Understanding Farm Profitability: Impact of Best Practices

Speaker 3:

Insights From 3 Years of Panel Data from Rwanda

Feed the Future Africa Great Lakes Coffee Support Program – Rwanda Data

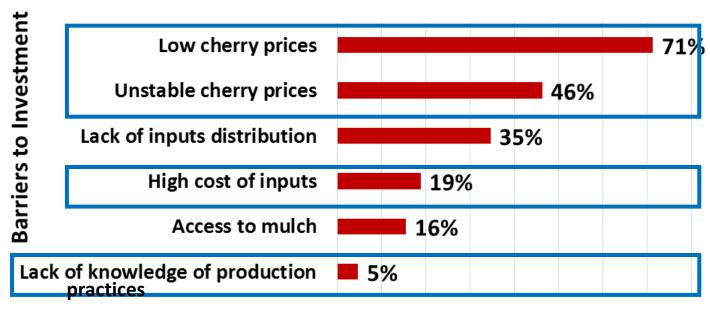
Ruth Ann Church, President, Artisan Coffee Imports
Representing

Michigan State University

What is the impact of best practices on farm profitability?



Farmers Say Cherry Price is #1 Barrier



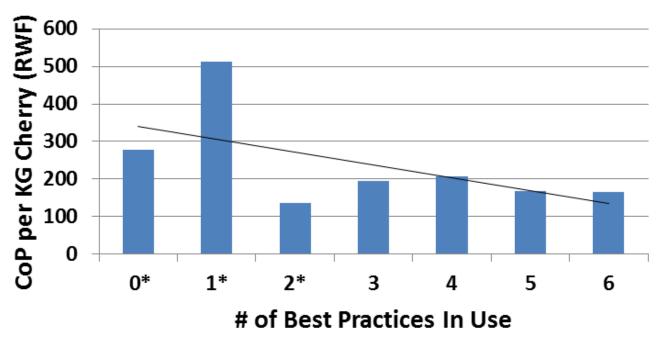
0% 10% 20% 30% 40% 50% 60% 70% 80%

Percent of Households Identifying Barrier

"Lack of training," or "cost of inputs" are not high priority barriers to investment.

Cost of Production And Best Practices

CoP/KG Improves with Best Practices

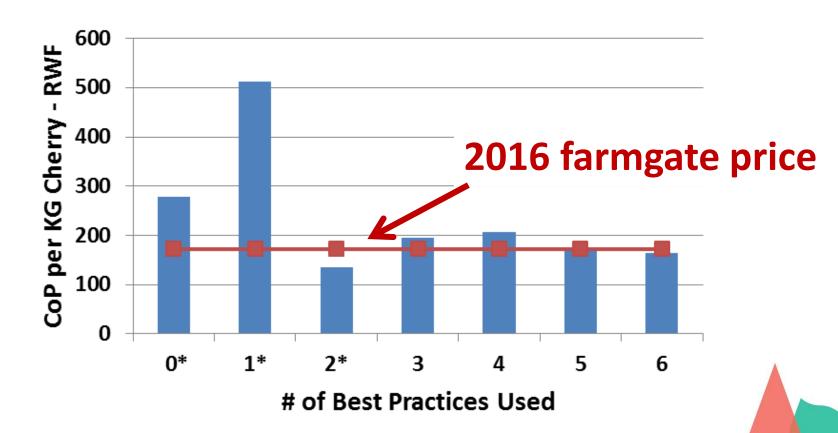


6 best practices: fertilizer application, pesticide application, mulching, pruning, weeding, and manure application



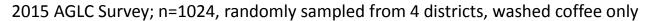
^{*} Negligible # of cases

Hypothesis: Low Prices Impact Farmer Motivation



^{*} Negligible # of cases

6 best practices: fertilizer application, pesticide application, mulching, pruning, weeding, and manure application



2017: Government Raises Floor Price

RWF p. Kg Cherry	2015	2016	2017
Avg. Gov't Floor Price	170	161	249
Avg. Cherry Price Paid	198	172 L	270

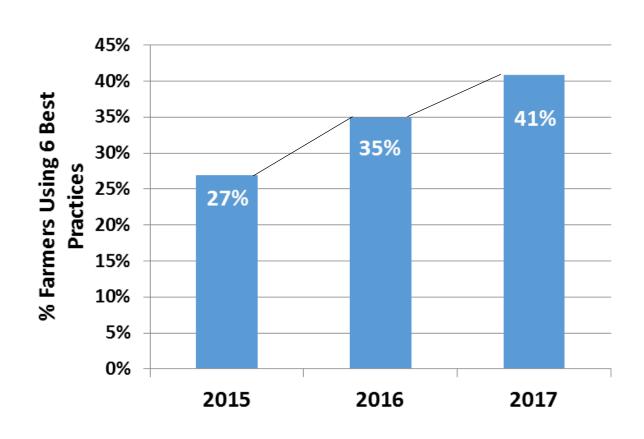
55% increase

Farmers say they need 300

Panel data: 2015 Survey, n=1024; 2016 survey, n=512; 2017 survey, n=512, washed coffee only



Higher Prices – Higher % of Farmers Applying Best Practices



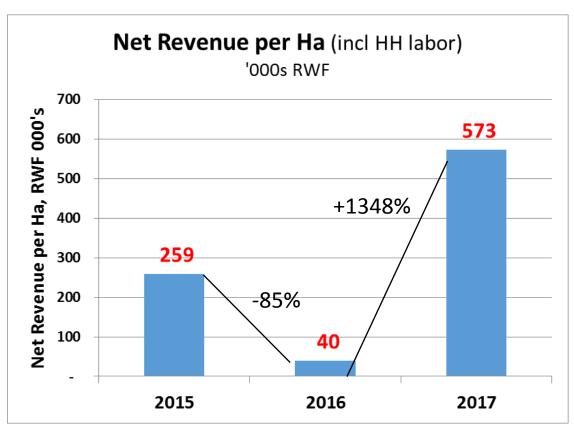
Avg. price paid, RWF p. Kg Cherry:

198

172

270

Higher Price Increases Profit (Net Revenue) per Ha.



Avg. price paid, RWF p. Kg Cherry:

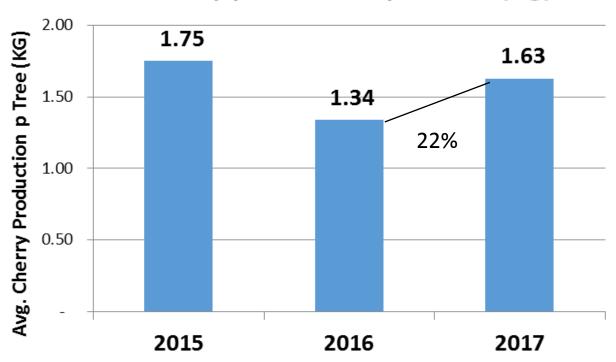
198 172 **270**

Costs include estimated value of unpaid labor.

Panel data: 2015 Survey, n=1024; 2016 survey, n=512; 2017 survey, n=512, washed coffee only

Yield – 22% increase

Mean cherry production per tree (Kg)



Avg. price paid, RWF p. Kg Cherry:

198

172

270

Price is primary driver of farmer investment.

Evidence from research: <u>sustainable prices</u> engage farmers' latent knowledge of best practices.

Thanks to the Feed the Future Africa Great Lakes Coffee (AGLC) Support Program











HANDOUTS AVAILABLE ON THE SCA EXPO APP!

Project Overview, Reports and Publications available on the MICHIGAN STATE UNIVERSITY website:

http://foodsecuritypolicy.msu.edu/countries/aglc_rwanda_burundi