

Researchers

Shilpa Aggarwal
India School of Business

Susan Godlonton
Williams College

Ammar Kawash
World Food Programme, Rwanda

Jonathan Robinson
University of California, Santa Cruz

Alan Spearot
University of California, Santa Cruz

Guanghong Xu
University of California, Santa Cruz

Staff

Aline Munyeshuli Uwimanzi
Senior Research Associate

Ave Maria Therese
Field Manager

Elie Mwemanani
Field Manager

Timeline

2020-2024

Study Status

In Progress

Study Type

Randomized Evaluation

Sample Size

180 maize cooperatives



August 2023
Agriculture | Results Brief

Linking Farming Cooperatives with a Processor to Improve Maize Production Quality in Rwanda



One of the main challenges keeping small farmers from tapping into commercial value chains is that their output often does not meet required quality standards. In Rwanda, The Farmers to Market Alliance (FtMA) connects cooperatives with a commercial food processor to improve maize processing after harvest and enable farmers to receive higher prices for their output. Researchers are conducting a randomized evaluation of FtMA to measure its impact on farmers' maize quality, sales, and investment in productive inputs. Preliminary results show significant participation in FtMA and a large increase in the number of contracts between cooperatives and the food processor. However, results do not suggest an impact on farmers' sales and prices received.

RESEARCHERS

Shilpa Aggarwal, Susan Goddard, Ameer Kassar, Jonathan Robinson, Alan Speroff, and Guanghong Xu

PARTNERS

Ministry of Agriculture and Animal Resources, World Food Programme Rwanda, BA 30 (Bill & Melinda Gates Foundation), ATR, IFPRI, University of California, Santa Cruz, Williams College, Indian School Business

COUNTRY

Rwanda

SAMPLE

180 maize cooperatives

TOPICS

Access to Markets, Human Capital & Skills, Technology Adoption, Women & Girls

STUDY TYPE

Randomized Evaluation

IPA STAFF

Aline Umlenz, Ana Maria Thomas, Sila Mwanuzi

TIMELINE

2020-2024

Project Brief

Connecting Smallholder Farmers to Agricultural Value Chains in Rwanda



In This Image

Dried maize cobs hanging © 2017 Sarah de Tournemire

In collaboration with the World Food Programme and the Rwandan Ministry of Agriculture, researchers are evaluating the impact of connecting maize cooperatives with commercial food processors on farmers' output of high-quality maize, sales, and investment in productive inputs.

One way that farmers can improve their income and livelihoods is to transition from subsistence farming to market-driven commercial agriculture in which output is sold into value chains.¹ However, their production often falls short of required quality standards. In Rwanda, several factors — such as the timing of the rainy season — prevents farmers from properly drying maize after harvest, leading to contamination and reduced maize quality. Many premium food processors thus tend to reject a large share of what farmers bring them, effectively shutting farmers out of value chains and discouraging them from investing in quality inputs.²

To improve and incentivize quality maize production, the World Food Programme's Farm to Market Alliance (FtMA) connects farming cooperatives in Rwanda to commercial food processors. These processors buy farmers' entire output immediately after harvest and have industrial facilities that can dry maize quickly, eliminating the need for farmers to dry maize

and reducing the likelihood of post-harvest contamination. Through FtMA, farmers can receive higher and guaranteed prices for their maize production, leading to increased revenue and profits. Consequently, farmers may expand their land holdings and invest in productivity-enhancing inputs.

Researchers partnered with the Rwandan Ministry of Agriculture and the World Food Programme to conduct a randomized evaluation of the FtMA program. They are measuring the impact of FtMA on farmers' output of high-quality maize, sales, and input investments. World Food Programme representatives visited 90 cooperatives to explain the FtMA program and encouraged them to secure a buyer contract with a food processor before the next harvest. Another 90 cooperatives served as a comparison group without visits from World Food Programme representatives.

Results will be available later in 2023.

Sources

¹ Liverpool-Tasie, Lenis Saweda O., Ayala Wineman, Sarah Young, Justice Tambo, Carolina Vargas, Thomas Reardon, Guignonan Serge Adjognon et al. "A scoping review of market links between value chain actors and small-scale producers in developing regions." *Nature Sustainability* 3, no. 10 (2020): 799-808.

² World Food Programme, "Promoting Health and Food Security in Rwanda by Reducing Aflatoxin in Crops," World Food Programme, November 19, 2021, <https://www.wfp.org/news/promoting-health-and-food-security-rwanda-reducing-aflatoxin-crops>

Research Partner



B A S I S
MRR Innovation Lab

Implementing Partners



World Food Programme



Rwandan Ministry of Agriculture and Animal Resources

Funding Partners



USAID



J-PAL