

DIGITAL INFORMATION SERVICES FOR COFFEE GROWERS IN PERU







Beneficiary organisations

ACPC Pichanaki and Selva Andina are two farmer cooperatives in Peru. ACPC Pichanaki in the Chanchamayo province exports certified coffee collected from 300 farmer members. Selva Andina in the Jaén province supports 618 farmer members by producing and exporting certified, high-quality coffee.

Peru is the 9th largest producer of coffee in the world and one of the leading producers of organic and Fair-Trade certified coffees. Coffee is Peru's main agricultural export commodity, making up about 25% of national agricultural income.

The challenge

The geographical spread of the farmer members in remote locations poses common challenges to the operations of the two cooperatives. Long distances impede information exchange and complicate the cooperatives' support to the farmers. At the same time, the farmers require timely weather information and improved farm management techniques.

The proposed solutions

The project aimed to develop a mobile application that provides farmers with timely weather information and educational materials to support farm management. It would also enhance information exchange between coffee cooperatives and farmers, enabling the cooperatives to collect more accurate data and insights on farmer farm-level activities. A team of agronomists would generate educational and farming content for the application and answer farmers' questions. Through a white-label approach, the application would be marketed and deployed with each cooperative's name and easily replicated for other cooperatives.

The expected results of the project were:

- 1 Ensure that the application is adapted to the needs of the targeted farmers (the pilot phase aimed to reach 180 farmers, including 47 women).
- 2 Facilitate the roll-out of the application to a larger group of users in various geographies.
- 3 Strengthen coffee production skills and knowledge of the targeted farmers.
- 4 Contribute to improving harvest yield.

IMPACT INVESTOR



BENEFICIARY ORGANISATIONS

ACPC Pichanaki Selva Andina

NUMBER OF FARMERS REACHED

AGRICULTURAL VALUE CHAIN

Coffee

START DATE

March 2021

END DATE

July 2022

TOTAL EXPENDITURE

€ 28.049

Including € 20,885 (74%) financed by SSNUP





key results

The application's main functionalities include:



- ✓ Educational manuals for coffee-related farm management activities (video, image, text)
- ✓ Calendar with weather forecasts and activities
- ✓ Image-based scanner for detecting diseases
- ✓ Q&A module between farmers and agronomists
- ✓ Updated farmers' contact details shared with the cooperatives
- ✓ Direct notifications to farmers or groups of farmers







The application is compatible with older smartphones,

reducing latency in low network-connected areas.



>20 farming manuals developed

by the ACPC Pichanaki cooperative's agronomist team via the online platform.



277

smallholder farmers actively use the application

(246 in ACPC Pichanaki and 31 from Selva Andina, including 22 women).



2. Zero hunger

- 2.3 Adoption of productive and sustainable agricultural practices
- 2.4 Improving agricultural productivity



5.5 Women's participation in economic life



Farmers have access to information at the tip of their fingers

They now use the application to learn best farming practices and for daily local weather checks. Most do not have a weather station on their farm, and the application gives similar information to a weather station at a 1km² precision.



Improved efficiency for agronomists

Previously, recommending best practices required a visit from an agronomist. The application now helps agronomists have fewer farm visits and can asynchronously support the farmers.



3,361,000 million EUR in working capital have been provided to the two cooperatives since the project's inception.



lessons learnt

✓ New applications should be tested with users who are willing to accept minor malfunctioning and provide feedback for improving them

Many farmers were invited to use the newly deployed application. Some are willing to cope with the tool's minor "bugs "for long-term success, and some are not. Therefore, a proper approach to piloting new applications should be implemented, including identifying early adopters who actively accept to test and contribute to improving the applications.

✓ Digital solutions can exclude some disadvantaged groups of farmers if not designed and implemented inclusively

Farmers in remote areas lacking access to modern smartphones and the internet remains the critical barrier to deploying digital solutions. The application's first deployment was delayed due to incompatibility with old mobile phones. The consultant team had to develop a new version of the application that is now compatible with older mobile phones so that more farmers can access the application.

✓ In-person visits are essential to increase digital literacy

First-time deployment of digital solutions among farmers in remote areas who are not used to all the new technologies still requires close support and direct quidance.

Outlook

Internet connection has been a constant hurdle throughout the project. The areas covered by mobile and wifi networks still need to be improved, especially for remote farms. Therefore, only a group of farmers can leverage the benefits the application offers for now. However, there is a silver lining: the country's infrastructure is rapidly improving, which could accelerate the adoption of more efficient digital solutions.