



Tropentag, September 10-12, 2025, hybrid conference

“Reconcile land system changes
with planetary health”

Long-term sustainability of community seed banks in India

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Abstract

Community seed banks (CSBs) offer access to diverse, locally adapted seeds and serve as a powerful resource for protecting agricultural biodiversity, adapting to climate change, and strengthening food security and sovereignty (Vernooy et al., 2024; Altieri and NICHOLLS., 2012). These community-run seed collections help to preserve traditional crops and knowledge, empowering local communities and increasing resilience to environmental shifts (Duthie-Kannikkatt et al., 2019). While the benefits of CSBs are clearly described, ensuring their long-term sustainability, is a major challenge. Often, CSBs struggle with limited funds, lack of technical support, and difficulties in selling their seeds. This can make it harder for them to effectively conserve and share seeds, potentially limiting their long-term impact. Our research examined eight CSBs across India, representing different farming environments: two in West Bengal, three in Odisha, and three in Karnataka. These CSBs were established between 2012 and 2023 with support from non-profit organisations to protect local seeds and traditional farming methods. Our study involved two main steps. First, we reviewed existing research to build a foundation for our investigation. This review helped us create a framework for understanding how CSBs work and what hinders their sustainable operation. Second, we conducted an on-the-ground study involving interviews and regular visits at each CSB. The findings from these case studies offer valuable insights into how CSBs function and provide practical suggestions for making them more sustainable in the long run. Our research confirms and refines our initial framework, emphasising the critical need for CSBs to build strong support networks for technical, financial, and human resources and expand their marketing efforts. To achieve this goal changes to policies and regulations for more supportive environment for CSBs are recommended.

Keywords: Agrobiodiversity, community seed bank, food security, seed conservation, seed sovereignty