AgResults
INNOVATION IN RESEARCH AND DELIVERY

AgResults Lessons Learned Series #8

March 2019

The Kenya On-Farm Storage Pay-for-Results Contest: Competitor Responses and Perspectives

Key Takeaways

- Kenya On-Farm Storage Challenge Project (2014-2018) used mid-point and end-point prizes to incentivize sales of hermetic storage devices to smallholder farmers.
- AgResults interviewed 8 competitors (A to Z Textile Mills Ltd., AFMA/GrainPro, Bell Industries, CBF/Vestergaard, Ekima, Elite Innovations Ltd., Kentainers, and Post Harvest Africa) to gather their perspectives on participating in the Kenya project.
- Successful competitors leveraged existing finance, developed new distribution channels, and diversified portfolios to reach smallholder farmers and sell hermetic devices.
- Unsuccessful competitors struggled with unattainable sales targets, infrastructure costs, and skepticism.

Introduction

The AgResults Kenya On-Farm Storage Challenge Project ("Project") was a Pay-for-Results (PfR) project under the AgResults Initiative. The Project incentivized private sector competitors ("Competitors") to develop, market, and sell on-farm storage devices to smallholder farmers (SHFs) in the Rift Valley and Eastern Regions of Kenya over a three-year period. These hermetic devices, such as bags, as well as plastic and metal silos, helped SHFs reduce post-harvest losses. If competitors sold at least 21,000 metric tons (MT) of hermetic devices, they received a monetary prize from the Project. In this way, the Kenyan private sector was encouraged to strengthen SHFs' food security and create a sustainable market for such devices.

In March 2018, AgResults held the mid-point award ceremony and met with eight Competitors to learn more about their experience participating in the Project. Out of these eight companies, A to Z Textiles Limited, Bell Industries, and Elite Innovations Limited achieved the sales targets and won prizes. Five were ultimately unsuccessful. Of those five, Post Harvest Africa and Ekima, officially joined but never sold any devices, and the other three, AFMA/GrainPro, CBF/Vestergaard, and Kentainers, sold on-farm storage devices but fell short of the prize thresholds. Among other things, the Competitors reflected on how they set up new systems and established new distribution networks. The Competitors were also interviewed on how the incentive had impacted their business models and the investments they made to reach the project's target. What insights arose from this activity?

Throughout the Project, these companies invested in new distribution networks and new partnerships, some significantly changing their business models to reach smallholder farmers, regardless of their size and financial capacity. Despite the low number of successful Competitors, the Project still motivated broad private

sector participation, enabling these companies to enter into a nascent market and lay the groundwork to sell hermetic devices without the benefit of an incentive. By analyzing the full spectrum of factors involved in Competitors' successes and obstacles — from access to finance to distribution networks to prize payment timing — we can understand what affects PfR efforts to increase affordable on-farm storage in Kenya.

What Helped Some Competitors Succeed?

To achieve the thresholds, the successful companies, A to Z Textiles Limited, Bell Industries, and Elite Innovations Limited, relied on three common factors: access to finance, development of distribution networks, and diverse portfolios.

Investments in Access to Finance

To qualify for the incentive, Competitors had to sell on-farm storage devices tailored to smallholder farmers' specific needs. To reach this group, the three successful competitors made significant investments that depended on access to finance. A to Z Textile Mills Ltd. and Bell Industries leveraged internal financing, while Elite Innovations Ltd. used the prize to attract and leverage outside investments. To receive a prize, Competitors invested heavily in targeted marketing, improved machinery, additional labor, transportation, imports, and distribution systems. A to Z Textile Mills Ltd. and Bell Industries also invested in new machinery and technological improvements to enhance the production process as well as the outputs.

Establishment of Distribution Networks

Building new distribution networks to reach smallholder farmers was an important investment among successful competitors. Many smallholder farmers in Kenya live far from major cities, and they will only travel up to 5km to purchase agricultural inputs. In contrast, at the start of the contest, most Competitors only worked with big distributors at the wholesale level. By having to sell to smallholder farmers, Competitors had to expand their distribution channels to reach all the way down to the agro-dealers at the village level. Cultivating these networks required investing in additional staff, establishing efficient delivery systems, and directly marketing to the agro-dealers and farmers. One Competitor, Elite Innovations, even employed sales and marketing staff from each county to better connect with consumers, local cooperatives, and farmer groups to increase access to smallholders.

Portfolio Diversification and Risk

For A to Z Textiles and Bell Industries, on-farm storage only makes up a small percentage of their overall sales portfolio. With these diversified portfolios, their business models were already set up to allow and even encourage risk-taking in a new market. This meant they could invest in expanding their on-farm storage activities and try to qualify for the prize and the rest of the company could absorb the cost if they were unsuccessful. The third successful competitor, Elite Innovations, did not have a diverse portfolio at the start of the project but leveraged the financing they received to further expand and diversify their portfolio, positioning themselves to take strategic risks in the future.

Barriers to Success and Participation: Unattainable Sales Targets, Skepticism, New Markets, and Policy Roadblocks

Myriad factors led to Competitors failing to hit the sales threshold to qualify for the prize. Some participants expressed that the sales targets were too high and that they initially had not believed they would receive a prize even if they hit the target, others explained that the costs to establish a market in a new region would require them to move their operations and stop working in their established markets, a factor that ultimately deterred them from participating. The interviews also highlighted political factors that arose as roadblocks.

Unattainable Sales Targets

One common theme emerged during the meetings with unsuccessful competitors: They were unable to mobilize distribution networks necessary to reach smallholder farmers and attain the sales targets. Setting up networks to reach smallholder farmers was a key element for success, and even with access to finance, these companies needed more time to expand their reach throughout the target area. Some could not achieve the sales thresholds without access to finance to scale their operations. Others identified funding sources, but their investments arrived too late to reach the target. The Project design did not account for companies that joined late and the time required to access finance, make investments, and set up the necessary networks. Identifying funding sources takes time, and unless Competitors had that immediate access to finance, they were up against an insurmountable hurdle.

> "In April, we will receive $1 million from our shareholders to invest in our distribution networks and marketing which is why we are asking to extend the sales period to give us enough time to reach the sales threshold."
>
> **—AFMA/GrainPro**

Skepticism around Prizes

Most Competitors did not believe in the prize until the mid-point prize was distributed in March 2018 (This prize was delayed due to external factors reducing the time between the mid-point and end-of-project prize). This award ceremony galvanized Competitors to participate, but there remained only two months before the end of the sales period. Without seeing the distribution of the prize, Competitors and investors hesitated to invest, delaying efforts to expand networks and boost sales.

The PfR structure was new for all Competitors, and many of them needed to see the actual award before they genuinely believed in it and committed resources. Once the mid-point award ceremony was set and the reality of a prize kicked in, AFMA attracted investors that would have allowed them to expand their networks and increase sales. Although their funding arrived too late for the competition, they recognized smallholder farmers as a viable market and planned to continue investing in on-farm storage device sales to this group.

> "It was exciting to see the mid-point award ceremony last night and we are excited to work toward the end-of-project prize if we had more time."
>
> **—CBF/Vestergaard**

Infrastructural Costs to Establish New Market

A third set of Competitors joined the project but never made any investments or sales. These companies were interested but were unable to participate because they operated outside the targeted regions. Both Ekima and Post Harvest Africa said that they were interested in the prize but did not have the financial capacity to invest in a new region with no prior presence. Post Harvest Africa knew that if they focused on the project regions, they would not have the capital to continue working in their established markets. Transitioning to a new region was simply too great of a risk. On the other hand, Ekima tried to identify investors to set up production sites in the project regions but never received the necessary funding.

Policy Roadblocks

Several Competitors expressed frustration with government policies that hindered their success. Similar findings have emerged across other AgResults projects, underlining how political roadblocks can impact success in PfR projects.

Kenya Cereal Enhancement Program: Throughout the project, the Kenyan government implemented the Kenya Cereal Enhancement Program (KCEP), which promoted government approved on-farm storage devices to smallholder farmers. Only a few Competitors submitted their KCEP program applications on time, so as a result, those eligible devices with the government's seal of approval became more appealing to farmers. Although these farmers had a higher awareness of the KCEP-approved options as a result, it demoralized those whose devices were not eligible through KCEP. However, since the Project's sales period ended, AFMA/GrainPro, which had

> “Not being included in the KCEP program demoralized our staff, they felt they would not be able to sell enough devices because farmers trusted and purchased the government approved and promoted bags.”
>
> **—AFMA/GrainPro**

been greatly impacted by their lack of participation in the KCEP program, has been approved and is now eligible to sell their devices at KCEP retailers.

Government Ban on Plastics: The government’s plastics ban also impacted Competitors selling the storage bags, delaying participation until there was clarity on the specific plastics banned under this policy as well as the process to apply for an exemption. Post Harvest Africa, who imported their plastic inner liner, was particularly affected by having to wait to learn about the exemption procedure. Other companies decided to sell their on-farm storage bag with the plastic inner liner as they waited for clarification.

Conclusion

From discussions with Competitors, we learned which factors enabled success and which prevented others from succeeding. Although only three Competitors officially received the prize, the Project exposed all participating companies to a new large potential market. The strategic approaches to distribution networks and marketing and outreach that emerged to target smallholder farmers clearly indicate that the private sector sees this group as a viable market. However, the Project’s high sales targets suggest that the project’s design ended up favoring companies who could readily access finance and invest in adapting their business model and distribution structures.

Regardless, all Competitors increased farmer awareness of hermetic on-farm storage devices and in total sold more than 1.3 million devices — reaching more than 329,000 smallholder farmers and leveraging more than US$2.8million in investments. Over the three years of the project, the Competitors laid critical groundwork, positioning them not only to continue selling hermetic devices but also to expand throughout Kenya and East Africa.

About AgResults

AgResults is a $147 million collaborative initiative between the governments of Australia, Canada, the United Kingdom, the United States, and the Bill & Melinda Gates Foundation to incentivize the private sector to overcome market barriers and develop solutions to food security and agricultural challenges that disproportionately affect people living in poverty. The initiative designs and implements agriculture-focused prize competitions, also referred to as pay-for-results or pull mechanisms, which are innovative development finance programs that incentivize the private sector to work towards a defined goal to receive a monetary award.

About AgResults Lessons Learned Series

One of the primary objectives of AgResults is to better understand how well pay-for-results prize competitions work to overcome market failures in agricultural development. The lessons learned series explores AgResults’ experience designing and implementing agricultural-focused pay-for-results prize competitions, with the goal of providing key lessons and recommendations that development practitioners should take into account when designing similar programs.

AgResults
INNOVATION IN RESEARCH AND DELIVERY

AgResults is a Partnership Between:

Australian Government Department of Foreign Affairs and Trade | Canada | Bill & Melinda Gates foundation | UKaid from the British people | USAID From the American People | World Bank Group