

Location:
IPAR Rwanda,
Kigali

May 24, 2016
8:30 AM



USAID
FROM THE AMERICAN PEOPLE



GLOBAL
KNOWLEDGE
INITIATIVE



USAID Feed the Future African Great Lakes Region Coffee Support Program (AGLC)

Policy Advocacy Roundtable on
Ensuring Access to Improved Inputs

Guiding Question: How might we ensure that farmers will have adequate and timely access to improved inputs (fertilizers & pesticides)?

Key Issues

1

Coffee farmers very rarely purchase fertilizers and pesticides. Rather they rely on CEPAR / NAEB as their source of inputs. However, lack of adequate distribution serves as a major barrier to productivity and to farmer investment in coffee.

2

CWSs often have little incentive to provide inputs to farmers who might then sell to another CWS or local trader at harvest time. What's more, some farmers resell inputs because they perceive immediate cash as better than hoping for additional income from more or higher quality cherry at harvest.

3

With limited access to inputs, farmers are not applying the proper doses of fertilizer and pesticide consistently to all fields or consistently throughout the year. Inconsistent and incorrect application can negatively impact productivity, profits and human and environmental safety.

The Challenge

Rwanda's strategic objectives for the coffee sector focus on increasing the productivity and quality of coffee harvested, as well as improving quality through processing by 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 and affordability present major barriers. Nearly all coffee farmers depend on the CEPAR / NAEB distributions of inputs and when the distributed amounts are not sufficient, they do not have access to and/or cannot afford an alternative. Only a very small percentage of farmers buy fertilizers and pesticides to supplement distributed inputs.

"Potato Taste Defect" (PTD), linked to damage caused by the antestia bug, threatens Rwanda's reputation as a producer of one of the world's best coffees. Controlling antestia is now a top priority for coffee stakeholders in Rwanda and other countries in the region. 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 human and environmental safety, as well as efficacy in the field.

Questions to consider: Are inputs equitably distributed to farmers outside of the fully-washed system? Although all farmers pay for inputs, do they all benefit from input distribution? How might we assess the cost-benefit of doubling or tripling the CEPAR / NAEB inputs distribution program?



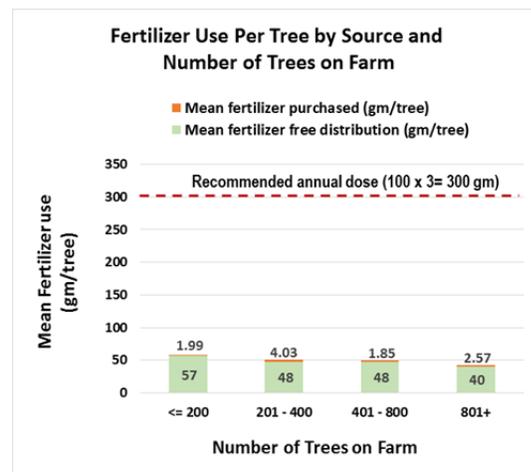
FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Productivity per Tree (Kg cherry) by Amount of Fertilizer Received through Free Distribution by Selected Determinants/Covariates

OLS Model: Productivity (Kg/Tree)	B	Std. Error	Beta	t	Sig.
Fertilizer per tree (distributed)	0.003	0.001	0.135	4.270	0.000 ***
Pesticide per tree (distributed)	1.108	0.327	0.106	3.390	0.001 ***
Income 2015 (not including coffee)	0.000	0.000	0.041	1.138	0.255
Total land owned	0.000	0.000	-0.027	-0.769	0.442
Age of HHH	0.001	0.003	0.014	0.404	0.686
Education of HHH	0.088	0.041	0.075	2.156	0.031 **
Active adults in HH	0.015	0.027	0.018	0.540	0.589
Gender of HHH	-0.203	0.110	-0.060	-1.839	0.066 *
Elevation of HH (m)	0.000	0.000	0.056	1.779	0.075 *
(Constant)	0.727	0.489		1.485	0.138

*Sig. at 10% level; **Sig. at 5% level; ***Sig. at 1% level



Key Data and Quotes:

Evidence from the Baseline and Qualitative Data

- Both a lack of input distribution and the high cost of inputs serve as major barriers to productivity and to farmer investment in coffee. The distribution of fertilizer is only 1/6th the recommended dose, while the distribution of pesticide is only 1/3rd the recommended dose. Even at small doses, the application of inputs shows a modest positive impact on coffee productivity.
- Due to insufficient input distribution, farmers tend to concentrate their inputs on one or two fields and leave others, often those farther from the *rugo*, with little or none. The consequences go beyond reduced productivity. For insecticides (e.g., Confidor), application in lower, insufficient doses can build resistance in pests, while applying a dose that is too high is costly and bad for the environment. Thus, timing and correct dosage is critical.
- During key informant interviews, one respondent noted: “Today there are many coffee washing stations (CWS) that still have debts owed to NAEB for fertilizers they were given to distribute to farmers as loans, and which farmers didn’t pay back. Farmers had to supply their coffee cherry to the CWS that gave them the fertilizers, but they didn’t do it since they knew that they were going to be given less money after taking off money for fertilizers. So farmers would sell their coffee cherry to other CWS or to the middlemen....”

- 71% of households in the baseline applied fertilizers, and 68.8% applied pesticides.
- Very few of the more distant fields receive inputs.
- Quote from key informant interview:

“The more production we get, the more inputs we buy. If farmers were using inputs the way they are supposed to be used, along with good practices in coffee farming, that would increase productivity and hence more inputs would be bought and the cycle [of productivity] would continue.” – Key Informant

Background on AGLC:

International experts and consumers alike recognize Rwandan and Burundian specialty coffees for their exquisite flavor. With support from 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 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.