Strengthening Seed Systems in Zimbabwe: Moving From Fragmentation to Coordination

Summary

Limited coordination among farmers, community seedbanks, national genebank, government institutions and international organizations has resulted in seed insecurity at the farmers' level, as well as misaligned policy and planning processes. BOLD's partnership with the Community Technology Development Trust (CTDT) in Zimbabwe enabled community seedbanks to serve as a centralized hub connecting these groups into a more coordinated and secure seed system. CTDT strengthened its internal linkages with community seedbanks and farmers by improving seed conservation, regeneration practices and local seed security. CTDT also built stronger external connections with the national genebank, government, academic institutions and international organizations. This enhanced the visibility and recognition of community seed bank networks, while also contributing to more informed policy development and long-term strategic planning.

Background and Challenges

Community seedbanks play an important role to ensure seed security for Zimbabwean farmers. They naturally form a strong bond with their nearby seedbanks due to the easy access and convenience. However, their connection to national level institutions such as national genebanks, government agencies and research institutions remain weak and fragmented. For farmers and community seedbanks, this gap results in insecure seed sourcing and lack of technical support. For government and national institutions, the absence of systematic engagement with farmers limits feedback on local seed needs and constraints, resulting in government policy design and implementation that are misaligned with farmer's needs.

The Community Technology Development Trust (CTDT) in Zimbabwe aims to address these challenges and has already established a strong foundation as a community genebank hub. CTDT previously worked with 24 community seedbanks and over 50 farmer field schools, directly reaching more than 600 farmers, over

70% of the farmers are women, across seven districts in Zimbabwe. This comprehensive network developed by CTDT covered farmers in a diverse range of planting environments, spatial scale, social status, education level and gender.

CTDT also recognized seed regeneration as a critical process for conserving and multiplying farmer-preferred crop varieties. However, due to limited funding and external support, regeneration activities were carried out on small scales and at individual farmer level. Seeds were often deposited in community seedbanks for storage only.

Solution

In 2021, CTDT forged a partnership with BOLD, marking a significant milestone in its mission to enhance seed conservation and regeneration. This collaboration has empowered CTDT to build capacity in critical areas, while also raising awareness among farmers about the importance of regeneration and safety duplication of accessions. Furthermore, CTDT has leveraged partnerships to strengthen collaborative relationships with external institutions, paving the way for informed policy decisions and a robust long-term support network for local farmers.

With the support from BOLD, CTDT went further to engage farmers and local stakeholders, introducing the concept of regeneration of accessions in community seed banks for safety duplication in the National Genebank of Zimbabwe and the Svalbard Global Seed Vault. Participating farmers were organized into Farmer Field Schools, where they received clear explanations of the importance of safety duplicating their materials, along with hands-on training in seed viability testing, regeneration techniques and passport data collection. CTDT conducted regular field monitoring visits to track progress and provide technical support.

By the end of the project in 2025, a total of 1,100 accessions had been successfully regenerated in farmers' fields and securely duplicated at multiple levels (national, regional and international). The regenerated crops included sorghum, cowpea, groundnut, pearl millet, finger millet, Bambara groundnut, local rice and local maize varieties. Farmers' active participation also contributed to the success of the project's field days, which attracted 1,108 participants. In addition, seed and food fairs reached 1,195 participants, including 868 women.

Over the years, CTDT has developed a well-structured and sustained collaboration with the National Genebank of Zimbabwe, relevant departments within the ministry responsible for agriculture, academic institutions and global organizations such as the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the International Maize and Wheat Improvement Center (CIMMYT) to strengthen the role of community seed banks within broader seed system.

The BOLD Project

BOLD (Biodiversity for Opportunities, Livelihoods and Development) is a 10-year initiative to strengthen global food and nutrition security through the conservation and use of crop diversity. Funded by the Government of Norway, BOLD was launched in 2021 and builds on the work and achievements of the decade-long Crop Wild Relatives Project (2011–2021).

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Through formal partnerships and engagement platforms (Figure 1), CTDT has facilitated safety duplication of community-held germplasm in the National Genebank, ensuring long-term conservation and reducing the risk of genetic loss. This two-way relationship meant that farmers involved in community seedbanks could access technical guidance on conservation standards, documentation and quality management, while also contributing locally adapted varieties to national collections.

CTDT's efforts in engaging government departments integrated community seed banks into national agricultural and biodiversity strategies, improving policy recognition and institutional support. Collaboration with universities and research institutions has broadened impacts by strengthening farmers' participatory research and increasing student engagement in seed conservation initiatives. At the international level, partnerships with global organizations have enabled knowledge exchange, resources mobilization and alignment with global frameworks on plant genetic resources. Together, these linkages have strengthened the legitimacy, sustainability and influence of community seedbanks at local, national, regional and global levels.

Impact

These BOLD-supported activities built strong knowledge basis and hand-on skills among farmers, particularly in seed regeneration. Training on seed vaults and safety duplication increased their sense of seed security and seed ownership while also raising awareness of the value of linking local seed systems with national and global institutions. Zimbabwean farmers reached through the project understand that during drought, they can access backed-up seeds stored at multiple safety levels, greatly reducing the risk of seed loss.

An unexpected impact arose through the BOLD project was strong appreciation and acceptance from local community stakeholders (local chiefs). By emphasizing the value of opportunity and minor crops, the project elevated crops often viewed as "poor people food" and highlighted their nutritional and climate-adaptive benefits.

Figure 1. The central role of the CTDT in linking farmers, community seedbanks, the national genebank, government institutions and international organizations. Source: Community Technology Development Organization (2022), Community Seed Bank Technical Manual.

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This shift increased social acceptance and pride for local communities, strengthening within-community support for conservation activities.

Beyond local impacts through strengthened inward connection, CTDT also made significant progress by building outward connections. National genebanks are now actively engaged in multi-level safety duplication.

Academic institutions have increased attention and use of the CTDT network for research on seed storage and community-based conservation. Government agencies gained a bridging hub that facilitates engagement with farmers, recognized the importance of existing community information hubs, and integrate these systems into current and future seed policies to shape sustained seed security for local farmers.

Additional details can be found at https://bold.croptrust.org/

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