

Can innovation improve post harvest handling in Uganda?

By Joshua Kato

Jane Bayitanunga, a mother of six, is a small-holder farmer in Iganga district. She mostly grows maize and beans, which she uses to feed her family and then sells the surplus. Like many farmers in the area, Bayitanunga has been losing a significant portion of her harvest through bad storage practices.

"We took a lot of caution, harvesting our grain using baskets and tarpaulins to maintain the quality," she explained.

"But it was a waste of time as we had no where to store the produce. It was later attacked by weevils and rats. If I harvested five bags, one or two would be ruined after storing for a month."

Bayitanunga is not alone. Almost 40% of agricultural produce in the Sub-Saharan Africa is lost every year due to inadequate post-harvest management and household storage. In Uganda, WFP and its partners are combining efforts to reduce such losses through a post-harvest loss reduction initiative. Given the fact that the profit margin on cereals is less than 20% of the gross earnings, this means many farmers are making losses due to poor post-harvest handling.

But according to Simon Costa, an official from UN World Food Programme, these losses can easily be stopped with the application of simple innovations. "This system has been implemented effectively elsewhere in the world and I am sure it can be done here in Uganda," Costa says.

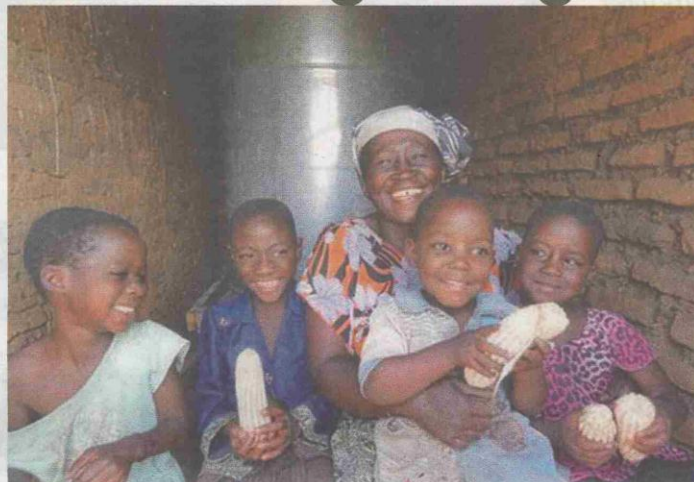
The air-tight cereals storage facilities can store all kinds of grains including maize, sorghum, millet and beans.

Is this a saviour?

Thanks to the post-harvest loss minimization programme funded by WFP, Bayitanunga is one of over 16,600 low income farmers to realize more from their labour through improved post-harvest practices and storage equipment. The programme, although started with just 400 farmers, has now spread to Acholi, Lango and most of eastern Uganda.

According to experts, to produce high quality grain, it is essential that farming households handle their produce after harvest in a proper and timely manner. The programme not only trains farmers on how to do this, but is also providing household storage and handling equipment on a cost-sharing basis.

According to Costa, following a trial last year, where the improved



A mother and her children in front of a metallic silo

"We are extremely happy that the silos have been introduced to us,"

Bayitanunga

storage equipment registered a 98% reduction in losses, WFP increased the programme this year to assist over 16,600 farmers (mostly women) throughout Uganda. The target is to reach 17,000 farmers.

WFP is promoting the most successful options from the trial – the metallic and plastic silos and the Super Grain bags – to enable households store food for family consumption and for sale.

The project is aligned with a joint post-harvest loss minimisation programme by the Rome-based agencies, namely WFP, the Food and Agriculture Organisation and the International Fund for Agricultural



Drying maize on a tarpaulin donated by WFP

Development. The facilities come in different sizes and costs. The smallest one, with a capacity to store 100kg, goes for around sh10,000.

This is largely a normal storage bag whose inside is lined with a water tight polythene bag. The second is a modified PVC water tank, with the capacity to store 250kgs.

It costs sh140,000, while the last is the metallic silo, with a capacity to store 540kgs-1,200kgs. It goes for between sh480,000-sh650,000. The storage facilities are durable.

According to Costa, facilities are acquired under a subsidized price system. At the beginning, WFP paid 70% of the cost while a farmer paid 30%.

However, the subsidy will gradually reduce to 50%, then to 30% and then to zero. "We think that after 4-5 years the farmers have been empowered well enough to buy these facilities by themselves," Costa says.

The other advantage is that the facilities can be adopted and manufactured by local artisans.

Positive results

"We are happy that these silos have been introduced to us," Bayitanunga said.

"They reduce infestation and (aflatoxin) contamination, they help us keep everything that we grow and allow us to store it for as long as we want. Besides the silos we have acquired a useful new skill as we now know how to dry our grain before it can be stored well in the silos," she says.

Sophia Namugaya lives in Mwira village, a few kilometers away from Bayitanunga's house. Last year, she harvested 3,000 kilos of maize grain and lost 80 percent of it to rats, contamination and infestation.

After acquiring her 1.3 metric ton capacity silo from WFP this year, she allocated it an entire room in her small house. She was happy to temporarily remove her roof in order to install the silo. The plan is to spread the storage facilities across the country.

"This year, I am confident I will not lose any of the maize that I will store in the silo," said Namugaya, with a broad smile. The silos can store food for almost a year. This means that farmers are now able to keep their produce and sell it when prices are better.

The WFP project also covers parts of the areas which were affected by the Lord's Resistance Army (LRA) insurgency.

David Olwoch, formerly from the internally displaced people's camp of Kalongo in Agago district, says when he returned to his home at the end of the LRA insurgency, there were few livelihood opportunities besides farming and yet there were no adequate means of storing his harvest.

Olwoch used to store his food in the granary. And now, the new facilities are gradually replacing the traditional granary.

For tens of years, the grass and wattle granary has been seen as the main storage facility. However, its main disadvantage was that the produce was always stolen because it was kept outside.

"But now I have this (plastic) silo for household storage. I used it to store maize last year, now I am using it to store the beans. It is sealed and they are safe and in good condition. It can keep seeds up to nine months. I would like to buy another one, the bigger metallic type, so I can use them for different types of produce," explained Olwoch.



dfcu
Agribusiness
WE FACILITATE YOUR GROWTH

Supporting small holders to expand their agribusiness.

Through our out-grower schemes, we increase the availability of affordable finance for small-holder farmers to support them expand their output. Our Group Savings Schemes support small holder farmers to pool resources for agri-investments through access to affordable loans of up to 150% of the group savings.

IT'S POSSIBLE

Visit your nearest dfcu Branch for more information.

dfcu Bank is regulated by the Central Bank of Uganda

Head Office: Plot 26 Kyindondo Road Call Centre: 0414 351000 Toll Free: 0800 222 000
Email: customercare@dfcugroup.com Website: www.dfcugroup.com

dfcuBANK
where progress is