Mbugo area cooperative enterprise testing the usage of the eProd mobile application for field activities.
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COFFEE INNOVATION

Development of a Big Data Platform for Sustainable Coffee Production and Market Access

CHALLENGE

Historically-grounded practices keep cooperatives and farmers from realizing the full value of optimization and data for making decisions and improving returns. The data needed to manage coffee production and trade is becoming too complex for cooperatives and exporters to manage manually.

INNOVATION

BIG DATA PLATFORM FOR COFFEE SUPPLY CHAINS

Using a data analytics platform designed and provided by eProd Solutions, farmer groups can better understand how to manage production and payments. This tech solution manages "first mile" transactions such as the farmer mill and cooperative, and can integrate hardware such as scaled and software to provide a full picture of the conditions and product from a farmer group. The platform also provides forecasting – from daily SMS weather forecasts to agronomic advice (e.g. spray alerts and fertilizer advice). Aggregators now have a platform to efficiently manage the information flow between the individual producers and other stakeholders.

COMPANY DESCRIPTION

eProd Solutions offers an affordable supply chain management system for agribusiness and cooperatives to manage their farmer groups, supply volumes, financials etc. eProd Solutions started exporting chili peppers and is now working in a number of crops.

KEY COMPANY STATS

NUMBER OF PRODUCER PARTNERS

Five co-operatives (2,996 farmers)

NUMBER OF STAFF

22

COST

COSTS

Annual license for trader and mill (0.50 cent per farmer per year)
First year costs for training and set up: USD 2,000

EFFECTS ON REVENUE

Results unknown given the timeframe of the project.

PREPARATION

TIMELINE

Six to eight weeks

MATERIALS AND EQUIPMENT

Computer, laptop, or similar device that can synchronize on low-speed networks and collect data offline

STAFFING REQUIREMENTS

Could not be determined

LESSONS LEARNED

CHALLENGES

- Cooperatives had low capacity to adopt digital tools and to apply complex data and analysis to high-level decision-making processes.
- The balance of tool development, cooperative selection and onboarding left the implementation feeling rushed.
- While key implementing partners were an important support, having to contract them caused delays to the start of the project that were not expected.

TAKEAWAYS

- Select partners with appropriate digital literacy and capacity.
- Tool development and roll out needs to be coordinated with coffee harvest and other events that occupy cooperatives' time.
- Cooperative boards are more administratively constrained and as membership organizations less quick to adopt new approaches. It would be good to include mid-to-large coffee companies that are management-driven, can make decisions more quickly and avail resources to ensure sufficient technical hardware and manpower to focus on the adoption of a system.

As a result of eProd Solutions' Supply Chain Data Management Platform:

Participants during the first design workshop group discussion. © eProd Solutions

FIVE COOPERATIVES AND 2,996 FARMERS
were trained

ACCESS TO MARKETS IN EUROPE WAS ESTABLISHED
as traceability is required for all coffee imports under the European
Union Regulation for Deforestation-Free Products (EUDR)

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The eProd will be able to provide data that international coffee market dealers will require
if the Ugandan coffee farmers' coffee is to be traded internationally.

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To onboard new traders and cooperatives:

Vincent Okoth introducing the project during the first design workshop. © eProd Solutions

STEP 1 Intake call

STEP 2 Training for staff or co-operatives and traders

STEP 3 Implement programming in the field

How to replicate this app for other regions:

STEP 1 Design workshop with various stakeholders to understand challenges and needs of target users

STEP 2 Product development

STEP 3 Trial and pilot user selection, training and monitoring

STEP 4 Incorporate feedback, continuous improvement and integration with other service providers

On behalf of

Federal Ministry
for Economic Cooperation
and Development