

Evidences

Study #101

Contributing Projects:

- P66 - Global policy support for biologically diverse, climate resilient agriculture

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: Completed

Year: 2018

Title: Towards a national network of community seedbanks in South Africa

Short outcome/impact statement:

Through capacity development and action research support to South Africa's National Plant Genetic Resources Centre (NPGR, under the Department of Agriculture, Forestry and Fisheries) and district level extension officials, the first three community seedbanks of an envisioned national network were established in marginalized smallholder farming areas.

Outcome story for communications use:

Based on community biodiversity assessments, the organization of seed and food fairs and the delivery of several capacity development activities, three new community seedbanks are up and running in marginalized smallholder areas of South Africa: Gumbu village in Mutale municipality in Limpopo province, Sterkspruit town of Joe Ngcabi municipality in Eastern Cape Province, and Jericho town in North West Province (Vernooy et al. 2017). Potential sites for two more community seedbanks have been identified in Free State and Northern Cape Province respectively. Reported benefits include safely stored seed, new seed storing techniques leading to higher quality seed, increased quantity and diversity of seed stored in the community, seed of landraces multiplied and distributed (increased availability), exchanges of knowledge and seed, collaboration with the NPGR, collective sharing of experiences (Matelele et al. 2018). The accumulated experiences of establishing and supporting three community seedbanks in South Africa have been used as input for the development of two community seedbank manuals, one for facilitators (Vernooy et al. 2017) and one for farmers (Vernooy et al. 2018). The three community seedbanks established so far will support the Department of Agriculture, Forestry and Fisheries' strategy on conservation and sustainable use of Genetic Resources for Food and Agriculture both in situ and ex situ.

Links to any communications materials relating to this outcome:

- <https://tinyurl.com/yyebr3b6>

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : Yes

Policies contribution:

- 50 - National strategy for conservation of plant genetic resources in South Africa (<https://tinyurl.com/2gumbmnz>)

Stage of maturity of change reported: Stage 2

Links to the Strategic Results Framework:

Sub-IDs:

- Conducive agricultural policy environment

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- # of more farm households have adopted improved varieties, breeds or trees

Description of activity / study: <Not Defined>

Geographic scope:

- National

Country(ies):

- South Africa

Comments: The work in South Africa, through the exemplary collaboration between the National Plant Genetic Resources Centre (national genebank) and the community seedbanks, is inspiring other countries to follow.

Key Contributors:

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security

Contributing Flagships:

- FP1: Priorities and Policies for CSA

Contributing Regional programs: <Not Defined>

Contributing external partners:

- DAFF - Department of Agriculture, Forestry and Fisheries (South Africa)

CGIAR innovation(s) or findings that have resulted in this outcome or impact:

A targeted community seedbank capacity development strategy for the National Plant Genetic Resources Centre was designed and implemented by Bioversity International.

Innovations: <Not Defined>

Elaboration of Outcome/Impact Statement:

Since 2013, the Department of Agriculture, Forestry and Fisheries (DAFF), South Africa, and Bioversity International have been working together to establish and support community seedbanks as a means to strengthen farmers' seed systems, support conservation and sustainable use of traditional farmer varieties and maintain seed security at district and community levels. Following an in-depth community assessment of trends in agricultural biodiversity conservation and use in two selected smallholder farming areas, the organizational process of establishing a community seedbank was initiated through a number of capacity development activities related to technical and organizational aspects of running a community seedbank (1). DAFF and provincial agricultural extension staff was trained by the Bioversity International team.

The two pilot sites are Gumbu village in Mutale municipality in Limpopo and Sterkspruit town of Joe Ngcabi municipality in Eastern Cape. In 2017, based on the experiences and lessons learned in Gumbu and Sterkspruit, a third site was added: Jericho in North West. The Gumbu community seedbank is managed by a group of about 30 women; the Sterkspruit community seedbank by a mixed group of women and men (about 20), similar to the Jericho community seedbank (about 30). (2)

In 2015, the DAFF and Bioversity International team trained farmers in Gumbu and Sterkspruit in the many practical aspects of running a community seedbank, e.g. seed management, governance, leadership, participation, seed registration, book keeping and documentation.

In 2016, farmers learned the use of silica (zeolite) beads to improve storage conditions. Farmers also learned to use a seed register as a farmer-managed database of genetic resources. In 2017 and 2018, farmers of Gumbu and Sterkspruit initiated the first seed multiplication activities of selected crop varieties. Due to drought, results were not as good as expected, and new efforts were planned for early 2019. Drought has severely affected South Africa in recent years.

By the end of 2018, the Gumbu community seedbank had received about 250 contributions and the Sterkspruit community seedbank about 150 contributions. Seeds were exchanged between the two community seedbanks, with the Jericho community seedbank, and with the National Plant Genetic Resources Centre.

The experiences were used to develop two community seedbank manuals, one for facilitators and one for farmers (translated in French, Russian, Spanish; Chinese version under development) (3 and 4), which are now used in other countries. Presentations about the work were made at international events in China, Germany, Holland, India, Italy, Nepal, South Africa.

References cited:

- 1) Vernoooy, R., Sthapit, B., Dibiloane, A., Makuleke, N. L., Moila, P., Phora, G., and Tjikana, T. (2017) Implementing a national community seedbank strategy for South Africa. Bioversity International, Rome, Italy, and Department of Agriculture, Forestry and Fisheries, Pretoria, South Africa. Available: <https://www.bioversityinternational.org/e-library/publications/detail/implementing-a-national-community-seedbank-strategy-for-south-africa/>
- 2) Matelele, L.A., Sema, R.P., Maluleke, N.L., Tjikana, T.T., Mokoena, M.L., Dibiloane, M.A. and Vernoooy, R. 2018. Sharing diversity: exchanging seeds and experiences of community seedbanks in South Africa. Bioversity International, Rome, Italy and Department of Agriculture, Forestry and Fisheries, Pretoria, Republic of South Africa. Available: https://www.bioversityinternational.org/index.php?id=244&tx_news_pi1%5Bnews%5D=10022&cHash=3c76408aa692e635e255f84f5e7aa6a4
- 3) Vernoooy, R.; Sthapit, B.; Bessette, G. (2017) Community seed banks: concept and practice. Facilitator handbook. Bioversity International, Rome, Italy; the Department of Agriculture, Forestry and Fisheries, Pretoria, South Africa [Also available in French, Russian and Spanish]. Available: https://www.bioversityinternational.org/fileadmin/user_upload/CSB_Vernoooy_2017.pdf
- 4) Vernoooy, R.; Bessette, G.; Sthapit, S.; Dibiloane, A.; Lettie Maluleke, N.; Abner Matelele, L.; Mokoena, M.; Phora, G.; Sema, P.; Thabo, T. (2018) How to develop and manage your own community seed bank: Farmers' handbook. Establishing a community seed bank: Booklet 1 of 3. Bioversity International, Rome, Italy; the Department of Agriculture, Forestry and Fisheries, Pretoria, South Africa [Also available in French and Spanish]. Available: <https://www.bioversityinternational.org/e-library/publications/detail/how-to-develop-and-manage-your-own-community-seed-bank-farmers-handbookestablishing-a-commun/>

Quantification: <Not Defined>

Gender, Youth, Capacity Development and Climate Change:

Gender relevance: 1 - Significant

Main achievements with specific **Gender** relevance: Social and gender analysis were used to assess the socio-economic situation in the communities. The role of women as seed guardians was analyzed. Women play key roles in seed conservation and management in the country, but these roles are often not recognized and rewarded. In many communities, women are also the main food producers. In all the capacity development and research activities, women's empowerment receives special attention.

Youth relevance: 0 - Not Targeted

CapDev relevance: 1 - Significant

Main achievements with specific **CapDev** relevance: The experiences in the field form the basis of the capacity development of the National Plant Genetic Resources Centre. A team of five staff has been trained in all aspects of community seedbank development. Farmers are trained in technical and organizational aspects of establishing and running a community seedbank. The practical experiences have been used to develop two manuals.

Climate Change relevance: 1 - Significant

Describe main achievements with specific **Climate Change** relevance: The multiple roles of community seedbanks to respond to climate change have been integrated in the capacity development and research activities from the beginning. Crops and crop varieties in the seedbanks are continuously evaluated for their capacity to cope with the changing climatic conditions. In 2019, the community seedbanking efforts will be complemented by participatory crop improvement experiments. Novel crop diversity will be introduced to the community seedbanks for testing under the changing climatic conditions. This will be done in collaboration with the NARS.

Other cross-cutting dimensions: No

Other cross-cutting dimensions description: <Not Defined>

Outcome Impact Case Report link: [Study #101](#)

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