



Seeds E-voucher: An Approach to Inclusive Agri-Market Development

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Mercy Corps' Growth, Health, and Governance Program

Mercy Corps is currently implementing the USAID Office of Food for Peace (FFP)-funded Growth, Health, and Governance (GHG) Program located in the Karamoja region of northeast Uganda. Karamoja is overcoming years of social, political, and economic isolation as a result of cross-border and intra-ethnic violence. The violence contributed to the displacement of communities and loss of assets leading to chronic levels of poverty and malnutrition.



Karamoja has the worst performing human development indices in Uganda, with an estimated 82 percent of the population living in absolute poverty compared to the national average of 31 percent, and malnutrition levels estimated at 11.6 percent compared to the national average of 6 percent.¹ Past conflicts, poor agronomic practices and inputs, and low levels of rainfall in the region contribute to increased incidences of food insecurity.

In past seasons, Karamojong farmers were not willing to purchase improved seeds due to their higher costs and a lack of understanding of the increased benefits from these products. This limited demand hampered the development of seed supply markets, contributing to chronically poor harvests and food insecurity.

¹ Office of the Prime Minister. May 2009. Karamoja Action Plan for Food Security Report (2009-2014). http://www.fao.org/fileadmin/user_upload/drought/docs/ProgrammeDocumentKaramoja.pdf.

To address the limited supply and demand for improved seeds, Mercy Corps is implementing a seed e-voucher activity that enables farmers to access high yielding and drought tolerant seed varieties through certified national seed suppliers, agro-dealers, and agents at the community level. The intervention allows businesses along the value chain to bring products and services to the most disadvantaged segments of the population in Karamoja through a subsidized voucher. The voucher utilizes mobile money technology to alleviate working capital constraints and to facilitate long-term business relationships between agro-dealers in Karamoja and reputable producers of high quality input seeds at the national level.

To overcome future constraints around upfront input costs, GHG is working with farmers to plan and save for anticipated planting costs in future seasons, now that they understand the benefit of these improved inputs.



E-voucher Technology



Seed e-voucher advertisement

In 2015, GHG implemented a paper voucher intervention for seeds. Feedback from the intervention indicated that this system was time consuming and costly for agro-dealers as they had to travel to the GHG office to redeem the voucher. In addition, farmer participation was lower than expected. In response to this, in 2016, in partnership with Innovate More Ltd² and Mercy Corps' AgriFin Mobile Program,³ Mercy Corps distributed e-vouchers through youth and mother care groups over an Unstructured Supplementary Service Data (USSD)⁴-supported platform through the MTN-mobile network operator. Each voucher was similar to an airtime scratch card, commonly used in Uganda. One voucher provided a 50 percent subsidy with a monetary value of 3,250 Ugandan Shillings (equivalent to \$1 USD). The farmer was required to pay an equal amount in order to get a total of 6,500 Shillings worth of seed. The combined total was enough to buy approximately 1 kilogram of improved seed, ranging from sorghum, maize, beans, vegetables, or groundnuts. The farmer presented the e-voucher to the agro-dealer who would then scratch the card and enter the secured voucher number on their phone with the details of the purchase.

Mercy Corps trained the agro-dealers on how to use the mobile platform and enter information into the data menu. Additionally, the agro-dealers were required to utilize their networks to set up community-based agents in order to limit the distances between farmers and seed outlets. This created an expanded distribution network of 35 retailers. In addition, GHG designed a partial credit supply

² More information about Innovate More (U) Ltd is available here: www.uginnovate.com

³ For more information about AgriFin Mobile, please visit: www.mercycorps.org/research-resources/agri-fin-mobile

⁴ Unstructured Supplementary Service Data (USSD) is a communication supporting technology that enables real time messaging services for both ag-dealers and their agents. The GHG Program staff were able to transact and redeem ag-input vouchers using this technology.

guarantee plan with the seed companies, requiring the agro-dealers to deposit only 10 percent of total stock cost to mitigate working capital constraints identified in previous season.

The e-vouchers were not tied to any particular type of improved seed, which gave farmers the opportunity to buy the seeds they wanted from the retailers. This also encouraged the agro-dealers to order and stock seed based on customer demand. In addition, the e-voucher technology reduced the processing time and eased the data capturing process for the agro-dealers. Money was transferred to the agro-dealers as soon as the agro-dealer entered the voucher into the mobile system, allowing agro-dealers to pay their suppliers with mobile money and quickly re-stock seed based on the level of demand.

Results and Impact

In 2016, more than 18,000 e-vouchers were redeemed (including 10,453 by women), compared to approximately 3,000 paper vouchers in 2015.

Farmers bought 13,622 kilograms of legumes, mainly groundnuts, beans, and cowpeas, and 2,474 kilograms of cereal, mainly maize and sorghum. In addition to creating a market supply system for high quality seeds, GHG hired community-level agricultural extension service providers to deliver training and support to build farmers' skills and capacity to maximize their productivity.

GHG staff collected the e-voucher purchasing data an electronic dashboard, which was updated each time a voucher was redeemed. This allowed program staff to monitor buying patterns, including which days farmers preferred to buy seeds and what type of seeds were purchased. In addition, the data indicated if any regions were having trouble redeeming their e-vouchers, which allowed staff to respond quickly to any complications.

Lessons Learned

Mercy Corps learned several lessons through the implementation of the seed e-vouchers. The benefits of using seed e-vouchers include:

- **Scalability**—the intervention reached significantly more farmers than the paper vouchers, indicating it is highly scalable.
- **Market actors**—the agro-dealers were in a better position to understand and respond to customer demand than the NGOs because of the direct business-to-customer relationship.



Agro-dealers learning how to use the mobile voucher system.

Photo Credit: Evelyn Namara, Innovate More Ltd.

- **Market facilitation**—the unrestricted e-vouchers facilitated markets more than vouchers that specify a seed type and quantity. Giving farmers the ability to choose their seeds allowed agro-dealers to respond by stocking preferred improved seeds within the same planting season, increasing efficiency in the market.
- **Mobile money**—the improved cash flow allowed agro-dealers to access their revenue quickly in order to restock their supply. Agro-dealers also repaid seed companies in mobile money, decreasing their payment period and improving the relationship with seed companies.
- **Seed quality**—compared to previous seasons when the seed companies provided seeds directly to NGOs to distribute, the e-vouchers incentivized seed companies to provide higher quality seeds to the agro-dealers because they had a more direct link to their customer.
- **Farmer capacity strengthening**—the farmers learned the costs and benefits of improved seeds. The e-vouchers allowed GHG staff to explain how the benefits of using improved seeds exceeded the increased costs.
- **Project monitoring**—the real time dashboard highlighted implementation problems and captured results quickly. This improved the monitoring of the project and allowed quick adjustments to be made on the ground.

Improvements needed for the seed e-voucher activity:

- Data menus must be extremely simple and brief because agro-dealers do not have the capacity to complete complicated data menus on their phones.
- In certain locations, the agro-agents were limited by the lack of mobile connection—this had an impact on the redemptions. A heavy workload was then transferred to the more centrally-located agro-dealers who faced their own labor limitations, sometimes slowing the voucher redemption and transfer of money funds.

The e-voucher demonstrated that the most vulnerable farmers in Karamoja are willing to invest in improved products and services if transaction costs and risks are subsidized until benefits are demonstrated. Future seasons will indicate whether farmers now value the higher yields of the improved seed varieties despite their higher cost.

The TOPS Program

The Technical and Operational Performance Support (TOPS) Program is the USAID/Food for Peace-funded learning and knowledge management initiative, bringing the highest quality information, knowledge, and promising practices in food assistance programming to implementers and donors around the world to ensure more communities and households benefit from the U.S. Government's investments to fight global hunger.

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