

## 4 Governance and management

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In this chapter, we look at how community seed banks are dealing with governance and aspects of management, including costs; what has gone well and not so well; and what key issues have emerged. We present a governance typology to categorize the various forms that can be found among the case studies. Both governance and management are influenced by social and gender variables, and the case studies in Part II shed some light on how this takes place.

Governance is a process whereby a group of individuals works as a collective to assure the health of an organization. It usually includes moral, legal, political and financial aspects. The way in which accountability is dealt with is central to governance. A community seed bank, as defined in this book, represents a community-managed approach that comprises community-based practices of conservation and sustainable use of plant genetic resources from the level of household seed storage to the community (and sometimes beyond). The daily operations of community seed banks are expressions of collective action. The value of a community seed bank is that it is governed by local people based on rules and regulations that are locally developed. The very process of community seed banking builds social capital by mobilizing the local community, and this can lead to community empowerment. It also creates a learning platform for community-based management of agricultural biodiversity through use and conservation.

Management refers to the day-to-day coordination, execution and monitoring of key tasks required to maintain a community seed bank in the short and long term. It usually involves human resources, as well as technical, administrative, organizational and financial elements. In most countries, community seed banks are characterized by a high degree of voluntary effort, and this has a direct impact on the way management is organized.

### **Governance**

Looking at the case studies in this book, only a small number have all the basic elements of governance and management structures. Some have

detailed formalized rules and regulations; some have only general working principles; and many have mostly informal ways of organizing both governance and day-to-day management. The seed banks described in the case studies can be grouped into five categories of governance and management systems (Table 4.1). In many community seed banks, no matter which type, women play key roles, sometimes facilitated by outside intervention, but often because of

Table 4.1 Governance and management structures of community seed banks

<i>Type</i>	<i>Basic elements of governance</i>	<i>Case study examples (Chapter)</i>
Basic stage of implementation without key formal elements of governance	Run by external stakeholders, usually project managers, often a nongovernmental organization (NGO) or donor staff. Custodian farmers are encouraged to take a leadership role as they have an affinity with local crop diversity.	Bolivia (11), Rwanda (27)
Under strong control of a public-sector agency and managed as a kind of decentralized national gene bank	Operated by public-sector agency. Phytosanitary regulations in place. Technically driven operational plans for ensuring quality and genetic purity.	Bhutan (10), China (15)
Governed by a board of volunteers and managed as a seed network based on formal membership	Managed by small committees with both conservation and commercial arms. Support from private companies, membership fees and income from seed sales.	Brazil (13), Honduras (33), Mali (21, 22), Mexico (23, 42), Spain (36), Trinidad (29), United States (31)
Governed by elected committee (of men and women farmers) with transparent operational plans and guided by locally developed rules and regulatory framework	Executive committee (usually with balanced representation of women and men) has overall responsibility for collecting, cleaning, drying, storing, distributing and regenerating seed. Locally developed operation plans match technical requirements. Identified roles and responsibilities of committee members. Sometimes include an ex-situ backup system; a community biodiversity fund; and social auditing.	Bangladesh (9), Costa Rica (16), Nepal (24, 25, 34), Nicaragua (26), Zimbabwe (38)
Governed by ideology of free access, open source and seed sovereignty	Volunteer based (with varying degrees of formal management) or network of seed-saver groups. Some cases prefer the concept of seed library over seed bank as seed should not be privatized.	Canada (14); see also Kloppenburg (2010)

women's strong interest and leading role in seed management in the household and community.

A caveat on this typology is necessary. Most of these seed banks have evolved and continue to evolve through a 'learning by doing' approach. Over time, a clearer distinction between what is governance and what is management might emerge, rules and regulations will become more elaborate and formalized and, overall, the activities related to governance and management will become more complex. For example, in Mali, community seed banks have been formally registered as cooperative societies whose governance and management follow internal regulations. Each community seed bank has a general assembly, a board of directors and an oversight committee. The general assembly is the decision-making body and meets at least once a year, with additional meetings held on special occasions. The board of directors is in charge of implementing the decisions made by the general assembly while the oversight committee ensures that these decisions are applied correctly (Chapter 22). Surprisingly, many of the community seed banks documented here operate in a legal grey area. Only a few have been formally registered, for example, under a non-profit civil society organization umbrella (e.g. Sri Lanka) or as cooperatives (e.g. Burundi, Mali, Mexico and Nepal) or as seed enterprises (e.g. India). This aspect is discussed in more detail in Chapter 7, Policy and legal environment.

The issue of accountability, apart from proper management of infrastructure and finances, is most clearly expressed through the rules and regulations concerning the use of seeds maintained in community seed banks. All community seed banks have adopted a clear principle about this. Some examples are given in Box 4.1.

#### **Box 4.1 Keeping seeds on the shelves (examples from the case studies)**

##### **Nicaragua**

Seed loan requests are received in April, right before the first growing cycle (May to June). The management committee reviews these requests, considering whether the applicant farmer is known to be an honest person – an important factor taken into account to ensure that the community seed bank will recover its seed. On receiving a seed loan, the farmer signs a promissory note and a contract in which he or she agrees to return seed of the same quality that has been selected, weighed, cleaned, dried and is free of mould. Although community seed bank members have priority, non-members are also granted loans when enough seed is available. The interest rate is 50 per cent, i.e. when 100g is borrowed, 150g must be returned.

### **China**

Farmers from various villages are encouraged, through crop seed diversity fairs and locally displayed posters, to store their seeds in the community gene bank. At farmers' field day activities, farmers are able to examine various species of rice, corn, etc. To obtain seeds of varieties other than his or her own, the farmer must deposit seeds in the community gene bank in a 1:1 ratio, i.e. 100g deposited allows the farmer to borrow 100g from the bank.

### **Management**

Often a community elects a management committee to oversee the community seed bank, with formal distribution of tasks that include coordination and leadership, technical issues, finance, administration, communication and outreach. However, more often the roles and responsibilities of each member are not that well defined. The number of farmers making up the management committee varies, from three in the case of Oaxaca, Mexico, to six in Nicaragua. In a few cases, the committee is guided by a constitution drafted by the farmers (e.g. Nicaragua) or, in some cases, with external support from an NGO (e.g. Bara in Nepal and the community seed banks in Zimbabwe). In a few cases, both technical and management committees have been set up to undertake specialized functions and provide expertise (e.g. Bangladesh and Trinidad). Women, as custodians and caretakers of seeds in many countries, play an active role in the day-to-day functioning of community seed banks. In Nicaragua, several banks are run exclusively by women.

The technical committee is usually responsible for deciding on:

- collection methods (e.g. through seed fairs, on farm/in the field, household seed storage, collections maintained by custodian farmers, etc.);
- phytosanitary standards (e.g. keeping seed free of diseases and pests, removing weed seeds, sun drying, etc.);
- documentation methods (e.g. passport data sheets, variety catalogue, community biodiversity register, etc.);
- seed multiplication and evaluation (based on farmers' descriptors);
- storage methods (e.g. short versus long term, local storage structure or scientific approach);
- monitoring of seed samples (e.g. viability and vigour, initially and at planting time);
- rejuvenation (e.g. annual seed multiplication in diversity blocks, decision tools to determine which seeds should have priority, pollen control in open-pollinated crops, etc.);

- distribution (e.g. systems to improve access and availability; access for various categories of users: men or women, poor or rich, community or outsiders, researchers, private sector, etc.).

Across the case studies, considerable variety exists in terms of exactly how these tasks are executed. Although most seed banks pay attention to these factors, variation can be observed in the rigour and regularity of their execution.

Reviewing both governance and management, the case studies seem to offer evidence that a number of the NGO-supported community seed banks could benefit from strengthening the roles and capacities of technical committee members. The public-sector-run or gene-bank-facilitated community seed banks could benefit from improved governance so that the community plays a stronger role in leading the process. In these cases, the local community could build capacity through input from science and support from various sources so that the seed bank activities are long term, useful and sustainable. Both technical and management committees have to play a joint role in collection, multiplication and evaluation processes and in developing strategies for seed distribution to needy people.

## **Costs**

How much does it cost to establish a community seed bank, and what are the annual operating costs? This kind of information is hard to obtain from the case studies. A better understanding of the roles played by community seed banks in the conservation and use of agricultural biodiversity and the costs involved in this work is important in terms of gaining recognition from formal seed sectors and policymakers who can provide technical and institutional support. Community seed banks combine in-situ and ex-situ conservation; they store species in seed containers, packets or a dedicated conservation field, but with the idea that those crop varieties are immediately available for local use. Physical structures, storage units and equipment needed for regeneration of seeds and day-to-day operations and care both in the field and at storage facilities are major costs.

Estimates of the cost of modern types of ex-situ conservation exist. In contrast, for most community seed banks, the physical structure, storage materials and equipment are often simple and low cost. Labour-intensive tasks are carried out by volunteers, although some community seed banks hire a local person to carry out day-to-day operations. Costs also vary depending on the extent of activities; some seed banks deal with a few local varieties and provide small quantities of seeds (e.g. Bhutan and China) while others deal with tonnes of seeds (e.g. Costa Rica and Zimbabwe). As far as we know, no thorough cost calculations have been carried out.

Some community seed banks started with a small seed fund of about US\$1,000–2,000. Others received start-up funds ranging from US\$5,000–10,000 to build social capital and initial physical infrastructure, including

seed-storage units. Communities often mobilize local resources, such as construction materials, land (obtained sometimes from the local government) and labour. In parallel, external support agencies, through their regular project activities, also assume part of the cost of building social, human and physical capital from which community seed banks benefit. In a few cases, government agencies cover these expenditures.

When support organizations are associated with community seed banks over a long period, the total costs (including professional staff time, travel costs, costs of meetings, training, materials, etc.) will likely be higher by several hundred dollars a year per community seed bank. However, long-term capacity development is essential for building successful community seed banks. Investment in excellent and experienced community organizers to mobilize community members and support local leadership represents an important component of this process.

Community seed banks act as a central node where farmers can exchange seeds through their own networks or via social events such as seed fairs. They are also platforms for sharing seed-related skills and knowledge. They are a key source of good-quality local species, especially those not covered by commercial plant breeders and, thus, make an important contribution to agricultural biodiversity. Community seed banks are locally based and locally run (often by women) and located within reach of the communities that use them. Local practices, such as seed huts, seed fairs and seed exchanges, can overcome the expense of distributing seeds and make seeds easily available.

## **Key issues and challenges**

### ***Building legitimacy and a strong local institution***

Community seed banks can be effective mechanisms, either in the absence of other local organizations or as another form of local organization, to mobilize existing social capital (trust, networks and customary practices). Either way, being recognized and supported as a legitimate form of organization is important. The more the establishment and development process is based on community-driven participation that integrates the new knowledge and practices with the local social system and local rules and norms, the greater the chance that the community seed bank will be effective in the short and long term (Sthapit et al., 2008a,b), even in an environment that is not fully supportive. To build and strengthen the social capital required to operate community seed banks, Local Initiatives for Biodiversity, Research and Development (LI-BIRD) has developed the following steps:

- sensitize the community;
- strengthen local institutions;
- develop rules and regulations;
- construct seed-storage facilities;

- receive seed deposits or collect local seeds;
- document community biodiversity using a register/inventory/passport data;
- mobilize a community biodiversity management fund for community development and conservation;
- multiply seeds;
- monitor seed transactions and impacts.

This approach, which is centred around institution building, has produced good results in Nepal (see Chapters 25 and 34) and has been followed by other organizations in other countries working with community seed banks, e.g. Sri Lanka (Chapter 28). The success and sustainability of community seed banks depend on how the technical knowledge and management capacity of the change agents are enhanced and how the bank is empowered to conduct a self-directed decision-making process. Similar experiences can be found in the cases from the Americas, such as Nicaragua (Chapter 26), Mexico (Chapter 23) and the United States (Chapter 31).

### ***Recognition, access and benefit-sharing mechanisms***

As the case studies indicate, community seed banks can be legitimate and effective community-based organizations to improve access and benefit sharing of locally important crop diversity, but in many countries they have yet to be formally recognized by the government. Recognition can take different forms: visits by local, national or foreign officials; awards for special efforts and achievements from the local or national government; invitations to participate in important policy events locally or nationally; funds from local or national government and international donor agencies; and publicity in the local, national or even international media (Sthapit, 2013). The case studies, with a few exceptions (Bangladesh and Nepal, Chapters 9 and 24), do not mention these forms of recognition, suggesting that much more work remains to be done.

Although recognition is important, the development of proper access and benefit-sharing mechanisms is equally important. Civil society organizations and the private sector have a common interest in good governance to ensure that the quality of seeds is maintained or enhanced and that reliable and useful genetic resources remain available. Community seed banks have to face the challenges of the technical superiority of hybrid and modern cultivars, on the one hand, and restrictions related to intellectual property rights on most of these cultivars, on the other. Thus, it is essential that community seed banks develop niche outlets for local landraces and farmer-improved cultivars and strengthen the marketing of locally produced or bred varieties. Such efforts are described in the case studies from Bolivia, Guatemala, Honduras, India (two case studies), Nicaragua and Nepal (Bara) (Chapters 11, 17, 33, 18, 19, 26 and 34, respectively).

Based on the diverse experiences and lessons of community seed banks, there is another way to conceptualize access and benefits: as an institutional

platform for ensuring farmers' rights. Policymakers might consider community seed banks as a mechanism for ensuring the effective implementation of farmers' rights, in terms of recognition, participation in decision-making, benefit sharing and a supportive policy and seed regulatory framework. This also provides an opportunity for interaction and integration of informal and formal seed systems to address local problems; promotion of in-situ and ex-situ links to backup genetic resources locally (as a building block of crop improvement and food security); and ensuring community development in a sustainable way. This approach is highlighted in a few case studies, in particular the one about the Development Fund (Chapter 35) and the Community Technology Development Trust in Zimbabwe (Chapter 38). Bioversity International has been making a similar case (Vernooy, 2013), but recognizing and rewarding community seed banks as such takes time.

Starting a community seed bank requires a major effort, but keeping it alive over time has been a challenge for many, as the case studies demonstrate. The seed banks that are strongly dependent on outside resources and support have particularly struggled at times. This challenge is discussed in more detail in Chapter 8, Sustainability.

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