



# COMMUNITY SEEDBANK ESTABLISHMENT GUIDELINES



**SANREM-AFRICA**  
Sustainable Agriculture and Natural  
Resource Management Africa



# List Of Abbreviations

CIAT	International Center for Tropical Agriculture
CSB	Community Seed Banks
GERRI	Genetic Resource Research Institute
KALRO	Kenya Agricultural & Livestock research Organization
KEPHIS	Kenya Plant Health Inspectorate Service
MOA	Ministry Of Agriculture
NGO	Non-Governmental Organization
SANREM	Sustainable Agriculture and Natural Resource Management Africa

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# Introduction

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In Kenya, information about community seed bank establishment and management is not consolidated in one document. Actors working in this area are not coordinated and new organizations joining community seed banking work lack guidelines to promote their endeavors. Farmers in different seed banks also lack means to learn from their counterparts in other regions to improve own knowledge and practices.

These guidelines aim to fill the knowledge gap by consolidating practical experiences from seedbank practitioners and technical knowledge vital for seed production and banking. They are the result of joint efforts of the government of Kenya through the National Genebank and non-governmental organizations promoting community seed banking in the country. The guidelines are organized in a step-wise sequence, which is easy to carry out.

## **Step 1. Community seed situation analysis**

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A seed survey is conducted with the following terms of reference:

### **Seed access**

- Crop/tree types, e.g. cuttings, cereals, vegetables, pulses root crops, tubers
- Suppliers: bulking plots, agro shops, research organizations, multipliers
- Prices of seed/cuttings and associated inputs
- Distance to suppliers, logistics involved in getting the seed/cuttings
- Availability of seed related information (e.g. source of seed)
- Seed quality, i.e. certified or not, labeled or not
- Community purchasing power capacity / access to markets for produce
- Seed independence
- Which types of seed are used: farmer saved seeds, improved varieties, hybrids
- Whether seeds are patented or open source
- Number of suppliers; competition or monopoly
- Farmers' own knowledge and practice of seed multiplication
- Seed system resilience in climate change or environmental disasters
- Seed diversity/ crops diversity in species and varieties,

over time and in space

- Traditional knowledge and practices that make the seed system resilient
- National/ county seed policy framework / laws and regulations with respects to
- Seed banks establishment and construction
- Seed bank operations, seed saving, exchange, sharing, sale

### **Varietal suitability**

- In relation to climate – what can grow where / altitude, rainfall
- In relation to diets and food preferences
- In relation to nutritional requirements (health)

### **Seed quality**

- Germination, community experience
- Seed borne pest and diseases

## **STEP 2. Mobilization and sensitization**

### **Mobilization**

Selection criteria are identified for whom to mobilize and attend the sensitization meeting before rolling out the idea or project. This could include farmers, seed bulkers, leaders; everybody involved with seed in some way. It could be village or community based depending on the population density. Mobilize people who can spearhead the idea. Keep the number in check to make the meeting productive. If village based, mobilize 50 – 60 people per meeting.

### **Forums for mobilization**

- Existing farmer groups
- Use of local Barazas
- Community gatherings, i.e. ceremonies, religious activities
- Community social online platforms, e.g., Whatsapp, Facebook

### **Sensitization and awareness creation**

The meetings should be done at the village levels and be inclusive in the sense that all the partners who are involved in seed 'business' are invited for the meeting. Location of the meeting should be in public and appropriate place, e.g. school, church, chief's offices etc.

Participants to be invited in the meetings:

1. Researchers – KALRO, GERRI, NGOs involved in seed issues
2. Community lead persons – e.g. lead farmers from the existing groups
3. Local administration – chiefs, assist chiefs and village elders
4. Ministry of Agriculture – ward and sub county Agricultural officers
5. Community elderly representatives

## **STEP 2. Mobilization and sensitization**

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### **Issues to be discussed during the sensitization meetings**

- i. Objectives of the community seed bank (project idea).
- ii. Being an anew idea, one needs to highlight the meaning and elaborate more what the idea entails.
- iii. Brief history about other seed banks from other places.
- iv. Why a community seed bank. The reason of coming up with the idea and share challenges or situation that the farmers are going through in terms of seed access, loss, quality, varieties found in the community and affordability by farmers. Importance of the community seed bank and the expectations from the community seed bank, problems that shall be solved by establishing a community seed bank.
- v. Beneficiaries of the community seed bank.
- vi. Motivational talks/speeches from other service providers. E.g. KALRO /GERRI, Bioversity International/CIAT, MOA, KEPHIS and other organizations.
- vii. Questions and answers from the participants for clarification and deepening their understanding. Let the public or community and administration ask as many questions as possible. All questions asked should be answered and in cases where it requires experts, allow other partners to respond.
- viii. Final feedback from the community and way forward. Give all the participants or representatives a chance to speak out what they feel about the idea or project. Come up with a way forward and recommendations before ending the meeting.

## **STEP 3. Registration, governance and management structure**

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### **Registration**

- Preliminary documents needed for registration
- Contents of constitution

A decision that needs to be made during the establishment of a CSB concerns the type of entity that the CSB will be. The community will need to decide whether it will be a standalone CSB or whether it will form part of a larger organization/group. In most cases, CSBs are formed as units within farmer cooperatives or community based organizations, with such organizations having diverse mandates.

The advantages of anchoring the existence of CSBs within larger entities is that it might enhance sustainability. While registration of CSBs is entirely a matter of choice for the members, it is important to state registration has particular advantages, e.g. it gives legal recognition of the respective entity. It is easier to obtain external support on the establishment and operations of a legally registered CSB than for one which is not. During registration, the functions of the entity will need to be stated.

The function of the CSB may be limited to ensuring access to seeds for its members or it may include other activities such as conservation. In cases where it is established as part of a larger organization, it may involve income generating activities, for example, through a seed enterprise.

## **Governance and management structure**

One of the key prerequisites of a functional and effective CSB is the existence of a clearly defined governance and management structure. This structure is usually spelt out in the organization's constitution or rules and procedures. In Kenya, depending on the type of entity, that constitution may be need to be deposited with the relevant authorities, such as registrar of companies or commissioner of cooperatives, department of social services.

The management structure that exists in seed banks varies widely. In most cases, the operations are implemented by committees that are composed of volunteer members. Most CSBs avoid creating remunerative positions principally due to financial constraints. A general committee may be formed with the responsibility of making decisions on the running of the CSB. Decisions made by this committee can be implemented by a technical committee, with the bulk of its work being handling of technical issues. The technical committee can then be supervised by an oversight committee.

The seed bank may opt to employ a different structure where positions are created for individual members rather than committees. These could be paid or volunteers. Some of the positions that could be created include:

**Seed bank manager:** In-charge of the overall management of the seed bank. The manager ensures that the position of the members is clearly articulated within the entity.

**Quality assurance manager:** Responsible for ensuring that the seeds being loaned and paid back by members are of acceptable physiological (seed germination and vigour) and pathological (seed health) quality.

**Seed loan manager:** Responsible for managing seed loans to members. This include ensuring that all seed loaned to members is paid back at the agreed interest rate.

**Documentation manager:** This position involves documenting all the activities and operations of the seed bank. At each stage of the seed bank operations, there is data and information that are generated that need to be properly managed. Some of the common data types include passport data, seed testing, seed loaning and evaluation data.

**Mobilizers:** Do follow-ups and mobilize farmers to carry out seed bank functions.

The advantage of relying on committees in the management of a CSB is that it enhances ownership and ensures the decisions made benefit from the wide experience and knowledge base of the committee members.

On the other hand, making decisions in a committee can be slow, especially on contentious issues. In order to increase chances of getting consensus on decisions, the size of the committee should be reduced to a small number. Very small committees should however be avoided as decision making may be dominated by only a few individuals.

## STEP 4. Trainings

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- Seed production process
- Seed quality assessment/analysis/tests, for example, seed viability etc.
- Seed conservation techniques
- On-farm genetic conservation/field genebanks
- Pests and disease management for specific crops/trees (*phytosanitary practices*)
- Seedbank empowerment and capacity building: group dynamics, challenges, such as causes of seed bank failure, roles and duties of everyone, conflict resolution, building trust
- Networking and collaboration with other community seed banks
- Record keeping and documentation

## **STEP 5. Structural design and construction of a community seed bank**

### **Site selection for a seed bank construction**

The following factors have to be taken in consideration when selecting a site for the seed bank construction:

- **Accessibility:** Choose a site that is convenient and accessible to the community. It therefore needs to be centrally located and should have a good transport network.
- **Climate:** Select a site where the seed bank will be dry and cool with at least stable temperatures and protected from events such as floods.
- **Protection from pests:** Evaluate whether there is a risk of rodents, insects or other animals causing damage to the seeds.

### **Design of a community seed bank**

**Space:** the ideal design for a community seed bank will accommodate the needs of both seed and people, so that it will provide adequate storage for seed and a working or learning space for people. It should have an extra room for inventory records and other materials. It also must have space to store seed donations from famers (and enough space to sort).

The seed bank should be constructed to suit local conditions and using locally available materials that the community can easily access. It should be simple to build.

The room(s) must be well ventilated to maintain low humidity, which is good for seed storage.

- The materials used in construction should provide or enhance a cool environment, which is conducive for seed storage. A low-temperature environment can



effectively postpone seed spoilage. This can be achieved in the following ways. Thermal insulation is achieved through the construction of the walls of the seed bank. In terms of material, the walls are made of materials with low thermal conductivity plastered with mud. This reduces the speed of heat transfer.

- In terms of color, outside of the walls are painted white; white walls can reflect more sunlight, thus reducing indoor radiant heat and lowering the temperature of the storage surfaces. Further thermal insulation is achieved through the construction of the roof.
- There should be empty space provided under the roof, with ventilation to the outside air. This allows flowing air to remove the heat absorbed by the roof, effectively preventing the collection of radiant heat.
- The building must have a door, which must remain locked to avoid entry of rodents, insects and thieves.
- Data and information management. Record keeping

## **STEP 6. Seed bank activities**

on seeds received and collected (seed storage, seed collection events).

- Seed sourcing options
- Seed multiplication and regeneration
- Moisture testing
- Germination testing
- Seed storage/preservation/treatment based on modern science and traditional knowledge
- Seed loaning, distribution or exchange in conformity to the existing national and international laws
- Seed fairs and seed festivals
- Outreach to non-members
- Regular Meetings
- Farmer participatory characterization and evaluation using modern scientific and technological approaches

### **Sustainability**

- Ensuring seed in the seed bank meets farmers' preferences.
- Diversification of activities in addition to seed conservation (seed enterprises, table-banking, income generating activity, shared interest engagements for cohesion).

- Use of locally available materials and traditional knowledge to enhance local based solutions in conservation and storage.
- Empowering farmers to run the seed bank on their own through capacity building programmes.
- Promoting utilization of food produced from the seeds conserved in the seed bank.
- Developing mechanism for seed banks to link with the National genebank and other partners like breeders.
- Sensitizing government and non-government actors (multi-stakeholder involvement) on the importance of community seed banks for their support in policy development.
- Ensuring gender inclusivity and youth involvement in the operations and management of the seed bank.

# Resources

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*For more information on this guideline, please contact*



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