



Unlocking Public and Private
Finance for the Poor

Bridging the financing gap for agriculture cooperatives through data-driven decision-making: recommendations and lessons learned for practitioners

CASE STUDY
OCTOBER | 2020

COMMBANANE IN A NUTSHELL

In 2019, United Nations Capital Development Fund (UNCDF) wanted to explore how data-driven decision-making and new dimensions of information could reduce the risk of lending to the youth segment – in particular those working in agriculture – providing alternatives for those who do not have traditional credit records. UNCDF has partnered with Dimagi and Baobab Sénégal to pilot an existing digital solution dedicated to the agriculture sector to reduce the information asymmetry between agri-cooperatives and financial service providers (FSPs) when it comes to lending decisions. CommBanane is the joint platform funded by UNCDF supported by the Last Mile Finance Trust Fund and developed by Dimagi, Inc. CommBanane has reached more than 472 smallholders active in the banana value chain in rural Senegal to track their business records and help them access specific credit products adapted to their needs.



**Inclusive Digital
Economies
workstream:**
Inclusive
innovation



**Inclusive Digital
Economies
segment:**
Smallholders



**Types of
service:**
Digital recording
of business data;
loan products



**Number of
beneficiaries
reached:**
472 smallholders;
10 agri-cooperatives;
1 regional union of
agri-producers

RATIONALE OF THE INTERVENTION

The youth employment crisis is a global development priority. In much of West Africa, including in countries such as Senegal, high youth unemployment, significant proportions of the working-poor involved in vulnerable employment and economic disengagement run the risk of creating disaffection, driving migration, inciting social unrest and slowing progress towards development goals. Young people, in particular those working in agriculture, are usually perceived as a high-risk segment: they often lack collateral, have no credit history and may not comply with the requirements that are typically set by FSPs to limit risk, such as proof of business ownership or years of experience. The negative stereotypes about young people are also as a result of their low level of financial education and are often exacerbated by cultural and social norms.

The lack of high-quality information, information asymmetry between clients and FSPs, and inefficient industry-level coordination are key factors that drive up costs for both clients and FSPs. Data-driven decision-making reveals new dimensions of information that could reduce the risk of lending; it could also help FSPs tap into an innovative mechanism to improve lending decisions, and lower collateral requirements and interest rates to potentially overcome the barrier of serving underserved market segments. It is within this context that UNCDF wanted to scale up an already existing digital solution in Senegal that provides services for agriculture cooperatives and member farmers, and also helps them build a business case to ensure the buy-in of a private service provider and thereby ultimately ensure financial inclusion of excluded young smallholders.

Through a competitive process, UNCDF selected CommAgri, a mobile platform built by Dimagi under the United States Agency for International Development (USAID) funded Naatal Mbay project. CommAgri facilitates the management of producers, seasonal activities, crop monitoring, harvest and yield assessments, and quality-control data in irrigated and rainfed rice, maize and millet value chains.

Modules support credit tracking and inventory management as well as sales and client management. While the intent was to develop a profitable and sustainable business model over time, Dimagi was granted funding by UNCDF for a quick-win action to build a business case for UNCDF partner Baobab Sénégal (BS) by developing, testing and validating the service offerings and data products to increase the financial inclusion of young smallholders. The specific objectives of the project were mainly:



OVERVIEW OF THE 6-MONTH PILOT

Scoping and requirement gathering: The objective was to help BS build financial services or products for smallholder segments by developing a data dashboard prototype that enables them to leverage the CommAgri network and data to offer new products or services to smallholders. BS conducted a market study of the banana value chain (BVC) as it presents a high-value-added sector and has strategic interest for the organization.

The exercise followed human-centred design techniques to understand the structure of the BVC, the profiles of each stakeholder and their needs in terms of financial services. The business opportunity for digitizing the data flow would allow BS to have more visibility on the business information of the smallholders thereby 'de-risking' the smallholders profile in their access to credit (with more information on its clients, BS is less risky in the eyes of the banks).

Prototype development: Dimagi and BS worked together to adapt the existing solution to the specific business needs of the organization. CommBanane was released with additional features to improve visibility of smallholder activities. Relevant modules are: (i) management of farmers and plots to track business data; (ii) needs assessments for inputs and related financial needs; (iii) loan and reimbursement management; (iv) sales management to register clients and vendors; and (v) portfolio management tool to provide BS with a data analysis and risk management framework.

The solution enabled the smallholder cooperatives to apply directly from their loan apps, which can be viewed and processed through the loan processing tools developed for Baobab. The portfolio managers can review and analyse the loan application before submitting to the Loan Committee, which will approve or deny the loan.

BS has also prototyped a specific credit product that responds to BVC needs by adapting the BS group loan product for BVC cooperatives. The loan is mainly for working capital needs and is granted to the cooperative; the assessment of loan request will be done via the app; reimbursement is managed by the co-op secretariat (president, secretary, deputy, treasurer), but all members are equally responsible. Loan amounts vary (US\$160 to US\$16,000) and loan periods are up to 12 months. Minimal credit fees are applied (disbursement, loan request, insurance) but can be pre-financed by the FSP.

Training and launch: In conjunction with the regional association of banana producers (COPROBAT), BS has selected 10 cooperatives among the 7 regional unions active in the BVC in Tambacounda region (south-eastern Senegal) to test the solution developed. Dimagi and BS organized on-site training of trainers with representatives of the BVC to make sure all user types (farmers, cooperatives, credit agents) could understand, test and practise using CommBanane prior to launch in the field.

The trainees have replicated the training at the co-op level for upscaling.

The app was launched on 19 November 2019.

Figure I | Version of the application for cooperatives

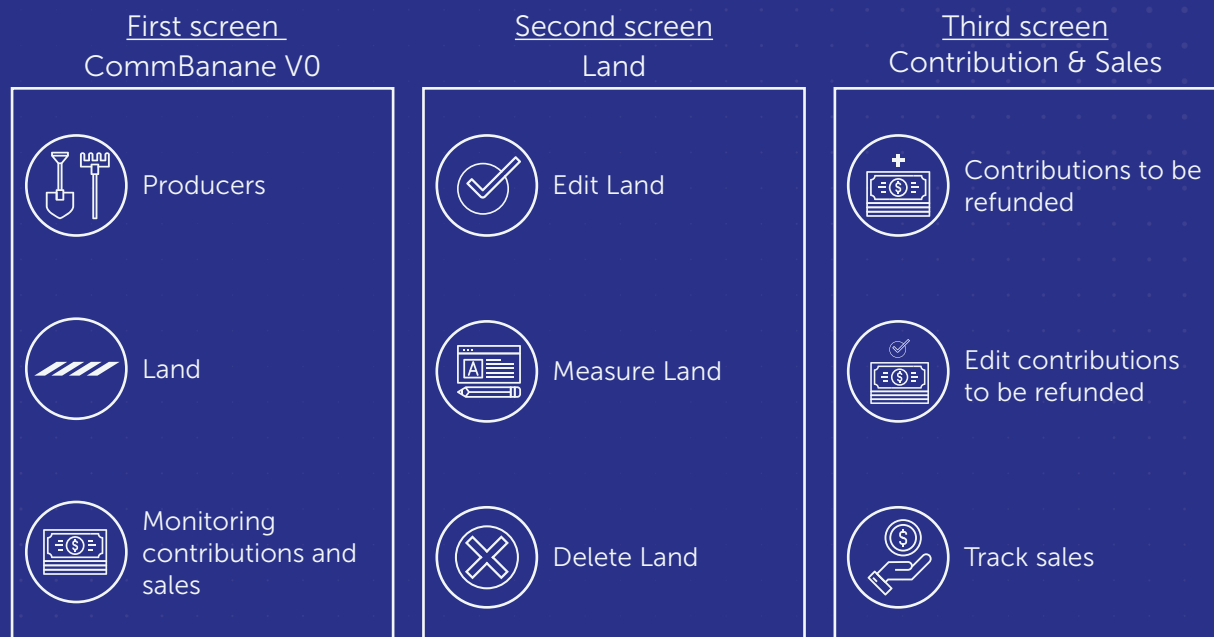


Figure II | Version of the application for financial institutions



RESULTS

While the pilot is still ongoing, UNCDF has been able to demonstrate several quick-win results during the first months of use of the new solution: for example, 9 out of the 10 cooperatives targeted started using the application, representing 170 hectares of agriculture area (and almost 130 hectares cultivated); 472 farmers have been registered for the app, with 29 per cent being women – these farmers have registered a turnover of US\$79,000.

Nine cooperatives have completed their needs assessments through the app and loan requests have been submitted to BS via the app for a total value of US\$118,000. The loan application has been approved for six cooperatives for a total value of US\$42,000. The difference between the amount requested and the amount disbursed is mainly driven by the prudent approach of BS vis-à-vis a new value chain served and of a new tool being tested within the project.

On a broader scale, to initially answer the project's specific objectives, UNCDF can attest that:



a **digital tracking system is relevant** for data collection in the agriculture sector, as shown by the amount of information that all stakeholders can now access and assess



the **cooperatives are interested** in such a solution and they acknowledge the importance of having more visibility of their businesses for their own co-op management, but most importantly to access financing



BS seems favourable to this kind of solution to improve its business processes while ensuring access to financial services of underserved segments.

LESSONS LEARNED & RECOMMENDATIONS

Importance of understanding the target audience: Dimagi and BS ran initial user human-centred design workshops to make better-informed decisions about the solution design and business requirements. Initial results confirmed the business opportunity.

Ensuring institutional interest in the agriculture cooperative sector: At the institutional level, BS is not yet targeting cooperatives, even though the top management is interested in serving the agriculture sector in a more systematic way. This pilot allowed BS to venture

into one value chain with clients already familiar with the platform thanks to Naatal Mbay (rice, millet and maize). In addition, the existing cooperatives have already built business relationships with other FSPs, so it will be crucial for BS to work on a longer and more complex strategy to enter the niche market.

Buy-in of the financial services provider partner: Despite the limited positioning of BS as leading FSP for agri-financing, the top management recognized multiple advantages of the BVC. BS's commitment to be the first mover in this niche market has made the difference, as they saw a business opportunity with the project for their long-term positioning. This has been crucial to ensure the effectiveness of the quick win.

Commitment and structure of all actors of the value chain: Top management of the BVC showed their interest in being part of the pilot from the beginning. They were involved in the design phase to prototype a solution aligned to their business needs. This ensured not only a successful solution, but also their involvement in the organization of training, in the launch, as well as in the follow-up and data-collection phases. The well-structured organization of the BVC allowed Dimagi to quickly launch the app and BS to better respond to the financial needs of smallholder members of the co-ops. For instance, the BVC top management has engaged financial resources in the project to ensure internet connection to transfer data to the BS staff.

Reviewing data validation and cross-check: The pilot has highlighted the risk of self-reported data for the sustainability of the solution and therefore the need to minimize the risk of misrepresentation of data by smallholders. Given the tight timeline of the pilot, data entry is currently managed at smallholder level; however, the conflict of interest is relevant and could distort the information collected and lending decisions once the solution is scaled up to a greater number of users and to less-structured cooperatives. As a mitigating measure for the pilot, BS has put in place a counter-evaluation and cross-check system (by its staff). This strategy has been key to the success of the pilot in terms of credibility of data and correct use of the platform. However, for the longer term, it is important to find third-party entities to be in charge of supporting smallholders to ensure data validation and monitor business flows of the cooperatives.

Training and support function to smallholders: The use of technology for data collection is a new concept for these cooperatives, so it is important to provide support to them and closely monitor the use of the app. Defining a framework on how to build the capacity of the cooperatives will be crucial for scale up.

Proximity of the services: The presence of a BS staff member dedicated to the project has become key for coaching smallholders and to fully ensure the uptake and use of the platform. For a scale-up phase, it is recommended to open dedicated points of service (kiosks or mini-branches) in remote areas to facilitate access and support to underserved clients.

THE WAY FORWARD

Based on lessons learned and recommendations during the six-month pilot, as well as the long-term objectives of UNCDF in playing the role of an enabler for more inclusive digital economies through market system development approaches, UNCDF will advocate and work through the following lines of intervention.

- Extension of Dimagi's support to BS to make sure the project team fully masters the solution developed, to ensure a smooth transition towards a private-led business solution.
- Prove the business case of digitizing value chains as a way to improve the efficiency of cooperatives, visibility of business data and lending decisions of FSPs.
- Build capacities of BS in agri-financing to scale up the solution to additional value chains, better understand the sector and adopt targeted solutions (e.g. insurance) to minimize the risks of lending while ensuring financial inclusion of smallholders.
- Expand the functionalities of the CommBanane app to give broader support to smallholders in times of crisis, such as the current COVID-19 outbreak, through the implementation on the app of a COVID-19 sensitization module for smallholders.

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COMMBANANE RESULTS SO FAR...

UNCDF has partnered with Dimagi and Baobab Sénégal (BS) to pilot an existing digital solution dedicated to the agriculture sector aimed at reducing the information asymmetry between agro-cooperatives and financial service providers (FSPs) when it comes to lending decisions. CommBanane is the joint platform funded by UNCDF thanks to the support of Last Mile Finance Trust Fund (LMTF) Funds and developed by Dimagi, Inc.

9 of 10

cooperatives targeted started using the application.

These cooperatives represent 170 hectares of agriculture area.



472

farmers have been registered onto the app, 29% are women.

These farmers have registered a turnover of US\$79,000.

US\$ 118,000

worth of loan requests have been submitted via the app.

Loan applications have been approved for a total value of US\$42,000.





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