

DESIGNING DIGITAL TRACEABILITY TO BENEFIT COFFEE FARMERS

SUMMARY OF KEY LEARNINGS + RECOMMENDATIONS

In March 2018 Starbucks launched a pilot in order to test the benefits of digital traceability in Colombia, Costa Rica and Rwanda, designed to both connect customers with the origin of the coffee and to explore opportunities to provide benefits to coffee farmers.

Over the past year Conservation International (CI) has been working with Starbucks to identify the potential benefits of digital traceability programs and how best to design for these. The CI team conducted a series of field visits to interview cooperative / washing stations managers, a sample of farmers and other key stakeholders. Some of the key objectives of these field visits included:

- I. Determine the challenges and opportunities for supply chains in implementing digital traceability programs
- II. Recognize the level of farmer understanding of traceability & final coffee destination, transaction records, etc.
- III. Gain insights on farmer and supply chain expectations / perceived benefits of digital records and traceability

Based on the interviews during the field visits, CI's recommendations are to design digital traceability programs with the following objectives:

- Provide value back to the supply chain, especially to farmers
- Improve farmer access to information and technology
- Improve farmer access to financial services
- Assist in engaging the next generation of coffee farmers.

In order to do so, we have highlighted the following key opportunities and recommendations.

UNDERSTAND THE VALUE OF DIGITAL TRACEABILITY FOR COOPERATIVES AND FARMERS

ENSURE DIGITAL TRACEABILITY PROVIDES ECONOMIC VALUE TO THE SUPPLY CHAIN AND HELP THEM RECOGNIZE THIS VALUE

Digital traceability programs should ensure 2-way information flow that enhances farmers' knowledge of the market and value chain. Cooperatives and washing stations that have invested in traceability programs saw value from improved organization, efficiency, data management and market access. However, in most cases, farmers were not aware of traceability programs or how they benefitted. It is important to ensure that the supply chain is providing farmers information about its transactions. Farmers are interested in knowing which countries import their coffee and the types of products produced.

IMPROVE FARMER ACCESS TO INFORMATION AND TECHNOLOGY

INTEGRATE DIGITAL PAYMENTS AND TECHNOLOGY WITHIN PROGRAMS ENGAGING YOUNGER FARMERS

The results confirm that farmers in cooperatives using digital tools to communicate had knowledge about the value chain and how the coffee moves within the supply chain. The farmers most leveraging technology are usually the younger ones with more land. While the younger generation was more likely to have smartphones and engage with cooperatives/washing stations and exporters via an app, this was not enough by itself to attract them into coffee, especially during low coffee prices. Digital payments and technology, therefore, should be embedded into broader programs to engage the younger generations in coffee growing.

LEVERAGE TECHNOLOGY TO ENHANCE FARMER ACCESS TO INFORMATION WHILE CONTINUING TO USE TRADITIONAL COMMUNICATIONS TO REACH ALL FARMERS.

Supply chains have a variety of methods to communicate with farmers, and the most successful use both modern and traditional communication channels. Using multiple channels assures that the different profiles of farmers feel comfortable when they received the messages by their coops. Additionally, in terms of modern technology, each of the three countries has different smartphone adoption levels due primarily to cost and literacy levels.

The results show that the farmers without access to cellphones are the ones with less knowledge about coffee prices, trainings and opportunities to access financial services. In some localities access to data services is limited, and some farmers would not be able to access to internet even if they had a plan.

Developers of digital traceability programs should explore opportunities to partner with cooperatives, exporters, other roasters and cell phone companies to develop innovative programs that enable greater, affordable access to cell phones and smartphones. Examples could include developing 'coffee farmer service and data plans' with service providers. Any program introducing or expanding cell and smartphone technology should also include digital literacy training.

IMPROVE FARMER ACCESS TO FINANCIAL SERVICES

ENGAGE WITH FINANCE INDUSTRY TO CREATE NEW FINANCIAL SERVICE MODELS WITH LOWER TRANSACTION FEES AND INTEREST RATES THAT INCENTIVIZE LONGER-TERM SAVING.

Farmers viewed digital payments as a way of enhancing their savings but noted high fees and lack of access to banks and ATMs. Many farmers stated that when receiving cash, they spent the money more quickly and were able to save less, especially for expenses that hit later in the year. Some farmers would like to choose the way they get paid, and with lower fees they would choose digital payments in order to save some money. By partnering with the finance industry, companies could develop innovative savings schemes that provide attractive fees and interest rates for farmers willing to commit to longer term savings plans (e.g. certificate of deposit - type programs) that enable them to plan for future expenses like annual school fees.

LESSONS LEARNT

- Technology can be an enabler. In Costa Rica and Colombia farmers with access to smartphones gain a better understanding of the value chain and knowledge about C.A.F.E Practices. They are also in constant communication with cooperative leaders, technicians and fellow farmers.
- It was assumed that only farmers with smartphones would be able to connect directly with digital platforms. However, in the field we learnt that in Africa mobile payments work with regular phones, and these could be used to provide digital alternatives for payment to the farmers that access mobile money regularly.
- The global price crisis is top of mind for the stakeholders throughout the value chain, with farmers concerned about their ability to cover of their costs of production.

Traceability is not a silver bullet solution for farmers or supply chains. However, it can help level the playing field across different actors in the supply chain when it comes to knowledge and information if designed with farmers' needs in mind. It also has the potential to increase efficiency and transparency of payments throughout the supply chain and to facilitate greater savings by farmers. To realize these benefits, programs must consider local conditions and the level of collaboration between cooperatives, exporters, roasters, local institutions, cell phone companies and other key stakeholders. These elements should inform the design of all digital traceability programs to ensure real benefits for farmers.