

Community Seed Banks and their Importance for Farmers

Mamta Singh*, Raut
Vijaykumar Kailasrao,
Ankit Saroha,
Dhammaprakash P.
Wankhede,
Vikender Kaur

ICAR - National Bureau of Plant
Genetic Resources, Pusa
Campus, New Delhi - 11001²



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*Corresponding Author

Mamta Singh*

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INTRODUCTION

The practice of saving the seeds at community level came into existence since decades. The concept was mainly formulated to conserve, rejuvenate, strengthen and promote local seed systems and to focus on local diverse varieties. Such efforts have been named in various ways like community level seed banks, seed hut, farmer seed house, seeds savers group etc. The beauty of such seed banks is that they are devoted to conserve and protect all kinds of seeds whether major, minor, underutilized as well as neglected ones. Since farmers' role can never be replaced in terms of growing and saving local seeds thereby maintaining and rejuvenating them, the formation of such seed banks at community level have helped to strengthen the control of farmers over the local seed systems. This concept also helps to establish the dynamic co-operation among farmers. Few drivers for the establishment of such seed banks have been mentioned as follow:

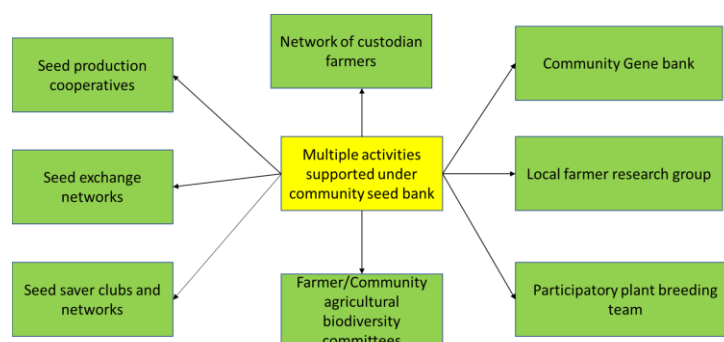


Figure 1: Multiple activities supported under community seed banks

- a. To tackle with the situations like famine e.g., drought or flood
- b. Loss of local seed supply
- c. To promote participatory crop improvement efforts
- d. Efforts to maintain healthy and pure seeds of locally available crop plants
- e. To establish a reliable source of quality seeds for farmers
- f. Raising awareness and education, documentation of traditional knowledge
- g. Income generating activities for the participating members

Bioversity International's research approach on community seed bank

Nowadays with the changing climatic conditions, a big issue for agriculture is the conservation of crop diversity, most importantly for the farmers' varieties. Diversity has also lost due to more commercially intended modernized agriculture, fast spreading industries for commercial and packaged food systems and monopoly of seed production. A potential solution for conserving crop biodiversity and

provide local buffer to the disturbing environmental conditions, community seed banks are formed. Bioversity International supports seed sharing and seed conservation and also supports on-farm conservation of crop varieties. They further rely on contributing to seed systems based on community-based strategies for adaptation to climate change. These gene banks are also an effective realization of farmers' right on their conserved germplasm.

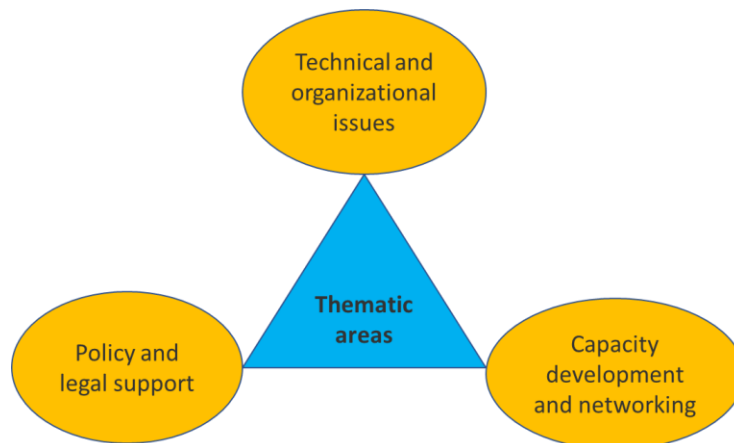


Figure 2: Three thematic areas of Bioversity International for effective implementation of community seed bank

Community seed banks in India

In India community seed banks have been operating for about twenty years. They were supported and initiated by a large number of nonprofit organizations such as Bharatiya Agro-Industries Foundation, the Centre for Sustainable Agriculture, the Green Foundation, the M.S. Swaminathan Research Foundation and Seva Mandir-Udaipur etc. A new approach has been started recently as a part of "Seeds for Needs" Programme in many countries. It mainly focuses on the availability of seeds to adapt for climate change. Farmers do not work alone but are supported by the

researchers from national agricultural research systems, extension workers, front line demonstrations, NGOs and Bioversity International. They work together to test and supply the various varieties of rice, wheat, pulses and vegetables through various activities performed as on farm activities. Together they assess how the selected materials perform at test sites in various agro-climatic zones. After multiple on farm evaluation farmers have identifies the best package of practices for the cultivation and conservation of such varieties and also have started their seed production especially rice

and wheat. Over time, thousands of farmers carry out small trials, and researchers collect and analyses the data. Since its start in 2011 with about 30 farmers in one district, the Seeds for Needs project in India has involved more than 15,000 active farmers in 24 districts in four states (Bihar, Chhattisgarh, Madhya Pradesh and Uttar Pradesh). This participatory approach for selection of best suited varieties and practices have resulted in establishment of more than 20 community seed banks. Their main function is to provide quality seeds at low cost, encourage seed exchange at local and supra-local level, also to avail new seed varieties not available previously. and access seeds from areas where plants have adapted to extreme weather conditions or that that have unique characteristics. Farmers also envision selling some of the multiplied seed at the local level as a way to generate additional income.

Protection of farmer's right in community seed banks

The seed exchange done through community seed banks is largely regulated by Seeds Act of 1966. This allows free flow of seeds without the need of any brand name. Conservation and sustainable use of plant genetic resources are the main objectives of Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) which are internationally functional organizations. The latter recognizes the role of farmers', local and indigenous communities engaged in conserving the biodiversity around the world. The main focus for farmers, right is to save, use, exchange and sell farm-saved seed and propagating material, the right to protect traditional knowledge, the right to an equitable share of benefits and access and benefit-sharing. This may directly or indirectly recognize and support the establishment of CSBs in the countries like India. However, there are a few hurdles to recognize the role of CBDs among public or the policymakers.

Governance and management of Community seed banks

Governance is the process by which a group of people work together for organizational targets, in a healthy approach. Community seed banks also represents a kind of organization that represents a community-based approach that makes their efforts to conserve and ensure sustainable use of plant genetic resources from household level to community levels. The beauty of community seed banks is that it operates by the rules and regulations developed and practiced by local people. It helps build up of social capital being mobilized by the local people and thereby leading to empowering the social strengths. Management of community seed banks looks after the day to day activities which are needed to fulfill the long and short term objectives of community seeds banks.

Technical issues of Community seed banks

Community seed banks that are set up without a proper understanding of the complexities of seed management may have a short lifespan. To really make the concept of community seed banks functional in long term, a minimum set of technical criteria and the issues must be addressed by those who wish to operate community seed banks. Some are mentioned as follow:

1. Physically and genetically pure seeds
2. Seeds free from diseases and pests,
3. Seed germination and establishment
4. Seeds accompanied by useful information and knowledge.
5. Selection of crop species for conservation and management by a community seed bank is usually a matter of discussion among the farmers in charge EG., traditional crops associated with local culture
6. Documenting, sharing and communicating information
7. Storing seeds: structures and methods
8. Regenerating seeds: bulk seed production/quality assurance

9. On-farm characterization and assessment
10. Filling the Knowledge gaps

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