

Uganda coffee agronomy training – Focused assistance for 100,000 smallholder Robusta farmers

Benckiser Stiftung Zukunft is launching a four-year technical assistance project in the Ugandan coffee sector, aiming to achieve at least a 50% increase in coffee yields across 100,000 farming households. We are beginning with 60,000 farmers in groups. As implementing partners of this program, Hanns R. Neumann Stiftung and TechnoServe will each deliver intensive, practical agronomy training for 30,000 farmers. Enveritas will provide additional support. Michael Kremer, the Gates Professor of Developing Societies in the Department of Economics at Harvard University, and Vivian Hoffmann, Research Fellow at the International Food Policy Research Institute (IFPRI) will validate the outcomes of the training through a randomized controlled trial.

Ugandan smallholders can increase yields significantly

Uganda is one of the world's top Robusta coffee producers and among the top ten coffee origins by volume. With an estimated 1.7 million smallholders growing coffee, Uganda has one of the largest populations of coffee farmers worldwide. But Uganda's farmers face significant challenges. Despite growing a sought-after cash crop, many of them still live in poverty.

Uganda has developed a roadmap to achieve ambitious targets for increasing the country's coffee production. Opportunities exist to improve farmers' knowledge of agronomic and environmental practices including soil fertility management, pest and disease control, and tree rejuvenation. As a result, focused interventions to improve coffee farm productivity could support this national vision, increase output per farmer, thus improving farmer incomes and livelihoods, and serve as a foundation for further scaling through other efforts to follow. Furthermore this approach can be replicated in other coffee origins facing similar challenges.

The program will focus on Good Agricultural Practices

The principal aim of the program is to achieve, on average, at least a 50% increase in coffee yields relative to a robust counterfactual, with a clear focus on Good Agricultural Practices (GAP). Hanns R. Neumann Stiftung and TechnoServe will each offer intensive, practical agronomy training to 30,000 households. Each household will receive training for a period of 18-24 months. Farmer training will be field-based, practical, and participatory. As a foundation, it will cover improved farming practices such as pruning and rejuvenation, fertilization tailored to soil conditions and integrated pest management, as well as basic business and farm management training.

We believe such an approach offers substantial productivity and sustainability benefits for relatively low investment in terms of time and money for smallholder farmers. It thus provides a cost-efficient way to improve smallholder income and wellbeing, and also allows to reach a large number of farmers in a relatively short amount of time.

Outcomes of the program will be scientifically evaluated

We are convinced that well-executed training offers substantial benefits for coffee farmers. Impact evaluations of implementers show promising results. However, most project evaluations tend to lack scientific rigor and strong empirical information relating to GAP adoption and yields. As in other areas, apart from a multitude of anecdotal evidence, robust impact evaluations of the efficiency and effectiveness of interventions with coffee smallholders are scarce. Where impact has been evaluated, agronomy training has often been bundled into broader service delivery mechanisms that also included elements like access to inputs or credit, support for building producer organizations of different types, or free or subsidized materials. These set-ups make it difficult to isolate the impact of agronomy training from the other services offered.

We are therefore conducting the first comprehensive randomized controlled trial (RCT) to assess the impact of focused agronomy training in the coffee sector. This will provide a robust, independent assessment of the success of our program. And it will provide an important contribution to the ongoing debate in the coffee sector which interventions are the most effective and the most efficient in addressing smallholder well-being.

The RCT will be conducted by a highly experienced team of renowned researchers, led by Michael Kremer, Harvard University, and Vivian Hoffmann, IFPRI. It will seek to answer the following three key questions, amongst others:

1. How does the training contribute to the **adoption of good agricultural practices**?
2. What are the **increases in productivity/ yields** that the training achieves?
3. How do these translate into **livelihood improvements**?

The program will run for a duration of 4 years

Our program is being launched in October 2017. The training of coffee farmers will be carried out in cohorts and last until the end of 2021. The endline survey of the RCT will be conducted in the year following the end of the training program.

Fact Sheet: Uganda coffee agronomy training

Approach	Intensive, practical agronomy training with a clear focus on Good Agricultural Practices
Target group	100,000 smallholder Robusta farmers
Program targets	To achieve, on average, at least a 50% increase in coffee yields (relative to a robust counterfactual)
Location	Uganda
Timeline	10/2017 – 12/2021
Implementing partners	Hanns R. Neumann Stiftung TechnoServe
Evaluators	Michael Kremer, Harvard University Vivian Hoffmann, IFPRI
Evaluation design	Randomized controlled trial
Funder	Benckiser Stiftung Zukunft