



## POLICY BRIEF No. 90

# Building an enabling framework to promote community seed banks, harnessing four core elements: recognition, respect, support, and collaboration

### Authors

Ronnie Vernooy [corresponding author], Bioversity International\*, Wageningen, the Netherlands, r.vernooy@cgiar.org

Arnab Gupta, Abishkar Subedi, Wageningen Centre for Development Innovation, Wageningen University and Research, the Netherlands

\*Bioversity International is part of the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT).



First seeds for the Nyatonzi community seed bank, Uganda.

© Bioversity International/R. Vernooy

### HIGHLIGHTS



It has been recognized that community seed banks can be an effective platform for realizing farmers' rights as defined by the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). The multiple functions that community seed banks already fulfil (or could fulfil with additional support and growth) – seed production, conservation, exchange and marketing, crop improvement, and a platform for farmer empowerment – suggest that they are instrumental in safeguarding agricultural biodiversity and sharing the benefits derived from its use.



Despite growing interest in and the presence of community seed banks globally, they largely continue to exist and function in a policy, legal and, to a lesser degree, institutional void.



Only in a few countries, notably Brazil, Kenya, Nepal, South Africa, South Sudan, and Uganda, community seed bank functions and operations have been incorporated into (draft) national or sub-national policy and legal documents.



This brief offers elements of a proposed strategy to support national and sub-national authorities in creating policy, legal, and institutional space for community seed banks to provide long-term legal protection, a social security network, financial, technical and organizational support, and opportunities for collaboration, based on four core dimensions: recognition, respect, support, and collaboration.

# Background

Community seed banks – these may be referred to differently in some countries<sup>1</sup>– are locally-governed and -managed institutions that have been operating for over 30 years, in an increasing number of countries (Vernooy et al. 2015a). Their core function is to maintain and distribute local seed for local and community use. Besides this core conservation function, community seed banks can provide a broad range of additional functions, for instance, seed distribution and multiplication, crop experimentation and/or improvement, value chain development, credit service delivery, and act as an exchange and learning platform (Vernooy et al. 2014). Community seed banks vary significantly in scope, size, governance and management models, infrastructure, technical aspects, and number and kind of relationships with other seed-sector actors.

Many community seed banks have been established through farmer-policy-research initiatives, while others have been established in response to crises, to conserve and restore seed in times of drought, flooding or civil unrest, for example, in the Horn of Africa, Sub-Saharan Africa, South-east Asia, and Central America. During the initial stages of community seed bank establishment, farmers from different localities will gather to discuss topics related to seed security, seed status, loss of agrobiodiversity, and the need for local action. Through facilitated interactions, they can develop a common understanding of the seed situation in their communities and agree to work together to resolve some of the challenges by establishing a community seed bank. These initial activities contribute to improving social stability, which can be further strengthened over time through further interaction and collaboration as the community seed bank is consolidated. Thus, Community seed banks can play a role in fostering social cohesion and an agricultural/social security net. This can be important in areas undergoing protracted crises.

Although it is hard to precisely quantify the number of community seed banks worldwide, the Alliance of Bioversity International and CIAT – one of the lead organizations supporting their establishment – estimates that the number of countries where they operate and the number of community seed banks per

country is steadily rising. The Alliance of Bioversity and CIAT has established community seed banks in 30 countries of the global south.

While civil society organizations were largely responsible for community seed bank establishment in the first two decades of community seed banking, initiatives to establish and support community seed banks and/or create the legal space for them in the last decade have been driven by several (sub)national governments, notably in Bhutan, Bolivia, Brazil, Ethiopia, Mexico, Nepal [see box 1], South Africa, Uganda, Zambia, and Zimbabwe (Vernooy et al. 2015b). At the same time, international and national civil society organizations continue to actively support them.

## Box 1

### Nepal develops Community Seed Bank Guidelines

Nepal's government developed Community Seed Bank Guidelines (2009), a comprehensive document that guides planning, implementation, and regular monitoring of community seed bank activities in the country. The guidelines mainly are targeted to marginalized, subsistence, indigenous peoples, and war-affected households, who often have poor access to seeds. The guidelines share a clear vision for community seed banks and outline strategies for coordinating and collaborating with governmental and non-governmental institutions in establishing them; the complementary roles the community needs to play in establishing and maintaining them; and outlines a capacity-building and community empowerment plan. The National Agricultural Genetic Resources Centre (housing the National Genebank) strategy includes building a network of community seed banks as a key element of a complementary conservation strategy. However, the guidelines have only been used by some local government agencies to establish and support a limited number of community seed banks and still need to be widely disseminated [adapted from Vernooy et al. 2015b].

<sup>1</sup> Examples of other terms include "community or farmers' seed house", "seed hut", "seed library", "seed reserve", "seed wealth center".

# Filling the void

Across the world, community seed banks operate in countries with diverse political regimes, and policy, legal, and institutional contexts. Despite the growing interest in, presence and recognized benefits of community seed banks, they largely function in a policy, legal and – to a lesser degree – institutional void. To date, no country officially allows a community seed bank to legally register as such. Those wanting to be registered can only do so as a different type of organization, for example as a farmers’ association, cooperative, or community-based organization. In only a few countries, notably Brazil, Kenya, Nepal, South Africa, South Sudan, and Uganda, community seed banks have been incorporated into either draft or any other national or sub-national policy and legal documents. These six countries are offering direct financial, technical, and/or organizational support. However, recent progress has been made in publishing (2021) a Protocol for collaboration between national genebanks and community seed banks, as a result of a consultative process involving various international and national organizations in East and Southern Africa<sup>2</sup>. The Protocol includes principles and practical guidance for collaboration and has been endorsed by the relevant authorities in Kenya, Tanzania, Uganda, and Zimbabwe.

Given this void, it seems appropriate to draft a strategy document to guide national and sub-national authorities towards creating a policy, legal, and institutional space for community seed banks to provide long-term legal protection, a social security network, financial, technical, and organizational support, and opportunities for collaboration among national organizations working on the conservation and sustainable use of agrobiodiversity.

This document offers key elements towards such a proposed strategy, based on four core dimensions: recognition and respect, support and collaboration. Feedback to further improve this proposed strategy is welcome and can be sent to the corresponding author.

## Box 2

### The international context

Conserving and sustainably using plant genetic resources – key functions of community seed banks – are the two core elements underpinning two important, legally-binding international agreements, of which many countries are signatories: the Convention on Biological Diversity (CBD) Nagoya Protocol on Access and Benefit Sharing, and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). The activities of accessing, distributing (sharing), improving, and selling seeds by community seed banks (covered in these agreements by the common legal terms “access and benefit sharing”) may be subject to the rules and regulations of either the CBD/Nagoya Protocol or ITPGRFA. This brief will not further elaborate on this; the situation of community seed banks in Europe in relation to access and benefit sharing has been elaborated by the European Coordination Let’s Liberate Diversity (2021); and for an example from Madagascar, see Rakotondrabe and Girard (2021).

It has been recognized that community seed banks can be an effective platform for realizing farmers’ rights, as defined by the ITPGRFA (FAO-ITPGRFA, no date)<sup>3</sup>. They can be instrumental in establishing comprehensive farmers’ rights, although the degree and depth may vary according to the national context (Vernooy et al. 2021). The multiple functions that community seed banks already fulfil (or could fulfil with additional support and growth) – seed production, conservation, exchange and marketing, crop improvement, and a platform for farmer empowerment – suggest that they are instrumental in safeguarding agricultural biodiversity and sharing the benefits derived from its use.

<sup>2</sup> Community Technology Development Trust (CTDT); Seed Savers Network-Kenya (SSN); National Agricultural Research Organisation – Plant Genetic Resources Centre (NARO-PGRC); Wageningen Centre for Development Innovation, Wageningen University and Research (WCDI-WUR) and the Alliance of Bioversity International and CIAT. 2021. Protocol for Collaboration between the National Genebank and Community Seed Banks. Wageningen (The Netherlands): ISSD Africa, and Alliance of Bioversity International and CIAT, Rome, Italy. <https://cgispace.cgiar.org/handle/10568/111243>

<sup>3</sup> See the various contributions about community seed banks to the “Inventory of national measures, best practices and lessons learned from the realization of Farmers’ Rights, as set out in Article 9 of the International Treaty,” compiled by the FAO-ITPGRFA. The Inventory resulted from the work of an Ad Hoc Technical Expert Group to develop options for encouraging, guiding and promoting the realization of Farmers’ Rights at the national level, which was called for and accepted at the Seventh Session of the Governing Body of the Plant Treaty, held from 30 October to 3 November 2017 in Kigali, Rwanda (Andersen et al. 2018). See also, Clancy (2016), and Vernooy et al. (2020).

# PROPOSED STRATEGY to guide national and sub-national authorities in creating a policy, legal, and institutional space for the recognition, establishment, and long-term support for community seed banks

## Recognition and respect

It is recognized that farmers play a key role in selecting, conserving, using, improving and adapting plant genetic resources. Women farmers are often key seed custodians and managers.

Community seed banks are recognized as a form of farmers' organization delivering agriculture and rural development outcomes, with a focus on the multiple functions of seeds. It is recognized that community seed banks – through which farmers collaborate and coordinate activities of common and collective interest – can play key roles in the selection, conservation, use, improvement, and adaptation of plant genetic resources. Community seed banks can also facilitate the revival, restoration, and repatriation of lost crop and varietal diversity. As such, community seed banks deserve not only recognition, but respect and support for their contributions to the conservation of agricultural biodiversity and rural development at large.

It is recognized that community seed bank operations are influenced by policies, laws, and regulations concerning plant genetic resources and seeds, such as the registration, certification and release of crop varieties, marketing and trade, and rural development; seed quality control; the production and sale of seeds; which crops need to be conserved and the activities deployed by the national genebank; as well as the crops and strategies used by national crop improvement programs.

When it comes to accessing seeds and related knowledge held by a community seed bank, each community seed bank's rules and regulations will be recognized and respected, while also adhering to international agreements (in countries that are signatories), in particular the ITPGRFA and CBD/ Nagoya Protocol, and to national Access and Benefit Sharing policy/law, including the use of Free, Prior and Informed Consent (FPIC) or (the principle of) approval and involvement. FPIC allows local and indigenous communities to provide or withhold/withdraw consent, at any given moment, regarding interventions that impact their territory and livelihoods.

## Support and collaboration

Recognizing that maintaining and sustaining a community seed bank takes time, effort, and resources, community seed banks will benefit from a support strategy to build and strengthen the required capacities.

National seed authorities and actors are encouraged to develop, finance, and support such a strategy, e.g., the national genebank, one or more national breeding program(s), Ministry or Department of Agriculture, national farmers' union(s) or organization(s), rural development organization(s), or conservation organization(s).



Agyauli community seed bank crop passport data book (Nepal).  
© Bioversity International/R. Vernooy



Bangladesh UBINIG seed wealth center. © Bioversity International/R. Vernooy

The key capacities required for support and collaboration are to:

1. Govern and manage the community seed bank transparently, effectively, and efficiently, according to rules and regulations agreed upon by the community seed bank members.
2. Guarantee quality seed conservation, multiplication, and distribution.
3. Maintain records of the activities and transactions.
4. Conserve and revive (repatriate) local varieties of importance to the community.
5. Carry out participatory varietal selection to generate added value for cultivation and use of existing varieties.
6. Carry out participatory plant breeding to develop new varieties to provide access and options to new diversity to cope with adversity and strengthen farmers' selection skills.
7. Add value to the varieties conserved in the community seed bank through value chain development.
8. Establish local seed businesses (where conditions are appropriate).
9. Serve as coordinating or nodal platforms bringing together farmers, plant breeders, gene bank managers, and other actors, thereby becoming integral parts of the national conservation system.
10. Facilitate farmer-to-farmer knowledge and seed sharing (e.g., a seed web platform, and/or a national platform for community seed banks).
11. Build linkages and foster collaboration between seed-related government institutions (national genebank) and community seed banks [see next section].
12. Document and disseminate the results and impact of community seed banks through multiple media.

## CALL TO ACTION

# Towards a greater dissemination of community seed banks: Suggested collaborative mechanisms for community seed banks, policy/legal representatives and the national genebank

Recognizing the need for greater cooperation between the national genebank and the community seed banks in conserving and sustainably using each country's genetic resources for adaptation to climate change and the provision of healthy and nutritious foods,

- (i) National authorities and farmers are encouraged to ratify the "Protocol for collaboration between the national genebank and community seed banks" (see footnote 2).
- (ii) The national genebank and community seed banks will work together (on 12 key actions) to:
  1. Ensure that communities are supplied with seed that is adapted to local conditions through targeted multiplication.
  2. Properly document local/farmer varieties (database development and maintenance).
  3. Identify lost varieties of high value and conserve the most threatened or endangered species/varieties as a priority.
  4. Reintroduce lost varieties of high value within the community, where the national genebank can provide the lost varieties and the community seed banks can help to multiply and store them.
  5. Carry out research on and incorporate new research findings about new technologies for storing, conserving and multiplying plant genetic materials.
  6. Document and share information regarding new findings and emerging dynamics.
  7. Promote agroecology and crop diversification as sound agricultural management practices.
  8. Organize seed (diversity) fairs and community seed bank exchange visits.
  9. Work together on participatory crop improvement.
  10. Train farmers on conservation methods.
  11. Build capacity for the production of quality seed for the benefit of the farming communities.
  12. Promote the community seed bank as a platform for community development.



(Lower) Nyando community seed bank, Kenya. © Bioversity International/R. Vernooy

## Conclusion

The number of community seed banks around the world is increasing, yet a substantive policy and legal void persists in many countries regarding their contribution to agricultural conservation and community development, and mechanisms to support, protect, and strengthen their function and activities. Recognizing the investment of time, effort, and resources that maintaining and sustaining a community seed bank requires, it follows that any established community seed bank would benefit from and indeed should not operate without a support strategy, including building from scratch and strengthening the necessary organizational and technical capacities needed to sustain its efficient functioning. Such a strategy could be designed and implemented at the policy, legal, and/or regulatory level. This brief offers key elements harnessing four dimensions of a collaborative strategy: recognition, respect, support, and collaboration.

## References

Andersen, R., Shrestha, P., Otieno, G., Nishikawa, Y., Kasasa, P., Mushita, A. 2018. Community seed banks –sharing experiences from North and South. DIVERSIFOOD, Paris. <https://www.fni.no/publications/community-seed-banks-sharing-experiences-from-north-and-south>

Clancy, E. (2016) Supporting community seedbanks to realize farmers' rights. Bioversity International, Rome, Italy. <https://hdl.handle.net/10568/78756>

Community Technology Development Trust (CTDT); Seed Savers Network-Kenya (SSN); National Agricultural Research Organisation – Plant Genetic Resources Centre (NARO-PGRC); Wageningen Centre for Development Innovation, Wageningen University and Research (WCDI-WUR) and the Alliance of Bioversity International and CIAT. 2021. Protocol for Collaboration between the National Genebank and Community Seed Banks. ISSD Africa, Wageningen, The Netherlands, and Alliance of Bioversity International and CIAT, Rome, Italy. <https://cgspace.cgiar.org/handle/10568/111243>

European Coordination Let's Liberate Diversity. 2021. Manual 3. Community seed banks: access to germplasm and benefit sharing models. European Coordination Let's Liberate Diversity. [https://liberatediversity.org/wp-content/uploads/2021/05/Manual3\\_ENG\\_print-2-1.pdf](https://liberatediversity.org/wp-content/uploads/2021/05/Manual3_ENG_print-2-1.pdf)

Food and Agricultural Organization of the United National – International Treaty on Plant Genetic Resources for Food and Agriculture [FAO-ITPGRFA]. No date. Inventory of national measures, best practices and lessons learned from the realization of Farmers' Rights, as set out in Article 9 of the International Treaty. FAO-ITPGRFA, Rome. <https://www.fao.org/plant-treaty/areas-of-work/farmers-rights/overview-inventory/en/>



The variety registry book of the Farmers' Seed Network, China.  
© Bioversity International/R. Vernooy

Rakotondrabe, M., Girard, F. 2021. Protecting traditional knowledge through Biocultural Community Protocols in Madagascar: Do not forget the "B" in BCP. Sustainability 2021, 13(18), 10255; <https://doi.org/10.3390/su131810255>

Vernooy, R., Mulesa, T.H., Gupta, A., Jony, J.A., Koffi, K.E., Mbozi, H., Singh, P.B., Shrestha, P., Thabo T. Tjikana, T.T., Wakkumbure, C.L.K. 2020. The role of community seed banks in achieving farmers' rights. Development in Practice 30:5, 561-574, DOI: 10.1080/09614524.2020.1727415


Vernooy, R., Sthapit, B., Galluzzi, G. and Shrestha, P. 2014. The multiple functions and services of community seed banks. Resources 3(4): 636-656. [www.mdpi.com/2079-9276/3/4/636](http://www.mdpi.com/2079-9276/3/4/636)

Vernooy, R., Shrestha, P. and Sthapit, B. (eds.) 2015a. Community seed banks: origins, evolution and prospects. Routledge, Oxon, and New York. <https://cgspace.cgiar.org/handle/10568/68708>

Vernooy, R., Shrestha, P., Sthapit, B. 2015b. Policy and legal environment. In Vernooy, R., Shrestha, P. Sthapit, B. (eds.) 2015. Community seed banks. Origins, evolution and prospects. Routledge, Oxon and New York, pp. 49-55.



Drying seeds for the Vihiga Nutrition and community seed bank, Kenya.

 Bioversity International/R. Vernooy

## Acknowledgements

We acknowledge the support of the Food and Nutrition Security Resilience Programme (FNS-REPRO) South Sudan in the preparation of this brief. We thank Grace Ochino Karura and Luca Pierotti of the Alliance of Bioversity International and CIAT for administrative and design support, and Olga Spellman, Science Writer and Editor at the Alliance Science Writing Service, for English editing and technical inputs.

## Citation

Vernooy, R., Gupta, A., Subedi, A. 2023. Building an enabling framework to promote community seed banks, harnessing four core elements: recognition, respect, support, and collaboration Wageningen Centre for Development Innovation, Wageningen, the Netherlands; Bioversity International, Rome, Italy.

### CONTACT

**Ronnie Vernooy**

 [r.vernooy@cgiar.org](mailto:r.vernooy@cgiar.org)

### Cover Photos:

Left: Kabudi-Agoro community seed bank, Kenya. Credit: Bioversity International/R. Vernooy

Right: Seed multiplication field of the Gumbu community seed bank, South Africa. Bioversity International/R. Vernooy



[alliancebioversityciat.org](http://alliancebioversityciat.org)

[cgiar.org](http://cgiar.org)

The Alliance is part of CGIAR, a global research partnership for a food-secure future dedicated to transforming food, land, and water systems in a climate crisis.