

Effects of Microcredit Facilities on the Welfare of Households. Evidence from Suna East Sub-County, Migori County Kenya

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Abstract

The socio-economic growth and development of Migori County is to a great extent dependent on farming and small scale enterprise. Majority of the people working in these sectors are low income earners whose main source of credit facilities is the micro lending institutions. The aim of the present study was to analyse the effects of microcredit facilities on the welfare of households in Suna East Sub-County. The study focussed on the microcredit customers who got loan from the five selected microfinance institutions in Suna East Sub-County. A sample size of 306 respondents was obtained for the study using Krajcic & Morgans' table, 1970. A survey was conducted to carry out the study in which questionnaires were used to collect data from the respondents. Multiple regression analysis was used to test the proposed hypotheses of the study and to verify the association between variables. In this regard the study observed that microcredit played the positive role in changing and improving the living standards, income, diet patterns, health status and children's education of the respondents. The study recommends that emphasis on the importance of loan services on household welfare should be made and the amounts borrowed be increased so as to meet the needs of the residents, residents should be encouraged to save with the microcredit facilities so as to raise their chances of gaining support from the facilities and lastly capacity building among households should be maintained so that residents can maximize potentials within the microcredit facilities.

Key Words: Microcredit, Welfare,

1. Introduction

There are over 100 million people who use Micro-credit facilities around the world, of which 84% of them are women and youths, and 72% are "very poor", (Dunford et. al., 2007). The most important objective of micro-credit facilities is to alleviate poverty.

The living standard in low income developing countries always remain crucial issue to be addressed. In many developing countries, like Bangladesh, microfinance has been used as a tool to gear up the living standard of poor people (Akram & Hussain, 2011). There is an almost global agreement now that microfinance to the poor is viewed to achieve equitable and sustainable gains for economic and social development in the twenty-first century (Akram & Hussain, 2011)..

According to Liliana et.al (2010), there is a correlation between lack of financial access and low income. The success of some of the micro lenders working with the poor households, particularly in South East Asia, West, Central and Eastern Africa has put micro lending high on the agenda of many development agencies. In Tegucigalpa and Cholteca in Honduras in 2003, effect assessment studies revealed that 60% and 50% of micro-credit recipients had their sales and incomes increase respectively one year after receipt of credit for working capital. Agricultural Finance Cooperation Limited in 2008 in India, assessed development effect of microfinance programs. Clients reported increase in income from 76% of activities Liliana et.al (2010).

The challenge faced by most countries now, especially the developing countries, is to improve the lives of its citizens and achieve sustainable economic growth for health development. Developing countries, especially in Kenya, have been concerned about the rising unemployment, which is regarded as the main cause of urban and rural poverty. In Kenya, of the 13 million youth, less than 50% are in gainful economic activities in the formal, informal and public sectors of the economy, while majority are unemployed, (Simeyo et al., 2011). They comprise 61% of the unemployed. This trend is worrying and calls for intervention measures. Micro finance lending and associated services are one such intervention. As such, the number of micro-lending institutions has

steadily increased over the last decade in Africa, and particularly in Kenya.

Migori County, like other parts of the country, has also witnessed this increase in the number of microfinance institutions over past period of time. This sharp increase in Migori could be attributed to the kind of occupation dominating the area, especially farming and small scale business. People working in these informal sectors are low income earners who do not qualify for credit facilities from the commercial banking institutions. Micro finance lending and associated services are one such intervention. However, lack of collateral and high interest rates is an impediment to access to loans from Micro finance institutions (MFIs) by the people in this sector (Mushimiyimana, 2008).

Suna East Sub-County has witnessed an increase in the number of households accessing micro-credit facilities over the past decade especially the low income earners working in the informal sector who don't qualify for credit facilities from the commercial banking institutions. However, much as Microcredit services have existed in Migori for a period of time, there is lack of information on the good practices in the area and the exact magnitude of its effects and how the loans are accessed and utilized in order to attain socio-economic development. The fact that poverty still exists amidst the attempts of provision of Microcredit creates room for exploring how Microcredit has benefited the poor in Suna East Sub-County. The hypothesis of the study was stated as:

Ho: Microcredit facilities offered by the various microfinance institutions have no significant effect on the welfare of household.

2. Literature Review

Known collectively as microfinance services, microcredit facilities include micro-credit loans, inputs, micro-savings, micro-insurance, and money transfers, and have been attributed with enabling micro-entrepreneurs to build businesses and increase their income, as well as improving the general economic wellbeing of the poor. Microfinance has been credited with improving other financial outcomes such as furniture or a sewing machine, as well as non-financial outcomes such as health, food-security, nutrition, education, women's empowerment, housing, job creation, and social cohesion (Odell, 2010).

Others allude to negative impacts such as the exploitation of women, increased or at best unchanged poverty levels, increased income inequality, increased workloads and child labour, the creation of dependencies and barriers to sustainable local economic and social development (Bateman & Chang, 2011) Micro lending is therefore viewed by many as a vehicle towards poverty eradication. With more than half of the world's population living without access to banking or other financial services (Beck, Demirguc-Kunt, & Peria, 2008; Chaia et. al, 2009), the potential market for micro-credit facilities is substantial. As the number of micro-lending organizations has expanded (Swibel, 2007), so has the supply of microcredit facilities around the world.

Micro lending institution have been established in a number of countries, over the past decade, as a means of mitigating the key constrains of sustainable access to financial resources by low income earners. Proponents of micro lending view it as a cost effective way of building an entrepreneur culture, enhancing domestic economic capacity, reducing poverty and unemployment (Mersland and Strom, 2008). Rashmi Dyal-Chand (2005) asserted that, at first glance, the goal of micro lending is exciting and innovative: By making small loans to help impoverished people start small businesses, micro lenders appear to turn those who are marginalized by mainstream banks into successful entrepreneurs.

A loan becomes a debt, and the poor often face a crisis if an expected source for repayment evaporates. Therefore, borrowing is often much riskier than saving. Because starting a new business is risky and sustainable providers of credit cannot afford to lose money, credit is generally not used to start a new business but rather to expand an existing one. Therefore, most people must rely on savings to start up new business ventures. Savings enables future investment, by giving access to lump sums of money. These large sums of money can be used for investment opportunities, for life cycle events, such as marriages, funerals or for emergencies. Savings can also be used to smooth consumption (Hirschland 2005).

This insight is useful for understanding recent research on microfinance. Growing empirical evidence suggests that savings products can be valuable for generating income and for reducing poverty (Dupas and Robinson, 2013)

It is on this premise that Eneji et al. (2013), observed that rural dwellers need agricultural credit to a large extent to enable them invest in different types of economic ventures. Rural development involves taking into consideration the health (water supply, sanitation and hygiene), education food, poverty and rural economics and other social activities like security, transport and communication services.

Dong, Lu and Featherstone (2010) indicated that rural credit is a necessity for improving farm profits and improving the living standards of rural communities in developing countries. The writers found that by removing credit constraints, the income of farmers would improve considerably. Ibrahim and Bauer (2013) mentioned that the most significant interventions provided by microfinance institutions in the support of agriculture are the supply of improved seedlings, fertilizer and cash loans. Dong, Lu and Featherstone (2010) indicated that rural credit is a necessity for improving farm profits and improving the living standards of rural communities in developing countries.

2.1 Theoretical Framework

This study borrowed from the Restriction of Opportunities Theory of Poverty (ROTP) pioneered by Arjun Appadurai in 2004 and developed upon by Dipkanar Chakravarti in 2006. ROTP posit that poverty is as a result of environmental conditions and lack of social and economic capital. The theory emphasized the influence of human environment on people's daily lives; and since people's lives are condition by their environment, the individual's daily decisions/actions are dependent upon what is present or what is not in the environment. As the poor continue to navigate within the environment of poverty, he/she develops fluency within the environment, but a near illiterate in the larger society or environment (Chakravarti, 2006).

Lack of capacities could cause an individual to enter the environment of poverty. This implies that, an individual who is poor lack adequate capacities with which to change his/her position. The capacity to inspire is paramount in this regard; the individual through social interactions develops aspirations that would change his/her socio-economic environment. It suggests that, a person's aspiration is conditioned by his/her environment. It therefore holds that, the better one is placed in his/her environment, the more chances he/she has to not only aspire but to fulfil his/her aspiration (Appadurai, 2004).

ROTP is relevant to this study in that, microfinance credit scheme is belief to be meeting human basic necessities of life and is creating positive environment for high aspirations among beneficiaries across the world. The theory thus supports the very foundations upon which this study is involved—investigating the social value of microcredit facilities amongst poor families by examining the real effects of microfinance facilities on the welfare of households in Suna East Sub-County.

2.2. Empirical Related Studies

Despite the apparent success and popularity of microfinance, no clear evidence yet exists that microfinance programmes have positive impacts (Armendáriz and Morduch 2005; 2010). There have been major reviews examining impacts of microfinance. These reviews concluded that, while other inspiring stories purported to show that microfinance can make a real difference in the lives of those served, rigorous quantitative evidence on the nature, magnitude and balance of microfinance impact is still scarce and inconclusive (Armendáriz and Morduch 2005;2010). Overall, it is widely acknowledged that no well-known study clearly shows any strong impacts of microfinance (Armendáriz and Morduch 2005, p199-230). Because of the growth of the microfinance industry and the attention the sector has received from policy makers, donors and private investors in recent years, existing microfinance impact evaluations need to be re-investigated; the claims that microfinance successfully alleviates poverty and empowers women must be scrutinised more carefully.

Ibrahim and Bauer (2013) mentioned that the most significant interventions provided by microfinance institutions in the support of agriculture are the supply of improved seedlings, fertilizer and cash loans. According to Abhijit et al. 2014 in their study on the Miracle of microfinance, Evidence from a randomized evaluation, Small business investment and profits of pre-existing businesses increased, but consumption did not significantly increase. Durable goods expenditure increased, while “temptation goods” expenditure declined. They found no significant changes in health, education, or women's empowerment.

Collectively these findings suggest that over relatively short time periods, microfinance had positive impacts on business investments and outcomes but did not have impacts (positive or negative) on broader measures of poverty and social well-being. There have been attempts in the past to study Microcredit and Micro lending but much focus has been on the impact of micro-credit facilities in poverty alleviation, especially in Kenya. Mixed results regarding impact on income and expenditure have been found. Some studies show a significant, positive impact on beneficiaries while others show no significant impact. Not much has been done to find out the effects of these microcredit services on the welfare of the households in Suna East Sub-County using the four indicators; income security, education security, health security and food security to determine their effects on the well-being of the households, therefore this research addresses these gaps.

2.3. Conceptual Framework

The conceptual framework explains the direct and indirect effects of microcredit on welfare of the household through direct credit facilities offered by the micro lending institutions. The credit facilities offered are aimed at uplifting the welfare of the households by engaging in income generating activities. The change in household welfare status will be manifested through changes in credit amount, savings, income levels, education, food and health security situation, asset accumulation, better shelter and health status (dependent variables). However, the actual change in the level of welfare will be determined by a number of extraneous variables beyond the control of the client and/or the lending institution. Such variables include poverty level, household size, number of household dependants, inflation rate, level of education, business risk and government controls. This interrelationships is as illustrated in Figure 2.1

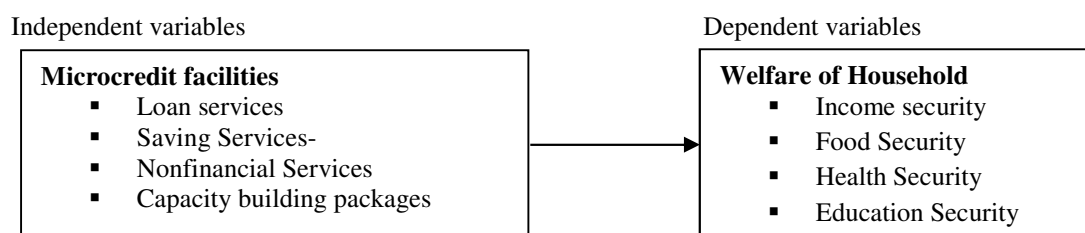


Figure 2.1: Diagram of Conceptual Framework

3. Research Methodology

The research methodology is always important in any research. This research adopted Descriptive Survey research design in carrying out the study method and the total population comprised all customers of the five selected microfinance institutions based in Migori town. Suna East Sub-County. Using Krejcie & Morgans', 1970 table, a sample of 306 customers were targeted which comprised regular customers of the five financial institutions. However a total of 283 respondents had returned the fully completed questionnaires which formed the actual sample. Change in the household's welfare was measured on a five- point range likert scale basing on the various indicators. The Statistical Package for Social Sciences (SPSS) version 18.0 was used to conduct the data analysis. Descriptive statistics (frequencies, means and standard deviations) were used to explore existing services offered by microcredit facilities. Multiple regression analysis was used to test the formulated hypotheses and deduce the effect of microcredit facility services on household welfare.

4. Findings

4.1 Demographic Characteristics of Respondents

Information about demographic characteristics of the respondents is presented in the table below

Table 4.1 Respondents Demographic Profile

Demographic Profile	Category	frequency	Percentage
Gender	Male	60	21.2
	Female	223	78.8
	Total	283	100.0
Age of respondents	Below 30 years	126	44.5
	31-40 Years	90	31.8
	41 Years & Above	67	23.7
	Total	283	100.0
Level of education	Secondary and Below	139	49.1
	Tertiary institute	79	27.9
	Graduate	65	23.0
	Total	283	100.0
Occupation of respondents	Farmer	114	40.3
	Business	66	23.3
	Professional	73	25.8
	Other	30	10.6
	Total	283	100.0

Source: Survey Data (2014)

Results of the gender distribution shown in Table 4.1 reveal that a majority (78.8%) of the respondents were female. Considering that the study targeted households, it is possible that women were easily found either at the group meetings or at their business places as opposed to men which explains the variation in gender among respondents.

Results presented in Table 4.5 indicate that most of the respondents (45.5%) were aged below 30 years; 31.8% were aged between 30 and 40 years; and 23.7% were aged above 41 years. These results imply that the study sample comprised across section of the residents of Suna East Sub-County and took care of the diverse interests of youth and elderly. Results of the level of education analysis presented in Table 4.5 reveal that a majority (49.1%) of the respondents were of secondary school level or below. Only a small proportion (23.0%) was graduates. The large proportion of respondents who were of secondary school and below vindicates the need for micro credit facilities that can be used to facilitate economic activities among household.

Personal occupation is the key characteristic for an individual's living standard, a good occupation gives space for ones savings and affordability of basic needs, in the current study, occupation was included to control respondents' occupation in examining the effects of microcredit facilities on the welfare of households. Table 4.1 above reveals that 40.3% of the respondents were farmers, respondents with professional occupation represented 25.8% of sample respondent; business dependent respondents occupied 23.3% of the respondents while other occupations covered 10.6% of the sample respondents.

The analyses used data compiled from household surveys of residents living in Suna East Sub-County. First the response rate was assessed for the respondents issued with the questionnaires. This was then followed by an analysis of the respondent's demographic profile. Descriptive statistics were used to analyze the structured sections of the questionnaire. All data were entered into SPSS version 18.0. Data screening was then conducted according to guidelines set out by Tabachnick and Fidell (2007). This included assessment of missing data, outliers, normality and testing basic assumptions of multiple regression analysis.

4.1.1 Testing for Normality

Normality was assessed using measures of skewness and kurtosis (Tabachnick and Fidell, 2007). The distribution was considered normal if skewness and kurtosis values fell within the interval -2.0 to 2.0. As shown in Table 4.2, the skewness and kurtosis values for all variables were within the acceptable interval. Normality assumptions were therefore met.

Table 4.2: Testing for Normality Requirements

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Loan services	-0.646	0.145	0.911	0.289
Saving services	-0.137	0.145	-0.539	0.289
Non Financial services	-1.130	0.145	2.947	0.289
Capacity building packages	-0.389	0.145	1.014	0.289
House hold welfare	0.318	0.145	-1.147	0.289

Source: Survey Data (2014)

4.1.2 Assumption of Linearity

Pearson's product moment correlation coefficients were used to examine the assumption of linearity. Results displayed in Table 4.3 indicate that there were positive associations among predictor variables. The linearity assumption was not violated.

Table 4.3: Testing for Linearity Requirements

	1	2	3	4	5
1.Loan services	1				
2.Saving services	0.732**	1			
3.Non financial services	0.492**	.256**	1		
4.Capacity building packages	0.679**	.660**	.111	1	
5.House hold welfare	.206**	.025	.452**	.165**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data (2014)

4.1.3 Assessing Homogeneity of Variances

Using Levene statistic for equality of variances, homogeneity of variances was assessed. The study revealed that the assumption of homogeneity of variances was not violated Table 4.4. None of the Levene statistic was significant (Tabachnick and Fidell, 2007).

Table 4.4 Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Loan services	2.982	1	281	0.085
Saving services	0.153	1	281	0.696
Non financial services	2.186	1	281	0.140
Capacity building packages	0.476	1	281	0.491
Household welfare	0.399	1	281	0.528

Source: Survey Data (2014)

4.5 Descriptive Statistics of Key Study Variables

Descriptive statistics were used to explore the prevailing levels of key study variable within the study area. In particular, frequency distributions, means and standard deviations were used to describe loan services, saving services, non financial services, capacity building packages, and household welfare.

4.5.1 Loans Services

Four items were used to examine the prevailing perceptions on loan services among residents in the Sub-County and the results were as shown in table 4.5 below.

Table 4.5 Prevailing perceptions on loan services

		f	%
The highest amount of cash you borrowed from your microcredit institution	Below 5000	17	6.0
	5001-10000	151	53.4
	10001 - 20000	108	38.2
	Above 20000	7	2.5
	Total	283	100.0
Major source of daily meals	Others	6	2.1
	Gifts	11	3.9
	Buying from market	128	45.2
	Farming	138	48.8
	Total	283	100.0
Average monthly spending on health and education	Below 20%	4	1.4
	21-40%	99	35.0
	41-60%	170	60.1
	61 and above	10	3.5
	Total	283	100.0

Source: Survey Data (2014)

Potential benefits of loan services were measured using 8 items reflecting benefits of loan services. Responses were elicited on a 5-point scale ranging from 1-very low extent to 5-very high extent.

Results presented in Table 4.6 indicate that residents in Suna East Sub-County appear to be highly motivated to take loans owing to the potential benefits accruing from use of loan money. The mean response scores on all items were approximately 4.00 and standard deviation values less than or equal to 1. This shows consistency among responses which reflect high extent of motivation. In particular, respondents tended to be highly motivated by among others; the urge to make home improvement (M=4.22, SD=0.869); ease of access of top up loan (M=3.96, SD=1.071); relaxed initial conditions and procedures (M=3.95, SD=0.882); short time taken before approval (M=3.91, SD=1.015); extra capital for business (M=3.80, 0.667); and ability to repay (M=3.72, SD=0.60).

Table 4.6 Factors motivating respondents to take a loan

	Mean	Std. Deviation
Urge to improve my home	4.22	.869
The ease of access of top up loan	3.96	1.071
The relaxed initial conditions and procedures	3.95	0.882
Short time taken before approval	3.91	1.015
Extra capital for my business	3.80	0.667
Ability to repay	3.72	0.60
Payment of medical bills	3.56	0.94
The low interest rates	3.50	0.63

Source: Survey Data (2014)

These statistics imply that the potential benefits that loans provide play a key role in motivating residents of Migori County to take loans. Many of them yearn to improve their homes, top up their loans, settle medical bills and pay school fees among other needs. The availability of microcredit facilities enables them to achieve all these.

4.5.2 Savings Services

Saving services were measured using a total of 8 items as displayed in the results in Table 4.7 which show respondents' views towards saving services offered at their respective microcredit institutions.

Table 4.7 Respondents' views towards saving services

	Mean	Std. Deviation
Microcredit savings have made basic needs affordable and accessible	4.36	0.76
Savings reduce vulnerability to economic stress and external shocks	3.89	0.78
Compulsory saving is conducive in encouraging saving habit	3.88	0.71
Microcredit institutions offer good loan and saving services compared to commercial banks	3.84	1.06
I prefer saving in financial form rather than non-financial form	3.83	0.77
Rural residents have difficulties to access microcredit institutions	3.64	1.12
I am comfortable using what I already have than taking out a loan	3.64	0.61
Savings act as an insurance for emergencies	3.59	0.80

Source: Survey Data (2014)

These results indicate that residents of Suna East Sub-County appreciate the importance of saving services and embrace the existence of microcredit facilities within the County.

Second, respondents were asked to indicate the average monthly savings made on income so as to take care of emergencies. Frequencies and percentages were used to analyze responses made to this item. Table 4.8 presents the summary statistics for this item.

Table 4.8 Respondents Average savings on Monthly Income for Emergencies

	Count	Table N %
Average percentage you save for general emergencies	Below 20%	85 30.0%
	21-40%	133 47.0%
	41-60%	46 16.3%
	61% and above	19 6.7%
	Total	283

Source: Survey Data (2014)

Results displayed in Table 4.9 reveals that a higher proportion (47.0%) of the residents of Suna East Sub-County save on average between 21-40% of their monthly income for emergency purposes; 30.0% save on average below 20% of their monthly income for emergency; while 16.3% save on average 41-60% of their monthly income for emergency. These results show that residents can only afford to save a small proportion of their income for emergency. This argues the case for the need of more microcredit facilities to empower residents and encourage them to make savings that can be useful in emergencies.

4.5.3 Non-Financial Services

To investigate the effect of non-financial services offered by the microcredit facilities on household welfare responses were elicited on a 5-point scale (1- strongly disagree, 2- disagree 3- Uncertain 4- Agree 5- Strongly agree). These responses were then analyzed using means and standard deviations, the mean response scores for all the items was approximately 4.00, which indicates that the majority of the respondents tended to agree that non-financial services have had an effect on their livelihoods. In addition, the standard deviations were very small showing in responses recorded as shown in Table 4.9.

Table 4.9 Non-Financial services

	Mean	Std. Deviation
Skills training services are beneficial	4.72	.49
Farm inputs provision takes care of farming needs	4.33	.87
Changes community sanitary dimensions	4.29	.85
Provision of health plans guarantees health insurance	4.28	.76
Women empowerment is realized	4.26	.73
Marketing services are accessed	4.16	.70

Source: Survey Data (2014)

These results reveal that microcredit facilities within Migori County offer services such as training services, farm inputs, community sensitization, provision of health plans, women empowerment, and marketing services. These services offered through microcredit facilities usually facilitate residents in their affairs. From training, to farm inputs and sanitary awareness, non financial services have had an influence on the livelihood of residents in the County. This underscores the diverse contributions that microcredit facilities can make to a community.

4.5.4 Capacity Building Packages

To determine the effect of capacity building packages offered by microcredit facilities on household welfare, responses were elicited on a 5 point scale (1-strongly disagree, 2- disagree 3-undecided 4-agree, 5-strongly agree) and Table 4.10 below provides a summary of these results.

Table 4.10 Capacity Building

	Mean	Std. Deviation
Training services help in reaching out to poorer individuals	4.22	.70
I have once been invited for informational session by my facilities	4.14	.67
Capacity building services facilitate kinship development	4.11	.84
Microcredit facilities have leadership training components built in them	3.94	.80
Microcredit firms provide appropriate skills to utilize finances	3.78	.76
Improved farm productivity is attributed to microcredit facilities	3.39	.96

Source: Survey Data (2014)

These results vindicate the role of microcredit facilities in building the capacity of residents in Migori County. Through capacity building packages, poor individuals are reached and imparted with appropriate skills both for going about with their concerns as well as in utilizing finances.

4.5.5 Prevailing Levels of Household Welfare among Residents of Migori County.

Household welfare was conceptualized as the dependent variable in the current study. Eight indicators were used to measure household welfare. Respondents were asked to indicate the extent to which microcredit facilities have improved their household welfare in terms of the given indicators. Responses were elicited on a 5-point response scale (1=greatly weakened, 2=weakened, 3=undecided, 4=improved 5=greatly improved).

Results presented in Table 4.11 show that mean response scores for all the items was approximately 4.00. This implies that respondents were of the view that their welfare in terms of the analyzed indicators had improved. In particular respondents indicated that their welfare had improved in terms of among others; clothing (M=4.24, SD=0.44); food (M=4.01, SD=0.61); physical mobility (M=3.95, SD=0.71); ownership of Assets (M=3.93, SD=0.74); children care (M=3.88, SD=0.69); medical care (M=3.74, SD=0.84); provision of educational expenses (M=3.61, SD=0.84); and home improvement (M=3.54, SD=0.60).

Table 4.11 Household welfare

	Mean	Std. Deviation
Clothing	4.24	.44
Food	4.01	.61
Physical mobility	3.95	.71
Ownership of assets	3.93	.74
Children care	3.88	.69
Medical care	3.74	.84
Provision of education expenses	3.61	.77
Home improvement	3.54	.60

Source: Survey Data (2014)

The results suggest that household welfare for most residents in Suna East Sub-County has improved. There seems to be a general improvement in most indicators of household welfare which include among others; clothing, food, physical mobility, ownership of assets; children care; medical care; and home improvements. The improvement in household welfare could be attributed to microcredit facilities which through several services are empowering residents in several income generating activities such as farming which is reported as the main income generating activity among residents.

4.6 Testing Formulated Hypotheses for the Study

The main purpose of this study was to examine the effect of microcredit facilities on household welfare of residents in Suna East Sub-County. Multiple regression analysis was used to test the hypotheses. Multiple-regression was used since several microcredit services were affecting household welfare simultaneously. It was therefore necessary to examine the influence of each service while holding others constant.

First the regression model was run to examine the strength of the proposed model. Results of the model summary presented in Table 4.12 reveal that microcredit services account for up to 87.3% of the variance in household welfare (R square=0.873). Besides, the Durbin-Watson statistic (1.452) indicates that the model residuals are uncorrelated. The model was therefore found to be quite powerful in predicting household welfare.

Table 4.12 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.934 ^a	.873	.871	.35773	1.452

a. Predictors: (Constant), Capacity building, saving services, Non financial services, Loan services

b. Dependent Variable: Household welfare

Source: Survey Data (2014)

4.6.1 Testing the effect of Loan Services offered by Microcredit facilities on Household Welfare

Results of the multiple-regression coefficients presented in table 4.13 below show that loan services offered by microcredit facilities are significant predictors of household welfare ($\beta=0.691$, $p<0.01$). The large t value of 24.833 implies that loan services are the major microcredit facilities services in predicting household welfare, as a result of these the hypothesis was rejected.

Table 4.13 Regression Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	1.420	0.229		6.204	0.000		
Loan services	0.773	0.031	0.691	24.833	0.000	0.620	1.614
Saving services	0.235	0.024	0.277	9.912	0.000	0.612	1.634
Non financial services	0.181	0.027	0.147	6.583	0.000	0.955	1.047
Capacity building	0.161	0.042	0.084	3.782	0.000	0.974	1.027

a. Dependent Variable: Household welfare

The implication of these results is that loan services have a positive effect on household welfare. The standardized coefficient $\beta=0.691$ reveals that an increase of 1 standard deviation in loan services has the potential to increase household welfare by 0.691 standard deviations. Consequently, loans offered by microcredit

facilities could be responsible for the observed improvement in household welfare among residents in Suna East Sub-County.

4.7 Study Model

The study therefore established that household welfare is a function of microcredit facilities services that include loans, savings, non financials, and capacity building packages. The researcher therefore suggested the following multiple regression model for prediction of household welfare among households in Suna East Sub-County.

$$\text{Household Welfare} = 0.691 \text{ loan services} + 0.277 \text{ Savings} + 0.147 \text{ non financial} + 0.084 \text{ capacity building}$$

4.8 Discussions of the findings

4.8.1 Assessing the influence of Loan Services on Household Welfare

The study found out that microcredit facilities through loan services have positive and significant effects on household welfare. This is achieved through improvements on clothing, food, physical mobility, ownership of assets, children care, medical care, provision of education expenses and homes among others.

The finding that loan services are positive and significant predictors of household welfare supports a plethora of findings (Beck, Demirgns-Kunt, & Knight, 2008; Hietalaliti & Linden, 2006; Hossain & Knight, 2008; Khandker, 2001; Odell, 2010). According to these findings, microfinance which is equivalent to loan services has been credited with improving other financial outcomes such as furniture, food-security, nutrition, education, housing, and social cohesion. The finding further supports findings by Wright (2005), that access to financial services has allowed many families throughout the developing world to make significant progress in their own effort to escape poverty.

The relevance of microfinance in empowering communities is further highlighted in other studies. Coperstake et al (2001) in a study assessing the impact of micro credit in Zambia found out that repeated taking of loans has a positive influence on profits and household income. In support of this notion, Ahmad at. el (2004) noted that microcredit scheme was efficiently serving the poor, helping them to get rid of poverty and improve their living standard. In addition, Jehanzeb (2008) in a study of effects of agricultural credit on farm productivity and the income of the small farmer productivity reveals that credit advanced by microcredit institutions made positive effects on the welfare of the farmer's productivity and living standards.

4.8.2 Effect of savings services offered by microcredit on household welfare

The study findings that saving services positively and significantly predict household welfare support the findings which highlight the importance of microcredit facilities in savings (Beck, Demirguc-Kunt, & Peria, 2008; Chaia et. al, 2009). According to these findings, more than half the world's population are living without access to banking or other financial services and therefore the market for microcredit facilities are substantial.

The finding further supports the findings by Armendáriz de Aghion and Morduch (2005, 2010) that other services provided by microcredit facilities such as saving have a direct bearing on education among the poor families world over. In a study on saving constraints and microenterprise development, Dupas & Robinson (2009) found that savings have a positive impact on the lives of the poor clients. In particular, they found that formal saving accounts increase business investment.

The study done by Dupas and Robinson (2010) revealed that there was no evidence that the bank based savings crowded out informal saving through savings clubs or via investments in livestock which means the bank based savings were a net increase. This was not true for the men, who tended to save less through clubs and livestock and thus did not measurably increase total savings.

4.8.3 Effect of Non-financial services offered by microcredit facilities on Household welfare

An examination of the effect of non-financial services on household welfare among residents of Migori County revealed that services such as, provision of farm inputs, and community sensitization among others positively and significantly predicts household welfare among residents. Thus, on the availability of non-financial services many of the respondents felt that the accessibility of these services warrants the usefulness of the services in their lives.

These findings are consistent with findings by Dong et. al (2010). According to these authors, rural credit is a necessity for improving farm profits and improving the living standards of rural communities in developing

countries. The writers found that by removing credit constraints, the income of farmers would improve considerably. Ibrahim and Bauer (2013) mentioned that the most significant interventions provided by microfinance institutions in the support of agriculture are the supply of improved seedlings, fertilizer and cash loans.

Microcredit may enable small and marginalized farmers to purchase the inputs they need to increase their productivity, as well as financing a range of activities adding value to agricultural output. Therefore this study concludes that non-financial services complements the rest of micro-finance services to realize the positive effects on user since these non-financial services sharpens personal skills that lead to positive behavioural change that influence successful realization of the general microfinance programs

4.8.4 Effect of Capacity building packages offered by microcredit facilities on household welfare.

Analysis of the effect of capacity building packages offered by microcredit facilities on household welfare revealed that capacity building packages such as training services, seminars and interactive sessions positively and significantly predict household welfare.

These findings reflect findings by Linnell (2003) who found that capacity building can be in context of any process within an organization, such as improvement of governance, leadership, mission and strategy, administration (including human resources, financial management, and legal matters), partnerships and collaboration, evaluation, advocacy and policy change, marketing, positioning and planning. Hence, capacity building can be concluded as enhancing capacity attributes of an individual or community (such as knowledge, physical or social infrastructure and competencies), to sustainably change to reach higher level of performance, effectiveness, and service level.

The study found that the most effective capacity-building services are those that are offered by well-trained providers (both foundation staff and expert service providers) and requested by knowledgeable, sophisticated 'consumers' – the managers and board members of non-profit organisations.

5. Summary of the findings, conclusions and recommendations

5.1 Introduction

The purpose of this study was to examine the effect of microcredit facilities on household welfare of residents of Suna East Sub-County. This chapter presents the summary, discussions and implications of the findings of the study. The first section provides a summary and discussion of the study findings in line with the research objectives. The second section presents conclusions drawn from the findings and the final section provides implications and recommendations of the study.

5.2 Study Findings

Objective one sought to examine the effect of loan services offered by microcredit facilities on household welfare. First the study found out that a majority of residents of Migori County mainly borrow amounts ranging from Ksh. 5,000 to Ksh. 10,000 which microcredit facilities can easily loan out. Second, using regression analysis, the study established that loan services have a positive and significant effect on household welfare of residents of Suna East Sub-County. In this regard, households have seen improvements in clothing, food, physical mobility, ownership of assets, children care, medical care, provision of education expenses and home improvement among others.

The second objective sought to determine the effect of saving services offered by microcredit facilities on household welfare. The study found out that saving services positively and significantly predict household welfare. The study further established that residents of Suna East Sub-County can only afford to save a small proportion of their income.

The third objective sought to investigate the effect of non-financial services offered by microcredit facilities on household welfare. The study established that among non-financial services offered by microcredit facilities in Suna East Sub-County are: workshops, provision of farm inputs, community sensitization, provision of health plans, women empowerment and offering marketing services. The study further found out that these non-financial services are positive and significant predictors of household welfare among residents of Suna East Sub-County.

The fourth and final objective of the current study sought to examine the effectiveness of capacity building packages offered by microcredit facilities on household welfare. First, the study revealed that residents were receptive of capacity building packages offered to them and which the study identified to include; training services, seminars and interaction sessions. Second, the study established that capacity building packages offered by microcredit facilities in Suna East Sub-County were positive and significant predictors of household welfare.

The study therefore revealed that household welfare is a function of services offered by microcredit facilities and could be modelled as; Household welfare = f (loan services, saving services, non-financial services and capacity building packages). The study revealed that this model could predict up to 87.3% of the variance in household welfare.

5.3 Conclusions

In view of the findings discussed above, the following conclusions were made; The microcredit facilities are used by members of Suna East Sub-County to access loans so that they can improve their welfare in terms of food, clothing, medical care and educational expenses but the amounts borrowed however are quite minimal to make lasting impacts. Secondly the microcredit facilities play a critical role in the household welfare through their savings services. The amount saved however remains a very small proportion of resident's income. Thirdly the facilities are utilized for their potential to offer non-financial services that impact positively on household welfare. These include provision of farm inputs, community sensitization and, women empowerment and lastly the facilities impact positively on the welfare of households in Suna East Sub-County through capacity building packages. Through seminars, trainings and interactive sessions, households are empowered to be self reliant

5.4 Recommendations

In view of the conclusions drawn above that microcredit services improves the loans improves household welfare, emphasis on the importance of loan services on household welfare should be made and the amounts borrowed be increased so as to meet the needs of the residents. In order to encourage saving habits among the borrowers, residents should be encouraged to save with the microcredit facilities so as to raise their chances of gaining support from the facilities which will also enables them to qualify for large amounts of loans. Another way to help borrowers who may not be able to handle financial services well is to enhance provision of non-financial services. Further rigorous training in the form capacity Building among households should be maintained so that residents can maximize potentials within the microcredit facilities.

5.5 Suggestions for future research

The current study did not put into consideration the effect of respondents background characteristics on household welfare. It is recommended that future studies look into the mediating/ or moderating effect of background characteristics on the relationship between microcredit services and household welfare. Lastly in order to enhance external validity, future studies should consider replicating the study in contexts with diverse/ different environmental settings.

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