Full Length Research Paper

The contribution of savings and credit cooperative societies to income poverty reduction: A case study of Mbozi District, Tanzania

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This paper explores the contribution of savings and credit cooperative societies (SACCOS) in reduction of rural households' income poverty. Specifically, the paper looks at; activities undertaken by SACCOS that can lead to reduction of income poverty; comparing income levels between SACCO's members and non-members; determining the impact of SACCOS to household's income poverty reduction, and exploring community's attitude towards SACCOS. A total of 160 respondents were involved in the study on which this paper is based; 80 SACCOS members and 80 non-members. Data were collected using a structured questionnaire, focus group discussions and key informant interviews. Quantitative data were analysed using SPSS where descriptive and inferential statistics were determined: qualitative data was analysed using content analysis. Study findings show that SACCOS perform different activities in the provision of financial and non-financial services to members. They provide shares, investment opportunities, savings, credit, and training on entrepreneurship skills. T-test analyses show a highly significant difference (p<0.001) between the two groups on income earned from agricultural activities and household expenditures; for the assets owned by household there was also a significant difference (p<0.05). Using MLR analysis, the impact of SACCOS to income poverty reduction was significant (p < 0.05). Generally, the respondents' attitude towards SACCOS was favourable. The paper concludes that SACCOS play a significant role in improving the conditions of smallholder farmers. The paper recommends that SACCOS be empowered to enable them perform better and provide a range of services to members thereby helping beneficiaries to reduce their income poverty.

Key words: Micro-finance institutions (MFIs), SACCOS, poverty and credit.

INTRODUCTION

Credit unions currently serve an estimated 120 million members in 87 countries around the world, helping members increase their incomes, build wealth and security and provide homes for their families

(Mwakajumilo, 2011). However, as Cain (2007) reports, the poor have little or no access to credit as a means of improving their livelihoods. Only the elite with privileged access get loans for business ventures. In this respect, there is a need for a mechanism to serve this disadvantaged group. The first true experiences in the area of savings and credit cooperatives (SACCOS) in Sub-Saharan African were to a large degree the work of foreign missionaries. The initiatives of these people were supported subsequently by the respective countries governments (PFCMP *et al.*, 2005, cited by Mwakajumilo, 2011).

In Tanzania, the first SACCOS was established in Moshi town by the Ismailia group in 1938 (SCCULT, 2006, cited by Mwakajumilo, 2011). By the year 1964, the movement had 35 primary societies (SACCOS) which managed to organize themselves to form their national association "the Savings and Credit Union League of Tanganyika (SCCULT). Unfortunately, this growth was brought to a halt through the government's intervention to transform cooperative activities so that they would be multipurpose in nature; this led to the abolishment of cooperative unions and cooperative national bodies. SCCULT was affected and this led to a shutdown of its activities following the government's take over. However, a tide of economic changes finally resulted into the enactment of the 1991 cooperatives Act through which the SCCULT (1992) LTD was established (SCCULT, 2006, cited by Mwakajumilo, 2011).

The introduction of Tanzania's 1991 cooperative societies Act created the legal framework for cooperatives to be established as privately owned and equity-based institutions registered under the Ministry of Cooperatives and Marketing (currently the Ministry of Agriculture, Food Security and Cooperatives). The Act applies to all types of cooperatives. The main principle established by the Act is volunteerism and self-regulation of the societies. The current profile of cooperatives in Tanzania is dominated by SACCOS whereby in 2005 there were 1875 SACCOS. Currently, there are 5344; this is an increase of 185 % (Kikwete, 2011). Tanzania's network of savings and credit societies involves grassroots' financial institutions, which have stood as effective micro-finance institutions (MFIs), offering members a convenient home for their savings and an access point for loans (Sungusia, 2007).

Tanzania has a large number of micro-finance Non Governmental Organizations (NGOs) which provide financial services to the poor; however, most of these are donor dependent (Maziku, 2007). According to Ahmed and Kaleem (2010) Microfinance institutions (MFIs) especially SACCOS are better placed in reducing poverty. MFIs provide money for consumption as well as production purposes and can thus broadly target the economic and social needs of the poorest of the poor. Generally, MFIs can minimize indebtedness and reduce unequal distribution of wealth in the society. Despite the recognition of the dynamic role of credit to small enter-

prises, few business owners and the poor in the rural have access to and benefit from the available financial services (Cain, 2007; Pronyk *et al.,* 2007; Lyons and Msoka, 2010). Anderson and Ssendi (2009) argue that, most institutions offering loan facilities operate mainly in the urban centres, thus, restricting accessibility to the rural poor. And in the view of Chemin (2008) and Nawaz (2010), although microfinance has had a positive impact on poverty reduction, there is a debate about the level of impact on poverty and whether micro-finance is reaching the poorest of the poor.

Mbozi District has experienced many interventions aimed at strengthening SACCOS so as to bring about sustainable increases in incomes, assets, and food security of poor rural households. Currently, almost every ward in Mbozi District has at least one SACCOS. The question is to what extent these SACCOS have contributed to raising members' household income. Moreover, most of these interventions have been unable to meet the growing demand for loans for the poor people (MDC, 2009). In addition, there is scarce information on how SACCOS in Mbozi District have contributed to the reduction of income poverty.Therefore; the findings from the current study are expected to fill the knowledge gap on the contribution of SACCOS to households' income poverty reduction in Mbozi District. Likewise, the findings would also create and raise awareness among various stakeholders on how growth, performance, and accessibility of MFIs services to many poor people in the District and in the country as a whole can be strengthened.

METHODOLOGY

Description of the study area

The study was conducted in Mbozi District[1]. The district was selected purposively for the study due to its rapid increase in the number of SACCOS. In 2005, there were only 11 SACCOS. Currently there are 45 SACCOS and this is an increase of 309% (MDC, 2011). Mbozi district, which is in Mbeya Region, shares borders with Mbeya District to the east, Ileje district to the south, Zambia and Rukwa region to the west, and Chunya district to the north. The District occupies a total area of 9 679 km² (967 900 ha) of which 766 640 ha (79%) is arable land, 93 738 ha (9.7%) is forest reserve, 78 322 ha (8.1%) is settlement, and 29 200 ha (3%) is covered by water. The District is divided into two main zones; the High Plateau and the Rift Valley (MDC, 2011). According to URT (2013), the current Mbozi District has a population of 446 339 (213 217 males and 233 122 females). The economy of the district is predominantly agricultural based whereby 88% of the inhabitants are dependent on agriculture for their livelihood. However, agricul-

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[1] While this research was being undertaken, the process of dividing Mbozi district into three councils of Mbozi District, Tunduma Town and Momba district was in progress. The study was conducted in the old Mbozi. Tunduma Town council and Momba District become operational on the 1st July; 2013.The new Mbozi District occupies the High Plateau while Momba District is found within the Rift Valley. Tunduma Town Council is within Momba District.
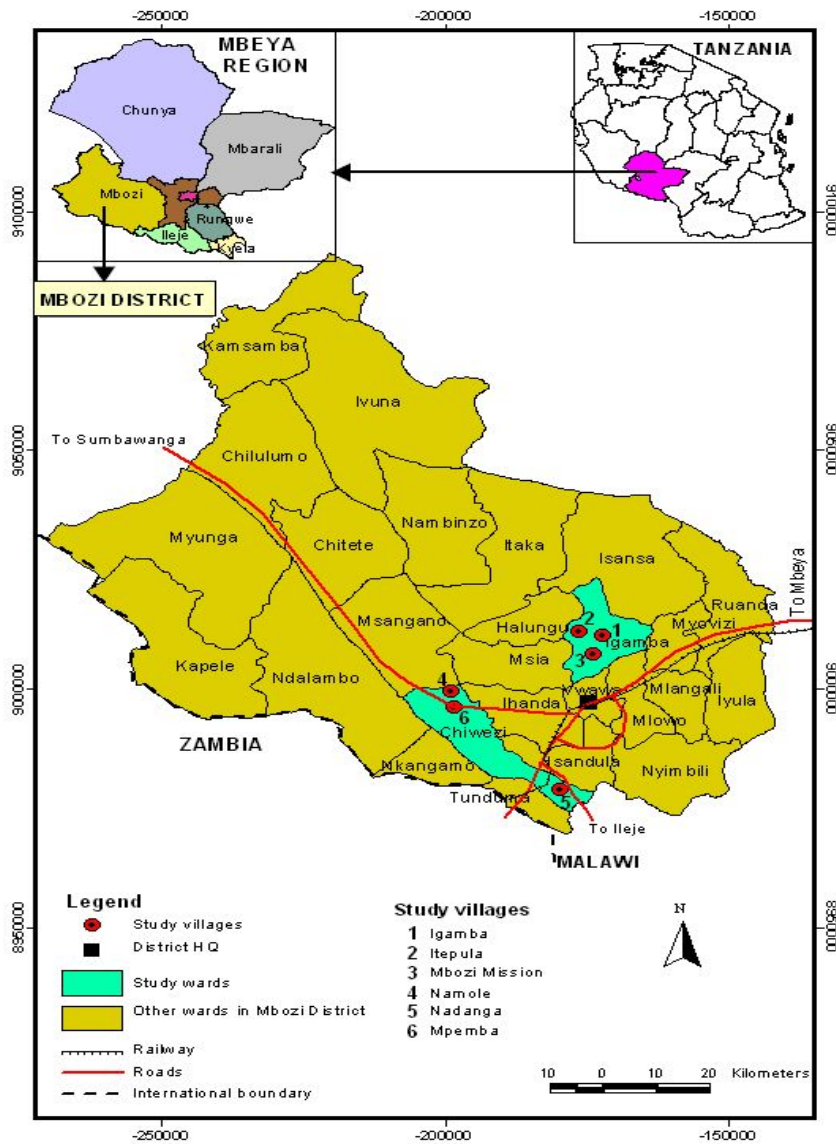
Figure 1. The map of Mbozi District (Source: Remote Sensing and GIS Laboratory at SUA).

tural production is mainly done by smallholder farmers of whom 50% use the hand hoe, 40% use animal power and only 10% use tractors (MDC, 2011).

Major crops grown in the high Plateau zone are; coffee, maize, beans, and bananas, and to a small extent round potatoes, sweet potatoes and paddy. Major crops grown in the lowland (Rift valley zones) are; paddy, sorghum, finger millet, cassava, sweet potatoes, simsim, and sunflower. A wide variety of fruits are also produced though in small amounts (Figure 1).

Research design

The study adopted a cross-sectional design whereby data were collected at a single point in time. This design was preferred, for despite its simplicity, it allows one to collect data about past and current experiences to identify possible cause-and–effect associations (Matthew and Ross, 2010).

Study population, sampling frame, sampling procedures and sample size

The population for the study comprised all SACCO's members. According to MDC (2012), Mbozi district has 7 315 SACCOS members of which 4 632 are males and 2 683 are females. Non-SACCOS members were involved for comparison purpose.

Sampling procedures

A sampling frame of SACCOS in Mbozi District was obtained from

Table 1. The sub-sampling frames and the subsequent sub-samples.

Ward	SACCOS members (n – 80)			Non-SACCOS members (n – 80)	
	SACCOS selected	Members	Sample	Village selected	Sample
Igamba	Igamba SACCOS	132	44	Igamba	16
				Itepula	14
				Mbozi mission	14
Chiwezi	Chiwezi SACCOS	108	36	Mpemba	12
				Nandanga	12
				Namole	12

the District's Cooperative Officer Section. Based on the geographical area where there are two zones in the district, cluster sampling was employed to identify SACCOS from the eastern and western parts of the District, whereby two clusters were obtained. In order to select SACCOS with many smallholder farmers, two SACCOS were selected purposively, one SACCOS from each cluster. Igamba SACCOS from Igamba ward was selected from the eastern part and Chiwezi SACCOS from Chiwezi ward from the western part of the district. SACCOS with many farmers were of particular interest in this study due to a common slogan in Mbozi District that says, "*SACCOS ni mkombozi wa wakulima wadogo*" (SACCOS is the liberator of smallholder farmers). The study on which this paper is based mainly aimed to explore how SACCOS have helped smallholder farmers get out of poverty.

In order to select non-SACCOS members for comparison purposes, purposive sampling was employed to select three villages from each ward namely Igamba, Mbozi Mission, Itepula (Igamba ward) and Mpemba, Namole and Nandanga (Chiwezi ward). These villages were selected because they have many farmers who were using SACCOS services as opposed to other villages in those wards. Moreover, choosing respondents/farmers from other villages with fewer SACCOS members would not have allowed a fair comparison. This is based on the fact that other inherent differences other than membership or non-membership to A SACCOS may contribute to a household's income. Therefore, the selected respondents only differed in their membership status but were subjected to a more or less similar environment in terms of soils and rainfall patterns. Thus, a simple random sampling was used to select 80 respondents from each group making a total sample of 160 respondents. Table 1 shows the sub- sampling frames and the sub-samples from them.

Data collection

Both primary and secondary data were collected. Primary data were collected using structured questionnaires with close and open-ended questions. The questionnaire essentially focused on generating information related to the respondents' social-economic characteristics, SACCO's activities, and the respondents' participation in income generating activities.

A checklist for key informants and a focus group discussions (FGDs) guide were also used to collect primary data. In-depth interviews were done with eight key informants (KI's). Four FGDs were carried out involving eight participants each. The FGDs and KI's interviews were necessary to validate and complement information gathered trough the questionnaires. In short both the FGDs and KI's aimed at collecting information on community members' understanding of the SACCOS, their operation, benefits, challenges and what motivates or discourages farmers in the respective villages to join or not join the same. In addition, the KI's

aimed at getting opinions from experts and leaders on the functioning and benefits of SACCOS in their respective areas of jurisdiction. Generally, the KI's in-depth interviews were conducted to eight purposively selected key informants: these included Mbozi District's Cooperative Officer (DCO), Mbozi District's Microfinance (DMFIs)-coordinator, two ward Executive Officers (WEOs), two SACCOS managers and two SACCOS board members. Secondary data were obtained from the reports and other documents of the surveyed SACCOS and Mbozi District Council Office. Secondary data were needed because some of the beneficiaries could not remember some of the research parameters; the data were on members dates of joining the SACCOS, their amounts of shares and savings, amount of loans received and last time when a loan was taken.

Data analysis

Qualitative information from the FGDs and KI's were analysed using content analysis. According to Nachmias and Nachmias (1976) as cited by Prashad (2008), the content of the message forms the basis for drawing inferences and conclusions about the content. Therefore, the content of the messages gathered from the FGDs and KI's was used to make inferences and in drawing conclusions in relation to the role played by SACCOS in poverty reduction. As regards primary data collected using the questionnaire, data were sorted, coded and summarized prior to analysis. The analysis was done using Statistical Package for Social Science (version 16) Computer software. Based on the objectives of the study, both descriptive and inferential analyses were carried out.

Descriptive analysis

The descriptive statistics determined included frequencies, percent-tages, and means. As stated by Amaza *et al.* (2009), descriptive statistics are used to examine the socio-economic characteristics of the respondent's household. The need for such analysis was based on the fact that a household's poverty is largely a function of farmers' social and economic characteristics.

Inferential analysis

Different quantitative analytical techniques were employed to analyze data as per the study objectives. Pearson's Moment Correlation coefficients amongst all variables recorded at the ratio level were computed to find how they were related to one another in the sample. Independent sample T-test was used to compare means of incomes between SACCOS and non-SACCOS members. Cross tabulation of respondents' attitude by sex and membership to

SACCOS was done to determine the proportions of male and female, members and non-members respondents who had different types of attitudes. In order to determine the association, Chi-Square test was done concomitantly with cross tabulation.

A multiple linear regression (MLR) model was run to quantify the combined effect of the contribution of SACCOS to income poverty reduction. The multiple regression model was chosen because it is useful in establishing the relative importance of independent variables to the dependent variable (Bryman and Cramer, 1992). Such importance is deduced from standardized regression coefficients (beta-weights), whose magnitudes show how much relative impact the independent variables have on the dependent variable, while the negative and positive signs associated with the coefficients show negative and positive impacts respectively (Bryman and Cramer, 1992). Also it is ideal for the dependent variable to be recorded at a continuous level of measurement as was the case for the present study.

Further , before running the MLR model a check for normality in the distribution of the variables was done. According to Pallant (2007), MLR models need variables to be normally distributed. Following the normality check it was observed that the dependent variable was skewed to the right. Therefore, in an attempt to achieve a normal distribution the variable was transformed to $\log_{10}$. The independent variables included in the model were, respondent's age (years), sex of the respondent, the respondent's education level, main source of income, household size, habit of saving, access to entrepreneurship trainings, number of trainings received, membership to SACCOS and whether or not the respondent had received a loan from any institution. The ten independent variables (x_1 to x_{10}) were chosen for inclusion in the model because they were thought to account for much variation in the dependent variable. The multiple linear regression model was specified as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_{9} + \varepsilon$$

Where;
Y_i = Households Income
X_1 = Age (Number of years of the respondent)
X_2 = Sex of respondent; (1-female, 0-male)
X_3 = Education level (Number of years in schooling)
X_4 = Household size (Number of family members)
X_5 = Habit of saving; (1-Yes, 0-No)
X_6 = Ever had entrepreneurship trainings; (1-Yes, 0-No)
X_7 = Number of entrepreneurship trainings received (actual number)
X_8 = Membership; (1-SACCOS member, 0-Non members)
X_9 = Main source of income (1-Crop production, 0-Otherwise)
X_{10} = Ever received loan (1-Yes, 0-No)
β_0 = constant term;
β_1- β_{10} = Coefficients; $\varepsilon_{=Error}$

RESULTS AND DISCUSSION

Respondents' socio-demographic characteristics

Demographic and socio-economic characteristics of the respondents have important implications on poverty reduction. They have important value attributes to any society as they reflect their behaviour in decision making and its probable expected responses to stimuli exposed from them. The general characteristics of the respondents examined in this study were: age, education level, household size and main source of income. As regards

respondents' age it ranged between 22 and 89 years. According to the results (Table 2), over three-quarters (76.2%) of the SACCOS members were in the age group of 36-60 years, whereas for non-SACCOS members, more than two-fifths (45%) were between 36-60 years. The mean age for SACCOS members was 48.1 while that for non- SACCOS was 39.6. These results therefore, imply that most of the respondents were economically active, in Tanzania, age of the economically active and productive group ranges between 15 and 64 years (URT, 1991). The above results are similar to observations made by Marijan (2008) who reported that majority of the respondents from Kilosa District, both borrowers and non-borrowers were mature and fall within the economically active and productive age.

Results in Table 2 also show that about two thirds (66.2%) of the respondents among SACCOS members were males as opposed to 33.8% female. Likewise for the non-SACCOS just under two thirds (63.8%) were males and 36.2% were females. According to MDC (2009), Mbozi District council wanted at least 40% of SACCOS members to be females. But, the results show that more needs to be done to achieve the goal. These findings are contrary to Mahega (2009) who reported that out of 100 micro-credit beneficiaries in Singida Municipality 68% were female and only 32% were male.

Household size was determined by considering all members in each household including parents, children and dependants during the research and all children and dependants who were at school. The findings indicate that the highest percentages (60%) of respondents who were SACCOS members have a medium household size as compared to 38.8% of non-members. The average household size for SACCOS members was 7.6 whereas that of non-SACCOS was 4.7. The results imply that SACCOS members have large household sizes. The observed household size for SACCOS members was higher than that of non-SACCOS members. In addition, the observed household size is also higher than the national average household size in Tanzania and Mbozi District which is 4.8 and 4.3 respectively (URT, 2013). However, in most rural areas of Tanzania, having more family members and dependants, means having cheap labour for different developmental activities. This argument is supported by Kamuzora (2001), cited by Kayunze *et al.* (2007) that in less developed countries in Africa there is less poverty with large households size as compared to more developed African countries such as South Africa where there is less poverty with smaller households.

As regards education level of respondents, Table 2 shows that, more than three-quarters (77.5%) of the respondents among both SACCOS and non-SACCOS members had primary education. The study also shows that, secondary school leavers were 6.2 and 7.5% for SACCOS and non-SACCOS members respectively. The above observations imply that most of the respondents

know how to read and write. According to Kashuliza et al. (1998), people with high education are expected to have better knowledge on credit procedures and skills for running economic activities. Lack of formal education might hinder prosperity of micro enterprises hence lower income generation. Likewise, Kayunze and Twamala (2000) argue that, credit should be given to at least those who know how to read and write regardless of their years of formal schooling. In addition, Kuhn and Cheston (2000) report that a combination of education and credit can put borrowers in a stronger position to ensure equal access to food, schooling and medical care.

Table 2 further shows that 92.6% of the SACCOS members as opposed to 63.5% of non-SACCOS depended on crop production. Generally, majority of the respondents interviewed in this study were small farmers. These findings are similar to those by Anyelwisye (2007) who reported that, majority (91.3%) of the borrowers and 76.3% of non-borrowers from Dodoma and Kongwa Districts were involved in agriculture as their primary source of income. Likewise the above findings are con-sistent with URT's (2011) observation that, employment opportunities and output in Tanzania are heavily concentrated in agriculture whereby about 80% of the poor live in rural areas and out of them 81% live in households where the main activity is agriculture.

Membership to SACCOS and the benefits accrued

Members shares deposited in SACCOS

Study findings show that more than three quarters (77.5%) of the SACCOS members owned 1-3 shares[2] only, 11.2% owned 4-6 shares and 11.2% owned 7-10 shares. This observation suggests that members are either incapable of affording more shares or they have not been well informed on the importance of having many shares. According to Bailey (2001), cited by Ahimbisibwe (2007) SACCOS offer different products to their members. One of the products is shares, which are in the form of investment, whose returns depend on the number of shares one holds. The returns are paid in the form of dividends hence the one with most shares stands to benefit more.

Members savings deposited in SACCOS

SACCOS members are encouraged to have savings in their SACCOS to enable them get loans. Study results show that about three-fifths (62.5%) of the members had savings of less than 100 000 Tshs (Table 3). This implies that SACCOS

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[2]For Chiwezi SACCOS 1 share equals to 5 000 Tshs and 10 maximum shares are required whereby for Igamba SACCOS 1 share equals to 10 000 Tshs and 10 maximum shares are required according to their bylaws.

members are not saving much. According to Kayunze and Twamala (2000), savings are encouraged not only for getting credit but also as a fall back when it comes to reviving business, which has been struck by calamities.

Amount of loan received by respondents from SACCOS

The study results show that 30% of the SACCOS members received credit of less than 100 000 Tshs whereas, 17.5 and 18.8% received between 100 000 and 200 000 Tshs and above 200 000 Tshs respectively. The average amount of loan given to a member was 131 000 Tshs for a cycle ranging from three to six months. This implies that, SACCOS loans are very small. This finding is consistent with Navajas' *et al. (2000) who argue* that SACCOS are very important in improving the welfare of the poor because of better access to small loans. Similarly, Wanyama *et al.* (2008) add that, MFIs (Micro-finance Institutions) provide small loans to small entrepreneurs who lack the credentials and collaterals demanded by the banks. According to Evanston (2005), SACCO's loan cycles are usually shorter than the traditional commercial loans generally ranging from six months to a year with payments plus interest, which is done weekly. Small and shorter loan cycle repayments help borrowers stay current and not become overwhelmed by large payments (Evanston, 2005).

According to Table 3 observations from the study show that 33.8% of the members have never received loans from their SACCOS. Inadequate availability of credit was cited as a reason by 92.6% of those who had never received loans; while 7.4% said it was due to poor leadership or management. Krain (1998) and Mohamed (1999) point out that, small farmers and rural producers have not benefited from credit expansion. In addition, they have continued to rely mainly on their own resources occasionally supplemented by credit from traditional sources. Additionally, limited availability of credit services has undermined rural micro-enterprise activities due to lack of capital for investment. Moreover, inadequate credit facilities have discouraged the entry of youth to the farming sector and leave the majority unemployed because of lack of investment capital (Mutua, 1996).

Interest rate charged on credit/loan per month

Interest rates charged on credit varied from one SACCOS to another. Study results (Table 3) show that 45% of the respondents from Chiwezi SACCOS reported to be charged an interest rate of 10% per month and 55% of the respondents from Igamba SACCOS indicated to be charged an interest rate of 2% per month. These results imply that, some of the SACCOS were charging very high interest rates (10% per month). However, as reported by

Table 2. Respondents' socio-demographic characteristics (n=160).

Characteristic		SACCOS members (n$_s$=80)		Non-members (n$_{ns}$=80)	
		Frequency	Percent	Frequency	Percent
Respondents' age(Years)	21-35	4	5.0	38	47.5
	36-60	61	76.2	36	45.0
	> 60	15	18.8	6	7.5
Respondent's sex	Female	27	33.8	29	36.2
	Male	53	66.2	51	63.8
HH size	1-5 Small household	21	26.2	48	60
	6-10 Medium household	48	60.0	31	38.8
	>10 Large household	11	13.8	1	1.2
Respondents' education level	No formal education	1	1.2	5	6.2
	Standard I-IV	9	11.2	6	7.5
	Standard VII	62	77.5	62	77.5
	Standard VIII	3	3.8	1	1.2
	Form four	5	6.2	6	7.5
Respondents' main source of income	Small business	5	6.3	19	23.8
	Crop production	74	92.5	51	63.5
	Livestock production	0	0.0	2	2.5
	Carpentry ,tailoring and mason	1	1.2	8	10.0

NB: n$_s$=number of SACCOS members; n$_{ns}$= number of non-SACCOS members; HH=Household.

Table 3. Members shares and savings, credit received from SACCOS and the interest rate charged per month (n=80).

Characteristic		Frequency	Percent
Shares	1-3	62	77.5
	4-6	9	11.2
	7-10	9	11.2
Savings (Tshs)	<50 000	36	45.0
	50 000-100 000	14	17.5
	>100 000	30	37.5
Credit (Tshs)	No loan from SACCOS	27	33.8
	Below 100 000 Tshs	24	30.0
	100 000-200 000 Tshs	14	17.5
	Above 200 000 Tshs	15	18.8
Interest rate	10%	36	45.0
	2%	44	55.0

some of the key informants, SACCOS were advised to charge an interest rate ranging from 2-5% per month, but so long as members are the owners they have all the rights to decide on the amount of interest to be charged on their credit. Nonetheless, Madestam (2011) argues that, high interest rates may have a negative reper-cussion not only for the cost of credit but also on the application of loans by poor borrowers. High interest rates usually push the borrowers towards riskier behaviour thus, undermining repayment probability.

Therefore, SACCOS have generally been advised to charge reasonable interest rates.

Training for operating and managing IGAs

Results from the study (Table 4) show that 67.5% of the SACCOS members reported to have received training on entrepreneurship, while 32.5% said they had never got any training. On the other hand, 81.2% of non-SACCO's

Table 4. Trainings for operating and managing IGAs (n=160).

Characteristic		SACCOS members (n_s=80)		Non- SACCOS members (n_{ns}=80)	
		Frequency	Percent	Frequency	Percent
Training in entrepreneurship skills	Yes	54	67.5	15	18.8
	No	26	32.5	65	81.2
	None	26	32.5	65	81.2
Number of trainings	Once	22	27.5	8	10.0
	Twice	14	17.5	3	3.8
	>Twice	18	22.6	4	5.0

NB: n_s=number of SACCOS members; n_{ns}= number of non-SACCOS members.

Table 5. T-test results for the comparison of income, assets values and expenditure between SACCOS and non SACCOS members.

	n	Mean in Tsh ('000)	F-value	P-value
SACCOS members annual income from agricultural activities	80	2 240	19.956***	0.000
Non-SACCOS members annual income from agricultural activities	80	764		
SACCOS Members monthly income from non- farm activities	80	146	1.832[ns']	0.312
Non-SACCOS members monthly income from non-farm activities	80	104		
SACCOS members total assets value	80	7 270	1.220**	0.001
Non-SACCOS members total assets value	80	3 890		
SACCOS members annual household expenditures	80	1 100	33.935***	0.000
Non-SACCOS members annual household expenditures	80	566		

NB: ***, **, * means significantly different at 1, 5 and 10% respectively; ns means not significantly different statistically. Tsh – Tanzania shillings.

members reported to have never been trained on entrepreneurship while 18.8 said they had. The results further show that, SACCOS members have received more training relative to the non- members. According to Nawaz (2010) for micro-finance to be more effective in poverty reduction, other services such as skills training; technological support and education related strategies should be part of the MFIs. It has also been reported by Microned (2006) that, in order for credit to influence IGAs (Income Generating Activities) for poverty reduction, education and trainings have to be well addressed.

Comparing incomes of SACCOS members and non-members

According to the independent sample t-test results (Table 5 a significant variation (p< 0.001; p<0.01 p<0.001) was observed for incomes from agricultural activities, asset ownership, and household expenditures respectively between members and Non-SACCOS members. As regards income earned from non-farm activities, the variation between the two groups was not statistically significant. This suggests that, SACCOS has an impact on members' income, since the respondents were smallholder farmers it is assumed that being a SACCOS member helps them finance their agricultural activities which then enables them to earn more hence increasing their incomes. The observation therefore suggests a possible contribution of SACCOS to income poverty reduction.

Impact of SACCOS on income poverty reduction

A multiple linear regression model was used to establish the impact of SACCOS on the overall household income. Results are as presented in Table 6. The adjusted R Square (R^2) was 0.552, meaning that 55.2% of the variation in the reduction of income poverty was due to the ten independent variables included in the regression equation while the other 44.8% was due to variables that were not included in the equation. In addition, the findings show that seven of the variables included in the analysis

Table 6. Results from the regression analysis on the impact of SACCOS on income poverty reduction (n=160).

Variables	Unstd. Coefficients		Std. Coefficients	t	p-value
	B	Std. error	Beta		
Constant	4.829	0.176		27.447	0.000
Sex (X_1)	-0.158	0.063	-0.155**	-2.518	0.013
Age(X_2)	0.006	0.003	0.161**	2.326	0.021
Education level(X_3)	0.013	0.014	0.052ns	0.890	0.375
Household size(X_4)	0.047	0.010	0.307***	4.618	0.000
Main source of income(X_5)	0.232	0.080	0.194**	2.911	0.004
Habit of saving (X_6)	0.145	0.073	0.112**	1.994	0.048
Entrepreneurship skills (X_7)	-0.030	0.095	-0.030ns	-0.314	0.754
Number of trainings (X_8)	0.070	0.035	0.183**	2.002	0.047
Membership (X_9)	0.186	0.073	0.190**	2.537	0.012
Received loan (X_{10})	-0.030	0.065	-0.030ns	-0.456	0.649

R Square (R^2) =0.58, Adjusted R Square (R^2) =0.55, Model was significant at 0.001% level, Dependent variable: Income poverty reduction (Monetary value of products and service), ns= not statistically significantly and **, ***means significant at $p < 0.05$ and $p < 0.001$ respectively.

had significant regression coefficients.

The Multiple regression results (Table 6) show that, the incomes of household members were greatly influenced by household size. The impact of household size on the household income was positive (β=+0.307) and highly statistically significant (p<0.001). This implies that having more family members and dependants who are economically active means availability of cheap labour for different development activities, which enables one to earn more income and hence reduce poverty. This finding is supported by Kamuzora (2001), cited by Kayunze et al. (2007) who reports on less poverty in larger households in Kagera. However, a study carried out in Dar es Salaam by Mbapila (2006) showed that having more family members and dependants per household means more demand for money to purchase food and other requirements thus, a possibility of more poverty in the household.

The main source of income contributed positively (β=+0.194) to a households income poverty reduction, and this was statistically significant (p=0.004). This suggests that, households whose main source of income was agriculture were able to reduce poverty unlike those households whose main source of income was non-farm activities. It is well acknowledged that agriculture is the lead sector, which provides livelihoods to a large proportion of Tanzanians. According to URT (2007), approximately 75% of the population depends on under-developed smallholder primary agricultural production characterised by small-scale cultivation, use of hand tools and reliance upon traditional rain-fed cropping methods and animal husbandry.

The results show that respondents' age had a positive impact on poverty reduction (β=+0.161) and the impact was statistically significant (p<0.05). The positive

coefficient of age implies that as one gets older he/she becomes less mobile and hence becomes more engaged in agricultural activities, which are the main source of income for the majority of rural households. This in turn helps in reducing income poverty. Likewise, as the age increases, a person is able to invest wisely due to experience and security in terms of capital assets (Rowlingson, 2006). Basnayake and Gunaratne (2002) argue that, the age of a person is usually a factor that can explain the level of production and efficiency. Age influences experience, wealth and decision-making these have an effect on the working capabilities thus, productivity of an individual.

Sex of the respondent had a negative influence (β=-0.155) on poverty reduction and its impact was statistically significant (p<0.05). This implies that, gender consideration in poverty reduction is essential. However, female respondents were found not quite capable for engaging in the poverty reduction process. This may be due to traditions and customs, which inhibit the majority of women from property ownership and control. Similar findings are reported by Tibaijuka and Kaijage (1996) that, customs and traditions on property ownership and control rights are still vested on men. In addition, Haase (2012) points out that women benefit less than men do from MFIs because they (women) invest their loans in less lucrative businesses and that women are further constrained by household responsibilities.

The results of the current study show that the habit of saving has a positive influence on poverty reduction (β=+0.112) and its impact was statistically significant (p<0.05). The fact that the habit of saving has a positive impact implies that as a person manages to save, it becomes more convenient for him to accumulate more income that can in turn be invested in IGAs leading to

poverty reduction. This result is in conformity with the neo-classical growth theory, which holds that savings play an important role in sustaining growth and development. Through savings, one can easily accumulate capital, which can then be invested in IGAs leading to economic growth and ultimately development. On the same token, Ahimbisibwe (2007) argues that development is induced by savings, in that, high levels of saving lead to capital accumulation, investments and high income levels, and ultimately breaking away from the vicious cycle of poverty; hence, development in the end.

The number of entrepreneurship trainings received had a positive impact on poverty reduction (β=+0.183) and this was statistically significant (p<0.05). This implies that, for any additional training given to a person, the more he/she gains skills on operating IGAs efficiently and more successfully, hence possibility of reducing poverty. According to URT (2007), those regions with high entrepreneurship skills have high development. The regression results also show that membership to SACCOS had a positive impact on poverty reduction (β=+0.190) and its impact was significant (p<0.05). This means that SACCOS members in Mbozi were likely to move out of poverty as compared to their counterparts. This may be a result of the products offered to SACCOS members, which include; savings, shares, and entrepreneurship training. These findings are in line with Ahmed and Kaleem's (2010) observation that MFIs may provide money for consumption as well as production purposes leading to poverty reduction. Similarly, Hanlon et al. (2010) have reported that, families involved in micro-finance programmes have an assured income though small in proportion, and are therefore able to take small risks by investing in their future such as buying seeds to increase farm production, purchasing goods that can be resold locally and which in the end may result into poverty reduction. Khandker et al. (1998) argue that, evidence shows that micro-credit has a positive impact on income, production, and employment particularly in the rural areas.

Community attitude towards SACCOS

Respondents' general attitude towards SACCOS

In measuring attitude, expressions strongly agree and agree were regrouped into agree; strongly disagree and disagree were regrouped into disagree while undecided was left intact (Table 7). The number of respondents who agreed with the statement "SACCOS supports poor people to increase their capital" was 124 (77.5%). Likewise, the number of respondents who agreed with the statement "Credit received through SACCOS helps to increase income" was 120 (75%), while the respondents who agreed with the statement "SACCOS provide loan to

poor people so that they may improve their existing IGAs, or develop new ones" was 119 (74.4%). These findings imply that the respondents concur with the main objective of SACCOS. According to MDC (2011), the main objective of SACCOS is to improve the living standard of rural communities by enabling them to have their own source of capital, which could enable them start IGAs, and hence contributing to poverty reduction.

Results in Table 7 further show that the number of respondents who disagreed with the statement "SACCOS is not relevant for the poorest of the poor" was 64 (40%). Also those who disagreed with the statement "Poor people have little or no access to credit through SACCOS" were 71 (44.4%). Furthermore, the respondents who disagreed with the statement "Credit through SACCOS creates indebtedness and leads to poverty traps" were 79 (49.4%). These findings also imply that, SACCOS is the main source of credit for the rural people. Since SACCOS savings are linked to credit, the results are in line with Kayunze et al. (2005) who conclude that, although there are some negative effects of credit on poverty, this happens among very few borrowers that it does not justify discouraging credit provision. As Krain (1998) observes, formal financial sources meet a small portion of the total credit demand of the agricultural sector.

About 54.4% of the respondents agreed with the statement "Women and men benefit equally through SACCOS". On the other hand, 45.6% of the respondents disagreed with the statement "Through SACCOS women benefit less than men". This implies that in SACCOS women and men have equal benefits (Table 7). Reed (2011) argues that, micro-finance has a positive impact on women's livelihood leading to higher income that would help them in performing their reproductive role better and in caring for the family; increasing women's employment in micro enterprises and improving income generating activities. Moreover, equal lending to men and women, to rural and urban dwellers, and to farm and non-farm activities will help bring equitable development (Kayunze et al., 2005). Based on what has been reported above and results in Table 7, the respondents' attitude towards SACCOS was favourable.

Chi-square test on respondents' attitude towards SACCOS by sex and membership category

Cross tabulation of respondents' attitude by sex and membership to SACCOS was done to determine the proportion of male and female, members and non-members respondents who had different types of attitudes. In order to determine the association between them, Chi-Square test was done concomitantly with cross tabulation. Results in Table 8 show that generally more than two fifths (46.2%) of male respondents had

Table 7. Respondents scores on the items of the Likert-type Summated scale used (n=160).

Attitudinal statement	Disagree	Undecided	Agree
SACCOS supports poor people to increase their capital	21 (13.2)	15 (9.4)	124 (77.5)
SACCOS is not relevant for the poorest of the poor	64 (40)	34 (21.2)	62 (38.8)
Poor people have little or no access to credit through SACCOS	71 (44.4)	34 (21.2)	55 (34.4)
SACCOS has reached many of the poorest in the village	51 (31.9)	49 (30.6)	60 (37.5)
Credit received through SACCOS helps to increase income	30 (18.8)	10 (6.2)	120 (75.0)
Credit through SACCOS creates indebtedness and leads to poverty traps	79 (49.4)	53 (33.1)	28 (17.5)
Through SACCOS women benefits less than men	73 (45.6)	48 (30.0)	39 (24.4)
Women and men benefit equally through SACCOS	28 (17.5)	45 (28.1)	87 (54.4)
SACCOS provide loan to poor people so that they may improve their existing IGAs, or develop new ones	30 (18.8)	11 (6.9)	119 (74.4)
There is no difference between assets owned by a SACCOS member and non- SACCOS member	38 (23.8)	82 (51.2)	40 (25.0)

NB: Numbers in brackets indicate percentages.

Table 8. Chi-square test results on respondents' attitude towards SACCOS (n=160).

Characteristic		Unfavourable (%)	Neutral (%)	Favourable (%)	Chi-square	P-value	Cramer's V
Sex	Male	14.4	3.8	46.2	0.622ns	0.733	0.062
	Female	6.9	3.1	25.6			
Membership	Members	11.2	3.8	35.0	0.287ns	0.866	0.042
	Non-members	10.0	3.1	36.9			

favourable attitude towards SACCOS relative to about a quarter (25.6%) of the female respondents. However, the results show that there was no significant association between respondents' sex and attitude towards SACCOS. In addition, Table 8 shows there was no significant difference between attitude towards SACCOS by members and non-SACCOS members. Moreover, the results show there was no significant (p=0.866) association between membership and attitude. Based on the results, the association between sex and membership category on attitude towards SACCOS was weak (Cramer's V=0.062; 0.042 respectively). According to Healey (2005), Cramer's V which measures the strength of association between two variables measured at categorical level is interpreted as follows: between 0.00 and 0.10 the relationship is weak; between 0.11 and 0.30 the relationship is moderate, and greater than 0.30 the relationship is strong.

Non-SACCOS members reasons for not joining SACCOS

Non-members were asked to account for the reasons that made them refrain from joining SACCOS. According to the study findings (Table 9), 30.0% of the respondents cited lack of awareness on the existence of SACCOS as

a major reason that hindered them from joining SACCOS. Lack of education on the importance of SACCOS was another reason reported by 22.5% of the respondents. One-fifth (20%) cited complaints by SACCOS members, that SACCOS performance was poor. Generally, these findings show that non-members had no proper information on the operation of SACCOS. A similar observation was made by Marijan (2008) who reported that, the majority of non-borrowers from Kilosa district lacked reliable and proper information about the existence of MFIs. However, Nawaz (2010) has reported from a study in Bangladesh that over half (55.2%) of the respondents did not join MFIs due to problems related to the micro-finance programme itself, such as the perceived high interest rate, dislike of the rules and regulations and bad impression of the program.

CONCLUSION AND RECOMMENDATIONS

Based on the empirical findings and discussion presented in the paper, the following conclusions are made: first, though SACCOS have been reported to play a significant role in the provision of financial services to the poor i.e. savings and credit for investment in income generating activities to its members, more needs to be done for better outcomes. The evidence presented in the paper

Table 9. Reasons for non-SACCOS members not to joining SACCOS (n=80).

Reason for not joining SACCOS	Frequency	Percent
No benefits to members	12	15.0
SACCOS members' complaints on poor performance	16	20.0
Lack of education on the importance of SACCOS	18	22.5
Lack of awareness on the existence of SACCOS	24	30.0
SACCOS has no capital	6	7.5
No entrance fee	8	5.0
Procedures of joining SACCOS not clearly known	10	12.5
Not interested with cooperatives	4	5.0

NB: Multiple responses existed hence percentage > 100.

shows that these SACCOS will only perform better if members are encouraged to increase their shares and savings, the major sources of capital to the SACCOS. Secondly, the paper has shown that services and products offered by the SACCOs to its members helped the later to improve their farm productivity leading to increased incomes. The increase in income reported was instrumental in improving the members' level of well-being and poverty reduction. Thirdly, the paper has shown that those involved in the study had a favourable attitude towards SACCOS, both males and females; members and non-members thought SACCOS were good and beneficial to the community. Therefore, it is quite possible that membership to SACCOS membership could increase leading to increased savings and credit access opportunities that will allow beneficiaries to invest in farm and non-farm activities. Generally, such a diversification enables reduction of income poverty and a general improvement in beneficiary households' well-being through increased expenditure and consumption of goods and services that were unaffordable before. Fourth, it is concluded that, the factor with most positive impact on poverty reduction was the household size that, having more family members and dependants who are economically active enables households to earn more income thus, improving their living standard. Lastly, the paper findings are in support of what the neo-classical growth theory that, though savings are not an end in themselves they nonetheless play an important role in sustaining growth and development. Generally, savings allow for accumulation of capital which is required for investments; hence economic growth and ultimately development. Moreover, just as is the case for econo-mies, individuals who cannot save will fail to accumulate assets fast enough to allow improvement in their economic conditions.

Based on the conclusions, the following recommen-dations are made: first, SACCOS should provide adequate knowledge to members to increase their shares and savings in the SACCOS; this could ensure sustainability of SACCOS activities and better provision of services. Second, SACCOS must expand the scope of beneficiaries to have broader and wider positive impacts as well as providing credit according to clients' demands to enable them invest in Income generating activities (IGAs) that are more productive. Third, there is a need for the government and other relevant stakeholders to increase efforts to empower SACCOS through additional capital; this would enable them provide sufficient loans amounts to members. Lastly, it is recommended that SACCO's members be sensitized on the importance of reviewing by-laws on a regular basis; this would help to break the barriers existing against non-members thus attracting them to join the MFIs in their respective areas, and hence increasing capital.

Conflict of Interests

The author has not declared any conflict of interests.

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