

INNOVATION LAB FOR FOOD SECURITY POLICY

African Great Lakes Region Coffee Support Program (AGLC) Policy Advocacy Roundtable on Farmer Investments in Coffee

Backgrounder 4

June 2017

Guiding Question: How might we explore improvements to input delivery and antestia bug / Potato Taste Defect control?

The Challenge

Rwanda's strategic objectives for the coffee sector focus on increasing the productivity and quality of coffee harvested, as well as increasing the share of coffee produced through the "fully-washed" channel. The National Agricultural Export Development Board (NAEB), has identified the five main drivers of low productivity as: (1) poor soil fertility; (2) poor application of mineral fertilizers; (3) yield loss due to pests and diseases; (4) lack of good agricultural practices; and (5) a large proportion of old trees.

The effective use of fertilizer and pesticide is an essential step to improving both productivity and quality across the sector. However, access to and affordability of inputs present major barriers. Nearly all coffee farmers depend on the CEPAR / NAEB distributions of inputs. However, the amounts distributed are not sufficient, and our data suggests that they are not distributed equally across districts. Moreover, the inputs purchased and delivered by coffee washing stations vary greatly and are not dependable. Farmers rarely purchase fertilizers and pesticides to supplement the distributed inputs, resulting in limited productivity and quality.

A major issue in Rwandan coffee quality, the "Potato Taste Defect" (PTD), which is linked to damage caused by the antestia bug, threatens Rwanda's reputation as a producer of one of the world's best coffees. The overarching challenge in this domain lies in the adoption of a fair and effective system for ensuring that farmers have an adequate supply of both pesticides and fertilizers and that they are applied using best practices for improved coffee productivity and quality, as well as human and environmental safety.

Key Issues

1. Not all coffee farmers receive fertilizer and pesticide. For those that do receive inputs from CEPAR / NAEB, they receive far less than the recommended dosage. The small volume of inputs distributed is a major barrier to coffee quality and productivity.
2. Coffee farmers often consider the inputs they receive from CEPAR / NAEB as "free," even though farmers pay for them through the export tax. Farmers very rarely have the incentive to spend their own money on fertilizer and pesticide.
3. With limited access to inputs, farmers are not applying the proper doses of fertilizer and pesticide consistently to all fields, nor are they applying consistently throughout the year. Inconsistent and incorrect application can negatively impact productivity, profits, and human and environmental safety.

Questions to consider: Why are the amounts of fertilizer and pesticide distributed below the recommended doses? Why does distribution vary so much? How are those distributed amounts determined? Should NAEB/CEPAR change this calculation to be more effective? Is the major issue cost, lack of accurate data, or something else?

Evidence from the Baseline

Findings from the AGLC Baseline Survey of 1,024 coffee producing households in Rwanda confirm that:

- Farmers see coffee as central to their livelihoods and as the most important source of cash to their household economy.
- Farmers that have both the capacity to invest and the incentive to invest have the highest productivity and highest profits (per tree); these are farmers with mid-range numbers of trees.
- Cost of production in Rwanda, including household and wage labor, inputs and equipment, totals 177 RWF/Kg of cherry.
- At 177 RWF/Kg the cost of production is high relative to what farmers are paid for their cherry, so a large proportion of growers suffer net losses in coffee (over one third in 2015). These farmers would make more working as agricultural wage laborers on the farms of other, more productive farms.
- Cherry prices, access to inputs, more trees and receipt of inputs all affect productivity and incomes.

Changes in the policy environment can help to ensure needed incentives to smallholder producers to invest (inputs, labor and eventually more land) in their coffee plantations for improved productivity and control of control of antestia/PTD.

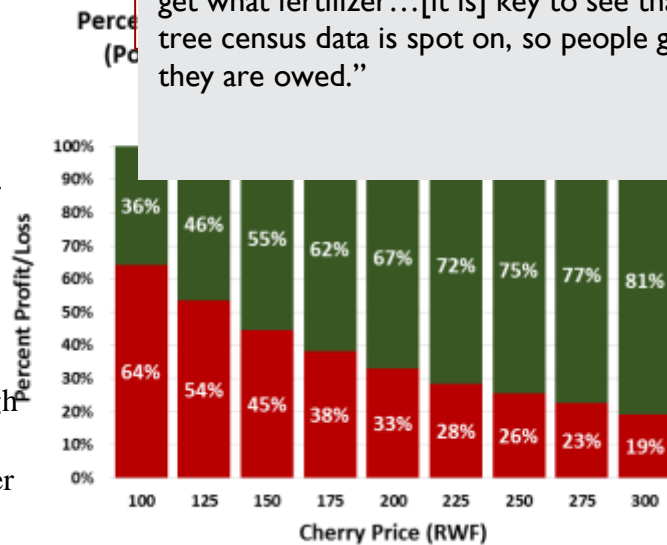
Key data and quotes:

63% of coffee farmers did not use fertilizer, and 68% of coffee farmers did not use pesticide because these inputs were not free.

Coffee farmers in Rutsiro are 80% less likely than coffee farmers in Gakenke to use pesticide, and 87% less likely than coffee farmers in Gakenke to use fertilizer.

Quote from key informant interview:

“I don’t know if the tree census is current [and I am] not sure what data we are using to say what districts are getting what [volume of inputs]. We have never had the ability to see what districts get what fertilizer...[it is] key to see that our tree census data is spot on, so people get what they are owed.”



government, private sector, and international partners, specialty coffee in Rwanda and Burundi has seen substantial growth over the past decade. Coffee provides millions of smallholder families in Africa’s Great Lakes region with their primary source of income. Despite this growth, the region’s coffee yields remain low compared to those of international competitors; these yields are further threatened by a “potato taste defect” (PTD) caused by rampant antestia bug infestations. Low productivity and PTD greatly reduce the potential incomes of the smallholder families that grow coffee in Rwanda and Burundi.

To address this issue, USAID supported the African Great Lakes Region Coffee Support Program (AGLC), a collaborative initiative led by Michigan State University (MSU) that integrates applied research, farmer capacity building, and policy engagement. The program’s goal is to dramatically reduce the effects of antestia/PTD and to raise farm-level productivity, both of which will improve smallholder farmer incomes and help to sustain the Africa Great Lakes region’s reputation for producing some of the highest quality coffees in the world. This program will forge enduring ties between the public, private, and university sectors, all of which are necessary for building

Background on AGLC:

sustainable regional capacity in research, extension/ outreach, and policy analysis and formulation, ultimately equipping policy makers with the research necessary to develop informed policies that address PTD and low coffee yields.