Principles and Operational Guidelines for Community Seed and Gene Banks

It is important for the indigenous people and local communities (IPLCs) to articulate and put in place a set of principles and guidelines regarding community seed and gene banks through which they hold enormous amount of diversity of agricultural genetic resources around the world. Based on our field work, direct engagement with communities and review of secondary literature, we realized that there is a need for networking these efforts and lay down principles and guidelines for managing these seed and gene banks. Therefore, the following principles and guidelines are being proposed for consideration both by IPLCs and policy makers at different levels.

Community Seed Banks are intertwined in three strategic areas, translated as scope for the purposes of this document.

Scope

1. Protecting agrobiodiversity for food, nutrition, health and human well-being. Seeking to connect future food, nutrition, health securities with an aim to achieve overall human well-being using anticipatory approaches and based on cultural values, ancestral knowledge, spiritual knowledge.

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1 These Principles and Guidelines are developed by Forum for Law, Environment, Development and Governance (FLEDGE) and the International Initiative on Knowledge Systems (IIKS) with inputs from M S Swaminathan Research Foundation (MSSRF) and representatives of communities from Wayanad, Kerala and others. The document is drafted by Dr. Balakrishna Pisupati, Chairperson, FLEDGE and Mr. Reynaldo Morales, Wisconsin University. Comments and inputs may be sent to pisupatibalakrishna@gmail.com.
2. Enhancing resilience, dealing with disasters and reducing risks. Promoting household and community-based adaptation, mitigation and resilience action that reduces the risks as well as prepares to deal with unknown and impending disasters, including through climate change.

3. Connecting with modern science and knowledge systems. Supporting actions to find answers to questions of modern science, including ways and means to deal with sustainability, knowledge systems through principles of ethics and equity.

**Principles of Seed and Gene Banks**

A futures framework, adopted by communities, globally, for determining self-reliance and self-sufficiency in food security, ecosystem based resilience systems and dealing with sustainability with focus on culture, knowledge and partnerships.

1. Increase the sustainable use of agro biodiversity in improving people’s well-being and food, nutrition and health securities.

2. Conserve, restore, revitalize, strengthen and improve local seed systems, especially, but not solely, focused on local varieties with an aim to improve quality, yield and resilience.

3. Regain, maintain and increase the control of farmers and local communities over seeds and to strengthen or establish dynamic forms of cooperation among farmers and between farmers and others involved in the conservation and sustainable use of agricultural biodiversity, based on principles of ethics, fairness, equity and rights-based approaches.

4. Support realization of ‘Community Rights’ over the genetic resources, including seeds and all planting material, that aligns with the rights and privileges of communities, including with the intellectual and property rights over the material that posses, share, exchange, improve and market.

5. Establish and support multiple activities, prioritized and self-determined by the communities, especially women, such as establishing community gene banks and seed banks, local farmer research groups or committees, participatory plant breeding teams, farmer and community agricultural biodiversity committees, seed-saver clubs and...
networks, seed exchange networks, seed production cooperatives, networks of custodian farmers and marketing initiatives.

6. Support and promote future food security at national, regional and global levels with aim to exchange experiences, expertise, material and the related.

7. Grow into centers for experimentation and innovation around seeds that can handle the vagaries and extremes of climate change and have become facilitators to help farm communities organize around their rights and interests in production that is affordable, productive and respectful of the integrity of their landscapes and plant genetic resources.

8. Evolve from seed restoration and rehabilitation centers, supported by participatory plant breeding, into organized seed grower associations for local seed production and marketing.

9. Develop new areas of interest such as seed health, soil fertility, increased yields and commercialization of agricultural biodiversity products.

10. Pay attention to cultural issues that can prevent organizations and farmers from reaching a shared agreement about how best to set up a community seed bank.

11. Establish locally relevant and socially sustainable policy and legal frameworks, using rights-based approaches, participatory decision making and influencing national and global policy on future food security and sustainable development.

In order to operationalise actions to achieve the above principles, the following policy and operational guidelines are being proposed.

Policy Guidelines

1. The establishment of community seed and gene banks requires the foundational incorporation of cutting-edge conventions or mandates of various kinds on issues of diversity, indigenous and traditional knowledge, and the rights of Indigenous peoples world-wide (Hoppers, 2002).

2. The institutional network in support of the establishment and connection between community seed and gene banks needs to formally incorporate indigenous knowledge
systems and traditional knowledge systems. External governmental and civil institutions, as well as international cooperation agencies need to understand that these two bodies of knowledge need to work together and be supported by appropriate institutions such as universities, research institutions and private sector.

3. The local knowledge system will be used as the basis for local-level decision-making in agriculture, and for its implications on health, food systems, education, natural resource management, and other activities in rural communities. These knowledge systems need to be recognized as value not only for the culture in which it evolves, but also for scientific and planning purposes.

4. The integration between different and complementary knowledge systems from indigenous nations, tribes, communities and cooperatives around the world need to develop location-specific curriculum and pedagogies to serve their own distinctive educational needs.

5. The scope of the reach of the impact of community seed and gene banks needs to be inextricably connected to strategies for improving health and nutrition for rural traditional communities, and to the processes of restoration, protection and exclusive exchange of genetic resources, based on the recognition of indigenous people as ancestral germplasm protector and custodians.

6. The incorporation of western science and western forms of management should be at the discretion of the communities that are part of this network since it could represent a threat to the necessary autonomy and self-determination of IPLCs according to international law.

7. Community seed and gene banks needs to incorporate a constant discussion and attention to issues of intellectual property laws and regulations from the intellectual property system (IP System), in order to create new Commons Agreements between its members to develop granting exclusive rights for the access of genetic resources and the maintenance of all pertinent digital records.

8. Community seed and gene banks from Indigenous nations and organizations around the world represent an alternative to the commodification of genetic resources to properly secure their ability to control the flow of or access to their resources.
9. Community seed and gene banks networks need to pay close attention to any forms of unnecessary intermediation by NGOs, as indigenous people and local communities need to gain independence from any form of intermediation with governmental organizations, as one of the premises of IK/TK systems is to strengthen and affirm forms of autonomy and self-determination according to international law.

10. Community seed and gene banks also need to seek the formal recognition of medicinal plants in traditional health systems. It is critical to pay attention and follow the development of Medical Patent Pools (such as those cases in Africa HIV, Mapuche nation, Chile) and the related WIPO resolutions in this area.

11. IPLCs that are part of the global network need to incorporate a change in research methods and protocols related to Indigenous Peoples in consideration of international law and the latest development of bio cultural indicators with IK/TK, including those related to multilateral frameworks such as the Convention on Biological Diversity, the Nagoya Protocol on access to genetic resources and benefit sharing.

12. Community seed and gene banks need to implement regular processes of consultation with key national and international experts on the matter of intellectual property for Indigenous Peoples. This consultation process needs to pay attention to the opportunities to reform the intellectual property system to recognize customary law, or the creation of a Global Indigenous Commons based on international treaties.

13. The global network of IPLCs Community seed and gene banks require an extensive and consistent educational exchange about knowledge systems, policy and legal tools to protect their cultural and genetic resources.

**Operational Guidelines**

Community seed banks have a broad range of additional purposes and vary significantly in scope, size, governance and management models, infrastructure and technical aspects, for example seed collection, seed storage and conservation, documentation and administration.
These operational guidelines are generic and communities will develop their own, appropriate, location-specific operational guidelines and modalities according to social, cultural, political and policy situations.

1. Create networks or associations of community seed banks supported by facilitated reflection on past experiences, targeted training in organizational development and technical cooperation with other institutions.

2. Create an ad hoc committee to establish a national network to be a platform for learning and sharing among community seed banks and to facilitate exchange of seeds and planting materials.

3. Prepare a national catalogue of genetic resources conserved by community seed banks.

4. Facilitate a process of linking community seed banks with the national gene bank, to represent community seed banks in national forums when necessary.

5. Support appropriate value-addition to the germplasm, including through actions such as participatory plant breeding.

6. Facilitate incorporation of the conservation of plant genetic resources into community seed banks where it has not yet been done.

7. Form a network that works in partnership with community seed banks to carry out key activities to enhance the value of and conserve farmers' seeds such as: seed fairs, multiplication of seeds that are unsuited to conditions in other regions, seed exchanges and advice to improve the productivity of different varieties.

8. Develop a plan and training program for the construction and management of different types of community seed bank.

9. Monitor their development before expanding the program from small-scale operations to regional, national and global networks.
10. Develop local capacity to dedicate time to the efforts required to set up and run a community seed bank, as labor constraints have become common in many rural areas of the world.

11. Link the efforts of community gene banks to national and international strategies for climate change, to respond to natural disasters and related problems, such as hurricanes, landslides and flooding.

12. Explore the availability of “black-boxing” options in tribal collections - to store seeds without making them publicly available, or available without the permission of IPLCs. Black-boxing mechanisms are critical primarily for companies that otherwise might be reluctant to obtain any form of authorization to pull seed stocks from ex-situ collections.

13. Develop the local capacity to maintain seed and germplasm collections to local and international standards to maintain viability and currency as germplasm evolves.

14. Expand the national germplasm system at national level beyond cultivated varieties. Many of tribal concerns regarding seeds and germplasm are also related to vital genetic resources and processes for the reproduction of domesticated and wild-harvested plants and animals, as well as all for the life forms that are part of the ecosystems within their territories.

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