

# Conservation and sustainable use of plant genetic resources for food and agriculture in South Africa through Community Seed Banks:

## *Safeguarding the inheritance for future generation*

**By: Mabjang Dibiloane**

**The practices of saving, preserving and exchanging seed within a farming community are old practices, which the rural smallholder and subsistence farmers rely on to promote farming and improving their production.**

The Directorate: Genetic Resources (Plant Genetic Resources Division) of the Department of Agriculture, Forestry and Fisheries (DAFF), promotes these practices among farmers and encourages them to set up Community Seed Banks (CSBs) to strengthen informal seed systems, support conservation of traditional seed variety of the farmers and maintain seed security at district, community and household level. Traditional and/or landraces seeds are mostly endangered and some are facing extinction, therefore, with CSBs, the farmers will reverse the situation and protect their inheritance for future generations and agricultural production. The Community Seed Banks adoption and practice will enable farmers to access, use and manage their seed locally.

### **Collective action**

Community Seed Banks are institutions for collective action where organised groups of farmers manage and govern different stages of seed management – selection, conservation, multiplication, exchange and improvement. They serve as local institutions and are mostly part of informal or farmers' seed systems. Community Seed Banks are also key components of the community seed network, representing a low-cost and low technology demanding seed management system that are owned and managed by the local communities.

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In 2012/13, DAFF started the assessment of possible Community Seed Banks with two different farming provinces, namely Limpopo (Gumbu community in Mutale Municipality) and Eastern Cape (Sterkspruit communities in Joe Gqabi Municipality). DAFF- National Plant Genetic Resources centre (NPGRC) together with Bioversity International officials trained the CSB members on seed management, cleaning, storage, multiplication and record keeping. Today, Gumbu and Sterkspruit farmers are now running the successful CSBs and they are even recovering some of the lost seed varieties, e.g. mung-bean. The Gumbu Community Seed Bank now have a total of 243 different seed crop varieties at the

bank such as Millet, sorghum, maize, watermelon, melon, pumpkin, sweet sorghum, groundnuts, Bambara, Mung-bean, beans, cowpea, calabash, etc, and Sterkspruit CSB have the total of 89 accession of Maize, Sorghum, Green peas, Beans, Bambara, Calabash, Pumpkin, Watermelon, Cowpeas, Sweet sorghum.

### **Success encouragements**

The success of the Gumbu and Sterkspruit CSBs encourages the Directorate: Genetic Resources on expanding and establishing a new CSB in the North West Province, Bojanala District, in Jericho village. The baseline study was conducted with the following seed analysis:

- historical trends
- four cell analysis
- seed network mapping
- a farmer survey of the community to ensure the sustainability, maintenance and constant seed supply to the Community Seed Bank was established.



**Figure 1. Gumbu community seed bank 1st collection success encouragement**



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Figure 2 Seed management training in Sterkspruit community seed bank



Figure 3: Seed deposited in Gumbu Community Seed Bank

The Directorate: Genetic Resources is also implementing the on-farm conservation and multiplication project in the Free State (Thaba Nchu) and Northern Cape Province (Mothibistad). The main purpose of these on-farm projects is to promote the broader usage of landraces at farmers' level and to increase the seed quantities for future use.

Please support Community Seed Banks to improve future household food security and sources of the seed crop varieties gene pool for sustainable agriculture production.

**For further information, contact:**

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