



*The graduate school
of global affairs
at Tufts University*

**Expanding Financial Access:
Enhancing Rural Financial
Inclusion in Armenia**

FLPFI RESEARCH BRIEF

This brief is based on the reports presented by the Research Prize Recipient of the Central Bank of Armenia. All data and comments reflect the findings of the study, and FLPFI was not responsible for the data collection or analysis presented in the final report or this brief. The research was done independently by the Research Prize grantee and the team of consultants hired by her with additional support from Colgate University.



The Fletcher Leadership Program for Financial Inclusion (FLPFI) works with policymakers and regulators to design innovative and inclusive policies. The Research Brief Series is an integral part of the Eight Question Method for Policy Development (8QM), the core of the FLPFI curriculum.

EXECUTIVE SUMMARY

This brief presents the findings from an ongoing experimental study on financial inclusion in rural Armenia, designed to assess the causal impact of mobile banking adoption on financial inclusion outcomes. Using a randomized controlled trial (RCT), we examine whether training individuals to use mobile banking apps, coupled with social network-based diffusion, can effectively overcome geographic barriers to financial services.

This study consists of three phases: baseline evaluations (July–October 2023), intervention (education) activities (April–June 2024), and endline surveys (October–December 2025). As the study is still ongoing and this brief is produced at the end of the second phase, the full answers to the research question have not yet been determined. The primary focus of this brief thus is on the methodology employed and preliminary findings, rather than on presenting conclusions or final answers. It outlines how the study has been set up and the steps taken to investigate the relationship between mobile banking adoption and financial inclusion. The first phase of the research i.e. the baseline evaluations were conducted with support from the Fletcher Leadership Program for Financial Inclusion (FLPFI).

Initially, 1,000 households across 41 villages were surveyed to assess banking exposure, ICT access, financial literacy, and social networks. Villages were then randomly assigned to one of three groups: (1) control, (2) mobile banking training, and (3) mobile banking training plus cash incentives. In mid-2024, selected households in the latter two groups received training on setting up and using mobile banking accounts. Future surveys will measure financial literacy changes and technology adoption. This brief summarizes the first two stages of the study, while the final stage will be conducted at the end of 2025.

The survey revealed that financial inclusion was very low in the villages, with many residents lacking access to formal banking services. However, the training program proved to be highly effective, with around 60% of participants across both treatment groups successfully setting up mobile banking accounts during the training sessions. Participants expressed high levels of satisfaction, highlighting the practical, hands-on approach as particularly valuable in building their confidence and understanding of mobile banking services. Additionally, many villages requested follow-up sessions, emphasizing the need for continued support and guidance as they begin using the mobile banking application independently.



BACKGROUND

Access by individuals and businesses to beneficial and inexpensive financial services and products, also known as financial inclusion, is a critical pathway to poverty alleviation and economic growth in developing countries. Recent studies show that financial inclusion decreases poverty and inequality (Iqbal et al., 2020; Silva et al., 2021; Demir et al., 2022), increases long-run GDP per capita (Kanga et al., 2022, Nandi et al., 2022), increases diversity of non-food items in a household's consumption set (Chakrabarty and Mukherjee, 2022), smooths consumption of preventative health expenditures and decreases child labor (Abiona and Koppensteiner, 2022) among many other positive impacts. Providing access to a formal savings account can also potentially reduce the risk of theft, increase women's economic empowerment, and improve household welfare (Ashraf et al., 2010; Brune et al., 2016). It is therefore in the public interest for governments and organizations to encourage financial inclusion, particularly in rural and provincial regions where overall rates of engagement with financial services and levels of financial literacy are lower.

While Armenia has made many advances in financial inclusion over the past two decades, persistent geographic inequities between Yerevan and the other regions (other cities and villages) mean that those outside the capital city have significantly lower levels of financial service adoption. While the World Bank does not provide statistics by region, they report that in 2021 among the poorest 40% of Armenians (who are significantly more likely to live outside Yerevan), only 45% have a bank account, 22% have borrowed from a financial institution or used a credit card, and 3% have money saved at a financial institution. However, statistics suggest that there is an opportunity for greater use of digital financial products. For example, even though 85% of the poorest 40% of Armenians had a mobile phone in 2021, only 6% of this demographic have used a mobile phone or the internet to check an account balance.



Table 1: Global Findex Indicators for Armenia

Indicator	2011	2014	2017	2021
Account (% age 15+)	17.5	17.7	47.8	55
Account at a financial institution, rural (% age 15+)	15.4	15.2	45.2	41
Account at a financial institution, income, poorest 40% (% age 15+)	15	11.1	33.7	45
Borrowed any money in the past year (% age 15+)		48	55.3	57
Borrowed from a financial institution (% age 15+)	18.9	19.9	28.5	28
Borrowed from a financial institution, rural (% age 15+)	21.6	22.7	27.6	28
Saved any money in the past year (% age 15+)	10.5	21	31.3	39
Saved any money in the past year, rural (% age 15+)	9.2	14.3	35.1	38
Saved at a financial institution (% age 15+)	0.8	1.6	10	6
Saved at a financial institution, rural (% age 15+)	0.3	1	13.1	7

Source: World Bank, Global Findex.





RESEARCH QUESTION, DATA AND METHODOLOGY

The study aims to answer the following primary research question:

Can introduction of mobile banking application and financial literacy trainings with or without financial incentives, increase financial inclusion among rural households in Armenia?

DATA COLLECTION

The study employs a three-phase data collection process:

1) Baseline Survey (July–October 2023): A survey was conducted with 1,000 households across 41 villages to gather information on financial service usage, digital literacy, social networks, and economic conditions. The baseline survey assessed existing access to and usage of financial services, prior exposure to mobile banking, and levels of financial literacy. The survey also explored the connection between the village population and identified the social network of the village.

2) Intervention Phase (April–June 2024): A random subset of households in selected treatment villages received structured training sessions on mobile banking. These sessions covered account setup, usage of mobile banking applications, security measures, common digital financial transactions, and financial literacy. A subset of the treatment group also received small cash incentives to encourage active participation and adoption.



RESEARCH QUESTION, DATA AND METHODOLOGY

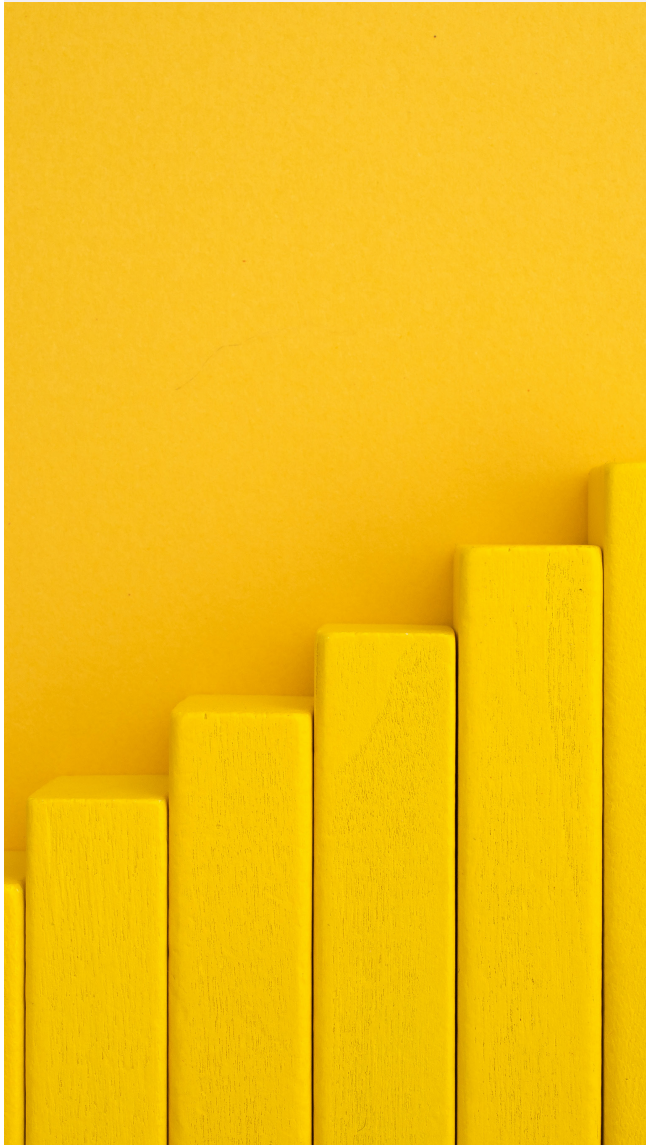
At the time of producing this research brief, only the first two phases of data collection were completed. Subsequently, this brief only discusses the findings from the baseline survey and the intervention phases of the research.

METHODOLOGY

The study employs a randomized controlled trial (RCT) design to measure the causal impact of mobile banking training on financial inclusion. First, villages were randomly selected from 2 regions to be included in the sampling frame. From this initial pool, villages with populations outside the range of 275 to 1,400 individuals were excluded to maintain consistency in community size. Villages predominantly inhabited by ethnic minorities were also omitted to avoid potential confounding factors related to cultural or language differences in adopting mobile banking technology.

Equally, to ensure that the survey included individuals more likely to engage with mobile banking technologies, households without a permanent member younger than 55 were excluded from the sample. The final sampling frame consisted of 71 eligible villages out of which 41 villages were randomly assigned to one of three groups:

- Control Group: No intervention.
- Treatment Group 1: Received mobile banking training and partook in financial literacy workshops.
- Treatment Group 2: Received mobile banking and financial literacy training along with cash incentives to encourage adoption.





RESEARCH QUESTION, DATA AND METHODOLOGY

Participant Demographics

A total of 67 villagers participated in the trainings, with an average attendance of 2 participants per village. The participants included:

- Gender Distribution: 79.9% women, 20.1% men
- Age Range: 16 to 73 years old
- Occupations: Farmers, pensioners, office workers and unemployed people

The RCT design ensures that differences in financial inclusion outcomes can be attributed to the intervention rather than other external factors. It also serves to remove bias from the survey. To assess the impact, key outcome variables include:

- Changes in financial literacy scores;
- Frequency and type of financial transactions conducted via mobile banking;
- Household savings and credit behaviors; and
- Diffusion of mobile banking adoption within social networks.

A difference-in-differences (DiD) approach will be used to compare changes in financial behavior across groups over time.





PRELIMINARY FINDINGS



At this stage, our findings indicate the following impacts:

1) Adoption of Mobile Banking:

- Account Set-Up: 61.5% of training participants in both treatment groups set up mobile banking accounts during the training.

2) Community Feedback:

- Positive Reception: Participants expressed high levels of satisfaction with the training, particularly appreciating the practical, hands-on approach.
- Requests for Further Training: Many villages requested follow-up sessions to be able to ask questions after using the mobile banking application.

Even though the training had a significant impact on mobile banking adoption, with strong positive feedback from participants, there were also challenges. These include unforeseen incidents affecting two of the target villages and the inability of some participants to attend the training session due to the agricultural season. Additionally, some participants were already customers of the bank, which necessitated the removal of their old accounts to create new ones. Lastly, some participants had prior penalties on their accounts and could not open new ones due to frozen records. This affected their full participation in the training as they could only be observers.



PRELIMINARY FINDINGS

Variable	Unit	Mean	Std .dev	Min	Max
Age	Years	50.042	14.2	18	95
Male	%	32.574	.469	0	1
Married	%	78.020	.414	0	1
Education	Years	11.477	2.393	4	26
Household size	people	4.591	2.079	1	13
Village population	People	864.03	464.838	200	1869
Std of Living	Score	4.278	.856	2	5
Fin Lit	Score	2.113	1.330	0	5
Numerical skills	Score	.585	.493	0	1
Dig inc	Score	.574	1.202	0	5
Active fin inc	Score	1.896	1.824	0	8
Fin Prod holding	Score	1.729	1.416	0	6

Note: sample size is 1010





TAKEAWAYS AND NEXT STEPS



The financial literacy and mobile banking training sessions successfully achieved their primary objectives. Although we encountered some technical issues, we resolved them by leveraging our available resources. To sustain and enhance the effectiveness of the trainings, it is recommended to choose a better season for the training so more villagers will attend and be more flexible with the timing so villagers would be able to participate after hours.

The next steps include expanding our training participant list to reach a larger audience and conducting the final survey at the end of the year to assess the long-term impact of the intervention.