



Nyatoni seed bank community members display various types of seed they are conserving at the newly launched seed bank facility in Masindi District. PHOTO/LOMINDA AFEDRARU

Bunyoro seed bank to facilitate crop diversity

The component of the seed banks includes storing seed for conservation and milling machine for processing flour for value addition.

LOMINDA AFEDRARU

Farmer community seed banks in Uganda are vital local initiatives preserving crop diversity, ensuring food security and empowering smallholder farmers by promoting the saving, sharing and use of indigenous and improved seeds.

There are about 40 farmer community seed banks across the country in the districts of Hoima, Sheema, Masaka, Gulu, Nakaseke, Bwiti, Apac, and with recent established in Nyatonzi, Masindi district amidst sugarcane plantations serving Kinyara Sugar Ltd.

These seed banks focus on conserving local crop diversity such as beans, groundnuts, sorghum and millet among others to improve farmer livelihoods and seed sovereignty.

According to experts, community seed banks first appeared towards the end of the 1980s.

Countries that pioneered various

types of community seed banks include Bangladesh, Brazil, Ethiopia, India, Nepal, Nicaragua, the Philippines and Zimbabwe.

In countries such as Australia, Canada, UK community seed banks are commonly known as a seed savers network.

Over time, the number and diversity of seed banks has grown, including in Uganda, with the support of scientists from the National Research Organisation and non governmental organisations

Experts note that seed is a reproducible resource that is the most important input for agricultural production and the foundation of a farmer's livelihood and food security.

Seed links conservation, cultivation, production, consumption and trade to the commercialisation of agriculture.

Telling the difference

Quality control is the basis of a community seed bank's reputation and farmers are called upon to differentiate seeds from grains. Farmers are also required to observe the properties of quality seed which include maintaining genetic purity, high germination rates and being disease-free.

Quality control mechanisms can reinforce a positive change in seed

quality can boost the crops' yielding potential more than any other input.

Seed banks in Western Uganda

There are two community seed banks in Hoima and Masindi districts, with the latter launched this week though it has been in operation since 2023.

The two seed banks have been established with the help of scientists at the Plant Genetic Resource Centre (PGRC) in collaboration with Alliance Bioversity and CIAT with funding from the government of Netherlands.

Ms Joyce Adokorach, a research officer at PGRC who has been leading the team explains that the seed banks were established under a project initiative which started in 2016.

The first phase of the project which was implemented in Uganda, Kenya and Tanzania namely 'Open source Seed system for common beans, finger millet and sorghum climate change adoption' led to formation of Hoima Community Seed bank in 2018.

The initiative was so that the three countries to exchange seed of the three crop varieties and test them in farmer fields. In Uganda several varieties of finger millet and common beans were tested, multiplied on station and given to farmers for on farm trials.

The results emerged successful with 40 varieties being selected by farmers.

However, farmers cannot yet use the selected varieties from Kenya and Tanzania because the current multilateral law of Food and Agriculture Organisation (FAO) does not allow.

Experts are working around the clock to amend the law to enable farmers use indigenous seed from other countries because for now, it can only be used for research.

The second phase of the project

WAY TO GO

The two seed banks have been established with the help of scientists at the Plant Genetic Resource Centre (PGRC) in collaboration with Alliance Bioversity and CIAT with funding from the government of Netherlands.

named 'Enabling and Scaling open-source seed system for common beans, finger millet and sorghum in Uganda, Kenya and Tanzania for climate change adaptation' is ongoing.

It involves three community seed banks - namely Hoima Community Seed Bank, Nyatonzi Community Seed bank in Masindi district and another in Soroti.

The component of the Seed banks includes storing seed for conservation and milling machine for processing flour for value addition.

Ms Adokorach explained that farmers are not limited to conserving seed for the three crops but include all crop varieties of their choice including vegetables and fruits.

"The focus right now is on seed multiplication and value addition in a bid to provide food and nutrition security" she says.

Sensitisation key

Ms Agatha Banganyire, the Hoima Community seed bank secretary notes that they have about 20 members from eight villages across Hoima.

The team has been sensitised on how to preserve seeds which includes use of air tight containers to avoid moisture infiltration.

"They use beads tied in cloth which are placed in the seed container to suck any moisture in case of any," she says. "To avoid weevil attacks, the team uses local methods of preserving including use of red pepper and leaves of local plants known by community members."

The distribution method involves giving farmers seed during planting season. Quantities vary from one farmer to another depending on the land size. In return, farmers are expected to bring back double the quantity they obtained from the seed bank.

On the other hand, the coordinator of the project from Alliance Bioversity and CIAT, Daudi Mubiru expressed gratitude to farmers in Nyatonzi for their cooperation since 2023 and encouraged them to fully utilize the seed bank facility to their own benefit.

"The food system today is faced with challenges of climate change, pests and diseases and increased food price. To address this challenges is for farmers to have access to diverse crop seed types. By keeping their seed collectively in seed bank, they will be able to access various seed varieties some of which are early maturing, pest and disease free and this will enable increase production for food security and for earning income," he says.

The bank's chairperson Bosco Jadri said having their own facility is a big achievement because they will be able to regenerate the lost biodiversity.

The major seeds being conserved are finger millet, common beans and sorghum.

The team has gone ahead to preserve cow pea seed, Nakatti and Soybeans.

Since the facility has a milling machine, their major focus will be on processing flour from soy bean, finger millet, sorghum and package the same as income earning initiative.