2018)

Methodology

This section provides specific procedures to be followed while undertaking the study such as research design, population to be considered, sampling design, data collection and analysis tools. Descriptive and exploratory designs were adopted since the research aimed at evaluating how Micro-credit as a source of finance reduces poverty among the poor. Furthermore exploratory design was adopted due to scanty literature on the topic especially within Kisumu County. The study focused on 150 Self-help groups under unbound organization registered by the Ministry of Gender and Social Services (2017) in Kisumu

County. Main groups of focus were those who were Micro-credit beneficiaries engaging in income generating activities with a lifespan since formation of at least two years and above to have some significant results. Multi stage random sampling technique was adopted as it was of much significance to overcome problems associated with geographically dispersed population where face to face contact is required.

The actual sample size was 109 groups with a total of 346 individual interviewees at 95% confidence level according to Yamane (1967).

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

Where:

n- Sample size

N- Population

P- Confidence level

Therefore, sample size of interviewees was derived as:

$$n = \frac{2549}{1 + 2549(0.05)^2}$$

= 346 respondents

Sample size of groups (n) =

$$n = \frac{150}{1 + 150(0.05)^2}$$

= 109 groups

Primary data was generated via questionnaires and observation checklist where individual respondents were evaluated using semi-structured questionnaires administered to the respondents with the support of group leaders and staff in charge of the groups identified while checklist items identified related to the standard of living and utilization of credit on stated businesses was observed and the findings noted. The two methods were chosen since some members may not give the true picture of how micro-credit has impacted their lives through questionnaires but with the support of the observation checklist, one may get hidden

information hence this makes them to complement each other well. A reliability test was conducted among the 15 members sampled randomly and the coefficient was above 50% (0.5) and that was deemed to be sufficient to validate the data collection instrument. According to Oso and Onen (2008) a response rate of more than 50% in social sciences is considered to be sufficient for analysis.

Inductive approach was adopted to analyze the data. Quantitative data was analyzed using descriptive statistics to determine the relationship between the variables through frequency, percentages, distribution mean and standard deviation as well as inferential statistics, specifically, Pearson Moment Correlation. Inferential statistics is very instrumental where it is not possible to carry out the census thus a sample is chosen randomly to describe and make inferences about the entire population. The whole process was carried out with the help of both Statistical Package of Social Sciences (SPSS) version 20 and Microsoft excel package to make data analysis easier thereafter presented using frequency tables and bar graphs.

Qualitative data on the other hand was organized into themes and patterns relevant to the research objective using content analysis method to identify emerging issues that arise through the process of data collection and analysis (Lewis, 2005).

Data Analysis, Results and Discussion

This section entail the analysis of the findings from the primary data collected with the objective of determining the relationship that exist between Micro-credit and Poverty Reduction among Self-help groups within Kisumu county by focusing on the indicators of poverty reduction which include income level, standard of living and business expansion. The outcome from the analysis was categorized into three sections where section one focused on Socio-demographic factors related to background information, section two looked at the relationship between Micro-credit provision and Poverty reduction while three focused on the value of training as far as poverty reduction is concerned. The results were discussed in relation to the findings of the literature reviewed.

The study sampled out 346 participants from 109 Self-help groups within Unbound Organization in Kisumu County who were administered with questionnaires. Details of the returned and filled questionnaires are presented in Table 1.

Table 1: Response Rate

Questionnaire	Number
Administered Questionnaires	346
Returned Questionnaires	292
Dully Filled	228
Partially Filled	64
Return Rate	66%

Out of the target sample size of 346 respondents chosen using multi-stage random sampling technique from 109 self-help groups within Unbound Organization in Kisumu County, 228 filled their questionnaires to the expected standard, 64 returned incomplete questionnaires while 54 did not return back their questionnaires. The actual response rate that was factored into analysis was 66% which was considered to be sufficient enough for analysis. According to Oso and Onen (2008) a response rate of more than 50% in social sciences is considered to be sufficient for analysis.

Socio-Demographic Factors of the Respondents

The research sought to find out the socio-demographic factors related to the respondents since they are the key determinants of understanding the background of the Micro-credit beneficiaries for better management of their welfare as far as poverty reduction is concerned. Major socio-demographic factors considered in this research include gender, age, education level, marital status, family size, source of family income and the average annual income before acquisition of Micro-credit loans as members of SHGs. The results were analyzed using SPSS and presented in Table 2 using frequencies and tables.

The results as analyzed in Table 2 reflect female within the age bracket of 30-40 years, primary education level, married with the family size of 5-10 dependants relying on business

that generates annual income below K sh 70,000 before loan acquisition to be the majority at 84.2%, 52.2%, 52.2%,59.6%, 50.9%, 55.7% and 91.2% respectively. This implies those living below the estimated international poverty line (US \$ 1.90 per day) are the highest at 91.2% though there is a slight improvement in gender equity compared to other studies which focused purely on women empowerment. The findings are in line with the Millennium development goals where gender equity and women empowerment is given priority in order to eradicate extreme poverty level among the poor (United Nations Millennium Summit, 2000).

The other variables considered had average results ranging from 50.9% to 59.6% in relation to age, education, marital status, family size and source of family income before loan acquisition hence more should be done to enhance the capacity of the respondents who are at their prime age with many responsibilities bestowed upon them thus relying on Micro-credit interventions to make ends meet therefore education should be given the priority it deserves to develop the intellectual capacity of human being to improve their economic conditions.

Table 2: Socio-demographic characteristics

	Response	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	36	15.8	15.8	15.8
	Female	192	84.2	84.2	100.0
	Total	228	100.0	100.0	
Age	Below 30	17	7.5	7.5	7.5
	30 to 40	119	52.2	52.2	59.6
	40 to 50	66	28.9	28.9	88.6
	Above 50	26	11.4	11.4	100.0
	Total	228	100.0	100.0	
Education Level	Primary	119	52.2	52.2	52.2
	Secondary	89	39.0	39.0	91.2
	Tertiary	20	8.8	8.8	100.0
	Total	228	100.0	100.0	
Marital Status	Married	136	59.6	59.6	59.6
	Widow	71	31.1	31.1	90.8
	Divorce	19	8.3	8.3	99.1
	Single	2	.9	.9	100.0
	Total	228	100.0	100.0	
Family Size	1 to 5	100	43.9	43.9	43.9
	5 to 10	116	50.9	50.9	94.7
	Above 10 persons	12	5.3	5.3	100.0
	Total	228	100.0	100.0	

Source of income before Loaning	Business	127	55.7	55.7	55.7
	Farming	89	39.0	39.0	94.7
	Donation	3	1.3	1.3	96.1
	Others	7	3.1	3.1	99.1
	Business and Farming	2	.9	.9	100.0
	Total	228	100.0	100.0	
Annual Income Before Loan Acquisition	Below 70,000	208	91.2	91.2	91.2
	70,000 to 140,000	17	7.5	7.5	98.7
	Above 140,000	3	1.3	1.3	100.0
	Total	228	100.0	100.0	

The results are in agreement with Bruns et al (2003) and Masood et al (2011) who view education as the powerful tool for reducing inequality, poverty and laying the foundations for sustained economic growth while Chege et al (2015) describe education as the key tool for the economic development of any country since it is perceived to be both a means and an end to sustainable development. The institutions offering Micro-credit services should engage more in capacity building of the potential lenders before and after issuing of credit to minimize risks of default and diverting of funds to consumption roles. High dependency ratio (50.9%) is a recipe to vicious cycle of poverty due to conversion of business loans to household needs which in the long run makes them to be high indebted to credit providers due to inability to pay the loans. The results are in consistent with Haggins et al (2009) and World bank report (2006) who term dependency ratio to be high in Sub-Saharan Africa with dependency ratio 0.8 (young) and 0.1 (old) due to HIV/AIDS pandemic hence poverty is termed to be transitory, dynamic where different groups and sectors move in and out of poverty over time as clearly elaborated under Vicious circle of poverty theory (Nurkse, 1971).

Poverty Reduction

In this study, the dependent variable was poverty reduction which was measured by three indicators namely: standard of living, business expansion and level of income (after loan acquisition).

Standard of Living

The standard of living of the participants was measured using 3 items on a 5-point Likert scale. The items sought to establish the impact of Micro-credit loans on participants' ability

to satisfy basic needs, access to formal healthcare and increased saving potential. The items were rated on a scale of 1 to 5 as 1 = Very Low (VL), 2 = Low (L), 3 = Moderate (M), 4 = High (H) and 5 = Very High (VH). The findings were summarized into frequency, percentages, mean and standard deviation as presented in Table 3.

Table3: Measure of standard of living

Standard of living	VL	L	M	H	VH	Mean	STDEV
Basic needs satisfaction (food, sanitation , shelter)	4 1.8%	19 8.3%	171 75.0%	22 9.6%	12 5.3%	3.08	0.67
Formal healthcare & education access	4 1.8%	44 19.3%	119 52.2%	54 23.7%	7 3.1%	3.07	0.79
Increased savings potential	7 3.1%	42 18.4%	146 64.0%	22 9.6%	11 4.8%	2.95	0.77

The findings from the study reflect majority of the respondents to have experienced moderate impact of Micro-credit loans on the standard of living ranging from a mean of 2.95 to 3.08 with slight standard deviation ranging from 0.67-0.79. More specifically majority feel to benefit more in relation to basic needs satisfaction such as food, shelter, sanitation, water and clothing followed closely with improved access to formal healthcare and education though its standard deviation from the mean is higher compared to increased savings fluctuation. The results differ with Rono et al (2015) in his study where he found Non-bank credit to have a negative impact on the poor living below the poverty line using autoregressive distributed lag model while the findings by Quibria (2012) and Muhammed et al (2013) confirm credit access to have positive impact on the living standards of the poor. Bichanga (2014) and Mutuku (2016) on the other hand found credit to enhance saving culture leading to greater investment.

Business Performance

Business performance as an indicator of poverty reduction was measured using 6 items on a 5-point Likert scale. The items sought to establish various aspects of business/Income Generating Activities growth. The items were rated on a scale of 1 to 5 as 1 = Very Low (VL), 2 = Low (L), 3 = Moderate (M), 4 = High (H) and 5 = Very High (VH). The findings

were summarized into frequency, percentages, mean and standard deviation as presented in Table 4.

Table 4: Impact of Micro-credit Loans on Business/IGA Performance

Aspect	VL	L	M	H	VH	Mean	STDEV
Business expansion and diversification	4 2.7%	21 14.4%	103 70.5%	14 9.6%	4 2.7%	2.95	0.68
Job creation to self and others	25 17.1%	29 19.9%	57 39.0%	29 19.9%	6 4.1%	2.74	1.09
Increase stock level	5 3.4%	25 17.1%	73 50.0%	33 22.6%	10 6.8%	3.12	0.89
High profitability	8 5.5%	23 15.8%	86 58.9%	22 15.1%	7 4.8%	2.98	0.85
Acquisition of higher loans	7 4.8%	18 12.3%	76 52.1%	36 24.7%	9 6.2%	3.15	0.89
Prompt loan repayment	4 2.7%	11 7.5%	62 42.5%	36 24.7%	33 22.6%	3.57	1.01

The outcome in Table 4 portray moderate effect of loans on IGAs or business performance in relation to business diversification, job creation , stock increase , high profits , higher loans and prompt loan repayment at 70.5%,39.9%, 50%, 58.9%,52.1% and 42.5% respectively but business expansion and diversification scored highly compared to others. Prompt loan repayment and job creation scored poorly thus more training should be offered before and after loan acquisition on best ways of using credit to minimize risks of default by lenders. Loans should also be insured and registered with Credit Bureau Referencing to minimize losses related to default. The findings are in agreement with World Bank report (2018) which argues that training helps lenders reduce transaction related risks and enhance asset management in a productive way.

Level of Income

Level of income as an indicator of poverty reduction was captured as the deviation in income before and after acquisition of loan. The participants reported their annual income bracket before and after the Micro-credit loan. The proportion of respondents in each income bracket

was compared before and after the loan and corresponding deviations computed. The findings are presented in Table 5.

Table 5: Level of Income

Family Income	Before Loan		After Loan		Deviation (%)
	Frequency	Percent	Frequency	Percent	
Below 70,000	208	91.2%	169	74.1%	-17.1%
70,000 to 140,000	17	7.5%	54	23.7%	16.2%
Above 140,000	3	1.3%	5	2.2%	0.9%
Total	228	100.0%	228	100.0%	

The results as reported in Table 5 reflect a decline in the number of people earning below Ksh 70,000 upon receiving the loans by 17.1% and an increase in the number of people earning between Ksh 70,000-140,000 by 16.2% but those who were earning before loaning above Ksh 140,000 increased only by a small margin of 0.9%. Generally this implies Micro-credit has a positive effect on poverty reduction and those earning below Ksh 140,000 gained more compared to those earning above Ksh 140,000. The findings are in concurrent with Waliaula (2013) who found Micro-credit to be an essential tool towards poverty reduction. The institutions offering Micro-credit services should provide more credit to the qualified low income earners in order to move more people from below poverty line of vicious circle of poverty to virtuous one as stated by Yunus (2013).

Relationship between Micro-credit Provision and Poverty Reduction

The major Micro-credit related factors considered entail evaluation of the highest loan respondents have ever received from different sources, its utilization, terms of acquisition and its effect on the standard of living and business expansion as a result of increased income in terms of ability to meet basic needs of life, quality education and formal medical services for their siblings, job creation, ability to acquire bigger loans, prompt loan repayment and increasing savings among others.

Highest Loan Acquired From Micro -Credit Institutions

The study sought to find out the relationship between Micro-credit and Poverty reduction depending on the highest loan amount one has ever received since it determines the level of

income and business expansion potential. The results were presented in Table 4.5.1 by frequency and percentage.

Table 6: Highest Loan Acquired from Micro-credit Institutions

Loan Range	Frequency	Percent	Valid Percent	Cumulative Percent
Below 20,000	161	70.6	70.6	70.6
20,000 to 50,000	52	22.8	22.8	93.4
Above 50,000	15	6.6	6.6	100.0
Total	228	100.0	100.0	

The results reflect majority to have received loans below Ksh 20,000 at 70.6% while 22.8% had loans between Ksh 20,000-50,000 and a few members have managed to get loans above Ksh 50,000 at only 6.6% thus affecting the increase in the level of income, business expansion and the ability to improve their living standards hence poverty reduction may be experienced but at a slower pace than expected which in the long run delay achievement of the Millennium goal of poverty reduction. Formal financial institutions which isolate the poor should accommodate them to supplement their capital from informal sources for them to realize their full potential. The findings were in concurrent with Kemunto (2015) who proposed more public private participation in issues related to poverty reduction to achieve meaningful results.

Highest Loan Acquired and its Use

The study sought to establish how loans acquired by respondents from micro-credit institutions were utilized among different functions such as fees, medical bills, farming, business, household assets and other not stated. The results upon analysis were presented in Table 7.

Table 7: Highest loan acquired and its use

		Use for acquired loan								
			School fees	Medical bill	Farming	Business	Household assets	Others	Total	
d from Micro -	Below	Count	26	6	35	87	5	2	161	
	20,000	% within	16.1%	3.7%	21.7%	54.0%	3.1%	1.2%	70.6%	

	Loan							
	Acquired							
20,000	Count	12	0	9	29	0	2	52
	% within							
to	Loan	23.1%	0.0%	17.3%	55.8%	0.0%	3.8%	22.8%
	Acquired							
50,000	Count	5	0	2	5	1	2	15
	% within							
Above	Loan	33.3%	0.0%	13.3%	33.3%	6.7%	13.3%	6.6%
	Acquired							
50,000	Count	43	6	46	121	6	6	228
	% within							
Total	Loan	18.9%	2.6%	20.2%	53.1%	2.6%	2.6%	100.0%
	Acquired							

The result portray business as the main consumer of loans acquired by participants but those who received between Ksh 20,000-50,000 spent a higher percentage on business than those who received below Ksh 20,000 at 55.8% and 54% respectively.. Farming came second at 20.2% but the below sh 20,000 invested more than those with loans between Ksh 20,000-50,000 and above sh 50,000 at 17.3% and 13.3% respectively. School fees loan was third at 18.9% but the above sh 50,000 borrowers spent equal amount on fees and business at an average of 33.3%. Medication, household items and other functions were the least at an average of 2.6% across. The outcome imply those getting loans above sh 50,000 do not depend more on business compared to below sh 50,000 whose investment in business ranges between 54%-55.8% therefore lenders should encourage more scrutiny and monitoring of higher loans applicants since the risks attached to them are higher and chances of default are also high. This may in the long run increase poverty level due to high indebtedness among the poor if caution is not exercised. Banerjee et al (2017) also believes Microfinance contributes more on indebtedness of those affected with extreme poverty in the society hence appraisal of the borrowers potential is key. Training on agribusiness is essential to enable members move away from traditional farming in order for them to reap more returns necessary to reduce poverty level.

Highest Loan Acquired And Its Impact On Family Annual Income

The study sought to determine the change in family annual income after loaning. The findings upon analysis were compiled in Table 8.

Table 8: Cross-tabulation Highest Loan Acquired and Family Annual Income after loan

			Family annual income after loan			
			Below 70,000	70,000 to 140,000	Above 140,000	Total
Highest Loan Acquired from Micro credit	Below 20,000	Count	89	13	0	102
		% within Highest Loan Acquired	87.3%	12.7%	0.0%	69.9%
	20,000 to 50,000	Count	14	18	1	33
		% within Highest Loan Acquired	42.4%	54.5%	3.0%	22.6%
	Above 50,000	Count	7	4	0	11
		% within Highest Loan Acquired	63.6%	36.4%	0.0%	7.5%
	Total	Count	110	35	1	146
		% within Highest Loan Acquired	75.3%	24.0%	.7%	100.0%

The results in table 8 reflect a decline in number of people earning below sh 70,000 as the loan amount increases to a certain level beyond which the number of those earning below sh 70,000 starts to increase. Therefore loans between sh 20,000-50,000 have the highest impact on family income at 54.5% compared to above sh 50,000 whose impact is at 36.4% though its values supersedes the below sh 20,000 loan by 23.7

This means as loan increases poverty level goes down due to increased income to a certain level beyond which leads borrowers to high risks of indebtedness. Overall there is a decline in poverty as a result of increased income by 24.7% down from 100% before loan acquisition hence loans are deemed to have a positive impact on the borrowers to a certain level beyond which leads to indebtedness. The findings are in concurrent with the outcome of Siakwah

(2010) who found mixed results while carrying out a research on the same variables in Ghana.

Challenges Related to Loan Acquisition

The study sought to find out if there are any challenges respondents have experienced while sourcing for the loans. Participants were asked to rate the 7 variables predetermined on the Likert scale of 5 where: 5- Strongly Agree (SA), 4- Agree (A), 3-Not sure (NS), 2-Disagree (D) and 1-Strongly disagree (SD). The results were compiled as shown in Table 9.

Table 9: Challenges related to loan acquisition

Challenges	SA	A	NS	D	SD	Mean	STDEV
Loan application procedure are long and tiresome	23 10.1%	67 29.4%	33 14.5%	58 25.4%	47 20.6%	3.17	1.32
Inadequate information on the cost of loan is provided	20 8.8%	76 33.3%	37 16.2%	51 22.4%	44 19.3%	3.10	1.29
Interest rate is high	17 7.5%	83 36.4%	34 14.9%	49 21.5%	45 19.7%	3.10	1.29
Loan amount is very low	29 12.7%	71 31.1%	39 17.1%	60 26.3%	29 12.7%	2.95	1.26
Loan repayment period is short	29 12.7%	74 32.5%	36 15.8%	54 23.7%	35 15.4%	2.96	1.30
Amount to be paid monthly is not clear	27 11.8%	68 29.8%	32 14.0%	46 20.2%	55 24.1%	3.15	1.39
High loan security requirement	26 11.4%	34 14.9%	26 11.4%	61 26.8%	81 35.5%	3.60	1.39

The findings from the study reflect majority of the respondents strongly agreed with the statements in Table 9 since the mean values range from 2.95 to 3.60. Majority with the mean of 3.60 were in strong agreement that accessing Micro-credit loans from informal financial institutions is easier but claim the loan amount awarded is very low making their business to be stagnated thus affecting their living standards. Furthermore some believe the repayment period is short hence limiting its impacts on their business. Therefore credit providers should review the loan amount upwards for those who qualify to enable them transform their lives leading to poverty reduction. The findings are consistent with Bichanga et al (2014) findings in Kiambu County where they deem credit provision at lower interest rate and favorable security requirement against loan as the best strategies to enhance poverty reduction.

Therefore lenders should consider the wellbeing of the borrowers when issuing loans for all parties to benefit as stated by Yunus (2013).

Correlation Between Loan Provision And Poverty Reduction Indicators

In order to conduct a correlation analysis between loan provision and poverty reduction indicators, scores on various scales were used. For the Likert scales viz. living standard, business expansion and challenges in loan acquisition, summation scores for items in each scale were obtained. such that living standard had a minimum score of 3 and a maximum score of 15 for the three items; business expansion had a minimum score of 6 and a maximum score of 30 for the 6 items while challenges scale had a minimum scores of 7 and a maximum score of 35 for the 7 items. As for the highest loan acquired and use of loan, these were reported by the respondents based on the predefined ranges. P-value represents the probability of an event occurring by chance if the null hypothesis (H_0) is true and its values lies between 0-1 where: $p < 0.01$ outcome means the result is highly significant, $0.01 > P < 0.05$ means the result is significant but if $P \geq 0.05$ it means the result is not significant thus null hypothesis is upheld. Correlation output is presented in Table 10.

The study found moderate positive correlation between business expansion and use for the acquired loan ($R = .226$; $p = .006 < .05$), use of loan acquired and challenges related to its acquisition ($R = .139$; $p = .036 < .05$), and also between business expansion and living standard ($R = .619$; $p = 0.000 < .05$). Thus there is a statistically high significant positive relationship between utilization of the loan acquired and business expansion where $P = 0.006$ ($P < 0.01$) such that as loan acquired increases and be pumped into the business its expansion becomes automatic therefore business expansion increases with more investment of micro-credit loans into it. In addition as the business expands with time the living standard of most respondents improves too where $P = 0.000$ ($P < 0.01$) due to the ability to meet the basic needs as they fall due. On the other hand as the uses of loan increases that requires more capital challenges related to loan acquisition also multiplies thus resulting to low loans at high interest rate that is not disclosed to credit seekers hence loan have statistically high significant results on poverty reduction but as the demand for more arises credit inadequacy and high interest crops up which affects poverty reduction among the poor. This is clearly reflected in the relationship between use of loan acquired and related challenges where the results are

statistically significant at $P=0.036$ ($0.01 < P < 0.05$) The findings are in agreement with the outcome by Mutuku (2016) who view credit as an opportunity for greater investment and improving of the living standards.

Table 10: Correlation between Loan Provision and Poverty Reduction Indicators

		Highest Loan Acquired	Use for acquired loan	Challenges in loan acquisition	Living standard	Business Expansion
Highest Loan Acquired	Pearson Correlation	1	.043	-.003	.022	.069
	Sig.		.516	.959	.747	.410
	N	228	228	228	228	146
Use for acquired loan	Pearson Correlation	.043	1	.139*	.021	.226*
	Sig.	.516		.036	.751	.006
	N	228	228	228	228	146
Challenges in loan acquisition	Pearson Correlation	-.003	.139*	1	.055	.009
	Sig.	.959	.036		.410	.913
	N	228	228	228	228	146
Living standard	Pearson Correlation	.022	.021	.055	1	.619*
	Sig.	.747	.751	.410		.000
	N	228	228	228	228	146
Business Expansion	Pearson Correlation	.069	.226*	.009	.619*	1
	Sig.	.410	.006	.913	.000	
	N	146	146	146	146	146

*. Correlation is significant at 0.05 level (2-tailed).

Comparison Between Credit Sources and Interest Rate Charged

The main objective of the study was to determine the interest rate charged on the loans by various lending institutions identified since it influences its ability to be approached for credit purposes. The higher the rate the poorer they become and the higher the rate of default. The results were as presented in Table 11.

Table 11: Cross-tabulation between Credit sources and interest rate charged

	Average Interest Rate Charged	Total
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		0 to 10	10 to 20	20 to 30	30 to 40		
Other available sources of credit	Friends	Count	8	5	0	0	13
		% within Other credit sources	61.5%	38.5%	0.0%	0.0%	100.0%
		% of Total	3.5%	2.2%	0.0%	0.0%	5.7%
	Table banking	Count	52	94	9	7	162
		% within Other credit sources	32.1%	58.0%	5.6%	4.3%	100.0%
		% of Total	22.8%	41.2%	3.9%	3.1%	71.1%
	Sacco	Count	23	13	2	0	38
		% within Other credit sources	60.5%	34.2%	5.3%	0.0%	100.0%
		% of Total	10.1%	5.7%	.9%	0.0%	16.7%
	Others	Count	8	3	2	2	15
		% within Other credit sources	53.3%	20.0%	13.3%	13.3%	100.0%
		% of Total	3.5%	1.3%	.9%	.9%	6.6%
Total	Count	91	115	13	9	228	
	% of Total	39.9%	50.4%	5.7%	3.9%	100.0%	

The results in Table 11 reflect friends and Sacco to be charging the rate below 10% while table banking charges the highest rate of 10-20% but majority prefer it over Sacco due to easy accessibility thus favorable terms of accessing Micro-credit loans is highly considered irrespective of the interest rate charged on the loan. The findings were supported by Yunus (1976) who advocated for loans without collateral to the poor in order to support them initiate IGAs for empowerment purposes by coming up with the Grameen model of lending which has been adopted by many Microfinance institutions worldwide.

Relationship Between Education Level And Annual Income

The research sought to determine how education influences ones annual income. The results were compiled as shown in Table 12. The results as presented in Table 12 reflect a decline in the number of living under extreme poverty since all have attained basic education that is considered necessary for operation of small businesses at 24.7% having income above sh 70,000. This implies education is key in developing intellectual capacity of the respondents to deal with financial risks in order to improve their financial position. Chege et al (2015) view education as end in itself towards economic development.

Table 12: Cross-tabulation Between Education Level and Family Annual Income

	Family annual income after loan	Total
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		Below 70,000	70,000 to 140,000	Above 140,000		
Education Level	Primary	Count	67	16	0	83
		% within Education Level	80.7%	19.3%	0.0%	100.0%
		% of Total	45.9%	11.0%	0.0%	56.8%
	Secondary	Count	34	14	1	49
		% within Education Level	69.4%	28.6%	2.0%	100.0%
		% of Total	23.3%	9.6%	.7%	33.6%
	Tertiary	Count	9	5	0	14
		% within Education Level	64.3%	35.7%	0.0%	100.0%
		% of Total	6.2%	3.4%	0.0%	9.6%
	Total	Count	110	35	1	146
		% of Total	75.3%	24.0%	.7%	100.0%

Relationship Between Micro-Credit Loan Training And Poverty Reduction

The study sought to determine the impact of loan training on poverty reduction based on the number of training one has attended and the skills learned. The findings were compiled in frequency tables and percentages.

Attended Training on Micro-Credit Loans

The study sought to find out if respondents had attended any training on loans since it enhances better utilization of funds received.

Table 13: Attended Training on Micro-credit Loans

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	204	89.5	89.5	89.5
No	24	10.5	10.5	100.0
Total	228	100.0	100.0	

The results in Table 13 reflect majority at 89.5% to have attended training related to Micro-credit compared to 10.5% who have not attended any due to reasons well known with them. This implies majority have gained basic skills related to business management leading to reduction in risk transactions. The findings are in consistent with Bichanga et al (2014) who believe skills gained through training enhance earning potential of the members.

Skills Acquired from Training

The study sought to find out the skills that respondents had gained from the trainings and also establishing the key areas that need further training. The results were presented in bar chart Figure 2.

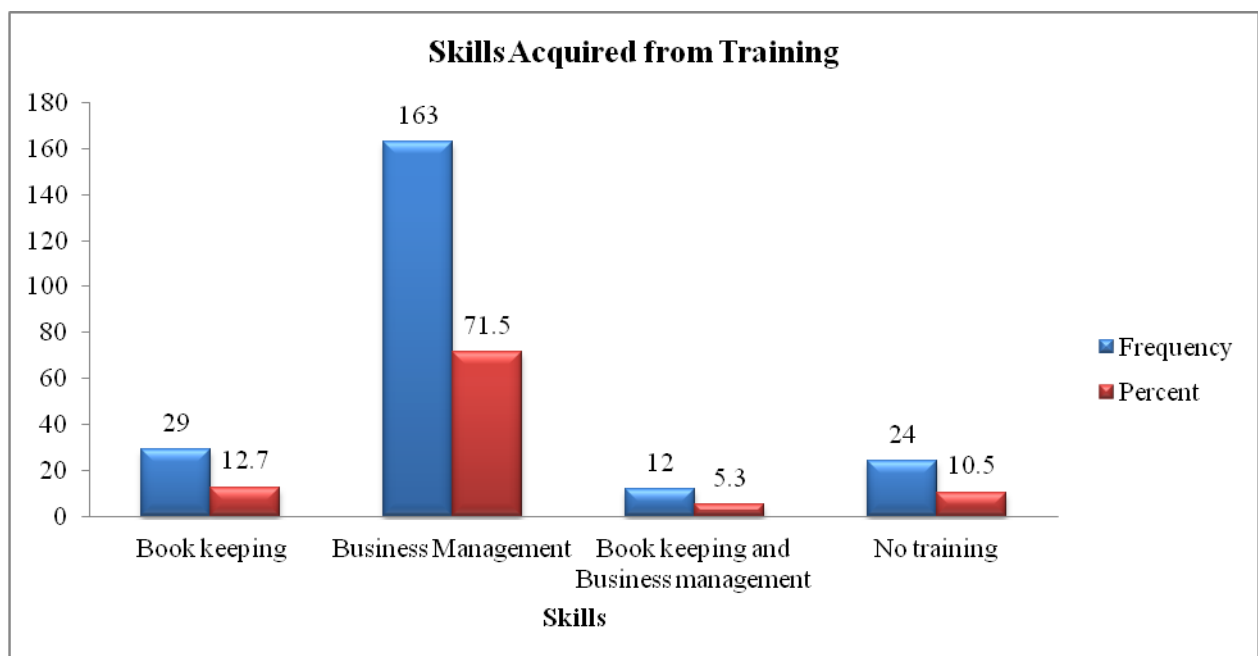


Figure 2: Skills Acquired from Training

The results in Figure 2 reflect business management as the key area where majority of the respondents at 71.5 % gained more after attending training; book keeping scored 12.7% while those who gained skills on both were 5.3%. This implies respondents technical skills development have not been fully realized thus more training on the weak areas should be emphasized by lenders to minimize occurrence of non-performing loans.

Recommendations from Respondents Towards Poverty Reduction

The study found that training offered to SHG members was not adequate. This emerged as most of the study participants suggested that frequent training should be offered on loan use. Specifically, one of the SHG members, during the interview, said that:

People should be trained on how to adequately and successfully use the loans disbursed to them while the loan amount should also be increased to ensure availability of adequate capital for their business ventures. [Interview SHG member 24: 30th September, 2018]

Summary of the Discussion

The Chapter sought to find the relationship that exist between Micro-credit and Poverty Reduction among SHGs in Kisumu County. Major Poverty reduction indicators considered include annual income level before and after loan acquisition, business performance upon receiving the loan and the living standard of the respondents. Micro-credit services considered that have influence on the poverty reduction were loan provision and its challenges, training and education. The findings reflect significant decline in poverty level upon acquisition of loans by 24.7% where some members income increased to above sh 70,000 and to some it rose to above sh 140,000 at 0.7%. The standard of living also improved to a large extent especially the ability to meet the basic needs of life scored highly while business expansion took the lead as a result of increased stock and more so most applicants utilized their better part of the loans in business compared to other functions such as farming and school fees. Some of the obstacles that they experienced which affected reduction to a greater extent include low amount of loans offered at high interest rate, discrimination related to loan access, inadequate skills development related to book keeping and dependency ratio.

Hence Micro-credit has a positive moderate impact on poverty reduction despite of the various obstacles identified. The result are in agreement with the findings by Quibria (2012), Wencong et al (2013), Bichanga et al (2014) and differs with the findings by Banerjee (2017), Rono et al (2015) who found Micro-credit to have negative impact on poverty reduction but partially in agreement with Siakwah (2010) who found mixed results.

Summary, Conclusions and Recommendations

This section entails the summary of the findings from the data analyzed, conclusions made and the recommendations on some of the strategies that can be applied by all stakeholders such as credit providers and beneficiaries to address the problems related to poverty reduction advanced in the study. In addition the chapter offers suggestions that may aid in future studies related to the topic at hand by other researchers.

Summary of the Findings

Poverty is deemed to be a multidimensional phenomenon thus it manifests itself in both Monetary and non-monetary while Micro-credit is defined as the provision of small loans to the poor who were isolated by the banks for IGAs in order to improve their living standards. Major Micro-credit related services considered in the study include loan provision, training and education since loan provision alone is termed inadequate while indicators of poverty reduction entail income, business expansion and standard of living. Major theories upon which the research was anchored on are Grameen model theory, vicious circle of poverty theory, liquidity theory and Cultural theory.

Major findings reflect a slight decline in poverty for those who received loans below Ksh 50,000 by 24.0% since some shifted from estimated poverty line annual income of Ksh 69,350 to annual income that lies between sh 70,000-140,000 and a few were above sh 140,000 but a very small change of 0.7% for those who received loans above Ksh 50,000. The findings therefore portray mixed results since the impact of loans seem to differ among the categories identified.

The findings from the study further reflect heavy reliance on table banking despite of high interest rate compared to friends and other sources of funding such as Sacco's since majority are more concerned with the ease of access compared to the related costs. High interest rate drains away all their returns which make them to be more indebted to credit providers instead of improving their lives.

The outcome from the study also reflect loan to have more impact on the living standards of the poor in terms of basic needs satisfaction than increasing the savings. This therefore implies many are more concerned with household needs related to the present than securing the future hence making them to fall into vicious cycle of poverty that is transferred from one generation to the next.

Micro-credit loans have moderate impact on the business performance of the respondents which were measured in form of job creation, increased stock, higher profitability and prompt repayment. More impact was experienced on stock level but very low impact on repayment of the loans. Poor repayment of the loan increases the risks related to default which forces many lenders to pay more than expected thus affecting their economic condition thus more awareness to the borrowers should be carried out to enhance prompt repayment of the loans to minimize more debts.

Main challenges identified during the study entail inadequate capital at the top followed closely with high interest rate, inadequate training and monitoring of the borrowers. Inadequate capital incapacitates their ability to expand their businesses that are capital intensive while high interest rate makes them to be slaves to credit providers in terms of high repayments. In addition poor training and lack of monitoring of how they utilize loans increases default risks. The government should supplement micro-credit institutions dealing with poverty eradication for the borrowers to acquire adequate capital. In addition trainings should be carried out before and after loaning and be cushioned with monitoring borrowers to minimize default and other related risks to both lenders and borrowers.

Conclusions

The findings portray mixed results in relation to Micro-credit services and Poverty reduction. As the loan amount increases the poverty level declines (measured with the increase in the income level) to a certain point beyond which any additional loan causes poverty level to raise again due to diverting part of the loan to household needs such as school fees and medication and also venturing into the business with high risks. The estimated international poverty line is US \$1.90/ per day which is equivalent to Ksh 69,350 per year.

The results also reflect prime age people between 30-40 years to be more involved in Micro-credit services but majority only have basic skills in business and financial management thus more has to be done in form of capacity building to enhance their technical skills since it is deemed to be essential for economic development. Book keeping and other related areas scored poorly due to lack of technical skills to comprehend and apply it in their businesses.

Recommendations

Some of the challenges that are limiting poverty reduction to a significant level are financial discipline, inadequate funding, high interest rate, lack of information on the cost of loans, gender imbalance and inadequate training and monitoring of the borrowers thus all stakeholders should come together to deal with the identified problems to reduce poverty among the poor. Capacity building programs are deemed to be essential for technical skills development to enable them deal with all risks related to loans in a prudent way hence all should embrace it.

Gender equity in groups is of essence to ensure all are empowered towards poverty reduction as the key pillars of MDGs and SDGs. Therefore gender equity should be observed to achieve economic development as a country due to large number contributing to its growth. Financial institutions engaging in profit making ventures should develop insurance and credit policies for SHGs to allow the qualified members to access loans to supplement what they have to build up their capital base. Furthermore clear information on the cost of loans including interest rate should be disclosed to lenders to minimize default cases.

Market linkage is of essence to enhance their business growth and expansion over time hence the government should create a conducive environment for business growth both locally and at a global range which may create more opportunities for the poor to increase their income. In addition they should prolong loan repayment for them to maximize their returns for betterment of their lives.

Limitations of the Study

The research was carried out to Self-help groups under Unbound Organization in Kisumu county and major focus was on Micro-credit beneficiaries to determine the extent to which it may be used as a tool towards poverty reduction using semi-structured questionnaires. The

findings may to some extent be subjective since the borrowers will portray only the positive side of Micro-credit but in real sense there is much information hidden. The views of all stakeholders such as credit providers, field workers, group leaders and the government department dealing with SHGs would have shade more light since Poverty is a multidimensional component that needs different approaches to realize significant results.

The study also considered only 109 groups sampled yet the County has over 2843 registered groups by the ministry of gender and social services therefore their views might not represent the voice of all SHGs in the county. A much more detailed research entailing the views of most SHG members including the control group that has not taken the loans is required to be able to generalize the information to the entire population. The research at hand used cross-sectional technique thus limiting the significant of the outcome therefore a longitudinal study should be considered to provide better results where participants are recruited for a study when they receive a loan and its impact on their income, standard of living and business expansion as indicators of poverty reduction be observed over a period of time to come up with a conclusive report.

Areas for Further Research

Few studies exist related to Micro-credit and Poverty reduction among SHGs especially in Kisumu County and more so on SHGs representing all genders since poverty affects all irrespective of gender thus more studies need to be done focusing on the county as a whole to have a conclusive report. In addition a longitudinal study should be carried out over time targeting the identified group of focus in relation to SHGS to have meaningful results.

Other studies should focus on Micro-credit and Market linkage on economic performance of SHGs. In addition a study should be carried out on Micro-credit and Capacity building on economic performance of SHGs to enhance financial discipline which in the long run reduces poverty among the poor in the society.

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