

6 Support and networking

*Ronnie Vernooy, Bhuwon Sthapit
and Pitambar Shrestha*

Community seed banks mobilize a range of actors in conservation, plant breeding and rural development to find new ways of collaborating with farmers and strengthening the multi-functionality of farmers' seed systems. Community seed banks tend to be small-scale organizations that store seed on a short-term basis and serve individual communities or several communities in surrounding villages. Such local efforts can have a multiplier effect if the community seed banks cultivate partnerships and engage in networking and sharing of information and seeds with other informal and formal seed system actors.

Some community seed banks have excelled in building relationships, but, overall, the networks that our case studies describe differ considerably. Some are stable, but remain limited in scope with few connections. Others span a large geographic area, include many social actors from various fields and have a large number of connections. The latter are part of, or becoming part of, a more-or-less formal group, network, association or federation of community seed banks along with other rural development organizations, such as non-governmental organizations (NGOs), cooperatives, farmers' enterprises and farmers' unions. Such connections increase the chances of accessing new materials and information. Currently, one such network operating at the state level in Brazil includes more than 240 community seed banks (Chapter 39). Likewise, the Spanish seed network, 'Resembrando e Intercambiando', is an informal federation that brings together 26 local seed networks that are distributed throughout the country (Chapter 36).

Some community seed banks interact regularly with researchers, mainly but not always on the initiative of the latter (e.g. Brazil, Costa Rica, Guatemala, Malaysia, Mali and Uganda cases) or extension agents (e.g. Bhutan, China and Zimbabwe cases), while others have little or no contact with these professionals or prefer not to interact with them (e.g. some examples from India). In India, some individual enthusiastic scientists and seed curators have established their own community seed banks by collecting local seeds from surrounding villages using their own resources (e.g. Debal Deo in Orissa, Laxman Shukla in Lucknow for mango; see Sthapit et al., 2013). Some community seed banks cooperate with national gene banks or national-level agencies in charge of plant genetic resources (e.g. Bhutan, Ethiopia, Mexico and Zimbabwe), while

some have started to explore working together (e.g. India and Nepal) or envision doing so (e.g. South Africa). National guidelines for such cooperation that spell out roles, rights and duties are still lacking everywhere.

In some countries, community seed banks are part of a dynamic network alongside the formal research system, jointly conducting participatory plant breeding and participatory variety selection and exchanging knowledge and experiences. Some community seed banks have evolved into more than just seed-oriented organizations and serve as platforms for social learning, mobilization and community development more broadly (e.g. Nepal cases).

The most common relations found among our case studies are between community seed banks and international or national NGOs (e.g. the Community Technology Development Trust, the Norwegian Development Fund, LI-BIRD (Local Initiatives for Biodiversity, Research and Development), USC Canada and Welthungerhilfe, all described in this book, as well as ActionAid and OXFAM-NOVIB). In some cases, national and international research organizations (notably Bioversity International) provide technical and financial support. Through these support organizations, some community seed banks have started to interact with the national government agencies that set policies on plant genetic resources (e.g. Honduras). However, even when long-term relations exist, they are seldom stable because of their often highly personal nature, and they will most likely never be stable, given the financial uncertainty that affects these organizations.

Sometimes, community seed bank leaders take the lead in establishing and maintaining a network; sometimes, there is much greater participation by members. In some cases, women farmers play a strong role in almost all operations of community seed banks; in other cases, women and men share roles and activities. Networking in developed countries (e.g. Australia, Canada, European countries and the United States) appears to function well with strongly committed members, focussed objectives and sound self-financing mechanisms. In developing countries, most networking is facilitated, at least initially, by donors or national or international NGOs, and local buy-in takes time and is sometimes hindered by distrust.

Many factors influence these dynamics, e.g. geography, roads and communications infrastructure, local culture, the role of local leaders, municipal or district politics, the occurrence of natural disasters, civil unrest or war, national policy development, international development priorities and the international financial situation. How does the nature of the web of relations have an influence on the operations and performance of community seed banks? In what ways does promoting networking make sense? How easy is it for a locally focussed organization to build a wider web of useful relationships? What can community seed banks do to create such links: organize annual seed diversity fairs and participatory exchanges?

Unfortunately, the case studies do not allow for an in-depth sociological assessment of how the nature of networks affects their performance and sustainability, which would require longer-term field research; however, they

offer some insights, nonetheless. We offer these insights in the following sections, grouping the case studies into two categories: light and dense webs, i.e. those with few linkages and those with multiple linkages, respectively. It remains a challenge to apply network analysis more deeply as part of a coherent conceptual framework to assess community seed banks and their value as dynamic and viable core participants of seed and information exchange networks. Before presenting the two types, we briefly review the kinds of support community seed banks receive and its significance.

Support

The case studies provide ample evidence that a combination of material, technical, financial, social, political and moral support is important for the establishment and continuous operations of community seed banks. Many seed banks received financial and material support to start up, build a seed-storage facility and acquire basic equipment and materials. In Oaxaca, Mexico, the Sistema Nacional de Recursos Fitogenéticos para la Alimentación y la Agricultura provided support for the construction of ten community seed banks (Chapter 23). In Nicaragua, several international NGOs financed the creation of a network made up of a central bank and a series of family-based community seed banks (Chapter 26). In Bangladesh and Sri Lanka, national and international NGOs shared the costs of the establishment of a number of community seed banks (Chapters 9 and 28). Although farmers are sometimes able to generate enough local resources to establish a community seed bank and build a basic facility, there is no doubt that external support is of great help.

However, establishing a community seed bank requires not only material resources, but also human capacity. The case studies of organizations supporting community seed banks in Part II are all good illustrations of this principle. The approach developed by LI-BIRD in Nepal emphasizes the need – from the very beginning – to empower community seed bank members through training and capacity building in technical and institutional aspects of seed conservation and community seed bank management, governance and networking (Chapter 34).

National extension, conservation and research agencies, national and international NGOs and international research organizations all provide technical training to members of community seed banks in a wide range of subjects: soil health, participatory crop diversity assessment, participatory variety selection and plant breeding, technical seed management, data registration, seed production and marketing, organizational development and enterprise development. The case of Bhutan is characterized by a few, but very strong, support connections between the community seed bank and government agencies, with the district agriculture officer and staff coordinating activities at the dzongkhag level; the National Biodiversity Centre (NBC) offering technical and financial support (and initial coordination); and the United Nations Development Programme's Global Environment Fund project, 'Integrated Livestock and Crop Conservation Project', providing financial support through

the NBC (Chapter 10). In Trinidad, the community seed bank obtained new technology (seed threshers, driers and a greenhouse) through the main national plant genetic resources agency (Chapter 29).

In the United States and Canada, community seed banking efforts rely heavily on volunteers who assist with many aspects of on-farm growing, seed cleaning and packaging. In the United States, volunteers also help with the retail store run by the community seed bank. Several case studies mention the importance of moral support, which is a form of legitimization of the establishment and operations.

These various forms of support, when properly appropriated by members of community seed banks, can strengthen operations and performance. However, a high degree of dependence on a single or a few support providers can have a negative effect. As community seed banks mature, the nature and level of support they benefit from will change. More demand-driven forms of support can be expected to replace supply-driven forms. The organizations committed to providing long-term support to community seed banks included in this book seem to have accepted this dynamic evolution and adjusted their support accordingly. USC Canada, for example, reflects that as community seed banks mature, its support is redirected to the national level, through targeted training, collaboration with other institutions and policy efforts. In terms of focus, USC Canada mentions that it is now paying more attention to market development and income generation opportunities, gender equality and youth engagement (Chapter 37).

Sometimes, despite strong support from national and international agencies and attention paid to human capacity development, community seed banks do not evolve beyond initial steps. As the case study from Malaysia makes clear (Chapter 20), this can be due to several factors, including cultural values that do not encourage seed sharing, lack of strong community support to maintain operations and labour shortages.

Light webs

In a number of countries, community seed banks have not yet become part of dense webs although this does not mean that they are not solid in terms of operations, governance and performance. In Nicaragua, the only important external support has been that of the national Programa Campesino a Campesino (PCaC; farmer-to-farmer programme) of the Unión Nacional de Agricultores y Ganaderos (UNAG; the national union of farmers and livestock ranchers), which channels resources received from European NGOs and provides technical support (Chapter 26). The PCaC–UNAG network is in turn part of an alliance of organizations called Seeds of Identity supported by SWISSAID. The PCaC is known for its close and long-term cooperation with farmers, but its financial dependence on outside sources has caused some problems.

In Rwanda, the community seed bank, newly set up with the involvement of Bioversity International, is being connected with other agencies, such as a

local youth cooperative, the Rwanda Agricultural Board, a government agency housing the national gene bank and the international NGO Caritas (Chapter 27). However, these connections are incipient and not very clearly defined. In Uganda, the newly established community seed bank works most closely with the national gene bank in Entebbe under the Plant Genetic Resources Centre of the National Agricultural Research Organization (NARO). The community seed bank receives technical guidance, and the gene bank stores duplicate accessions of its varieties (Chapter 30). NARO facilitated the link with support from Bioversity International.

In China, the first community seed bank in Xiding, Yunnan province, relies heavily on research support from provincial-level agencies and technical support from the local extension service bureau. It has not yet made other connections with formal-sector agencies, which, in the Chinese context, would require paying careful attention to formal cooperation procedures. Exchanges with other incipient community seed banks in southwest China are envisioned and could be useful in terms of sharing experience and seeds, as well as ideas for building more community seed banks in the country (Chapter 15).

In Bolivia, an early attempt to link community seed banks with formal rural development and seed-sector agencies did not last long, because of changes in the national political situation. Currently, a second attempt is benefitting from technical and financial support from an international donor agency project implemented by Bioversity International in cooperation with the Fundación para la Promoción e Investigación de Productos Andinos and four other national agencies. Partners are seeking how best to build a supportive network and policy and legal environment to guarantee sustainability (Chapter 11).

Dense webs

In a number of countries, community seed banks have become immersed in much denser webs characterized by a large number of and/or frequent connections with multiple and diverse social actors in both the formal and informal sectors. The case studies suggest that such dense webs can have a positive impact on the performance of community seed banks and offer opportunities to develop strategies in support of sustainability.

However, a caveat is necessary, as the experience in Mali suggests (Chapter 22). In Mali, a number of community seed banks, established with technical and financial support from USC Canada, now cooperate with other similar local and regional initiatives through networks and in partnership with a number of subregional organizations. When USC Canada support was withdrawn from one of the community seed banks, it continued to operate independently; in contrast, another community seed bank closed after funding ended. Although operating under similar, well-resourced network conditions, these banks differed in terms of level of empowerment of their members: leadership, motivation, sense of ownership and organizational skills.

A similar experience can be found in the Dalchowki case study, Nepal (Chapter 24). Although the community seed bank there collaborated with like-minded NGOs and government agencies (including the national gene bank) to receive technical and material support and seemed well connected, it suffered ups and downs in its development trajectory, mainly because of internal factors.

The Bhutan government is developing a national strategy to establish and support community seed banks. This represents an institutional model that could guide solid operations, good performance and sustainability (see Chapter 8). In Zimbabwe, community seed banks have benefitted from similar kinds of connections, although not backed up by a formal policy or national strategy (Chapter 38). The Zimbabwean community seed banks have developed close working relations with the national gene bank, which provides training and storage of seed samples collected by the community banks and participates in seed fairs. The national extension service has provided technical support from the beginning. The Community Technology Development Trust, the NGO supporting the community seed banks, has signed a memorandum of understanding with the Zimbabwe farmers' union to facilitate scaling up of the seed banks and networking among farmers at the national level.

Case studies from Brazil (Chapters 12 and 13) indicate that many hands working together can move a lot of soil. In the state of Paraíba, community seed banks are part of a network of farmers' and community associations, small cooperatives, unions, parishes and local NGOs that, together, have contributed to stronger farming systems and the realization of greater social equity and local sustainable development. In the state of Alagoas, community seed banks have joined forces with a cooperative of small-scale farmers and a large network of civil society organizations. These constellations of organizations have resulted in important policy and legal changes in support of community seed banks (Chapter 39). In Nepal, an ad hoc committee of the national network of community seed banks, formed in 2012, is promoting the exchange of knowledge and seeds and developing a catalogue of local varieties conserved in community seed banks across Nepal with support from LI-BIRD (Chapter 34). The committee is trying to bring all community seed banks in Nepal into the network. It is planning to meet with the national gene bank in late 2014 to discuss developing linkages.

Another way to build a dense web is through the execution of projects. Community seed banks alone are unlikely to be able to do this, but projects can be carried out through the agencies that support the banks. For example, the Native Seeds/SEARCH's project activities and impact in the southwest of the United States have created a dense web of connections through which knowledge and resources flow in multiple directions. These efforts also included the recent establishment of the first 'seed library' or small community seed bank with free exchange of seeds in Arizona and support to set up a sophisticated network among eight public libraries in Tucson (Chapter 31). This case might be atypical, but it points to the potential that well-functioning community seed banks can have in facilitating other initiatives.

Reference

Sthapit, B., Lamers, H. and Rao, R. (eds) (2013) *Custodian farmers of agricultural biodiversity: selected profiles from South and South East Asia. Proceedings of the Workshop on Custodian Farmers of Agricultural Biodiversity, 11–12 February 2013, New Delhi, India*. Bioversity International, New Delhi, India, www.bioversityinternational.org/e-library/publications/detail/custodian-farmers-of-agricultural-biodiversity-selected-profiles-from-south-and-south-east-asia/, accessed 26 January 2015