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“Exploring opportunities ...
for managing natural resources and a better life for all”

Increasing farmers’ opportunities to benefit from national seed collections: Experiences of five African national genebanks

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Abstract

African smallholder farmers predominantly rely on local biodiversity, locally produced seed of local varieties, to minimise risk and optimise their overall farm outputs in diverse agro-ecological and socio-economic conditions. Farmers’ skills, capacities, and culture for managing seed are thus major drivers for adapting their agricultural biodiversity to new threats and opportunities due to climate- and market-developments.

Agricultural researchers addressing these challenges focus on major crops and formal, centralised, seed systems. Biodiversity and the effectiveness of farmers’ seed management practices are rarely considered except for the establishment of genebanks. The genebanks were conceived as part of the larger seed and research systems, as a reservoir for genetic innovation focusing on major crops. African national genebanks hold important collections of their agricultural biodiversity, including specialised local crops, local varieties and their wild relatives.

The speed of changes in production conditions, especially in rainfed production systems, requires new crop diversity beyond the reach of local farmer seed systems. Could farmers’ access to the diversity held by national genebanks strengthen the innovative capacity of local seed systems?

African National genebanks, supported by the Seeds for Resilience Project, managed by the Global Crop Diversity Trust, explored, in five countries, options to support farmers in their own efforts to use and manage crop diversity for adapting their production systems to the wide range of new, and increasing challenges. Each genebank chose focus regions and

crops, conducted stakeholder analyses, identified interested partners and farmer groups and engaged in direct exchanges with these farmer groups. Farmer groups learned about the existence of the genebanks and the crop diversity they hold, and how this diversity can become accessible. Genebanks adapted tools for identifying accessions that may be of interest to specific groups of farmers, and developed approaches with farmer groups to foster integration of useful diversity into the seed systems farmers use. The five national genebanks evaluated their experiences of direct engagements with farmer groups in a workshop. Results of these discussions will be presented.

Keywords: Biodiversity, farmers' seed system, national genebanks