Improving Communication with Farmers

Research with Samunnati in India



SAMUNNATI OVERVIEW

Samunnati supports Farmer Producer Organizations (FPO) in India, which are registered groups of farmers. They provide a range of digital services to FPOs, including digital advisory tools, market access platforms, and financial products.

These services are delivered to farmers through robocalls (i.e., a computerized auto dialer that delivers a prerecorded message), bulk SMS messages, and a mobile app, all managed by the FPO. Farmers register for these services by giving their names and phone numbers to their FPO board.

Busara's Research: Using Digital Tools to Communicate with Farmers



Samunatti observed that the uptake of their digital services among smallholder farmers in FPOs was relatively low; whenever they tried to communicate with farmers through the FPOs using digital tools, farmers were largely unresponsive. We conducted research with FPOs and their farmers to help Samunnati improve its communication, making it more relevant and engaging so farmers would use the digital tools and act on the information provided.

The DIG-it-AL Project

With support from the Bill and Melinda Gates Foundation, Busara is researching ways to increase smallholder farmers' adoption and use of digital agricultural services. Our research uses human-centered design to identify and address "behavioral" barriers to digital service use, such as cognitive biases, preferences, and beliefs.

Methodology

<u>Phase 1: Diagnostic</u> Phase

We conducted 42 in-depth interviews with farmers and 10 interviews with FPO board members to identify the barriers to accessing and using Samunatti's digital services.

Phase 2: Co-Design Phase

We organized four codesign workshops across two villages to brainstorm solutions to overcome the barriers we identified. We then transformed some of these ideas into prototypes.

4 co-design workshops

Phase 3: Testing Phase

We conducted two experiments to test whether the solutions effectively solved the barriers they were meant to address. The experiments included 680 farmers in one FPO.

The first experiment provided insights into the effectiveness of and preferences for SMS, robocalls, apps, and in-person visits. The second experiment explored strategies for building trust.

680 farmers in one FPO

42 in-depth interviews

Phase 3: Testing Phase Experiments

For the first experiment, participants selected a digital communication channel for receiving agricultural information and completed a survey to measure their comprehension and ability to act on the information. After, they indicated whether they preferred receiving information via their chosen digital channel or a face-to-face meeting with an agent.

For the second experiment, participants were randomly assigned to groups and received information on a tablet that contained the same key messages, but the messages were framed slightly differently. They then completed a survey to measure their trust, willingness to recommend the information to a friend (i.e., to gauge whether they found it valuable), and likelihood of acting on the information given.

KEY INSIGHTS

Insights From Our Diagnostic

>> Lack of Onboarding and Coordination

FPOs did not offer training or introductory sessions on using the robocall feature or responding to bulk messages. Additionally, FPOs communicate with farmers through many channels: phone calls, WhatsApp, village-level meetings, among others. With each communication channel, farmers receive different pieces of information, and some farmers do not receive any information at all. This lack of onboarding and coordination causes confusion and, ultimately, mistrust, as farmers don't know where the information is coming from, what it's referring to, and if it's reliable.

>> Preference for In-Person Interactions

Farmers preferred traditional, face-to-face methods for sharing and receiving agricultural information, such as farmer group meetings.

>> Familiarity and Receptiveness to Digital Communication

We observed significant variation in how farmers received and acted on information from bulk SMS messages and robocalls. Some were unaware they had signed up for the service and didn't recognize the source of the messages. Others fully understood the system, knew how to interpret the information, and interacted with the messages effectively. A third group was aware they had subscribed but struggled to understand the content or how to engage with the robocalls and messages.

Our Co-Designed Ideas



1 Including Source of Information

Farmers suggested ways to make robocalls and bulk messages more trustworthy, such as including the name of FPO board members in recordings and messages to verify the source of the information.



2 In-Person Agent Visits

We explored the possibility of supplementing digital communication with in-person visits from an agent. These visits would reinforce the information shared digitally and support farmers in acting on it.

In addition to developing prototypes to overcome the identified barriers, we designed an experiment to explore ways to optimize digital communication. We sought to better understand which types of digital communication farmers find most comprehensible and which channels – robocalls, bulk SMS, or apps – are most effective in driving action. Samunnati and its FPO partners can apply these findings to refine their digital communication strategies, selecting the most effective channels to reach farmers and convey information clearly, thereby improving coordination.

Results From Testing Our Solutions



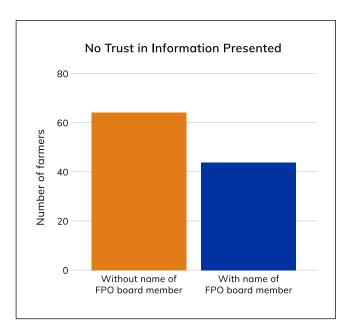
Participants favored in-person visits from agents over most digital communication methods, except for robocalls. Those who preferred robocalls chose them over digital agents for receiving information.



While most participants preferred robocalls, those who received information via SMS tended to be more likely to comprehend the information provided.

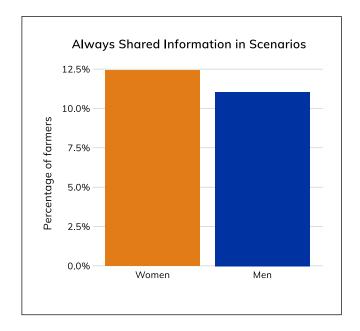
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Participants tended to trust information more when it included the name of the FPO responsible for sending it, compared to when the same information was provided without a name.





Although women were less trusting than men on average, we found a positive relationship between trust and willingness to recommend information among women; compared to men, women tended to be more likely to recommend information when they trusted it.



RECOMMENDATIONS AND AREAS FOR FURTHER EXPLORATION FOR IMPROVING DIGITAL COMMUNICATION TO FARMERS

1. Include Identifiers in Digital Communications

Messages should include the source of the information, especially specific names of individuals if possible, ensuring that farmers recognize and trust the source of information.

2. Leverage Women Farmers for Information Sharing

FPOs should encourage women farmers to take on leadership roles in information dissemination within their communities.

3. Introduce In-Person Visits from Agents

FPOs should explore introducing digital agents to complement their existing digital communication efforts, providing farmers with more tailored support and reinforcing key messages.

4. Provide FPOs With Communication Guidebook

Based on the study's findings, we created a guidebook to help FPOs communicate effectively with farmers through digital channels. It covers setting up communication systems, crafting trust-building messages, and using behavioral nudges to encourage farmer engagement.



