Alliance





HOW TO DEVELOP AND MANAGE YOUR OWN COMMUNITY SEED BANK

Farmers' handbook (updated version)



MANAGEMENT, NETWORKING, POLICIES AND A FINAL CHECKLIST

Ronnie Vernooy, Guy Bessette, Bhuwon Sthapit with Anna Porcuna Ferrer

3 of 3

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BOOKLET 3 OF 3

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Bioversity International 2020

The Alliance of **Bioversity International** and the **International Center for Tropical Agriculture (CIAT)** delivers research-based solutions that address the global crises of malnutrition, climate change, biodiversity loss, and environmental degradation.

The Alliance focuses on the nexus of agriculture, environment, and nutrition. We work with local, national, and multinational partners across Africa, Asia, and Latin America and the Caribbean, and with the public and private sectors and civil society. With novel partnerships, the Alliance generates evidence and mainstreams innovations to transform food systems and landscapes so that they sustain the planet, drive prosperity, and nourish people in a climate crisis.

The Alliance is part of CGIAR, the world's largest agricultural research and innovation partnership for a food-secure future dedicated to reducing poverty, enhancing food and nutrition security, and improving natural resources.

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The Department of Agriculture, Forestry and Fisheries (DAFF) is a national sphere of the South African government, responsible for implementing the laws and policies decided by the South African parliament. It specifically derives its core mandate from section 27 (1) (b) and (2) of the South African Constitution which is to: "....take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of the....right (of everyone) to have access to sufficient food." Within the DAFF, and more specifically the Agricultural Production, Health and Food Safety Branch of the DAFF, the Directorate Genetic Resources is mandated to regulate and provide an integrated national management system in support of the conservation and sustainable use of genetic resources for food and agriculture. This involves the development and implementation of policies, legislation, strategies and norms and standards on the management of genetic resources for food and agriculture, the regulation and promotion of propagating material of genetic resources for food and agriculture and to provide for a risk mitigating system in support of agricultural biodiversity.

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PHOTO CREDITS BOOKLET 3

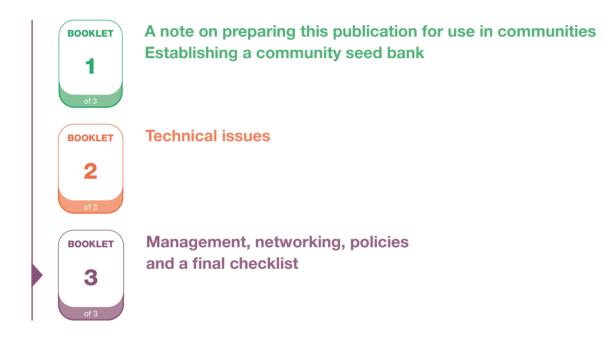
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BOOKLET 3

MANAGEMENT, NETWORKING, POLICIES AND A FINAL CHECKLIST



AN EXPERIENCE FROM LATIN AMERICA Who we are

We are members of the Cimentoro Reserva de Semillas (seed reserve) management team in the mountains of Guatemala. Our indigenous community is remote and not easy to reach. We rely on agriculture. Maize has always been and remains an important crop for our livelihoods and for cultural and religious reasons. Our community seed bank started in 2011. We conserve seeds of the following crops: beans ("frijol"), barley, coriander, fava beans ("haba"), gourds, maize, mustard, wheat, and medicinal plants such as spearmint and chamomile.

Having a safe place to store our seeds is very important for us because our area experiences hurricanes and earthquakes, which can cause major damage and losses. In recent years the weather has changed. First rains arrive later, some days are very cold, some mornings there is frost. Our crops suffer.

We receive regular technical support from a local nongovernmental organization (NGO) known as the association of the organizations of the Cuchumatanes (Asociación de las Organizaciones de los Cuchumatanes) or simply ASOCUCH.



What we want to share with you

We would like to discuss a few topics linked to the management of a community seed bank: its governance, its needs in terms of networking and support, how it is influenced by laws and policies, and how to ensure viability and sustainability. Every community seed bank requires a good management team and effective management practices.



1. How to manage a community seed bank

Community seed banks are usually managed by a committee of members elected by the members of the seed bank.

The management committee oversees daily operations, such as organization, membership participation, technical issues, finance, administration, and networking.

Holding regular management committee meetings and an annual meeting of all community seed bank members is also the responsibility of the management committee.

Many management committees include both women and men farmers, recognizing their various interests and roles in seed management and agriculture more broadly. In some countries, the committee is made up of mainly or only women, as they are champion custodians of seeds.



1. How to manage a community seed bank

The management committee is also responsible for **sharing information and experiences.** Its main methods are:

- √ The organization of seed or diversity fairs, during which farmers can share knowledge and experience and seeds can be obtained for the community seed bank
- \checkmark Setting up and running demonstration plots, for example, in collaboration with farmers' field schools
- \checkmark Exchange visits between farmers from various localities and between community seed banks

Technical operations can be conducted through collaboration with a farmers' field school, a technical committee, or individual farmers mandated for specific tasks, with the technical support of the extension officer working with the community seed bank.

Technical tasks include choosing seed collection and storage methods, health standards, documentation, seed multiplication and evaluation, monitoring seed samples, rejuvenation, and distribution.



2. Costs and viability

Construction and equipment costs are often supported by external agencies with in-kind contributions from the community in terms of construction materials, land, and labour.

Some community seed banks have started with a small seed fund of about US\$1000–2000. Others have received start-up funds ranging from US\$5000 to US\$15 000.

However, a seed bank requires **not only material resources**, but also **human capacity.** Farmers' field schools; national extension, conservation, and research agencies; national and international NGOs; and international research organizations can all provide technical training and supervision in a wide range of areas, such as:

- Soil and crop health
- Seed management, production and marketing
- Crop diversity assessment, variety selection and breeding
- Data registration and maintenance
- Organizational development



2. Costs and viability

Some community seed banks ask members to pay an annual fee, which can be used for maintenance, as an expression of social responsibility.

A few experienced community seed banks manage a revolving fund that provides short-term loans to members. In particular, less well-off households can benefit from such a fund.

From our experience, we know that **the viability of a community seed bank depends on:**

- $\sqrt{}$ Fair treatment of all members
- $\sqrt{}$ Good management of funds and other resources
- $\sqrt{}$ Recognition of and space for women's roles as very important seed custodians
- $\sqrt{}$ Strong collaboration with the local extension agent
- $\sqrt{}$ Continuous motivation of farmers
- $\sqrt{}$ A gradual increase in membership
- $\sqrt{}$ Good practices in the collection, conservation, and exchange of seeds
- $\sqrt{}$ Building relations with local authorities and NGOs



3. Building relationships

Building relationships with multiple actors, including other community seed banks, can help greatly in the effective running of a community seed bank.

Networking can have a positive impact on the performance of community seed banks and offer opportunities to develop sustainability strategies.

The most common links built by a community seed bank are with farmers' field schools, the local extension agent, the district field inspector, and international or national NGOs.

Exchanges with other community seed banks can be of great benefit. We have found that farmer-to-farmer exchanges of knowledge, experience, innovations, and seeds are very beneficial. It is easy to learn from our peers!

Community seed banks can also benefit from links with local and national policymakers and authorities by gaining (legal) recognition and obtaining (technical and financial) support.



3. Building relationships

ORGANIZING A SEED FAIR

Annual seed fairs can support the main activities of the community seed bank, such as awareness raising, conservation and seed exchange. Usually the community seed bank's management team organizes the seed fairs with the support of extension agents or civil society actors interested in this kind of activity. Farmers who are interested to participate in a seed fair should register on time with the management team.

At a seed fair farmers should have ample space to display their seeds so that visitors can walk around easily and observe the showcased crop diversity. Seeds could be displayed in containers on tables or on the ground, inside or outside, according to local conditions. It is important to facilitate easy observation and avoid too much bending over. The organizers should not only promote seed observation, but seed exchange as well.

The organizers could give some awards for the best seed exposition(s) to recognize the efforts of participating farmers. This is best done according to well-defined criteria announced in advance of the fair. Awards could be certificates or small gifts depending on the resources of the organizers.



4. Policies and laws

At the beginning of operations, we recommend that the community seed bank develop **a constitution that spells out rules and regulations.** Where appropriate, the constitution can be submitted for endorsement by local authorities. This is a form of recognition. In some countries, a community seed bank can only function when it is formally recognized by the government.

Other forms of recognition:

- $\sqrt{}$ Direct links with the national genebank
- $\sqrt{}$ Visits by local, national, or foreign officials
- $\sqrt{}$ Awards for special efforts
- $\sqrt{}$ Invitations to participate in important policy events
- $\sqrt{}$ Funds from local or national NGOs or international donor agencies
- $\sqrt{}$ Publicity in the media



4. Policies and laws

Policies and laws concerning cooperatives or farmer organizations may apply to community seed banks. They may provide:

- Legal recognition and protection
- Technical and financial support
- Opportunities for the commercialization of seeds

In some countries, the department of agriculture can also mainstream community seed banks in its plans and programmes as a strategy to increase access to good-quality improved seeds and to conserve local crops.

It is a good idea to investigate which of your country's policies and laws may have an influence on your community seed bank.



5. The sustainability of a community seed bank

We all want a dynamic and permanent community seed bank. Thus, we must address its **sustainability**, and we recommend doing that from the beginning. There are four important aspects of sustainability:

Human resources

- In addition to the physical facilities of the seed bank, the technical knowledge acquired and used by members plays a significant role in maintaining the quality of seeds. Technical know-how is essential.
- Another important aspect is the transfer of the leadership roles, knowledge, and expertise of senior members to youth. Try to involve young women and men from the start.



5. The sustainability of a community seed bank

Modes of operation

- Clear roles and responsibilities of the management team are features of well-governed community seed banks.
- The methods adopted for participation and decision-making by members also affect the long-term functioning of a community seed bank.

Economic viability

• Some community seed banks produce and sell seeds in large volumes to be viable financially. What other means are there to generate income?

Policy and laws

 In most countries, seed banks require legal recognition and registration before they can obtain funding. Many funding agencies hesitate to provide support to an organization that is not a legal entity.



A FINAL CHECKLIST

Let us briefly review what we have covered in these three booklets.

TOPIC 1: ASSESSING AGRICULTURAL BIODIVERSITY AND RAISING AWARENESS

- Assessing crop diversity
- Conducting a trend analysis
- Looking at the seed system
- Raising awareness





TOPIC 2: ESTABLISHING A COMMUNITY SEED BANK

- Making the decision to establish a community seed bank
- Getting support
- Selecting a site
- Motivating and organizing farmers in constructing the community seed bank
- Organizing training

TOPIC 3: DECIDING ON THE FUNCTIONS YOUR COMMUNITY SEED BANK WILL FULFILL

- Conservation
- Providing access and availability through seed exchange
- A platform for community development





TOPIC 4: MAKING SOME DECISIONS AND TAKING MEASURES TO OPERATE YOUR SEED BANK

- Deciding what kind of crops and varieties you want to collect and preserve in your community seed bank
- Identifying and taking appropriate measures to ensure good-quality seed
- Organizing the registration of new varieties and seeds in the seed bank
- Using appropriate storage equipment and methods to keep seed clean, healthy, and viable
- Verifying seed quality regularly
- Planning for seed regeneration
- Agreeing on rules and regulations concerning accessing seeds from the community seed bank

TOPIC 5: MANAGEMENT OF THE COMMUNITY SEED BANK

- Forming a management committee and one or more technical committees
- Evaluating costs and resources
- Achieving recognition and support as a legitimate organization





TOPIC 6: GETTING SUPPORT AND DEVELOPING NETWORKS

- Recognizing the value of networks
- Organizing farmer-to-farmer exchanges
- Obtaining policy and legal support from local authorities and the national government

TOPIC 7: POLICIES AND LAWS THAT CAN AFFECT THE VIABILITY AND SUSTAINABILITY OF A COMMUNITY SEED BANK

- Investigating, early on, national policies and laws regarding legal recognition and protection
- Finding technical and financial support
- Identifying opportunities for the commercialization of seeds





TOPIC 8: MAKING THE COMMUNITY SEED BANK SURVIVE IN THE LONG RUN

- Ensuring that human capacity, modes of operations, economic viability, and policy and legal support are in place
- Considering long-term sustainability from the earliest stages

About the authors

Ronnie Vernooy, Bioversity International, Wageningen, the Netherlands.

Ronnie joined Bioversity International in October 2011. He has worked on questions related to the conservation and sustainable use of agricultural biodiversity for more than 25 years in countries such as Bhutan, China, Colombia, Cuba, Honduras, Mongolia, Nepal, Nicaragua, South Africa, and Vietnam. His work focuses on the policy and legal aspects of safeguarding plant genetic resources and their sustainable use, both *ex situ* and *in situ*.

Guy Bessette, independent consultant, Gatineau, Quebec, Canada.

Guy has worked in development communication, social learning, and natural resource management in Africa and Southeast Asia. He currently supports various Bioversity International initiatives related to seed systems.

Bhuwon Sthapit (in memoriam)

Bhuwon, a plant breeder, joined Bioversity International in 1997 as an *in situ* conservation specialist, first based in Malaysia, then India, and, until his death in August 2017, Nepal. His major research interests included participatory methods to assess and use agricultural biodiversity, participatory crop improvement, *in situ* and on-farm conservation, home gardens, community-based biodiversity management, and community seed banks.

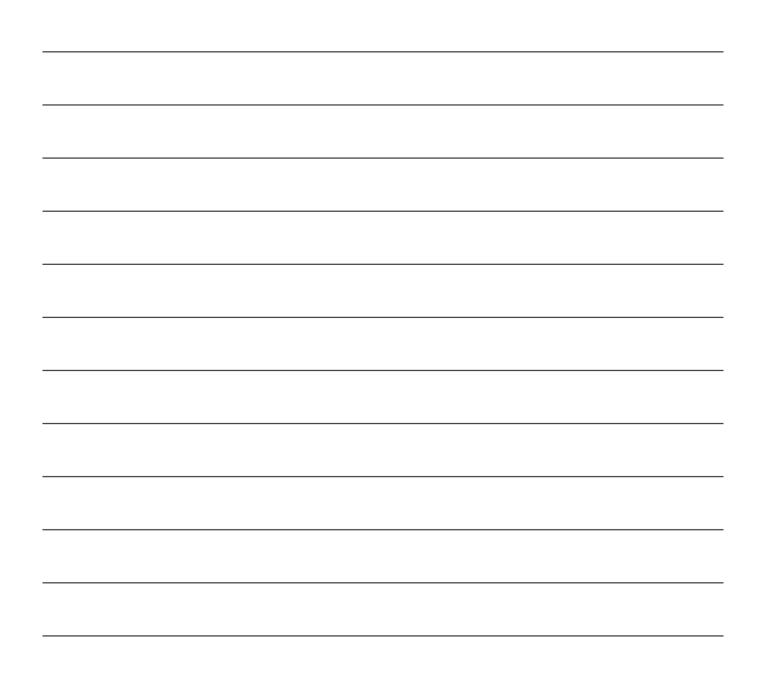
Anna Porcuna Ferrer is a PhD student at the Autonomous University of Barcelona, Spain. She wrote her Master thesis about community seed banks and their contribution to the socio-ecological resilience of the local communities in Sierra de los Cuchumatanes, Guatemala, with the support of ASOCUCH and Bioversity International.

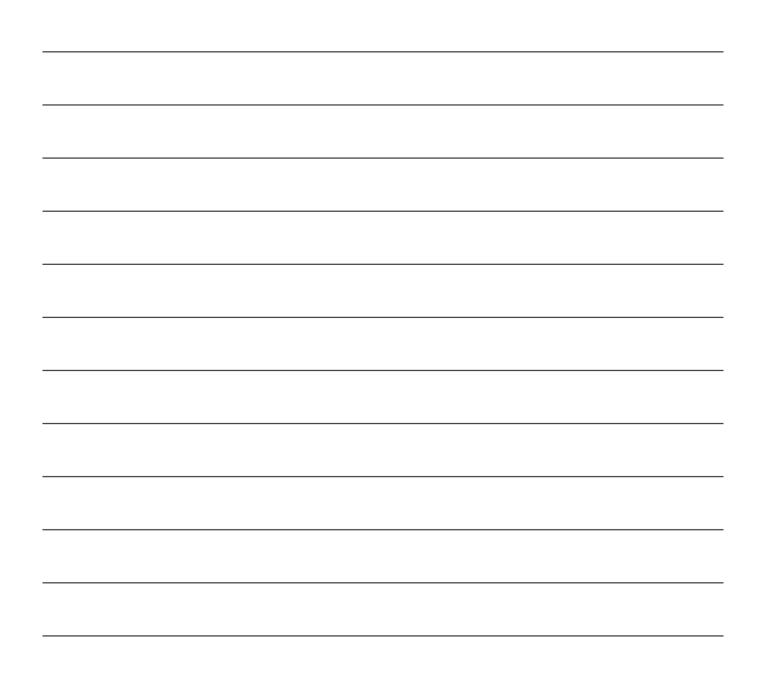
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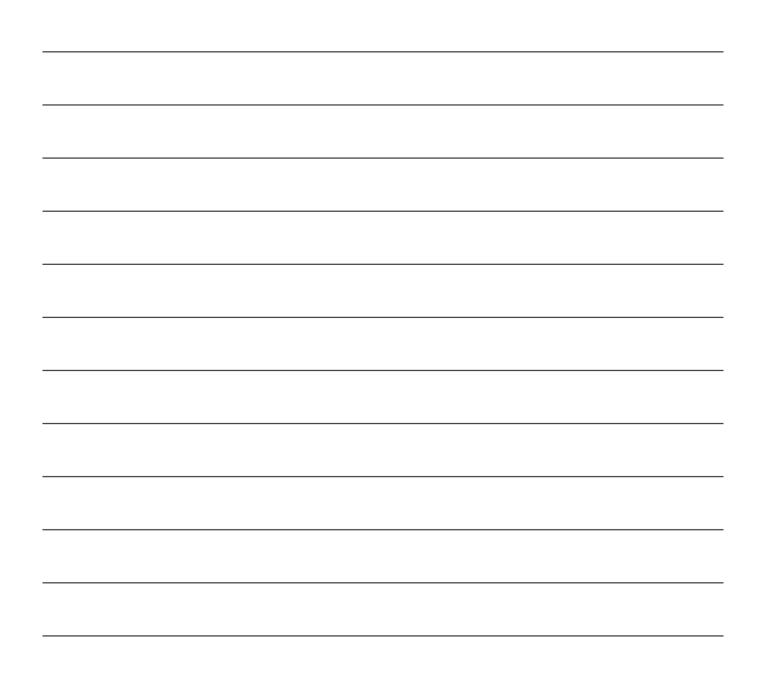
We hope it has given you a practical introduction to establishing and supporting a community seed bank.

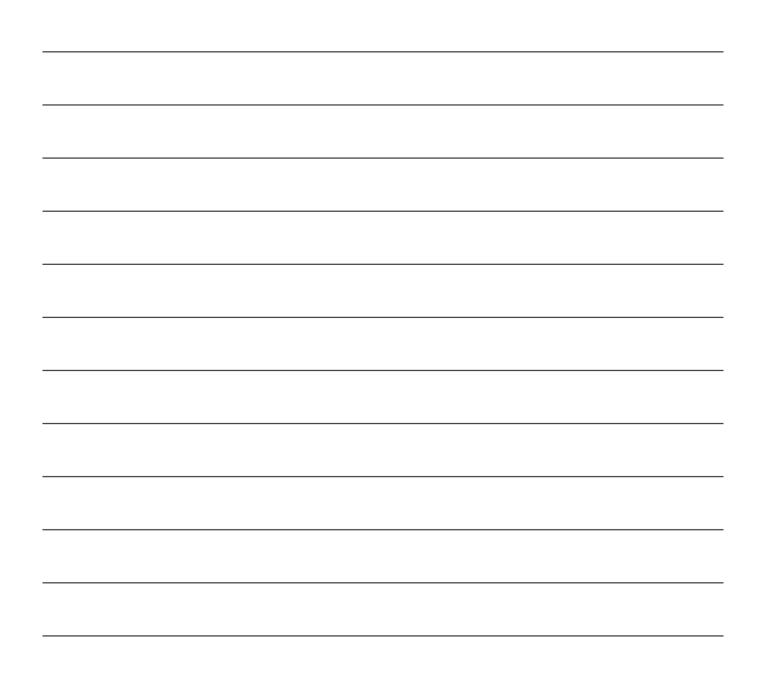
We wish you good luck with starting your community seed bank!

PERSONAL NOTES









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