

## 44 Epilogue

### Visions of the future

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In this book, we have recognized and applauded the major achievements of 30 years of community seed banking around the world. We have also identified a number of common weaknesses and challenges and offered some critical thoughts about the way forward. To conclude, we present three broad possible scenarios for the future development of community seed banks as input for reflection – and action.

#### **More of the same**

The first scenario depicts a development path that consists of more of the same. Community seed banks would come and go, perhaps increase in number in countries where they have made a recent start, but decrease in countries where strong growth occurred earlier. Support from external agencies would remain an important driver, although dwindling international development funds would most likely put the brakes on current levels of support. This could lead to supporting organizations not spending sufficient time to understand the local context and to build social and human capital according to the needs and interests of the community. Community seed banks would be faced with the challenge of generating funds locally (for example, through community-based management funds) or obtaining financial resources from donor agencies. A few ‘new’ countries would develop a strategy for institutional support through a specific policy clause or a national conservation strategy. In a few countries, existing or emerging networks would be consolidated. Other such initiatives would be difficult because of lack of recognition, weak financial and technical support and difficulties in establishing effective collaboration with other actors, such as research agencies and national gene banks. Community seed banks around the world would remain largely disconnected from each other.

#### **Institutionalization**

The second scenario represents a strong institutionalization path. Elements of this scenario are already being explored by various community seed banks highlighted in this book. Community-based frameworks for the conservation

of agricultural biodiversity would gain ground in many countries and internationally. Building on these processes, community seed banks, with the technical support of external agencies, would pursue interactions with national and even international gene banks to set up robust, dynamic and well-funded national systems that are well connected to the international level. Through this system, community seed banks would become part of a global system of conservation and exchange, receive institutional recognition and benefit from adequate, long-term technical and financial support. Community seed banks would form an international 'confederation' to share knowledge and experience and speak with a common voice. Community seed banks would take an active part in this system, not only in terms of seed management, but also concerning questions related to seed research and development, seed policies and laws and farmers' rights. The system would be based on agreed rules and regulations about providing and accessing seeds and related knowledge as well as concerning the sharing of non-monetary and monetary benefits. The system at large would operate in an enabling policy and legal environment at national levels and under international agreements, such as the International Treaty on Plant Genetic Resources for Food and Agriculture and the Convention on Biological Diversity's Nagoya Protocol. Community seed banks would embody the concrete practices that would make local access and benefit sharing a reality, as intended by international agreement.

### **Towards open-source seed systems**

The third scenario would lead to the establishment and expansion of open-source seed systems around the world. This is a more speculative scenario; although the idea of open-source seed systems is not new (e.g. see Kloppenburg, 2010), the actual practice is. (In 2014, the Open Source Seed Initiative in Minnesota, USA, began operations on a small scale; see [www.opensourcseedinitiative.org/about/](http://www.opensourcseedinitiative.org/about/)).

For a global open-source seed system to become a reality, well-functioning connectivity of community seed banks with each other and with other seed actors would be required. Another condition would be the creation of a supportive, or at least non-obstructive, policy and legal environment. An open-source seed system would be based on the principle that benefits can be maximized if no access and use restrictions exist based, in particular, on (private) monopolistic property rights. The underlying logic is that farmers are both users and innovators of technology, i.e. seeds in this case. Such a system aims to promote experimentation, innovation, sharing, exchanging, using or reusing seeds.

An open-source system would not necessarily mean free for all, but rather access and use could be regulated through licensing under a creative commons, open-source license (OSL) or general public license (GPL) agreement. The open-source model could be applied to the development of plant varieties or any other product used in farming, agro-machinery and sharing of information

and knowledge. For example, in plant breeding, any existing or newly developed variety could be made available under an OSL/GPL or a similar document explicitly outlining rights and claims.

To implement such a model, community seed banks would have to be empowered and could serve as coordinating or nodal agencies bringing together farmers, plant breeders, gene bank managers and others in the following areas:

- legitimization of community seed banks as local organizations for the conservation of agricultural biodiversity, the organization of seed fairs, participatory seed exchanges and community seed production and distribution;
- conservation and revival of existing varieties by providing access to and availability of rare and unique local varieties;
- participatory varietal selection to generate added value for cultivation and use of existing varieties;
- participatory plant breeding to develop newer varieties and provide options for access to new diversity to cope with adversity and strengthen farmers' skills in selection.

This scenario would be supported by significant local resource mobilization because of increased levels of awareness of and concerns about the need to safeguard agricultural biodiversity. International benefit-sharing funds would be strong supporters of community seed banks, and this might further influence government policies in support of community seed banks.

## **Reference**

Kloppenburg, J. (2010) 'Seed sovereignty: the promise of open source biology,' in H. Wittman, A. A. Desmarais and A. Wiebe (eds) *Food Sovereignty: Reconnecting Food, Nature and Community*, Fernwood, Halifax, Canada, pp152–167