Although microfinance institutions have provided millions of people with access to financial services over the past decades, provision of services in rural areas remains a major challenge. It is costly for microfinance organizations to reach the rural poor; consequently, many rural residents still lack access to formal financial products, such as savings accounts. Traditional community methods of saving, such as Rotating Savings and Credit Associations (ROSCAs), can provide an opportunity to save, but they do not allow savers to earn interest on their deposits in the way that formal accounts would.

The Village Savings and Loans Association (VSLA) model created by CARE attempts to overcome the difficulties of offering credit to the rural poor by creating groups of people who can pool their savings through the Accumulated Savings and Credit Association (ASCA) model. Members make savings deposits into a common pool, and can also borrow from it on an as-needed basis at moderate interest rates.

VSLAs are comprised of 15-30 self-selected members, each of whom is provided with an individual passbook. Members attend weekly meetings, where they make savings deposits by purchasing shares at preset prices that are established by the group. Each share is marked in a passbook, thereby simplifying accounting procedures. Members purchase between one and five shares at each meeting, based on their ability to save that week. At the end of each 8- to 12-month cycle, the accumulated funds are proportionally shared amongst members based on their individual contributions.

To ensure the security of funds in the VSLA, savings are kept in a locked box with 3 keys. These keys are held by members of a 5-person committee that is elected at the start of the cycle to manage the transactions of the group. In addition to providing a safe and flexible savings channel, VSLAs allow members to take loans from the group. Loans are paid back to the group with interest, thus giving members a positive return on their savings. Most groups also establish a social or emergency fund as an insurance and solidarity mechanism to provide the needed liquidity to members facing emergencies or financial shocks. Disbursements of the social fund are approved by the group and generally made in the form of a grant, or an interest-free loan.

As a self-sustainable and self-replicating mechanism, VSLAs provide reliable access to financial services even in remote areas. CARE partnered with IPA to conduct a rigorous evaluation that would measure the impact of VSLA programs on access to financial services, female empowerment, income generation and other socio-economic outcomes.

**THE STUDY**

Innovations for Poverty Action (IPA) implemented a randomized control trial to measure the impacts of a Village Savings and Loans Association (VSLA) program on households and women. The program began in 2009 and was implemented by CARE Uganda under the Access Africa program.
The evaluation was conducted in rural communities across seven districts in Eastern, Western, and South-Western Uganda. The program was implemented by seven implementing partners: Rucode and Build Africa in the East; Parents Concern, Covoid, Aprocel, Rudfa, and KIRDP in the Western and South-Western districts.

The sample comprises 196 geographical clusters in regions with little to no previous exposure to VSLA programming. Two villages within each cluster were selected for data collection: a central village as the primary target for program implementation, and a secondary location chosen from the villages within a 4km radius from the primary village. The locations of these secondary villages were not revealed to implementing partners. The cluster design allows us to measure group formation and replication by community-based trainers and fee-for-service village agents, recruited amongst members of existing VSLA groups.

Each cluster was randomly assigned to either receive the VSLA program (the "treatment" group) or not to receive it (the "control" group). The random assignment at the onset of the study creates two statistically comparable sets of households. A randomized control trial, when appropriate, is the most rigorous way to carry out an unbiased assessment in order to determine the causal impact of a program, with the control group allowing researchers to measure what would have happened had the program not existed.

IPA collected data on a sample of over 4,200 households across 392 villages. Baseline data collection took place between April and June 2009, prior to the implementation of the program, with an endline survey taking place two years later. The panel study spans 22 months of program activities in the treatment areas; upon completion of the study in June 2011, VSLA programming began in the control areas.

The two rounds of surveys covered a variety of welfare measures, including health, education and consumption, as well as social topics such as gender issues and levels of community involvement.

**Timeline of the Program**

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<th>April 2009</th>
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<td>Baseline data collection</td>
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<td>VSLA Program - Treatment Areas</td>
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**PROGRAM UPTAKE AND CHARACTERISTICS**

**Who joins a VSLA?** After about 22 months of activity, the program reached a take-up rate of 36% for female respondents in the program areas. Analysis shows that primary respondents who decide to join VSLAs are, on average, more literate, wealthier, more likely to have had a business before the program, and more experienced managing money than non-members. Below, we present some of the main differences between members and non-members.

Respondents who joined a VSLA are generally more educated than their peers in the community: 51% of them report having had at least 5 years of schooling, with 65% being literate, compared to 40% and 53% respectively for non-members. Having any savings at the baseline is a good predictor of VSLA membership, with 73% of members having reported savings at the baseline, compared to 58% of non-members. The same holds true for loans, with 38% of members having received a loan in the year leading up to the program, while only over a fourth - 26% - of non-members reported receiving a loan over the same period. Virtually every household in the community is engaged in agriculture. It is less common to own a business, but VSLA members remain more likely to have one than non-members (35% of VSLA members compared to 29% for non-members). When comparing households based on an asset index, we find that members are, on average, wealthier than respondents who have not joined a VSLA.

**Uses of the VSLA.** Female VSLA members report a median weekly contribution of 2,000 UGX (equivalent to $0.84 during the study period). Members have been part of the group for 14 months on average, and only 56% of VSLA members in Uganda had completed one or more full cycles at the time of the endline survey. The median share-out size is about 100,000 UGX ($42). Respondents most commonly use these funds for
education expenses (27%) and livestock purchases (17%). In addition, respondents also report spending the share-out amounts on food consumption and housing improvements (16% each.)

84% of members stated that they took a loan from the group at least once, with a median loan amount of 50,000 UGX ($21) per person. On average, each member had taken two or more loans from the VSLA at the time of the endline survey. Loans are mainly used to finance education (25%) and health (18%) expenses. 93% of VSLA members in Uganda report that their VSLA has a social fund. The social fund is most commonly disbursed in the form of an emergency loan that members have to pay back to the group. A relatively high percentage of members, 61%, had taken one of these loans at the time of the endline survey. These loans are predominantly used to pay for health expenses.

**Group Formation and Replication.** The data shows fairly high rates of group formation in the primary target village and beyond. Owing to the activity of village agents and community based trainers, 30% of respondents in the secondary villages participate in a VSLA at the time of the endline survey. This is only marginally below the take-up rate in primary villages (39%).

Natural replication and spread of the program beyond the treatment clusters may be responsible for increased VSLA uptake in control areas. We find that a growing share of respondents in control areas (6%) also report having joined a VSLA.

**IMPACTS**

Within the study period, we find that just over half of VSLA members had completed their first cycle. The impact evaluation finds impacts on financial outcomes deriving from VSLA members’ improved ability to save, along with their access to the group’s loans and social fund. We do not find significant impacts on ultimate welfare outcomes such as asset ownership and overall expenditures. However, we cannot rule out such impacts in the longer run, as members are better able to finance investments and expenditures through end-of-cycle share outs, and are able to avail of the larger loan and savings sizes associated with mature groups. In order to test this hypothesis, research spanning a longer timeframe would be needed.

We summarize some of the most important findings from the endline survey below:

**The program increases access to and usage of financial services.** We find that VSLAs largely complement other financial tools instead of crowding them out, with respondents being 7 percentage points more likely to hold savings overall. Average total deposits in ASCAs increase from 28,250 UGX in control areas to 43,750 UGX in treatment areas ($11.3 and $17.5 respectively). The point estimate of the program’s impact on total savings balances is positive, although not statistically significant. Access to credit also expands significantly, with respondents in treatment groups being 10 percentage points more likely to receive a loan; respondents in treatment areas have 13,750 UGX ($5.5) more in outstanding loans than respondents in control areas at the time of the endline survey. Treatment group respondents increase their access to capital, but do not appear to significantly increase their savings balances, the difference between deposit balances and outstanding credits.

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The VSLA program had no impact on investments in agriculture, or on the usage of agricultural inputs such as fertilizer and other chemical inputs. Usage of fertilizer is very low among households.

There is evidence of improvements in business outcomes for women. The percentage of women that take credit for business purposes increases from 8% in the control group to 14% in program areas. Women are 3 percentage points more likely to own a business at the time of the endline survey, and yearly business profits increase by 30,250 UGX ($12.1) in treatment areas.

Growth in business outcomes is also accompanied by a slight increase in the occurrence of business failures, although the percentage of households reporting a business failure over the previous year also increases, from 21% in control areas to 25% in the treatment group.

Investment and improvements in business outcomes are accompanied by a 6 percentage point increase in the percentage of women with considerable influence over business decisions within the household. We find suggestive evidence of a 4 percentage point impact on the same indicator on intra-household decisions for school expenses, while the influence of women in treatment areas does not improve for other decisions around food and healthcare. Other indicators of women’s empowerment and participation in the community are not affected by the program.

We observe a shift in the way households respond to economic shocks. Respondents in treatment areas are 4 percentage points more likely to draw on loans for this purpose. This allows them to substitute away from stock sales and reductions in expenditures (3 and 5 percentage points less likely, respectively.) In addition, we find some suggestive improvements in food security. Adults are 4 percentage points less likely to have had to reduce their daily food consumption, while the total number of meals increases slightly for respondents in the treatment clusters as well.

While we do not find impacts on food consumption and overall expenditure levels, we find a shift in the financing of education and health expenditures. Loans from savings groups are increasingly used to finance expenses on education (2 percentage point increase) and health (3 percentage point increase); this is accompanied by a significant reduction in the use of savings, assets and sales of stocks to finance health expenses. Although we do not see a similar substitution effect for education expenses, there is a significant 4 percentage point increase in the use of wage income to finance education expenses.

We do not find evidence of short-term impacts of the VSLA on asset accumulation and welfare improvements. The treatment group is not statistically different from the control group on metrics such as asset and livestock ownership, or on housing indicators. Similarly, education and health outcomes for household members are not affected by the program. However, we cannot rule out the possibility that the program would have an effect on these measures in the long-run.

This study is part of a set of research projects looking at the impacts of savings groups in sub-Saharan Africa. The comparison of findings across these different contexts will allow IPA researchers to draw confident policy conclusions on the impacts of savings group programs. Randomized evaluations of savings groups were conducted by IPA in collaboration with CARE in Ghana, Malawi and Uganda, and with Oxfam USA and Freedom from Hunger in Mali. The evaluations in Malawi and Ghana were completed at the same time as the Ugandan study. Results for a three-year study in Mali will be available at the end of 2012. For more information visit: www.poverty-action.org/microsavings/savingsgroups_replications.

Innovations for Poverty Action (IPA) is a US-based non-profit research organization which applies rigorous research techniques to develop and test solutions to real-world problems faced by the poor in developing countries. IPA consists of a group of leading academic researchers in development economics, behavioral economics, and psychology, along with researchers based in the U.S. and in developing countries.

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<td>101 Whitney Avenue</td>
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