



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



The Feed the Future Ethiopia - [Livelihoods for Resilience Activity \(L4R\)](#) is a 6.5-year USAID-funded project running from December 2016 through July 2023. Building on lessons learned from the preceding project (GRAD), the Livelihoods for Resilience Activity supports poor rural households to build resilient livelihoods with improved food and nutrition security, even in the face of shocks and stresses.

The project works closely with the livelihoods component of the Government of Ethiopia's Productive Safety Net Program (PSNP), and targets over 97,000 PSNP households in 41 woredas of Amhara, Tigray, Oromia, Sidama, and Southern Nations, Nationalities and Peoples' Region (SNNPR), with the aim of enabling these households to graduate from the PSNP with resilience.

A consortium led by CARE and comprising the Relief Society of Tigray (REST), ORDA Ethiopia, Agri-Service Ethiopia (ASE), and SNV implements the project.

Learning Brief #4

VESA digitalization

This brief explores the project's experience piloting the digitalization of village economic and social associations (VESAs)' record keeping and sharing of digital information with a micro-finance institution (MFI), with the objective of helping VESA members in Sidama access MFI loans more quickly. The brief delves into the potential benefits of digitalization, the challenges faced during implementation, the outcome of the pilot, and the lessons learned from the process.

Background – Why digitalize savings groups?

Digitalization can contribute to financial inclusion for underserved households. Ethiopia's financial inclusion rates are among the lowest rates in the world: only 35% of households hold accounts in financial institutions (Global Findex 2017). Average account ownership rates are even lower for women (23%) and the poor (14%). Rural households are particularly underserved, as their distance from microfinance

institutions (MFIs) and banks and reliance on agriculture makes it difficult for them to obtain loans, especially in southern Ethiopia.

Savings groups such as village economic and social associations (VESAs) can serve as a stepping stone toward financial inclusion for rural households. VESAs are savings groups of 15 to 30 village members



who meet to save and lend to one another. They elect management committees and develop bylaws governing savings amounts, social fund contributions, penalties, loans, and interest rates. VESAs provide households with experience saving regularly and taking small, low-risk loans to begin investing in their livelihoods. This experience helps demonstrate their creditworthiness to formal institutions such as MFIs.

Digital record-keeping can improve data quality and access to information. In L4R, VESAs manually record savings, social fund contributions, penalty payments, loan disbursements and repayments with interest, and end-of-cycle share-outs. Digitalizing records and processes has the potential to improve the quality of data recorded, benefiting members who can check their balances on their phones, and facilitating follow-up by

partners. Digitally recorded and backed up data is also more secure and less subject to loss.

Improved data tracking has the potential to increase loan access for underserved households. The key question examined in the pilot was whether digitalizing VESAs can lead to faster loan disbursement to more VESA members than the standard approach, whereby CARE facilitates the sharing of VESA members' loan application documents with MFIs in hard copy. By capturing data on volume and regularity of savings, use of credit, and timeliness of repayments, digital applications can be used by financial service providers to analyze individuals' capacity to borrow and repay formal loans. In countries such as China and Kenya, such information is being used to generate data-driven credit scores.

Setup of the pilot

CARE selected the digital application with the best chance of success for the pilot. CARE researched digital applications and selected one provided by an international firm with experience in Ethiopia, an Amharic version of the app already in use, and an existing relationship with one of L4R's partner MFIs.

"Treatment" and "comparison" VESAs were identified to assess the application's contribution to loan disbursement. CARE identified 20 mature VESAs (functional for 3-5 years) for the pilot and randomly selected ten of these as the "treatment" (digitalized) groups, with the other ten identified as the "comparison" groups, to compare the rate of MFI loan disbursement across the two sets of groups. These VESAs were among a larger number of VESAs in the district that were supported by CARE under L4R.

Treatment VESAs received smart phones and training on the use of the app. The selected application requires a smart phone, which members of the selected VESAs did not own. CARE purchased one moderately priced smart phone for each treatment VESA and provided it to the committee along with a SIM card loaded with sufficient mobile credit to begin data uploading. Management committee members of the treatment VESAs received in-depth training on the app.

CARE engaged a partner MFI with prior experience using data from the app to disburse loans. The MFI agreed to participate in the pilot by disbursing a total of approximately 100 loans to VESA members (both treatment and comparison) after assessing their

creditworthiness. The MFI's branch manager and one loan officer attended the training on the app, and VESA members provided informed consent on the sharing of their data through the app to CARE and the MFI.

Treatment and comparison VESAs were linked to the MFI. The MFI received data on the treatment VESAs and their members from the digital firm. The idea was for comparison VESAs to be linked to the MFI in more traditional ways, with staff collecting loan applications and other information from members, such as ID cards, photo, clearance letters from the kebele administration, and socioeconomic data such as marital status, family members, income and assets, and sharing it in hard copy with the MFI. In the end, this assistance was needed for the treatment groups as well – treatment and comparison VESAs both had to forward the same information in hard copy for their loan applications (ID, photo, kebele support letter, and socioeconomic data). CARE tracked the volume and timeframe of loan disbursements to members of each VESA.

All of the loans were supported by the L4R partial "loan guarantee"/risk mitigation fund, under which CARE disbursed funds to the MFI after loan disbursement based on historical default rates.

Field staff tracked time spent using the application, loan disbursement rates, and other data points. The pilot commenced in late 2022 with CARE staff attending each of the treatment VESA meetings on a weekly basis to provide assistance as they transitioned to the use of the digital app.

Learning along the way

Transitioning to digital record-keeping is a challenge for a rural group with low digital literacy:

It makes for long meetings. Low levels of financial and digital literacy, combined with poor internet connectivity, had an impact on the time taken to input data into the application. Even after training and five months of practice, some VESA committee members reported having trouble remembering the steps to complete the data entry process. Data entry got faster over time, with the average time taken going from 63 minutes in the first month to 42 minutes in the fifth month. However, this figure excludes the time taken for uploading data, which sometimes took hours or could not even be completed on the same day, requiring support from CARE staff. Hence, in practice, the duration of savings meetings went from 30 minutes before the app to 2-3 hours, as members waited for data to be entered and uploaded. Digitalized VESAs also continued to record data manually.

The question of how to manage the phone in the longer term is a difficult one. During the pilot, most VESAs began to make the small payments for the mobile data needed to use the app, in some cases using accumulated group funds. However, longer-term phone management remains an issue. VESAs locked the smart phones in their cash boxes between meetings. While this helped prevent damage, theft, and draining of the battery between meetings, it is admittedly not a very efficient use of a phone. It also contributed to the lengthy duration of meetings, as members had to wait not only for data to be entered into the system but also uploaded so that the phone could be placed back in the box – as VESA minimum standards stipulate that the box only be opened during meetings when all members are present.

VESA minimum standards can be at risk when transitioning to a digital application. In particular:

Transparency can be hard to maintain if only one person has a smart phone. Trust and transparency are core tenets of VESA methodology. Members save in front of other members, and money is counted openly. The box is opened during meetings only, and members repeat opening and closing balances together. Digitalization can help promote trust and transparency if all group members have access to the app. In the pilot, because none of the members possessed a smart phone, members were unable to

access group or individual data on their own device. To maintain transparency, they continued paper-based record-keeping in parallel with the application.

Trained management committee members will have an advantage over others in future years. VESA management committee positions (chairperson, secretary, box keeper, and two money counters) are typically up for re-election every year, and VESAs are encouraged to rotate responsibility for core functions. With their knowledge of the app, incumbent committee members are likely to have an advantage in retaining their positions during future elections.

Design limitations in the app limited its efficacy:

The app does not perform share-out calculations, which would be a useful function (as the calculation can be complicated when VESAs are flexible in the number of shares that can be saved by each member), nor does it allow VESAs to record share-outs, meaning that the VESA records in the application will not be accurate once share-out has been completed.

The app does not allow users to correct errors. While such a safeguard is useful after logout, to ensure that no-one changes VESA records between meetings, the app does not even allow corrections before logout. This is particularly problematic as users' low smart phone skills make them likely to make mistakes in entering data and to need to make corrections.

The MFI could not access the VESAs' data in real time, thereby limiting the app's usefulness for loan decisions. The application has a dashboard that is intended to summarize key VESA data; several CARE staff have access to this dashboard, but the data included is very limited. MFI staff do not have access to the dashboard; they receive VESA data in the form of an excel spreadsheet from the digital firm.

The app is missing other key features that would make it more useful. There is no provision in the app to record penalties, such as for late attendance or missing meetings, other than as "VESA income". In addition, the app does not contain basic member ID data needed for the MFI to disburse loans, though these are also not typically part of VESA records. The app also requires various login and logout procedures to go from one function to another, which do not always align with the prescribed running order of VESA meetings.

Achievements and outcomes of the pilot

The app was appreciated by VESA members and had both intended and unintended benefits. Interviews with treatment VESA members revealed high confidence in the accuracy of the data. Members saw benefits related to data security and backup of manual records, and reported a perceived MFI linkage benefit (although the data below refutes this perception). Some members also pointed to improvements in VESA membership, savings volume, and member punctuality as a result of the app. Members indicated strong willingness to continue using the app, provided that the user challenges could be overcome.

Use of the application did not appear to make the MFI more likely to lend to the treatment VESAs. Lending by the MFI under the pilot reached 109 PSNP borrowers, of which:

- 41 were members of treatment groups (66% of the 62 loan applications forwarded from treatment VESAs)
- 36 were from comparison VESAs (62% of the 58 loan applications forwarded from comparison VESAs)
- 32 were from other VESAs in the same operating areas (71% of the 45 loan applications forwarded)

The use of the application had no impact on the amount of time taken to disburse loans, nor on the size of the loans provided to households. It took anywhere from a couple of days to 1.5 months for the MFI to process and disburse loans for treatment and comparison VESAs, with no significant difference between the two groups. The average loan size overall was 6,761 ETB (approx. USD 126), while for treatment VESAs the figure was 6,829 (USD 125) – essentially the same size. Loan sizes were based on considerations that were unrelated to the app. The MFI representative stated that *“the lending process and facilitation is similar for both [digital app] and [non-digital app] VESAs.”*

The willingness of the MFI to provide credit to both treatment and control group members was largely influenced by the loan guarantee, rather than by the data provided through the application. However, the pilot’s short duration limited the availability of VESA historical data in the application, which could have further built MFI confidence to lend. The MFI branch manager saw only marginal value in the app data at the present time. He reported that the information summarized in the excel sheet was useful, but that at the end of the day they relied on the other information provided with the loan application, as well as CARE’s loan guarantees. However, he indicated that the longer the VESAs used the app, the more historic information on members would be available, to the benefit of the MFI’s credit assessment process.

Conclusions and recommendations

The purpose of the VESA digitalization pilot was to generate learning on the challenges and financial inclusion benefits of using digital applications in rural settings. The difficulties identified with internet access and low smart phone ownership were not altogether surprising, and the need to work with a more digitally literate group was somewhat expected. However, the shortcomings of the application and its limited contribution to loan disbursement suggest that work remains to be done in developing a tool can be scaled up for use with rural VESAs.

Despite the challenges, rural digitalization efforts should continue. With the rollout of Telebirr and entry of Safaricom and M-Pesa, Ethiopia is likely to begin to catch up with its neighbors Kenya, Uganda, and Tanzania in the use of digital tools. These developments are expected to improve digital literacy and have the potential to benefit underserved rural communities, underscoring the importance of continuing efforts to digitalize the financial records of rural households to take advantage of opportunities. This pilot should be seen as a forerunner to further investigations, ideally over a longer timeframe.

Work with groups that already have a basic level of digital literacy and smartphone ownership, such as youth. Targeting groups that already own smart

phones, such as youth VESAs – is likely to be significantly easier, minimize training requirements, and ensure that digitalization does not undermine VESAs’ foundational principle of transparency.

Ensure that the application is designed with lender and user inputs. To be relevant to VESAs and contribute to financial inclusion, the app needs to incorporate all VESA functions (including share-out calculations and penalty collection) and improve user friendliness (minimal logins, ability to correct errors prior to logout, etc.). Most importantly, data on members’ savings, loans, and repayment rates must be available in real time to the MFI loan officer via the dashboard if this information is to make any difference in loan decisions and disbursement.