



## **Pay-for-Results Incentive Programs for Agriculture: Incentivizing Affordable On-Farm Storage for Smallholder Farmers in Kenya**

Scale Up Conference – Innovations in Agriculture: Scaling Up to Reach Millions  
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**\$122 million** multi-donor initiative using pay-for-results prizes to incentivize and reward high impact agricultural innovations that improve outcomes in:



**Why?** To test pay-for-results (PfR) projects to incentivize the private sector to overcome market barriers by investing in innovation.

**How?** AgResults promotes the adoption and scaling of new technologies by the private sector to benefit smallholder farmers through the following process:



# Theory of Change: Increasing Adoption of On-Farm Storage

A pay-for-results (PfR) prize incentivizes the private sector to increase the production and sales of on-farm storage devices to smallholder farmers in Kenya to improve food security and livelihoods outcomes.

## Theory of Change

### Outputs

If an incentive is offered for the private sector to increase provision of appropriate on-farm storage devices to smallholder farmer...

Then the private sector will invest in innovative marketing and distribution channels to deliver on-farm storage solutions to smallholder farmer...

Due to increased private sector engagement, smallholder farmer increase purchases of on-farm storage solutions.

#### Key Outcome Indicators:

- % Change in smallholder farmer storage habits and methodology
- Smallholder farmer attitude and understand of new technologies and their perceptions about on-farm storage devices
- Performance of different on-farm storage solutions in reducing post-harvest losses and enhancing the quality of stored grain.

### Outcomes

**Primary:** Increased adoption of effective on-farm storage solutions will increase maize buffer stocks and lead to increased food security.

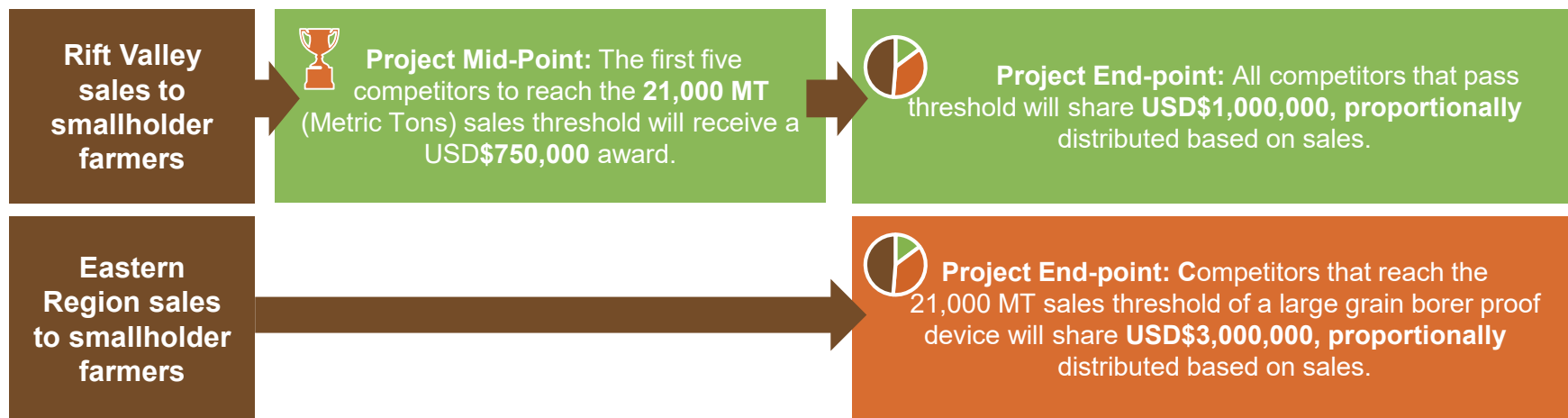
Increased adoption of on-farm storage products will lead to reduced long-term retail prices through economies of scale, further increasing demand.

New approaches to addressing post-harvest losses through private sector engagement may provide a business model applicable to delivery of other smallholder products and services.

# Kenya On-Farm Storage Project: Reduce post-harvest maize and grain losses through development, marketing, and distribution of on-farm storage solutions to SHFs

## Kenya Project PfR Incentive Structure

The project is regionally focused to address the presence of Large Grain Borers (LGB) in the Eastern Region.



Through a USD\$7.75 million award, the project aimed to:

- Increase the economic welfare of smallholder farmers by improving access to affordable storage devices
- Catalyze a sustainable market for smallholder farmer storage devices in Kenya
- Test an innovative model of engaging the private sector to serve smallholder needs, with potential future applicability to the delivery of other goods and services to smallholder farmers
- Incentivize the creation of new technologies and adapting existing technologies in a technologically agnostic framework
- Provide additional layer of data and analysis on development outcomes, led by External Evaluator Abt Associates, adding rigorous evaluation to project process and findings
- Document and analyze lessons learned to shape future pay-for-results project based on the outcomes of all the AgResults projects, led by Secretariat and Abt

**\$7.75M**

May 2018 sales: 1.2 million bags  
equivalent to 334,356 MT of storage

The project attracted significant participation from local, regional, and international private sector actors offering varying storage solutions, from plastic bags to metal silos.

Competitors	Size (kg)	Storage Product
Bell	100	PICS bag – triple layer polypropylene hermetic bag
Ekima	50 - 540	Metal silos – custom built galvanized metal silos
A to Z	100	AgroZ bag – multilayer co-extruded liner bag
AFMA / GrainPro Consortium	90 & 250	SuperGrain Bags and Cocoon – three multi-layered PE with barrier layer hermetic bags
Elite Innovations	90 & 100	ELITE bags – one double layer and two triple layer polypropylene hermetic bags
Post Harvest Africa	100	Grainz bag – triple layer polypropylene hermetic bag
CBF / Vestergaard	100	ZeroFly® bag – multilayer co-extruded liner bag with incorporated insecticide
KPMC	60 & 90	Storage enhancing bags – triple layer polypropylene hermetic bag (inactive)
Kentainers	380	GrainSilo – hermetic plastic silo

**Metal Silos**



**Plastic Tanks**



**Storage Bags**



# Competitors used a variety of distribution channels to get their post-harvest storage solutions to smallholder consumers.

## Distribution Channel Overviews

### Distributors

Large aggregators of various agro-inputs in the big urban centers sell devices to downstream smaller distributors (agro-dealers or agro-vets) in rural areas, and sometimes to the farmer. Distributors often require high profit margins from competitors, up to 25%.

### Direct Sales to Farmers

This entails bypassing all the distribution chain intermediaries and selling directly to the end user. Direct selling is used by start-ups and smaller companies; however, for bigger companies, this method is rarely cost-effective or feasible.

### Agro-dealers

Agro-dealers, or agro-vets, are smaller Distributors spread across the counties. Agro-dealers are the last point of sale as they are closest to the farmer. There are over 10,000 agro-dealers in Kenya.

### Sales Representatives/Field Staff

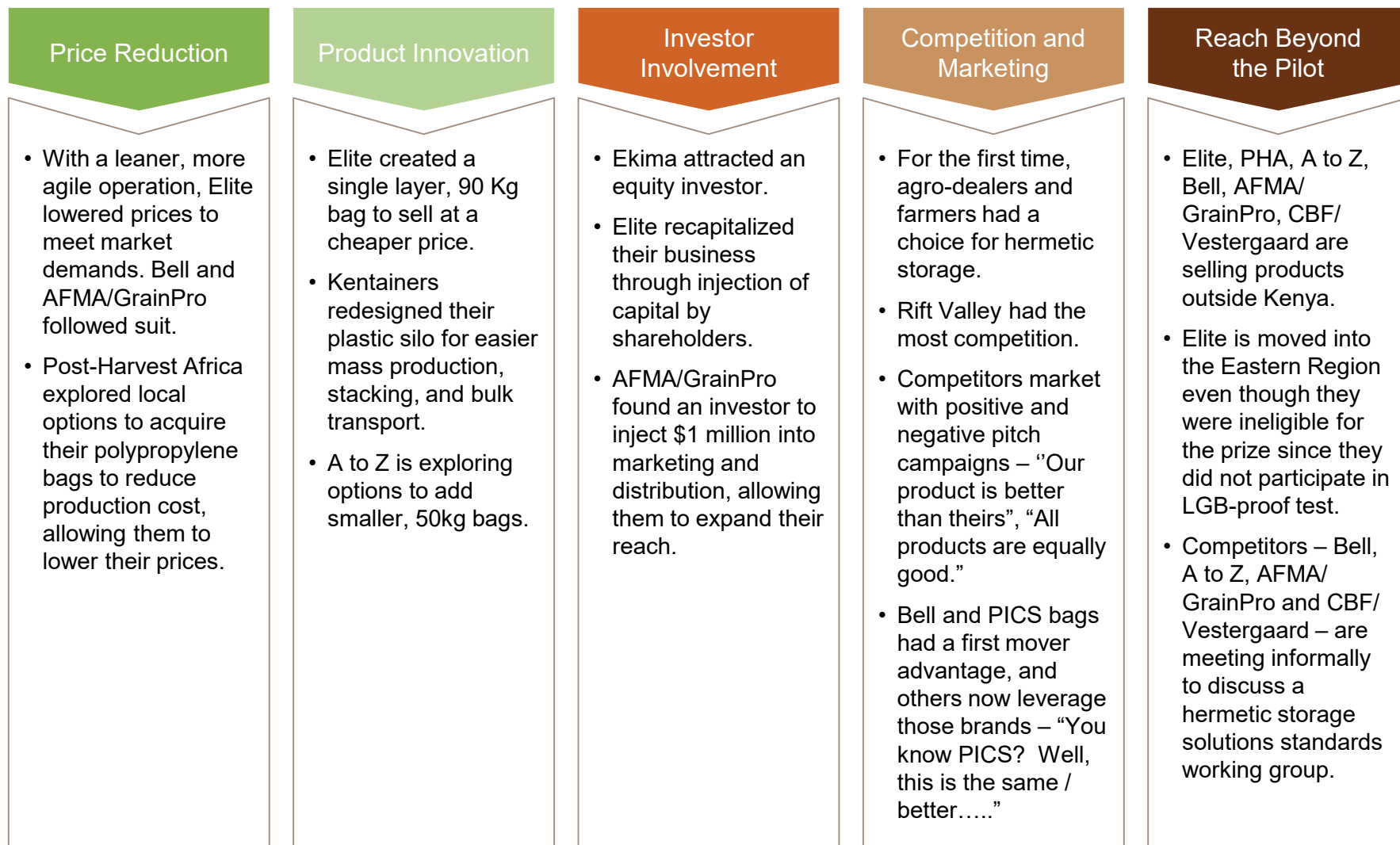
These are competitor-hired staff who act as proxy “Distributors.” They mainly liaise with agro-dealers to assess demand and stock levels in the field and ensure agro-dealers have ample supply of devices. In addition, they carry out farmer and agro-dealer sensitization and trainings.

### Commercial Villages

One competitor uses a “Commercial Villages” model, similar to a cooperative, to sell devices directly to farmers to access a larger number of smallholder farmers at once.



# The incentive- and solution-agnostic approach empowered competitors to innovate and position themselves for success during and after the project.





**Thank you!**

**Questions/Comments?**