



## Financial Inclusion for the Rural Poor Using Agent Networks in Peru

Measuring the Impact of Correspondent Banking Agents and  
Trust Workshops for Conditional Cash Transfer Beneficiaries

Innovations for Poverty Action

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Please see page 9 for contact details.

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## Acknowledgments

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### Implementing Partners

The Bank of the Nation (BN), known in Spanish as Banco de la Nación, is the bank that represents the Peruvian government in financial transactions in both the public and private sectors, as well as at both domestic and international levels. It is a state institution, not to be confused with the Central Reserve Bank of Peru, the Central Bank that coins money. BN belongs to the Peruvian Ministry of Economy and Finance. Its headquarters is located in the San Isidro District of Lima, the capital of Peru.

The Peruvian Ministry of Development and Social Inclusion (MIDIS) was created on 18 August 2011, during the presidency of Ollanta Humala and the cabinet of Salomon Lerner Ghitis. The inaugural minister was Kurt Burneo. The incumbent minister is Paola Bustamante. The ministry was created to turn social programs into productive tools for the benefit of the poor. One of its objectives is to create conditions so that beneficiaries of social programs, such as JUNTOS, Pensión 65, and Cuna Más, as promoted by Humala's policy of promoting social inclusion during his campaign, can use the subsidies for "financial leverage" to improve their quality of life, according to Prime Minister Salomon Lerner Ghitis.

Institute of Peruvian Studies (IEP) is a private institution dedicated to research, education, and dissemination of social studies in Peru and other countries in Latin America. Through its work, IEP aims to contribute to equitable economic development, to strengthen democratic institutions, and to recognize Peru's rich diversity.

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## Executive Summary

In developing countries, poor households often do not have access to formal financial products or use bank accounts to save for the future. Without a safe and secure way to save, many people rely on riskier and more expensive methods of managing their assets. Increasingly, government-to-person cash transfer programs are addressing this issue by providing beneficiaries with formal savings accounts through which they disburse cash transfers.

In Peru, evidence from one such program suggests that very few beneficiaries of a conditional cash transfer (CCT) use their accounts to save, preferring instead to withdraw the entire cash transfer immediately after it is made. Beneficiaries may prefer to withdraw their funds all at once due to the time and cost required to travel to a bank branch or automated teller machine (ATM) to access their account, especially in rural areas where there is limited banking infrastructure. Furthermore, although access is improved and travel time reduced, beneficiaries may not have the necessary knowledge or confidence when interacting with the formal financial system. This evaluation explores how the introduction of branchless banking and a workshop to build knowledge and trust of the formal financial system impacts beneficiaries' attitudes toward this same system and savings behavior.

As a component of the pilot project and evaluation "Financial inclusion for the Rural Poor Using Agent Networks," Banco de la Nación (BN) installed correspondent banking agents (*MultiRed Agents*) in municipalities and some shops on 30 districts of the Provinces of Puno, Cusco, Apurímac, and Ayacucho in Peru. Concurrently in 2015, the Instituto de Estudios Peruanos (IEP) implemented education and trust workshops in a subset of the districts where agents were functioning with the objective of improving the knowledge, trust, and empowerment of beneficiaries of the state's conditional cash transfer program (JUNTOS) in the formal financial system and encouraging the use of formal savings accounts via BN correspondent banking agents.

## 1. Project Background

The objective of the project "Financial Inclusion for the Rural Poor Using Agent Networks" is to gain a better understanding of the impact of different strategies to promote financial inclusion among rural poor households in Peru. CCT programs promote access to financial services for millions of beneficiaries around the world, by opening bank accounts in the name of beneficiaries and depositing the transfer directly into them. However, the evidence from Mexico and Peru shows that there are very few households who actually use the account, either for savings or other kinds of transactions.

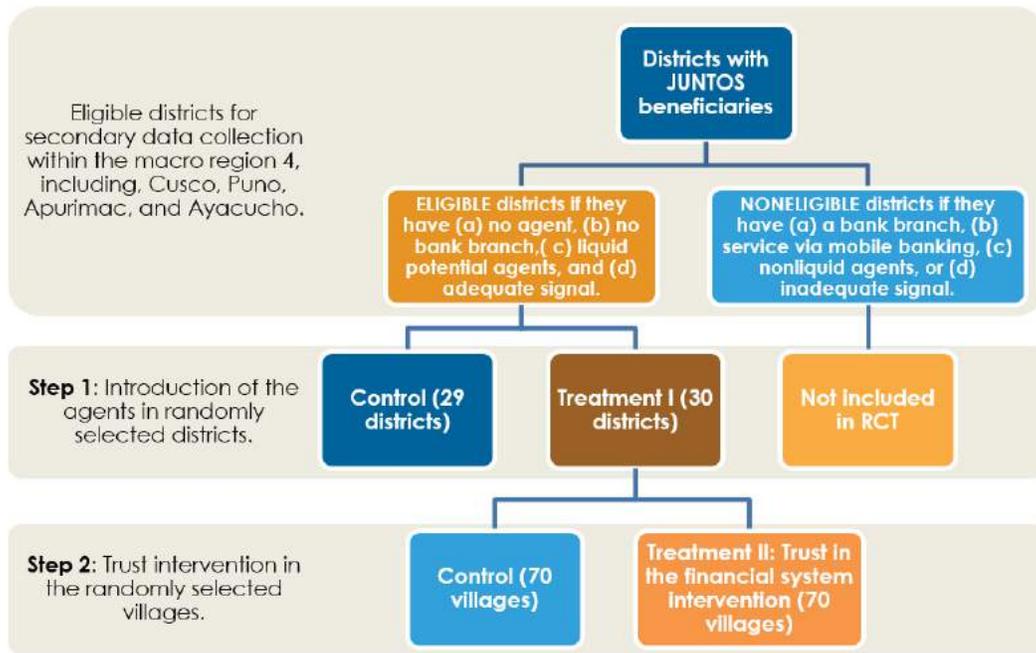
After reviewing the international literature and conducting preliminary research in the field, we identified three hypotheses to explain why users of the Peruvian conditional cash transfer (CCT) program JUNTOS do not actively use the accounts provided with their transfer. For each obstacle, we propose a solution, which is tested via this intervention.

Obstacle Identified		Proposed Solution
Transaction costs to reach the bank branch are high: on average costs S/.20 (10% of the transfer) and takes 6 hrs.		Install MultiRed Agents in shops and municipalities of district capitals where there are no bank branches
Lack of information regarding use of the agent and the account provided to the user.		Launch communication campaign from JUNTOS on how to use the account and agent.
Lack of trust in the financial system and knowledge on how to save.		Develop and conduct an interactive workshop to build confidence and empower beneficiaries vis-à-vis use of the financial system and the savings account.

## 2. Description of the Intervention and Experimental Design

Figure 1 illustrates the randomized allocation process, and the following text explains in more detail the intervention, eligibility criteria, and preselection fieldwork conducted.

Figure 1. Randomization Methodology



### 2.1. Agent Intervention

The districts randomly selected to receive the branchless banking agent were required to meet the following eligibility criteria:

<b>1</b>	Within Macro-Region 4 of BN	<b>4</b>	Sufficient signal from one of the telecom providers in the municipalities and shops of each district
<b>2</b>	Operate JUNTOS	<b>5</b>	BN has the capacity to install the agent
<b>2a</b>	No MultiRed Agent already installed	<b>6</b>	Minimum of 50 JUNTOS users who currently receive their transfer in the BN branch
<b>2b</b>	No BN branch paying JUNTOS in the district	<b>7</b>	No more than 60 percent of the districts in the province have an agent installed already
<b>2c</b>	Users do not currently receive solely via transporter		
<b>3</b>	BN in Cusco or Lima is not planning to install new agents there in 2014		

Of the remaining eligible districts that met the criteria, in collaboration with BN and JUNTOS, IPA randomized the roll out of new branchless banking agents (MultiRed) in 30 districts across four regions. A comparison (control) group was constructed by randomly selecting 29 districts from the same pool of eligible districts.

## 2.2. Financial Education and Trust Intervention

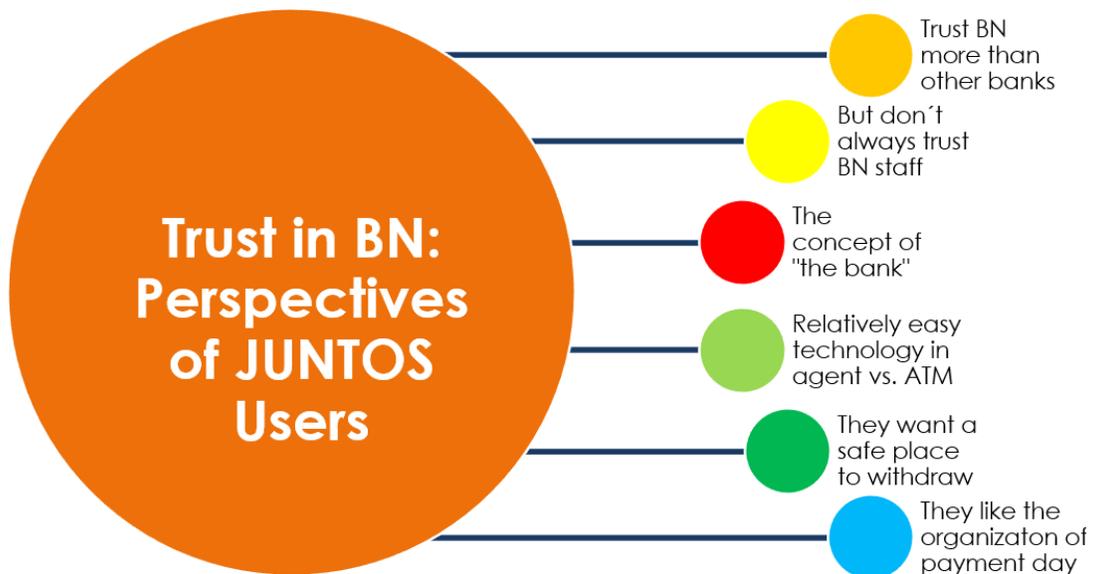
Villages within the 30 agent intervention districts were then randomly selected, taking into account the following:

- 1 The name and code of the village exists in each of the databases IPA uses for analysis—SISFOH, JUNTOS, and INEI.
- 2 The village has 15 beneficiaries or more (to avoid selecting villages that potentially do not exist).
- 3 It is not a village that receives CCT payment by transporter (i.e., the users travel to the bank branch).
- 4 At the point of holding the workshop, beneficiaries of the village are card holders.
- 5 The village saves time by travelling to our newly installed agent, over going to the bank branch.

From the eligible villages, IPA randomly assigned 70 to receive an additional intervention of the education and trust workshop to improve the confidence of JUNTOS users in the financial system. A further 70 villages were randomly selected to act as comparison (control) villages, those that receive the agent only and no workshop.

While the workshop was initially intended to be a simple financial education program that encouraged beneficiary savings, existing literature and focus groups with beneficiaries suggested that such an approach would not be effective on its own, given misconceptions of the formal financial system.<sup>1</sup> Therefore, components of the workshop were designed to improve the transparency of information concerning the system, with the objective of building more confidence and trust.

**Figure 2. Findings from Focus Groups on What Users Trust and do Not Trust When Using the Agent**



1. Focus groups designed and performed by IEP under the direction of the Principal Investigators of the impact evaluation. The research was designed to understand more deeply the existing barriers to saving by the JUNTOS beneficiaries in the area of the pilot interventions. The focus groups included questions concerning attitudes and perceptions of the beneficiaries toward the formal financial system, in particular BN.

### 3. Core Hypotheses

Our hypotheses being tested by the interventions are as follows:

- 3.1. The introduction of agents will also lower the cost of accessing the account for users, and this will increase their use of their accounts.
- 3.2. This effect will be larger when agents are combined with the education and trust workshop.
- 3.3. Use of the accounts leads to an increase in total savings, which facilitates consumption smoothing and increased capacity to make lumpy payments (durables, education, investments).

Our theory of change is explained in the following table.

	Problem	Inputs	Products	Outputs	Impact
<b>Agent intervention</b>	Beneficiaries do not use savings account because cost of access is too high	BN develops and markets a functional agent product, and enrolls agents	Agents provide services to beneficiaries, and have sufficient liquidity and incentives to serve the needs of beneficiaries in the district	Beneficiary uses the agents for transactions; travel and opportunity costs of accessing account are reduced	Beneficiary knowledge and attitudes toward formal financial system improve. Beneficiaries save more in BN account, total savings increase, consumption shift from temptation goods to durables/ human capital
<b>Workshop intervention</b>	Beneficiaries do not use savings account because they lack information and trust of the financial system	IEP develops training intervention, hires training team	Workshop sessions held in district capitals for JUNTOS beneficiaries	Beneficiaries have better and more transparent information about the financial system and products/ services available to them through BN	

### 4. Measurement Indicators

For the districts and villages selected for the study, IPA is analyzing the effectiveness of the treatments using a combination of BN and JUNTOS administrative data and household surveys. Examples of outcomes to be drawn from these data sources are as follows:

- 1. The first set of variables is taken purely from administrative data provided by our partners in MIDIS, JUNTOS, and BN. We have an agreement with these three institutions that they will merge individual-level data from their respective sources on the socioeconomic conditions of the beneficiaries, their belonging to the program, and the financial transactions carried out on their accounts. These data are then anonymized and sent to IPA for analysis to assess whether there are any observable changes in financial behavior in the treatment versus control group. Outcomes of interest include account balances, and the frequency and amounts of transactions.
- 2. The second outcome of interest is total saving, which will be analyzed from a mixture of administrative and household survey data. This will help to ensure that we account for those beneficiaries who perhaps, for example, started saving as a result of attending the workshops, but decided to save in a different bank, or preferred to continue to save informally.
- 3. Third, is to use household survey data to understand changes in perceptions and attitudes toward the financial system where there have been modified consumption patterns, including in education and business activity, as a result of the interventions.

## 5. Financial Education and Trust Workshop

### 5.1. Workshop Description

The financial education and trust workshop consists of a three-hour interactive session that covers five key themes. First, to show how beneficiaries can relate to both the bank and the agent, they are told a story through a series of pictures in which one woman, a JUNTOS beneficiary explains to another how she uses the bank to save her JUNTOS transfer.

The second theme emphasizes how beneficiaries can use their bank card by going through the different things they can use the card for, including withdrawals, deposits, or transactions through the agent including cell phone credit top-ups.

The third theme explains the concept of the agent itself and how beneficiaries can use agents. It tells them about the different transactions they can carry out through an agent, in a shop or a municipality, rather than only in BN branch. In this portion of the workshop is interactive with the workshop trainer pretending to be the agent operator with a real (though not functioning) point-of-sale (POS) machine.

In this role-playing exercise, the beneficiaries practice going up to enter their personal identification number (PIN), covering it with their hand as they do so, handing over the card, and saying how much money they want to receive. They then receive some imitation money and the receipt and are asked to verify that the amount is correct. In another exercise, beneficiaries practice entering their PIN on a giant POS poster displayed at the workshop. This exercise was added because it became clear in the first workshops that some beneficiaries were not sufficiently literate to confidently recognize the numbers on the POS, and for this reason, were reluctant to enter it themselves.

The fourth theme of savings is then introduced. This module teaches beneficiaries that saving in the bank is more secure than saving in the home or via the purchase of animals and addresses the different risks associated with each. It explains how beneficiaries' money in the bank is protected by the regulatory authority, the Peruvian Superintendent of Banks (SBS), and that beneficiaries have a right to complain about problems by calling the phone numbers made available to them. IPA originally wanted to provide beneficiaries with the BN and JUNTOS hotlines but thought it would be more beneficial for researchers to have direct information on the kind of complaints that were coming in and so provided cell phones that were managed by IPA's own surveyor team.<sup>2</sup>

In the final, closing theme, beneficiaries put their names into a hat to be selected by lottery to receive 50 soles in cash (US\$16). Once the winning beneficiary is identified, all the beneficiaries leave together to go to the newly installed MultiRed agent. The beneficiary who won the lottery is then asked to deposit some or all of the money in his or her account using the agent and then do a balance inquiry. On doing so, the beneficiary is able to see from the voucher that the 50 soles is in the account, and show this voucher to all the beneficiaries gathering around. The beneficiary is encouraged to come back the next day to check their balance again and see that the money is still there.



2. Post pilot evaluation, the existing hotline provided by JUNTOS and BN will continue to be made available to beneficiaries to voice complaints and recommendations.

## 5.2. Workshop Evaluation

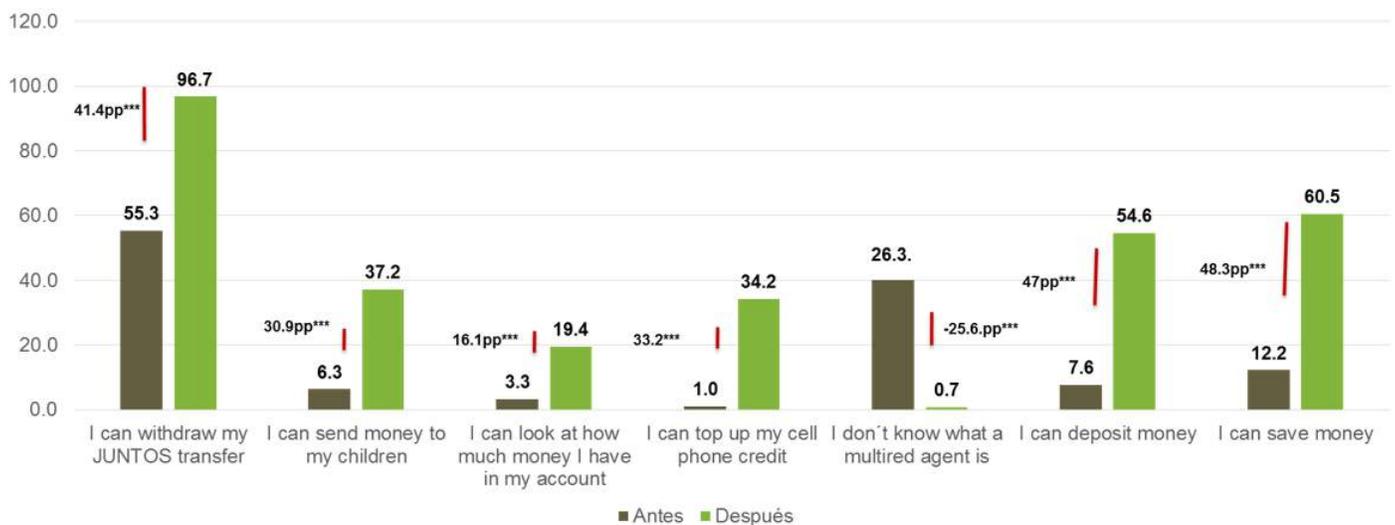
Although we will not have rigorous results until the endline household surveys scheduled for early 2016, we are keen to conduct a preliminary data analysis to gauge the initial effectiveness of the education and trust workshops on beneficiaries' knowledge and attitudes. To do this IPA contracted a small team of surveyors who were provided with tablets on which to conduct short, 10-minute surveys on a randomly selected group of five beneficiaries before and after receiving each workshop. At completion of the survey of the sample selected for the intervention, we had data from 304 beneficiaries over 57 villages and 16 districts in three departments. Some of the findings of these surveys show positive results in terms of knowledge and perceptions changes of beneficiaries after training.



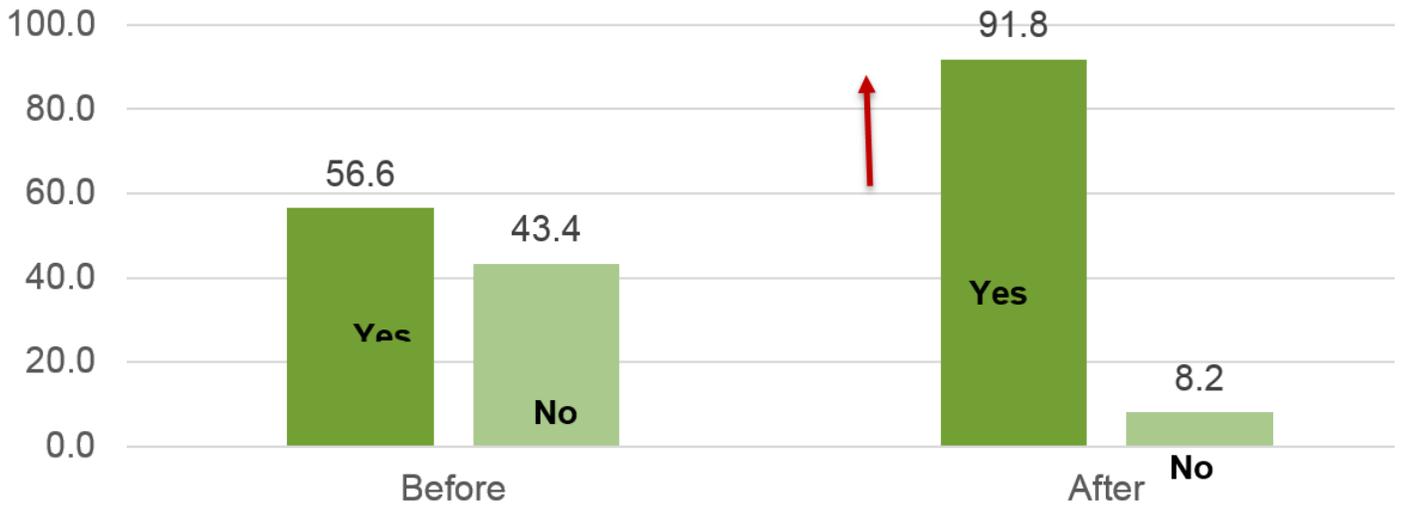
The questions are divided into two sections (after collecting basic information on the beneficiaries). The first looks at the beneficiaries' knowledge on basic questions, such as whether they know what a savings account is, what an agent is, or the transactions they can do in an agent. The second group of questions focuses on beneficiaries' level of trust with using the agent or leaving the money in the bank or with the agent.

When asked, "What can one do in a MultiRed Agent?" prior to the workshop, 26.3 percent of beneficiaries responded that they did not know what a MultiRed Agent was. After the workshop, this percentage decreased to 0.7 percent. Meanwhile, the majority of those who did know what an agent was primarily were solely aware that they could withdraw their JUNTOS transfer. While the percentage of those who were made aware of this increased from 55.3 percent to 96.7 percent following the workshop, there were also significant increases in the level of knowledge on the existence of possibilities of other transactions such as the ability to deposit money, send money, make balance enquiries, or credit top-ups on the cell phones. All of these increases were significant at the 0.01 level.

Graph 1. What can one do in a MultiRed Agent?



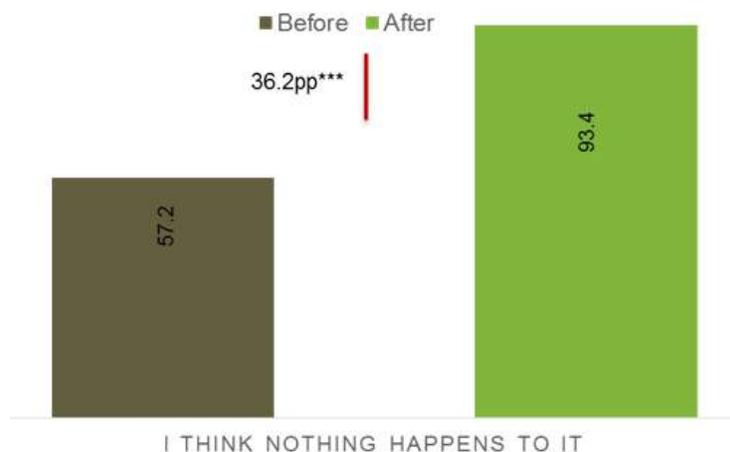
**Graph 2. Do you believe you would be capable of using the agent without help from anyone?**



In Graph 2, we ask if beneficiaries believe they could use the agent on their own without assistance. As is clear, there is a 35.2 percentage point improvement (highly significant at the 0.01 level) in the number who believe they can use the agent unassisted.

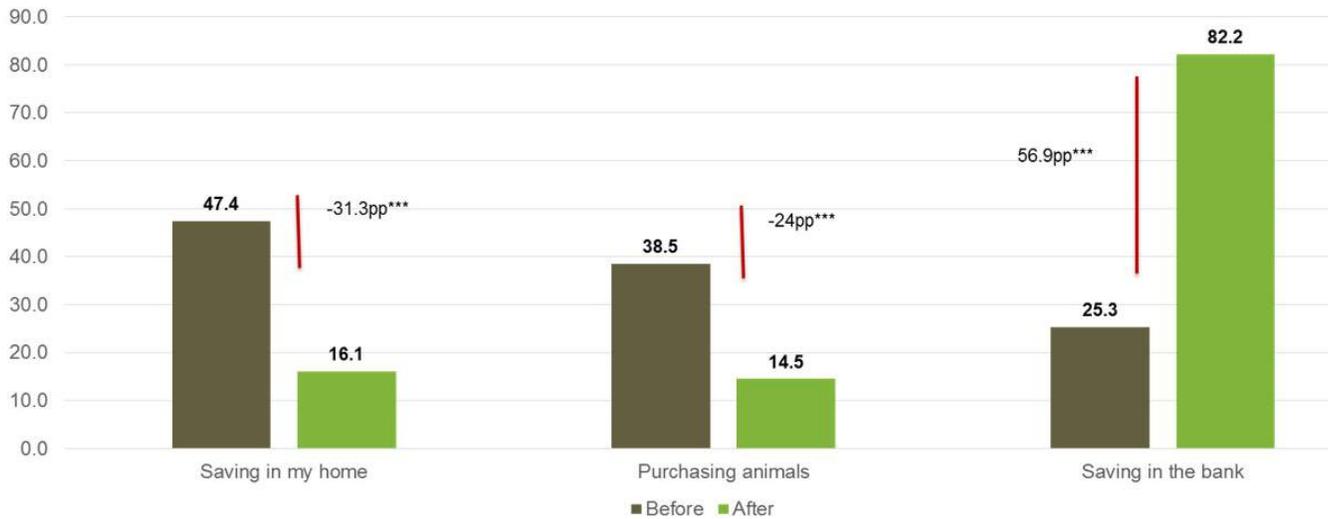
For the question, “What do you think happens when you leave your money in the MultiRed Agent?” beneficiaries were given optional responses, such as “I think that I will be robbed” or “I think that I won’t get my money back,” or “I think that the JUNTOS program will take part of my transfer away.” After the workshop we saw that those who believed that their money would be safe and nothing would happen to it improved by 36.2 percentage points, statistically significant at the 0.01 level.

**Graph 3. What do you think happens when you leave your money in the MultiRed Agent?**



Finally, when beneficiaries were asked where they felt safest saving their money, prior to the workshop, there was a tendency for them to say that they felt safest saving their money in their home or through investing in animals (which they could then either use as a food source or sell in a time of crisis). Following the workshop, the tendency to choose these options decreased significantly, and those who opted for saving in the bank increased by 56.9 percentage points (significant at the 0.01 level).

Graph 4. Where do you feel safest saving your money?



Thus, we can determine from these initial results that participating in the workshop affects beneficiaries' knowledge and confidence vis-à-vis their interactions with both the agent and the bank. What we cannot tell at this point is whether the effect can be sustained over time. These surveys were taken immediately before and immediately after the workshops (with no other information provided in between). The methodology is pre-post, and the aim is to describe the changes after the workshop rather than the impact of the program.

Nonetheless, to assess whether there is a sustained impact of the workshop on financial behavior such as savings in an account and consumption patterns on durable as opposed to temptation goods, or on impulse buying, we will need to take a look at the administrative data and conduct extensive household survey analysis at endline.

## 6. Next Steps

Our next steps are to receive and analyze the administrative data for the full sample up to March 2016. We also hope to obtain nationwide data, which involves over 200 other districts in the country where POS agents have been installed to conduct a difference in difference analysis on a nationally representative sample. Finally, beginning in April 2016, IPA will conduct endline household surveys to understand how financial behavior beyond bank account data was impacted from the interventions in terms of financial knowledge and attitudes and spending on durable and other consumer items.

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