Factors influencing savings among land reform beneficiaries in South Africa

Michael Antwi and Clarietta Chagwiza

Department of Agriculture and Animal Health,
University of South Africa, South Africa

Abstract

Purpose – The purpose of this paper is to determine the effects of socio-economic factors of land redistribution for agricultural development project beneficiaries on savings in the North West Province, South Africa.
Design/methodology/approach – A binary logistic regression model was employed to determine the effects of socio-economic factors of project beneficiaries on their savings.
Findings – The results show that the average number of trainings attended by the beneficiaries, the proportion of youth per project and the average net farm income of the project positively and significantly influence the level of savings by the beneficiaries. About 62 percent of the beneficiaries did not have savings; thus, only 38 percent of beneficiaries had savings. Of the 38 percent who had savings, the majority (77 percent) had an annual net farm income of less than R1,000. Only 2 percent of the projects had an annual net farm income of more than R10,000.
Research limitations/implications – The findings of this study are valuable to policymakers dealing with the issue of land reform and could shed some light on how land redistribution can achieve its intended purposes. These findings should be granted serious consideration when formulating policies aimed at improving savings within collective groups.
Practical implications – The findings of this study have revealed the importance of training and participation of youth in influencing savings. As well, the findings imply that an organization or household with a health income have a higher propensity of saving.
Social implications – The research findings point out to the importance of saving. With savings, a household is in a better position to deal with situations that arises in case of emergency.
Originality/value – This paper is among the few studies to analyze the determinants of savings at a group or project level. Most studies are done at household or individual level.
Keywords Agricultural development, Savings, Collective groups, Land reform beneficiaries
Paper type Research paper

1. Introduction

Land and the resources on it provide economic, socio-cultural and environmental goods and services that add to human well-being (Hebinck and Shackeleton, 2011). Most rural poor in developing countries including South Africa are entirely dependent on this basic livelihood asset for a living. Hall (2007) mentions that policies that facilitate access to land can reduce poverty and income inequality. Land reform program in South Africa was initiated in 1994 by the Department of Land Affairs which changed its name to the Department of Rural Development and Land Reform in order to redress the inequalities and disparities in ownership from the apartheid era. A three-pronged approach of land reform was

implemented in South Africa, which includes land restitution, land redistribution and land tenure. This paper focuses on the determinants of savings among the Land Redistribution for Agricultural Development (LRAD) program beneficiaries.

LRAD was generally expected to improve the food security, income, savings, employment and livelihoods of the beneficiaries and the local economy through sustainable agricultural production. All these expectations can be met if there are funds available to facilitate such developments. Access to finance is a critical challenge that many developing nations face and as a result a number of community-based financial intermediation models such as the village savings and lending associations have been implemented to enhance easy finance access (Maliti, 2015). In particular, for the land reform projects to be sustainable, it requires savings from the income generated from the projects which may be used to expand the production base of the projects through investments. Savings are an important element for hedging against shocks and emergencies. Without savings, future acquisition of farm inputs, important farm equipment and infrastructure will be impossible. Karlan *et al.* (2014) point out a number of important welfare consequences of undersaving such as variable consumption, low resilience to shocks and foregone profitable investments. According to Weideman (2004), when implemented with the beneficiaries' needs in minds, land reform programs can result in growth in the agricultural sector which could yield increased employment opportunities in the rural areas and induce lower food prices for consumers. When employment opportunities are created, it leads to higher income generation which could translate to higher savings within households.

Project or business savings and economic development cannot be disentangled. Hence, the economic role that savings can play cannot be underestimated. For instance, savings can enable farmers to invest in their farms and expand production; leading to higher profit margins. Thus savings ensure the continuity of a business due to its provision of fresh funds to grow the business and act as buffer in case of emergencies (Frank *et al.*, 2013). Savings also improves the farmers' eligibility for credit from credit providers such as banks and micro-finance providers. Given the social and economic importance of savings, this study, therefore, seeks to identify the factors which determine savings among LRAD project beneficiaries. Thus the focus of this study in not on household level but on project level which consist of several groups of land beneficiaries operating collectively. There is a dearth of information on whether land reform has managed to improve the beneficiaries' livelihoods in terms of increased income, savings and assets accumulation. This study attempts to bridge that gap by looking at the issue of savings. Thorough investigation of the various aspects of factors influencing savings of LRAD beneficiaries is of great importance both for policymakers and other major stakeholders and institutions. This implies that the significant variables should be given proper policy considerations in order to improve savings among LRAD beneficiaries in the study area.

The paper proceeds as follows: Section 2 reviews the previous literature on the factors that influence savings. The methodology, which describes the study area, the sample, the data and analytical methods, is presented in Section 3. The results are presented in Section 4. The results are discussed and concluded in Section 5. Policy recommendations are given in the same section.

2. What factors influence savings?
Economists defines saving as the difference between disposable income and consumption expenditures, be at household or business level. Saving is a key macroeconomic variable since it is a potential source of investment and thus economic growth (Beckmann *et al.,* 2013).

Cronje (2009) emphasizes the importance of high levels of gross national savings on reducing a country's reliance on and exposure to the unpredictable global capital market. As compared to other similar developing economies like China and India, Cronje and Roux (2010) indicate that South Africa's savings levels are very low making the country to depend on foreign investment to finance for its future growth. The same authors further argue that personal savings necessitate maintaining and improving of the quality of life and

also relieve the state from the burden to provide. Having the ability to save can stimulate an entrepreneurship spirit among individuals.

A number of factors that influence savings have been highlighted in previous empirical studies. Such studies have either been carried out at individual, household, corporate/business or national levels. Using data from the OeNB Euro Survey for ten Central, Eastern and Southeastern European countries in 2010 and 2011, the findings of Beckmann et al. (2013) reveal that income and higher levels of education positively and significantly influence savings within households. They further strengthen the importance of the relationship between higher levels of education with financial literacy.

Based on their findings in Nigeria, Odoemenem et al. (2013) found that sex and income of farmers significantly influenced savings. Other authors such as Frączek (2011) argue that the level of savings depends on various factors such as income, interest rates, fiscal factors, demographics factors as well as psychological, cultural and social factors. Investigations by Kibet et al. (2009) in Kenya reveal that household income and education significantly influence savings among rural farmers, entrepreneurs and teachers.

The cultural aspect has emerged in literature as one of the factors that influences saving behavior of households. For instance, Nga (2007) identified the cultural aspect as one of the important determinants in the decision to save in poor developing countries such as in Sub-Saharan Africa. In a similar vein, Carroll et al. (1999) highlight that some economists have also considered the possibility that cultural differences also play an important role in influencing saving differences rather than strictly economic differences across countries. The findings of the study by Paule-Paludkiewicz et al. (2016) revealed that culture has a significant effect on the saving behavior of households. The authors further indicated the two main cultural aspects that influence savings as the attitudes toward thrift and the importance assigned to wealth accumulation.

The discussion above has highlighted several factors that have been pointed out in several previous studies as important determinants of savings. However, the observed exogenous factors are contextual and they do not always cut across the board similarly. Moreover, most of these studies have been carried on individual level and not at the group level. Hence, this study aims to fill in this gap and contribute to the body of knowledge studying savings within collective farmer groups.

3. Methodology

3.1 Study area

The study was carried out in the Ngaka Modiri–Molema district in the North West Province of South Africa. The North West province consists of four main districts, namely, the Ngaka Modiri–Molema District, Bojanala Platinum district, Dr Kenneth Kaunda District and Dr Ruth Segomotsi Mompati District. The Ngaka Modiri-Molema (Central) district municipality is the second largest of the four districts in both population and size. Agriculture is the next most important sector of the provincial economy next to mining, contributing 13 percent of the GDP and 18 percent of employment. The province consists of 55,000 farm households of which 8,000 are commercial and the rest are developing farming units.

3.2 Sample

A list of the names of projects, their contacts, location (municipality), status and type of activity was obtained from the Department of Land Affairs and Rural Development. The projects vary in designs and cover both rural and peri-urban areas of the district. The project activities also cover a wide range of livestock (large and small stock), poultry, piggery, field crops and vegetable farm enterprises. Despite the dichotomous nature of the projects, they all share a common goal, that of sufficient income generation and improving the living standards of beneficiaries and the community at large.

The desktop information and data analysis indicated that approved and transferred land reform projects in the district municipality from 1997 to March 2009 were 90. Out of this, 5 were SLAG projects; 3 for Commonage; 72 for LRAD; and 10 for PLAS. From the project list, 35 percent of the LRAD projects in the study area were classified as livestock enterprises, 22 percent for grains and vegetables and 43 percent for both livestock and crops. However, the extension personnel in charge of the study area indicated that the majority of the farms have diversified under the new owners (project beneficiaries) and that they undertake combinations of livestock, grains and vegetable production. Therefore, based on the projects statistics, 47 (65 percent) of all the 72 active projects under LRAD sub-program which is the focus of this study in the Ngaka Modiri Molema district of the province were randomly selected. All the names of the projects were written on pieces of papers which were then put in a hat and mixed and the 47 projects were randomly selected.

3.3 Data

The data for this study were collected using a structured questionnaire. Prior to the actual fieldwork, the questionnaire was tested and validated to ensure proper administration of questions and good quality of data. The data were collected at two levels: at individual level including all the 244 direct project beneficiaries and at the project level including 47. The data collected from the 244 project beneficiaries ranged from demographic to socio-economic characteristics. At the project level, mainly the socio-economic data directly related to the project were gathered. The selected enumerators were trained on the professional way of asking questions and recording the information. All the respondents were informed beforehand about the interviews; hence all the interviews were done per appointment.

3.4 Econometric model

To identify the determinants of savings among the LRAD projects, a binary logistic regression model (BLRM) was employed. Logistic regression applies maximum likelihood estimation after transforming the dependent into a logit variable (the natural logs of the odds of the dependent occurring or not).

In BLRM, a single outcome variable Y_i $(i = 1, ..., n)$ follows a Bernoulli probability function that takes on the value 1 with probability P_i and 0 with probability $1-P_i$. $P_i/1-P_i$ and is referred to as the odds of an event occurring. P_i varies over the observations as an inverse logistic function of a vector X_i, which includes a constant and K explanatory variables (Greene, 2003). The Bernoulli probability function can be expressed as:

$$Y_i \Theta \text{Bernoulli}(Y_i/P), \tag{1}$$

or:

$$\ln\left[\frac{P_i(Y_i = 1)}{1 - P_i(Y_i = 1)}\right] = \ln(\text{Odds}) = \alpha_0 + \sum_{k=1}^{k} \beta_k X_{ik}. \tag{2}$$

In the current study, Y_i represent the savings of projects. The dependent variable (Y_i) takes the value of 1 when the project beneficiary saves and 0 if otherwise.

Those projects which have savings are classified with a value of 1, while those projects which did not have savings were classified with the value of 0. Equation (2) above is referred to as the log odds and also the logit and by taking the antilog of both sides, the model can also be expressed in odds rather than log odds, i.e.:

$$\text{Odds} = \left[\frac{P_i(Y_i = 1)}{1 - P_i(Y_i = 1)}\right] = \exp\left[\alpha_0 + \sum_{k=1}^{k} \beta_k X_{ik}\right], \tag{3}$$

or:

$$= e^{\alpha + \sum\limits_{k=1}^{k} \beta_k X_{ik}} = e^{\alpha_0} * \prod_{k=1}^{k} e^{\beta_k X_k} = e^{\alpha_0} * \prod_{k=1}^{k} \left(e^{\beta_k}\right)^{X_k}. \tag{4}$$

There are several alternatives to the BLRM that might be just as plausible in a particular case. However, as stated above, the BLRM is comparatively easy from a computational point of view. There are many tools available which can be used to estimate logistic regression models but in practice the BLRM tends to work fairly well. If either of the odds or the log odds is known, it is easy to figure out the corresponding probability which can be written as:

$$P = \left[\frac{\text{odds}}{1+\text{odds}}\right] = \left[\frac{\exp(\alpha_0 + \beta' X)}{1 + \exp(\alpha_0 + \beta' X)}\right]. \tag{5}$$

The unknown α_0 is a scalar constant term and β' is a $K \times 1$ vector with elements corresponding to the explanatory variables. In this study, the parameters of the model were estimated by maximum likelihood. That is, the coefficients that make the observed results most likely were selected. The likelihood function formed by assuming independence over the observations can be written as:

$$L(\alpha, \beta) = \prod_{i=1}^{n} P_{x_i}^{Y_i} \left(1 - P_{x_i}\right)^{1-Y_i}. \tag{6}$$

To random sample (x_i, y_i), $i = 1, 2, \ldots, n$, by taking logs and using Equation (2), the log-likelihood simplified to:

$$\text{In}[L(\alpha_0, \beta)] = \sum_{i=1}^{n} \left\{y(\alpha + \beta x) - \text{In}(1 + \exp(\alpha + \beta x)\right\}. \tag{7}$$

The estimator of unknown parameters α and β can be gained from the following equations by means of maximum-likelihood estimation:

$$\frac{\delta \text{In}[L(\alpha_0, \beta)]}{\delta \alpha_0} = \sum_{i=1}^{n} \left|y_i - \frac{\exp(\alpha + \beta x)}{1 + \exp(\alpha + \beta x)} = 0, \right. \tag{8}$$

$$\frac{\delta \text{In}[L(\alpha_0, \beta)]}{\delta \beta_0} = \sum_{i=1}^{n} \left|y_i - \frac{\exp(\alpha + \beta x)}{1 + \exp(\alpha + \beta x)} = 0. \right. \tag{9}$$

Since Equations (8) and (9) are non-linear, the maximum likelihood estimators must be obtained by an iterative process, such as the Newto–Raphson or Davidson–Flecher–Powell or Berndt–Hall–Hall–Hausman algorithm (Greene, 2003). A statistical model based on likelihood ratio (LR) was deemed appropriate. This ratio was defined as follows:

$$LR = 2(\text{Log}L_R - \text{Log}L_U),$$

where $\text{Log}L_U$ was defined as the log-likelihood for the unrestricted model and $\text{Log}L_R$ was the log-likelihood for the model with k parametric restrictions imposed. The LR statistic follows a χ^2 distribution with k degrees of freedom. This econometric model was carried out using the Statistical Package for Social Sciences. To conclude, the study analyses the decision to save (1) or not to save (0) as a function of a selected number of explanatory variables as presented in Table I.

ID	Independent variables	Variable label	Expected sign
1	NYR	No. of years of project operation	Positive
2	AVBP	Availability of project business plan. 0 = Not available; 1 = Available	Positive
3	AVTR	Average number of trainings attended	Positive
4	ADTECH	Adoption of new technologies by the projects 1 = Adopted, 0 = not adopted	Positive
5	TOTALJOB	Total jobs created per project	Positive
6	PROPY	Proportion of youth per project	Positive
7	PCFS	Project contribution to household food security of beneficiaries. 1 = nil; 2 = 1–50%; 3 ⩾ 50%	Positive
8	NFI	Average annual net farm income of the project. 1 = < R50,000; 2 = R50,000-R200,000; 3 ⩾ R200,000	Positive
9	FRK	Does project keeps farm records? 0 = No record keeping; 1 = Keep farm records	Positive
10	LINKAGE	No. of established linkages per project	Positive
11	VISITSE	Number of extension visits per season. 1 ⩽ 3 visits; 2 = 3–7 visits; 3 ⩾ 7 visits	Positive
12	Y (SAVINGS)	Does the project have savings? 0 = Have no savings; 1 = Have savings	

Table I.
Variables selected for
BLRM analysis

4. Empirical results
The empirical findings of the study are reported in this section. First, descriptive results are presented and then followed by the inferential results from the binary logistic regression analysis.

4.1 Descriptive results
The descriptive analyses give two sets of results. It gives a description of demographic information of the 244 individual project beneficiaries in Table II as well as the description of the 47 projects in Table III.

The demographics in Table II show that the majority (54 percent) of the respondents were male while 46 percent were female. However, it is important to point out that one of the 47 projects had no woman among its membership. The study further established that women were the most active and committed members of the projects. With regard to education, the majority (46 percent) have attained an education level below matric. About 28 percent indicated that they had matric while 26 percent of the respondents had tertiary education.

The findings further show that the majority of the project beneficiaries (52 percent) were married while 44 percent were not married and about 4 percent indicated they were in co-habitation. About 57 percent of the beneficiaries' households had a family size of one to five members while 43 percent had sizes of six to ten people. When it comes to food security, the study established that the majority (85 percent) of the households in the projects were food secure while 15 percent were food insecure. It was further revealed that the main source of the food security was through food produced from the projects and purchasing of some of the food using income from the projects, and also from other sources such as employment.

The study findings show that the majority (64 percent) of the project beneficiaries were earning an income which is less than R1,000 from the projects while 13 percent of the beneficiaries indicated that they earn an income between R1,000 and R2,000. About 23 percent of the project beneficiaries revealed that they earn a monthly income of more than R2,000 from the projects.

Table III shows that the majority (66 percent) of the projects had the sizes of their land lie between 1 and 300 hectares. About 23 percent of the projects had the sizes of the land lying between 301 and 600 hectares. About 9 percent of the project beneficiaries had land sizes ranging between 601 and 900 hectares. Only 2 percent of the projects had land sizes over

Variable	Frequency	Percent
Gender of farmers		
Female	112	46
Male	132	54
Total	244	100
Level of education		
Below matric	112	46
Matric	68	28
Tertiary	63	26
Total	244	100
Farmers' household size		
1–5 members	139	57
6–10 members	105	43
Total	244	100
Marital status		
Married	127	52
Unmarried	107	44
Co-habitation	10	4
Total	244	100
Monthly income from projects		
< 1,000	156	64
R1,000–R2,000	32	13
> R2,000	56	23
Total	244	100
Food security status		
Food secure	207	85
Food insecure	37	15
Total	244	100

Note: $n = 244$
Source: Own calculations based on field survey

Table II.
Demographic characteristics of beneficiaries in the study

900 hectares. The majority of the projects (42 percent) indicated that the skills training received positively impacted on their projects while about 30 percent revealed that they did not see any impact. About 62 percent of the beneficiaries did not have savings; thus, only 38 percent of the beneficiaries had savings.

The statistics shows that the majority (53 percent) of the projects have been in operation for six to ten years whereas 46 percent were in operation for one to five years. Only 3 percent were in operation for more than ten years. The study shows that 72 percent of the projects in the study area received one or two skills training while 13 percent received three to five skills training and 15 percent receiving more than five skills training since they were established. With regard to youth participation, the majority (59 percent) of the projects had youth aged more than 35 years while 41 percent of the projects had youth aged less than 35.

All the 47 projects indicated that their projects had created some employment. Further investigations revealed that of the 760 jobs created by the LRAD projects in the study area, 344 jobs were permanent while 416 were temporary. The financial analysis carried out show that 44 percent of the projects did not make a net farm income (NFI). As indicated in Table III, the average annual NFI from operations of some 33 percent of the projects was less than R1,000. About 21 percent of the projects indicated that they realized a NFI in the range of R1,000–10,000 while only 2 percent of the projects indicated they far exceeded a NFI of R10,000.

Variable	Frequency	Percent
Land size		
1–300 ha	31	66
301–600 ha	11	23
601–900 ha	4	9
> 900 ha	1	2
Total	47	100
Youth participation		
< 35 years	19	41
> 35 years	28	59
Total	47	100
Net farm income		
0	20	44
< R1,000	16	33
R1,000–R10,000	10	21
> R10,000	1	2
Total	47	100
Years of operation		
1–5 years	22	47
6–10 years	24	50
> 10 years	1	3
Total	47	100
Membership turnover		
Still in project	31	65
Left project	16	35
Total	47	100
Projects requesting for more skills		
All	47	100
Total	47	100
Impact of skills training on projects		
No impact	14	30
Low	13	28
High	20	42
Total	47	100
Employment creation		
All	47	100
Total	47	100
No. of skills training received		
1–2	34	72
3–5	6	13
> 5	7	15
Total	47	100

Note: $n = 47$. 18 projects (38 percent) had savings and 29 projects (62 percent) did not have savings
Source: Own calculations based on field survey

Table III.
Socio-economic
characteristics of the
projects in the study

4.2 Binary logistic regression model analysis
Table IV presents the regression results when modeling the effects of socio-economic
determinants (X_i) on levels of projects' savings (Y_i). This analysis was done at the project
level, thus 47 projects were analyzed.

	B	SE	Wald	df	Sig.	Exp (B)	95% CI for EXP (B) Lower	Upper
Step 1[a]								
NYR	−0.045	0.231	0.038	1	0.846	0.956	0.608	1.503
AVBP1	0.101	1.622	0.004	1	0.950	1.107	0.046	26.565
AVTR1	0.518	0.294	3.100	1	0.078*	1.678	0.943	2.985
ADTECH1	−2.403	1.496	2.581	1	0.108	0.090	0.005	1.697
TOTJOB	−0.098	0.075	1.727	1	0.189	0.906	0.782	1.050
PROPY1	0.263	0.116	5.158	1	0.023**	1.301	1.037	1.634
PCFS1	0.961	0.769	1.562	1	0.211	2.614	0.579	11.795
NFI1	2.421	1.195	4.102	1	0.043**	11.252	1.081	117.104
FRK1	0.098	2.248	0.002	1	0.965	1.103	0.013	90.356
AVLINK1	−1.705	3.969	0.184	1	0.668	0.182	0.000	435.036
VISITSE1	0.160	0.744	0.046	1	0.830	1.173	0.273	5.037
Constant	−4.614	5.822	0.628	1	0.428	0.010		
Diagnostics					Classification			
Cox and Snell $R^2 = 0.510$					Do you have savings from your project? Yes = 3; $n = 47$			
Goodness of fit-2 Log likelihood = 29.885					df = 1			
Nagelkerke $R^2 = 0.689$					Overall = 87.2%			

Notes: $n = 47$. *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

Table IV.
Logistic
regression results

The results in Table IV show that three variables positively and significantly influence the level of savings by the projects. The average number of trainings attended by the beneficiaries positively and significantly (10 percent) influences the level of project savings. As well, the proportion of youth per project was found to positively and significantly (5 percent) influence the level of savings of the project. Lastly, the average NFI of the project was found to have a positive and significant (at the 5 percent significant level) effect on the level of savings of the project.

5. Discussion and conclusions

Savings are an essential part of any business since they act as an insurance to shield the investment against unforeseen shocks. The study revealed that despite the importance of savings when running a project of any kind, the majority of the projects did not have savings. The study has further identified a number of factors that affect the decision of a collective group to save. For instance, the average number of trainings attended by beneficiaries or members (sig. 0.10 and p-value 0.078) positively influenced the decision to save. Saving is not an easy thing to engage in, be it at household or project level. It is generally an uncommon practice amongst smallholder farmers in most developing countries. Financial illiteracy also contributes to poor saving practices. Lusardi (2008) pinpoints that high illiteracy rates compromise the ability of those individuals to make well-informed saving decisions. Trainings, therefore, build on to the human capital of members so that they enhance their knowledge and skills in financial management and general control over their finances. In that way they become more open-minded and are willing to take bold business decision that enables them to grow their businesses.

The proportion of youth per project was also found to have a positive and significant effect on the farmer project group's savings in the study area. This finding suggests that holding other things constant, young people have the capacity to influence savings. Young people are more energetic and productive thereby improving productivity of the project leading to higher incomes. The higher income in turn translates to higher savings.

Higher youth participation reduce the hiring of external labor, leading to low production costs, improved income and increased savings. The youth are able to handle drudgery work that is difficult for women and the elderly to handle. All things being equal, youth are expected to be skillful, open-minded and innovative.

Lastly, the NFI of the project presented a positive significant impact on saving decision amongst the projects. In the event that the project has managed to fetch higher income from their farming activities, it will increase its propensity to save. This is in conjunction with the neoclassical theory of saving which states that people tend to save more when they have more disposable income. Frączek (2011) points out that income as an important determinant of the capacity to save. Income has even been noted in several studies (Beckmann *et al.*, 2013; Odoemenem *et al.*, 2013; Kibet *et al.*, 2009) at household level to positively influence savings.

A study by Chowa *et al.* (2012) on the determinants of saving among low income individuals in rural Uganda reveals that poor farmers are capable of saving when the barriers to saving are removed. One way to reduce savings barriers could be through formation of farmer cooperatives where those individuals can start learning to save from a group environment. When farmers realize the benefits of saving at a group level, they might want to try and emulate it on an individual level as well thereby fostering the spirit of saving. As ILO (2015) puts it, cooperatives foster democratic knowledge and practices and social inclusion, making them well-placed to support the achievement of sustainable development.

This study has provided important and unique insights into the factors that influence savings within farmer associations. As the findings suggest, an intense youth drive is needed to encourage young people to have an interest in farming. Putting incentives in place may be a way to attract the youth into farming. Furthermore, the significance of saving needs to be presented properly and strongly probably through extension so that people understand its importance and how it can be managed. Even though the savings are done at the project or collective group level (as the case in this study), they could also have a positive influence on members' personal or household level savings.

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Corresponding author
Clarietta Chagwiza can be contacted at: clarrytee@yahoo.co.uk