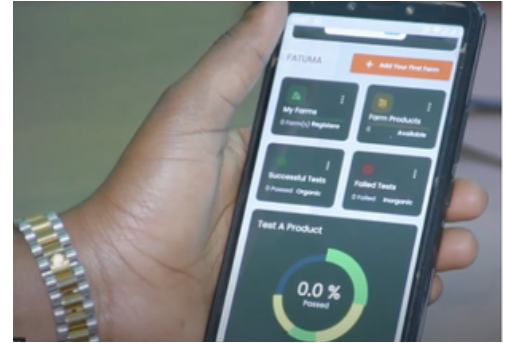


KeBERA; A Handheld Application to Verify Produce On-Farm

Research Question: How might we help **Ugandan smallholder farmers** gain access to international Certified Organic markets (worth >\$100 billion USD)?

Research Innovator:
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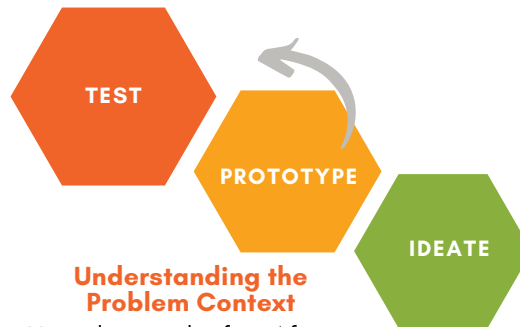


About the Innovation

KeBERA is an inexpensive mobile phone application that provides an alternative for farmers and their cooperatives to collectively certify their produce and meet global market standards. KeBERA verifies if synthetic chemicals were applied to produce and after testing, farmers upload results to an organic farming cooperative database. This reduces the need for field agents to visit rural farms and test for synthetic chemicals increasing opportunities for smallholder farmers to stay profitable.

Exploring the Innovation Process

The ISP Innovation Process applies a systems approach to innovation, designing *with* and *for* the people most closely impacted by the problem.



PROTOTYPING + TESTING Collaborate with Partners

Kabi and his team prototype an easy-to-use, on-farm device for farmers to detect synthetic chemical residues in crops.



EMPATHIZING Engage the End User

Small Ugandan farmers (cultivating <2 hectares) lack access to the global markets. How might these farmers identify an economical alternative to certify produce and access markets?

Understanding the Problem Context

Uganda was the first African country to develop a National Organic Agriculture Policy, with the 2nd largest number of organic farms per country worldwide. Despite an annual global market worth >\$100 billion USD, annual organic exports from Uganda only account for \$50 million USD.



DEFINING + IDEATION Understand the Problem

Farmers face difficulties in locating organic testing centers to certify their produce for the global market. When they do, they are either too expensive or time-intensive.

What's Next?

KeBERA LLC is validating the accuracy of its readings against ones received in laboratories. The National Organic Agricultural Movement of Uganda is organizing farmer groups to share the KeBERA application and offer feedback regarding "ease of use." To learn more, visit <https://keberaorganics.com>