



40th
Anniversary
1980 - 2020

SUCCESS STORIES



Zambia | Story 8 – 2020

One region 16 nations Towards a common future

From the beginning of time, the principles of Ubuntu have guided African societies. Best described as an African philosophy rooted in a deep awareness of: “I am because of who we all are”; the spirit of Ubuntu resonates in every fibre of SADCs existence – past and present. The 40th anniversary of SADC in 2020 commemorates a journey of progress on the complex road to achieving peace and security, development and economic growth. This “SADC Success Stories 2020” series shines a spotlight on the positive impacts achieved through regional integration in communities and in the lives of the people of the SADC region.

This story ‘Banking on food security’ is based on the SADC Protocol on Agriculture.

Banking on food security

“The SADC region, like the rest of the world, is dealing with the effects of climate change – like tropical cyclones Idai and Kenneth, which claimed lives, as well as crops and livelihoods, in Mozambique, Malawi and Zimbabwe,” says Plant Genetic Resources Centre head, Justice Shava. Disasters of this magnitude could destroy seed varieties in their entirety. In Zambia, there is also a possibility of losing seed due to severe drought.

When you hear the word ‘bank’ the first thing that comes to mind is money. But in Chongwe District, about 46 kilometres from Zambia’s capital city Lusaka, there is a different bank.

The Southern African Development Community (SADC) Plant Genetic Resources Centre (SPGRC) has developed a seed bank, which serves as storage for many different varieties of master seed that may no longer be available in member states. Reasons for these seeds becoming extinct include climate change, natural disaster and even changes in lifestyle.

If farmers find that they have run out of a certain seed type, they can go to the Chongwe SPGRC seed bank and request it. If the Chongwe SPGRC seed bank does not have the variety, the request is escalated to the regional gene bank. The last point of inquiry is the global seed vault. In the event that the seed cannot be traced there, then it is officially considered extinct.

Some of the seeds found at the Chongwe SPGRC seed bank, which sits on 88 hectares of land provided by the Zambian government, include cowpeas,



finger millet, Bambara groundnut, sorghum, pearl millet and sesame. Recently, the community of Lukwipa fell back on the Chongwe SPGRC seed bank to provide them with seed for the kadona, an indigenous groundnut variety that was nearly lost when consumer taste preferences changed. The Chongwe SPGRC seed bank has also helped the nearby Rufunsa community, with seed for the Bambara groundnut. Originally from Brazil, Bambara has become widely distributed throughout the semi-arid zone of sub-Saharan Africa; its drought tolerance makes it a useful legume to include in climate change adaptation strategies.

SPGRC head Justice Shava says that the centre was established both as a co-ordinating centre for a regional network of the plant genetic resources programme that involves all SADC states, and to hold a base collection of plant genetic resources as safety duplicates, on behalf of member states.

This is in line with the SADC Protocol on Agriculture, which aims to promote sustainable agriculture in the region and to enhance food security even in the face of climate change. For Zambia, it is also in line with its Seventh National Development Plan, which aims to promote agriculture as a mainstay of its national economy.

The Chongwe SPGRC seed bank, which is run by 17 members of staff drawn from SADC member states, also trains personnel, harmonises seed policies among its members and works with gene banks in member states.

Shava says that the SADC region, like the rest of the world, is dealing with the effects of climate change – like tropical cyclones Idai and Kenneth, which claimed lives, as well as crops and livelihoods, in Mozambique, Malawi and Zimbabwe recently. Disasters of this magnitude could destroy seed varieties in their entirety. Seed could also disappear due to consumers changing their preferences, as well as extensive capital development, which leads to land clearing. In Zambia, there is also a possibility of losing seed in the southern part of the country, for example, which has been experiencing severe droughts in recent years.

“With ever-increasing threats motivated by climate change, the Chongwe SPGRC seed bank operates as a buffer to prevent a society losing its source of food.”

Chongwe SPGRC seed bank is a unique institution that comprises contributions from 16 member states to consolidate a plant genetic resources conservation effort. It currently holds about 6,400 samples of different varieties, covering around 40 different crops and collected from farmers across the country. The seeds are conserved either at the Chongwe SPGRC seed bank or in their natural habitats. As a way of backup, 6,000 seeds are preserved at the Svalbard Global Seed Vault in the North Pole.

SPGRC Senior Programme Manager Lerotholi Qhobeli says that the seed, which is stored in cold rooms, is expected to exist for 800 years. “We are a bit aggressive in the way we are handling this issue, because this is our insurance for the next generation,” Qhobeli admits.

SPGRC works with national gene banks in all member states, including the Zambian Plant Genetic Resources Centre at Mt Makulu Research Station in Chilanga as a programme under the Zambia Agriculture Research Institute (ZARI). Godfrey Mwila, ZARI Deputy Director – Technical, says that around half of its samples are duplicated at the SPGRC as a back-up measure.

Mwila says among the benefits that the national gene bank of Zambia has derived from Chongwe SPGRC seed bank include capacity-building in terms of the training of staff and technical support, especially in the areas of documentation and information management. Other benefits are the provision of a platform for networking and collaboration with other SADC member countries and information exchange on best practices regarding gene bank management. Chongwe SPGRC seed bank is also responsible for managing the regional database of all the material stored in the national gene banks, which it feeds into the global system.

Source: Ministry of Agriculture



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