

Post-harvest grain losses in the developing world lead to lower incomes and food insecurity among smallholder farmers. This problem is particularly acute in Sub-Saharan Africa, where post-harvest losses are estimated at US \$1.6 billion per year, or about 13.5 percent of the total value of grain production. Insufficient on-farm storage often forces farmers to sell their crops right after harvest, causing a surge in supply that lowers prices for their maize. While private sector solutions to post-harvest losses exist, they are often too expensive or not accessible to smallholder farmers across the developing world.

The AgResults Kenya On-Farm Storage Pilot is a fouryear, US \$7.75 million pull mechanism designed to incentivize private sector companies to develop, market, and sell new, or redesigned, on-farm storage devices to smallholder farmers. The pull mechanism is technology, marketing, and distribution agnostic. Instead, companies are encouraged to consider cost and storage effectiveness for smallholder farmers, and the economic benefit to smallholder farmers and beyond.

The pilot targets two regions in Kenya: 1) The Rift Valley where 60% of the country's maize is produced; and 2) The Eastern Region, the third largest maize-producing region in the country but experiences losses due to the large grain borer. The large grain borer is a pest that infests in grains, particularly maize, and is heavily present in the Eastern Region of Kenya.

The pilot is managed by Agribusiness Systems International (ASI).

ANTICIPATED IMPACT



Reach approximately 480,000 smallholder farmers and generate at least 172,000 MT of adjusted storage capacity for grain in the Rift Valley and Eastern Region.



Generate US \$14 million in smallholder benefits from the storage of grain, sale of crops in higherprice market periods, and the reduced need to buy grain for household consumption



Enable private sector companies to test products and marketing strategies that can be used for distribution of storage solutions.

RESULTS TO-DATE



In the third year of operation, the Kenya pilot has nine companies working in the Rift Valley and the Eastern Province.



Participating companies have sold a combined total of 704,766 devices.



Smallholder farmers now have an increased capacity to store 146,436 MT of maize.

KENYA ON-FARM STORAGE PILOT PRIZE DESIGN

The pull mechanism is comprised of performance-based grants provided to companies based on verified sales of approved storage devices that meet the sales threshold of 21,000 MT. The sales threshold is calculated based on the useful life of a device. The number of devices are adjusted to reflect the number of smallholder farmers in each region.

Companies are accepted into the pilot: US \$100 Grant

There are two Rift Valley prizes: the mid-point and end-point prizes. Companies who recieve the mid-point prize are able to reinvest their grants into their business models and further grow their business.



End-Point Prize:

Companies that reach the 21,000 MT threshold of any single storage device type will share a US \$1 million, proportionally distributed based on total sales to smallholder farmers.

End-Point Prize:

Companies that reach the 21,000 MT threshold of any single storage device type that is LGB proof will share US \$3 million proportionally distributed based on total sales to smallholder farmers

There is one Eastern Region Prize. Due to the presence of large grain borers, companies need additional time for research and development prior launching their products. Because of this additional time needed, the Eastern Region prize will be distributed at the end of the pilot.

