

DOES PROVISION OF LOANS AND TRAINING SERVICES BY DAIRY FARMERS ASSOCIATION AFFECT FARMERS LIVELIHOOD IN NORTH RIFT REGION, KENYA?

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Abstract

The main purpose of this paper was to determine the effect of provision of loans and training services on farmers' livelihood by dairy farmers association in the North Rift Region, Kenya. The study was guided by Theory of Collective action. The study employed descriptive survey and explanatory research design. The target population of this study comprised 12,745 members/farmers drawn from 8 financial service associations operating within North Rift Region. The study used stratified sampling technique to select the 387 members as the study sample size. The study involved primary data which was collected directly from the respondents using questionnaires. The study used quantitative methods. The data was analyzed using descriptive statistics (mean, mode and standard deviation) and inferential statistics (Pearson correlation coefficients r and moderated multiple regression models). The findings of the study revealed that training services impact positively on the livelihood of farmers. The trainings offered are holistic with regard to proper dairy management and husbandry and business skills.

Keywords: Loan, Training, Service, Dairy Farmers, Kenya

INTRODUCTION

Livelihoods perspectives have been central to rural development thinking and practice in the past decade. A farmer's livelihood comprises the capabilities, assets including both material and social resources and activities required his/her a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Marcono, 2004) Livelihoods among farmers are formed within social, economic and political contexts. Institutions, processes and policies, such as markets, social norms, and land ownership policies affect their ability to access and use assets for a favorable outcome. As these contexts change they create new livelihood obstacles or opportunities. (Robinson 2001). However, farmers' livelihood in rural areas is facing many challenges such as banking sector which has for some years faced several inter-related challenges, including high interest rate spreads, high overhead costs and relatively high profit margins. Further factors are the deficiencies in the legal and institutional framework that limit the range of assets available to banks as acceptable collateral excluding many rural farmers participating in access to capital (Republic of Kenya, 2007). Despite exclusion from what is considered as formal banking, many people in rural areas have figured out their own ways to save money leading development of their livelihood. An increasing number of dairy farmers are participating in financial services associations also known as "village banks".

The Financial Services Association (FSA) model is a micro-finance concept designed to bring low cost financial services to rural areas. It is based on the establishment of village level financial structures, which are owned and operated by the local inhabitants themselves, and mobilizes the financial resources of the area, for investment back into the local area. The model is adaptable; it can focus on the mobilization of savings, the extension of credit, or a combination of the two. Additionally, it can be linked to a formal financial institution, such as a commercial bank, or a credit union, which then acts as a clearinghouse, depository bank, or as a place to invest surplus funds for the FSA. The long-term goal of FSA is to achieve financial and managerial sustainability, based on the resources available within the village itself.

FSAs are a microfinance model invented by Jazayeri (1998) whose approach is the provision of financial services through rural banking. FSAs mobilize capital from investors by offering high returns while providing cost effective and accessible financial services to the local community thereby contributing to poverty alleviation (Jazayeri 2000). In this regard, FSAs are microfinance institutions that provide "a broad range of financial services such as deposits, loans, payments services, money transfers, and insurance to the poor and low income

households and their farm or non-farm micro enterprises” (Charitonenko and Campion 2003; Fowler and Kinyanjui 2004).

FSAAs are occasionally referred to as village banks and they have two basic approaches. First, there is an approach where funds are received from the implementing agency to lend to the members. Second, there is the FSAAs approach where equity financing from shareholders is used to encourage local capacity development and ownership (Chao, 2003). Cash, savings, remittances and access to credit determine a household’s ability to purchase and maintain tools, draught animals, tractors and implements, and to hire farm-power services, however, financial services in North Rift are limited (CBK, 2010). Creating constraints to and promoting opportunities for diversification has potential to improve livelihood security in these zones (Miano, 2013). Therefore this study will seek to establish the effect of financial service association strategies on farmer’s livelihood more specifically in the North rift region, Kenya.

The access of the poor to formal financial intermediates in LDC is constrained by custom, traditions and lack of availability of personal assets for use as collateral which has resulted to the high levels of poverty among its citizens. Low livelihood has been persistent in Kenya North Rift despite government’s effort to combat it through national development programs. This is reflected in the rising number of people without food, and with inadequate access to other basic necessities. From the review of literature, it was discovered that there is a dearth of information about how incomes are distributed among different farming households in Kenya and the variety of strategies the households engage in so as to meet their livelihoods.

In recent microcredit literature, the differential impact of village banks on different types of household has become a major discussion point (Khandker, 2005; Coleman, 2006; Islam, 2007; Segers et al., 2010). So far, there has been little empirical research on this topic. However, there is so far no consensus among academicians about the actual impact of village banks on poverty reduction and household food security (Banerjee et al., 2009, Fisher and Sriram, 2002; Weiss and Montgomery, 2005; Develtere and Huybrechts, 2005; Segers et al., 2010; Armendáriz de Aghion and Morduch, 2010). Karlan and Zinman (2010) argue that, despite claims about the role of village banks in reduction of poverty, there is little agreement as to whether credit does borrowers more good than harm. This study sought to provide effect of the financial service association strategies on farmer’s livelihood, in the North Rift Region, Kenya. To fulfill the study objectives the study sought deeper insight on provision of loans and training services on farmers’ livelihood: A case of dairy farmers association in the North Rift Region, Kenya. Thus, the study hypothesized that

H₀₁: Provision of loans has no significant effect on farmers’ livelihood.

H₀₃: Training services have no significant effect on farmers’ livelihood

THEORETICAL FRAMEWORK

The theory of collective action was based on the institutional approach to the solution of societal problems and was thus concerned with the conditions under which groups of people with a common interest were perceive that interest and act on it (Clague, 1997). The foundational work on collective action in the economic sense was by Olson (1995). Collective action often leads to creation of peoples organizations, commonly referred to as groups which bring together individuals with common problems and aspirations and who cannot, as individuals, meet certain goals as effectively, if at all.

By pooling their capital, labor and other resources, members are able to access certain resources or carry out profitable activities, which if undertaken by individuals alone, would involve greater risk and effort (Bernard 1995). In this study external forces and authorities affect collective action to a large extent, and these forces may be interpreted as both financial and non-financial support. Financial support is particularly relevant at the initial stage of the collective action, since it usually involves higher transaction costs compared to individual activities (Mills et al. 2010). Conversely, non-financial support is related to the need of organization to play a pro-active role in setting basic rights, guidelines, rules (also with penalties and sanctions) and public objectives which may encourage collective action (Ayer, 1997).

EMPIRICAL REVIEW

FSA rates on loans and deposits appear to be uncompetitive compared to other financial service providers such as savings and credit cooperatives and Rotating Savings and Credit Associations, or ROSCAs. As a result, FSAs might struggle in competitive environments to attract those wishing to borrow or save. However, it appears that FSA scan operates in environments in which a range of other service providers are present hence improving the farmers' livelihoods. (Simanowitz, 2001)

Mayoux (2001) in his study argues that FSAs offer rapid access to loans to the farmers, an important potential link to the formal financial sector, a place to keep deposits, and a source of larger loan amounts depending on shareholding size. Those interested in a longer-term relationship with a financial service provider may favour the ability to 'buy in' to the FSA through share investments and the link between voting rights and shareholding. Better-off members of the community may be increasingly attracted to invest over time, as FSA profitability improves.

FSAs offer the potential to earn an attractive rate of return by farmers on relatively small amounts of share capital, in an environment with a limited range of investment opportunities. However, improved terms on deposit facilities and access to banking services offered through links with the formal financial sector would go a long way towards making FSAs more attractive

to the wider community relative to competitors hence bettering the lives of the farmers. (Robinson 2001)

FSA's have relatively high interest rates on loans. Since FSA's are not subject to such strong pressures to reduce lending rates, the rates charged by FSA's can - in theory at least - match supply and demand for funds more closely. Assuming that alternative pressures do not become dominant in FSA's, for example through the concentration of shareholding in a few investors, FSA's should be able to solve the rationing problem faced by credit unions by adjusting interest rates to balance supply and demand for funds. (Zohir and Matin 2004)

The relatively high interest rates on lending promote operational sustainability, and rapid access to loans may partially offset the potential disincentive of high financial borrowing costs. The loan analysis and approval process is facilitated by the small size of these and the narrow range of loan products offered in many cases only one. However, limited available loan funds restrict access, as does the dominance of larger shareholders, who, in some cases, monopolize the available funds through repeat lending to themselves. (Mosley and Rock 2004)

FSA's are shareholder bodies that exist for the benefit of the shareholders, not explicitly for the poor or for any other group. FSA's are principally investor-driven, reflected in high interest rates for borrowers, and zero interest rates for depositors. To date, FSA's have concentrated their efforts on the provision of expensive short-term credit to those who can offer collateral. The poorer sections of rural communities have tended not to join FSA's (although the communities themselves tend to be relatively less well-off), and levels of participation by women are low relative to other community-based financial service providers. (Christen 2000)

Training for farmers especially through the FSA's has been proven to yield variety of results. Murshed-E-Jahan and Pemsil (2011) on their study on Bangladeshi small farmers concluded that building the capacity of farmers through training is more valuable than the provision of financial support in terms of raising production and income. Similarly, a study by Tripp and Hiroshimil (2005) confirms the importance of training can contribute to enhancement of farmers 'skills in farming works.

Studies on the effectiveness of training for farmers showed that not all programmers meet success as most failures of programmes in the developing countries were attributed to the tendency of excessively concentrating on a particular technology transfer rather than a broader spectrum of farmer empowerment including knowledge disseminations (Oreszczyn, and Carr, 2010; Yang et al 2008).

However, these gaps could be overcome by carefully revising and designing the training to address the needs. It was also reported that some success stories were related to using non-

formal education and focusing on learning-discovery approach, and filling in the gaps in farmer's knowledge misconceptions (Sligo and Massey, 2007; Hiroshini, 2005).

Many FSAs have realized the importance of measuring the impact of training on their employees in order to determine the effectiveness of the training programmes. Some rationale to this measurement as highlighted by Tripp, (2005) includes: - To justify the financial investment in the training and development programmes; To gather feedback for ongoing improvement as a programme is being delivered; To demonstrate the link between HR program and the organization's objectives; To compare the effectiveness of two or more training programmes; and To meet requirements set by professional organizations or government regulations.

Most organizations subscribes to Kirkpatrick's four levels of evaluation, where the first level deals with trainees' perception or reaction on the overall of the programme. Also known as the happy sheet this level of evaluation assesses participants' views on the enjoyment of training emotional reaction, usefulness of training (perceived value) and difficulty of training understanding on training material (Yang et al 2008).

The second level focuses on trainees' learning level, that is, assessing to what extent trainees' have acquired the necessary knowledge. In this context, Kraiger identified three types of learning resulted from training: Cognitive Outcomes – measures immediate knowledge outcome or knowledge retention over time after training. Skill-Based Outcomes – can be measured by requiring the trainees to demonstrate their new skills (Pemsl, 2011).

The third level is about job application or behavioral change that is, assessing trainees' ability to apply or practice those skills and knowledge acquired during training to workplace environment. This form of evaluation is to track whether training has been positively transferred to workplace or vice versa. The final level of training evaluation is to assess whether training intervention has been beneficial and has helped companies to improve their performance. Most analysts resort to cost-benefit analysis to calculate the ROI (return on investment). Changes in results might appear in many forms such as productivity improvement, customer satisfaction, profitability, efficiency, employee morale and so on (Mosley 2004).

Mosley (2004) reported that some progress have been achieved in poverty reduction along with improvements in socio-economic indicators such as life expectancy, mortality rates, literacy rate, proportion of population supplied with safe drinking water and electricity and nutritional adequacy. However, the report also mentioned that there exists a disparity of income between and within the urban and rural sectors as poverty incidence is still high and serious in some sectors and region. (Mohd Mokhtar Ismail, 2010).

Review of the literature have well-articulated functions of FSAs, its history and evolution (Josily, 2006, Asiama & Osei, 2007, Jazayeri 2, Fowler and Kinyanjui and Chao 2003) but there is a gap on how FSAs assist farmers and farmers livelihood. Second, knowledge on farmers' use of FSA and their livelihood is still scarce and wanting. Third, previous studies have so much concreted on effect of MFIs on farmers performance, creating if none little attention on FSA services and the behavior of the farmers towards FSA.

RESEARCH METHODOLOGY

The study adopted an explanatory and survey design. This design was best for effect of financial service association strategies (provision of loans and training services) on farmer's livelihood, in the north rift region, Kenya The target population of this study comprised members/farmers of financial service association operating within North Rift Region; there were 12,745 members drawn from 8 FSAs.

Questionnaires were administered to all the respondents and were preferred because they were used to gather data quickly from a large sample population as well as reach many respondents easily (Borg and Gall, 1983).

From the target population of 12,745 members of FSA, Yamane (1973) sample size formula was used to select a sample size of 387 members. The study used stratified sampling technique to select the members where respondents were picked from.

To determine and improve the validity of the questionnaire assistance was sought from the supervisors. Cronbach alpha was used to measure the reliability of the questionnaire. The Statistical Package for the Social Sciences (SPSS) was used to calculate the value of the Pearson Product-moment Correlation Coefficient denoted by r .

The study used quantitative methods to analyze data. The information was codified and entered into a spread sheet and analyzed using SPSS. The data was analyzed using descriptive statistical methods for instance measures of central tendency such as mean, mode and standard deviation. Inferential statistics such as Pearson correlation coefficients r and multiple regression models were used test the hypothesis.

ANALYSIS AND FINDINGS

The members' characteristics include: status of farmer in household, age of the farmer and the highest level of education. The study showed that Male respondents represented 62.2% (212); on the other hand 37.8% (129) were female. As far as the status of the farmer in the household is concerned, 61.9% (211) are male headed households, 20.8% (71) female headed (husband away) and 17.3% (59) female headed (single).

Provision of Loans

Total Amount Borrowed by Farmers from the Group

Findings indicated that farmers have borrowed money in the range of Ksh 10,001-30,000, 7.6% have borrowed money in the tune of Ksh 30,001-60,000, and 2.6% of the farmers have borrowed money in the range of Ksh 60,001-90,000 and 26.7% of the farmers have borrowed over Ksh 90,000. As most of the members borrow against their savings, this gives an indication of how much money the farmers are saving and how much they can borrow and repay comfortably i.e. within the range of Ksh 10,001-30,000.

View Regarding Loan Provision of the Group

Table 1: View Regarding Loan Provision of the Group

	Frequency	Percent
Fair	126	37
Good	69	20.2
interest is high	40	11.7
no comment	106	31.1
Total	341	100

The researcher sought to establish respondents view regarding loan provision of the group. The results are presented in table 4.2. From the results, 37% (126) of the respondents stated that the loan provision of the group is fair, 31.1% (106) had no comment, and 20.2% (69) noted that the loan provision is good while 11.7% (40) of them noted that the interest is high. While majority of the farmers seem to be okay with the loan provision of the group, 31% seem not be sure of whether the loan provision process is good or bad. This gives an indication to their level of exposure to the loaning process of their group and/or other lending institutions.

Table 2: Provision of Loans

		sd	D	n	A	Sa	Mean	Std. Deviation
I prefer borrowing from the group than from any other financial institution	Freq.	0	29	121	189	2	3.48	0.658
	%	0	8.5	35.5	55.4	0.6		
Our group offers loans with low interest rate	Freq.	8	0	176	155	2	3.42	0.63
	%	2.3	0	51.6	45.5	0.6		
The charges for borrowing loan from the group is cheap and affordable	Freq.	0	42	152	147	0	3.31	0.679
	%	0	12.3	44.6	43.1	0		
Borrowing loan from my group is easier than borrowing from bank	Freq.	19	42	86	192	2	3.34	0.905
	%	5.6	12.3	25.2	56.3	0.6		

The researcher sought to establish the effect of provision of loans on farmers' livelihood. The results are presented in table 2. When the respondents were asked whether they prefer borrowing from the group than from any other financial institution, 55.4% (189) agreed with the statement, 35.5% (121) were neutral and 8.5% (29) of them disagreed (mean = 3.48, SD = 0.658). Additionally, 51.6% (176) of the respondents were not sure whether their group offers loans with low interest rates (mean = 3.42, SD = 0.63). Similarly, 44.6% (152) of them were not certain whether the charges for borrowing loan from the group are cheap and affordable (mean = 3.31, SD = 0.679). Finally, 56.3% (192) of the respondents agreed that borrowing loan from their group is easier than borrowing from the bank. However, 25.2% (86) of the respondents were neutral on the same while 12.3% (42) of them disagreed (mean = 3.34, SD = 0.905). While 51.6% were not sure if their group offers a low interest rate, majority still prefer borrowing from their group seen from 56% finding it easier to borrow from their group as opposed to the bank. This indicates that the group has made effort to ensure that it is running its operations efficiently and has managed to build a sense of customer loyalty compared to other institutions. In relation to the research questions, this shows that access to credit is important to farmers' livelihoods as they can access capital to start or expand their dairy business. Farmers are however keen on interest rates of which if high can deter sustainable livelihoods

Training Services

Trained by the Group

Table 3: Trained by the group

	Frequency	Percent
Yes	291	85.3
No	50	14.7
Total	341	100

The researcher also sought to establish whether the farmers were trained by the group. The result in table 3 indicates that majority 85.3% (291) of the respondents were trained by the group while 14.7% (50) of them were not trained by the group. This indicates that the group goes beyond loaning and offers extra services that ensure farmers are aware of their purpose for saving, borrowing and engaging in any other financial transaction. This can significantly lead to farmers making informed decisions regarding their finances and ensures good repayment rates within the group and therefore making the institutions a going concern

Areas Farmers have been trained on

Table 4: Areas Farmers have been trained on

	Frequency	Percent
Loan repayment process	116	34
Running a business	111	32.6
both loan repayment process and running a business/dairy farming	85	24.9
loan spending	29	8.5
Total	341	100

The researcher went a step further to establish the areas farmers have been trained on. The results in table 4 indicate that 34% (116) of the farmers have undergone training on loan repayment process, 32.6% (111) on how to run a business, and 24.9% (85) on both loan repayment process and running a business/dairy farming and 8.5% (29) of the farmers have undergone training on loan spending. Ensuring that one knows why they are borrowing is key to ensuring a low risk portfolio for any financial institution. Low financial literacy and lack of information affects an individual capacity to plan for his current and future cash flows thereby affecting his livelihood. The results show that the group puts emphasis on loan repayment and business management thereby empowering their farmers on matters of financial literacy and contributing to sustainable livelihoods.

Training services

Table 5: Training Services

		SD	D	N	A	SA	Mean	Std. Deviation
We are trained in business and management	Freq.	0	17	23	299	2	3.84	0.497
	%	0	5	6.7	87.7	0.6		
The group visit our farms for training	Freq.	10	55	165	109	2	3.11	0.782
	%	2.9	16.1	48.4	32	0.6		
The groups provide us with financial advises	Freq.	0	17	188	136	0	3.35	0.573
	%	0	5	55.1	39.9	0		
The groups trains on the feeding of dairy cows	Freq.	0	44	168	127	2	3.26	0.679
	%	0	12.9	49.3	37.2	0.6		
We are trained on the best dairy cows we can rear	Freq.	2	75	133	131	0	3.15	0.779
	%	0.6	22	39	38.4	0		
We are trained on how to control disease the group	Freq.	45	24	123	149	0	3.1	1.014
	%	13.2	7	36.1	43.7	0		

This section of analysis sought to establish the influence of training services on farmers' livelihood. As evidenced in table 5, 87.7% (299) of the respondents agreed that they are trained in business and management (mean = 3.84, SD = 0.497). However, 55.1% (188) of the respondents were not sure if the groups provide them with financial advises (mean = 3.35, SD = 0.573). Further, 49.3% (168) of the respondents were not certain whether the groups trains on how to feed dairy cows (mean = 3.26, SD = 0.679). Similarly, 39% (133) of the respondents were not sure if they are trained on the best cows to rear (mean = 3.15, SD = 0.779). Additionally, when the respondents were asked whether the group visits their farms for training, the respondents were neutral as evidenced by 48.4% (165) of the respondents (mean = 3.11, SD = 0.782). Finally, 36.1% of the respondents were not sure whether they are trained on how to control diseases (mean = 3.1, SD = 1.014). In addition to financial literacy and business management, the group goes beyond money issues and trains the farmers on how to improve productivity so as to attain maximum returns. This means that farmers are able to run profitable businesses which translate to capacity to save and repay loans advanced by the group. In relation to the research questions, this shows that a holistic training approach goes to ensure improved farmer livelihoods as they can increase production and productivity thereby increasing their income streams and consequently improving their economic status

Farmer's Livelihood

Table 6: Farmer's Livelihood

		Sd	d	N	a	sa	Mean	Std. Deviation
I can educate my children without any financial problem	Freq.	31	32	83	195	0	3.3	0.972
	%	9.1	9.4	24.3	57.2	0		
I am able to feed my family	Freq.	68	39	148	86	0	2.74	1.048
	%	19.9	11.4	43.4	25.2	0		
My family health is well catered for	Freq.	30	92	128	91	0	2.82	0.927
	%	8.8	27	37.5	26.7	0		
Am able to extend the number of dairy cows I have	Freq.	24	160	130	27	0	2.47	0.741
	%	7	46.9	38.1	7.9	0		
Am able to assist my neighbors with any financial obligations the need from me	Freq.	30	143	50	118	0	2.75	1.029
	%	8.8	41.9	14.7	34.6	0		

This section of the analysis put into account farmer's livelihood. As evidenced in table 6, 57.2% (195) of the respondents agreed that they can educate their children without any financial

problem. However, 24.3% (83) of them were not sure, 9.4% (32) disagreed and 9.1% (31) strongly disagreed on the same (mean = 3.3, SD = 0.972). With reference to whether the family health is well catered for, 26.7% (91) of the respondents agreed, 37.5% (128) were neutral, 27% (92) disagreed and 8.8% (30) of them strongly disagreed (mean = 2.82, SD = 0.927). Further, when the respondents were asked whether they are able to assist their neighbors with financial obligations they need from them, 34.6% (118) agreed while 14.7% (50) were neutral, 41.9% (143) disagreed and 8.8% (30) strongly disagreed (mean = 2.75, SD = 1.029). Further, 25.2% (86) of the respondents agreed that they are able to feed the family though 43.4% (148) of them were not sure, 11.4% (39) disagreed and 19.9% (68) strongly disagreed (mean = 2.74, SD = 1.048). Finally, 38.1% (130) of the respondents were not sure if they are able to extend the number of dairy cows they have while 46.9% (160) of them disagreed, 7.9% (27) agreed and 7% (24) strongly disagreed that they are able to extend the number of dairy cows they have (mean = 2.47, SD = 0.741). A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Marcono, 2004). Heifer International views sustainable livelihoods as those whereby farmers have adequate opportunities to create wealth for themselves, their families and communities, extending well beyond the accumulation of financial capital to include social and human capital. More concretely, sustainable livelihoods provide adequate and sustainable access to the resources necessary to meet basic household needs (access to nutritious food and clean water, housing, access to health services, opportunities for employment or income generation, access to education and opportunities for community participation). In relation to the research questions, this shows that the farmers are in a position to create wealth for themselves and families but does not go far beyond that into the communities seen as 41.9% are not in a position to help their neighbors with financial obligations when need arises.

Table 7: Correlation Statistics

	farmer livelihood	provision loans	training services
Farmer Livelihood	1		
	1		
Provision Loans	.705**	1	
	0		
Training Services	.672**	.830**	1

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

Pearson's product moment correlation analysis was used to assess the correlation between the variables. The results in table 7 indicate that, there is positive and significant correlation between provision of loans and farmers' livelihood ($r = 0.705$, $p < 0.01$) and training services and farmers' livelihood ($r = 0.672$, $p < 0.01$).

Hypotheses Testing

In order to explain the percentage of variation in the dependent variable farmers' livelihood as explained by the independent variables, the researcher used coefficient of determination that was obtained from the model summary in table 8. Coefficient of determination was used to explain whether the model is a good predictor. From the results of the analysis, the findings show that the independent variables (payment services, training services, savings services and provision of loans) contributed to 55.8% of the variation in farmers' livelihood as explained R^2 of 0.558% which shows that the model is a good prediction. Table 6 reveals that the F-value of 105.907 with a p value of 0.00 significant at 5% indicate that the overall regression model is significant, hence, the joint contribution of the independent variables was significant in predicting farmers' livelihood.

From the study findings, provision of loans has a positive and significant influence on farmers' livelihood as evidenced by $\beta_1 = 0.439$ ($p\text{-value} = 0.000$ which is less than $\alpha = 0.05$). Cognate to the results, Mayoux (2001) in his study argues that FSAs offer rapid access to loans to the farmers' and a place to keep deposits hence improving the farmers' livelihoods. Similarly, FSAs make it possible for farmers to earn an attractive rate of return on relatively small amounts of share capital which goes a long way towards bettering their lives (Robinson 2001). Further, FSAs are able to adjust interest rates to balance supply and demand for funds (Zohir and Matin 2004). However, FSAs offer expensive short-term credit to those who can offer collateral hence discouraging the poor sections of the local community from joining FSAs thereby impacting negatively on their livelihood since they have limited access to credit (Christen 2000).

Also, training services has a positive and significant effect on farmers livelihood (beta = 0.186, $p < 0.05$). In line with the results, Murshed-E-Jahan and Pemsil (2011) on their study on Bangladeshi small farmers concluded that training services are more valuable in terms of raising production and income compared to provision of financial support. In a similar vein, Tripp and Hiroshimil (2005) confirm that training contributes to enhancement of farmers' skills in farming thereby improving their livelihood. However, training services need to concentrate on a broader spectrum of farmer empowerment rather than concentrating on a particular technology transfer for it to succeed (Oreszczyn, and Carr, 2010; Yang et al 2008).

Table 8. Regression Model Summary

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-0.088	0.161		-0.547	0.585
provision loans	0.5	0.076	0.439	6.596	0
training services	0.221	0.083	0.186	2.667	0.008
R Square	0.558				
Adjusted R Square	0.552				
F	105.907				
Sig.	.000b				

a Dependent Variable: farmer livelihood

It is evident that farmers save though they lack the basic knowledge on minimum requirements to open an account the amount they can save. This implies that the groups' scope for savings is limited and they are unable to cover the costs associated with offering improved savings products. In regards to payment services, the results are indicative of a payment service that is efficient to the extent that it has made it possible for members to have their children's school fees paid before receiving salary. However, there are still shortcomings in the payment service since the groups operation do not exhibit speed and ease in operations.

The correlation result showed that there is a positive and significant relationship between provision of loans, training services, savings services and payment services with farmers' livelihood. Further findings indicate that provision of loans has the highest relationship with farmers' livelihood while payment services had the least. The multiple regression results indicate that the independent variables (payment services, training services, savings services and provision of loans) have a positive and significant effect on farmers' livelihood. This implies that a unit increase in the independent variables leads to a unit increase in farmers' livelihood.

CONCLUSION AND RECOMMNDATIONS

The study has established that farmers are provided with access to loans and this has had a positive influence on their livelihood. As a result, farmers prefer borrowing since through borrowing they are able to better their lives. Interest rates are fair making it possible for farmers to borrow as high as Ksh90,000. Farmers therefore have a link to the formal financial sector and also have the opportunity to invest through buying shares and earn profit from them. However, majority of the farmers still borrow small amounts of money and there is need to establish the adequacy interms of working capital requirments to run the dairy enterprises and repayment capacity. While majority of the farmers seem to be okay with the loan provision of the group,

31% seem not be sure of whether the loan provision process is good or bad. This gives an indication to their level of exposure to the loaning processes of their group compared to other lending institutions. The farmers are also keen on interest rates of which if high can deter borrowings and consequently sustainable livelihoods

Also, results from the study indicate that training services have an instrumental effect on the livelihood of farmers. Training services give an insight to farmers of what is required of them. Through training, farmers are taught of important aspects of dairy farming such as how to feed dairy cows and control diseases. A holistic training approach goes to ensure improved farmer livelihoods as they can increase production and productivity thereby increasing their income streams and consequently improving their economic status. Without training, farmers would not be able to make informed decisions on use of the finance extended to them. Despite a mix of opinion regarding the interest rates, majority of the farmers prefer to borrow from their group than any other lending institution. This indicates that a financial institution that goes beyond offering credit only and into empowering their members with regard to financial literacy and other relevant trainings increases customer loyalty.

As evidenced in the study, provision of loans to farmers is instrumental in improving their livelihood. There is therefore need to have fair interest rates to make it possible for farmers to access credit. Also, in order to make their services more attractive to farmers and increase borrowings, the groups need to develop credit products that meet the farmers particular demands.

The findings of the study have revealed that training services impact positively on the livelihood of farmers. The trainings offered are holistic with regard to proper dairy management and husbandry and business skills. However, after being trained, there is need for an assessment to establish to what extent they have acquired the necessary knowledge and if they will be able to apply the skills and knowledge acquired to their dairy farming activities.

This study was conducted to determine the effect of financial service strategies on farmers' livelihood: A case of dairy farmers association in the North Rift Region, Kenya. The study indicates that training services have an instrumental effect on the livelihood of farmers. There is need for a study on training delivery methods and timings and how this influences the adoption rates by farmers. Finally, there is need for a study to establish whether a link between banks and FSAs will aid in improving the financial products of FSAs.

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