



JAMACADDA NUGAAL

جامعة نجال

NUGAAL UNIVERSITY

“What You Seek Is What We Provide”

Community Seed Bank

Facilitator Training Manual



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Community Seed Bank Training Manual

A Facilitator's Guide

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Abstract

This facilitators manual is a detailed guide aimed at establishing and managing community seed banks (CSBs), primarily for agricultural professionals in Somaliland and South Sudan. It is developed by the team at Nugaal University, which is actively involved in this initiative. Structured into eight modules, the manual addresses various aspects of CSB operations, including seed preservation, biodiversity, governance, and technical challenges. It begins by emphasizing the historical and modern significance of seeds in agriculture and underscores the crucial role CSBs play in preserving local seed varieties and enhancing food security. This initiative forms part of the larger project "Entrepreneurship for Food System Resilience" supported by NUFFIC and the Netherlands, coordinated by the Wageningen Centre for Development Innovation alongside the Alliance of Bioversity International and CIAT. The project has developed a participatory curriculum, resulting in eight new short courses that blend theoretical frameworks with practical applications to improve existing community seed banks and seed labs, and to establish new ones.

The handbook advocates a participatory learning approach, incorporating interactive sessions, hands-on activities, and case studies to ensure that theoretical concepts are effectively translated into practical skills. This method aims to empower learners to implement and adapt these strategies within their communities, thereby fostering resilient agricultural practices that are environmentally sustainable and socially equitable. By enhancing the capabilities of agricultural professionals through specialized training, the handbook aims to contribute significantly to global food systems and local biodiversity conservation..



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Preface

Welcome to the Community Seed Bank Handbook, a comprehensive guide developed by the team at Nugaal University as part of the broader initiative to enhance agricultural resilience through community-driven seed bank efforts. This manual is intended for individuals who are actively working with farmers and are motivated to either establish a new community seed bank or strengthen the operations of an existing one. The primary audience includes NGO staff, researchers, government extension agents, and other professionals who are keen to deepen their understanding and practical skills in the realm of community seed banks.

Intended Audience

This handbook is crafted for those who are leading the process of establishing one or more community seed banks or conducting training sessions for community members about the concept and practices associated with community seed banks. It aims to equip them with the necessary knowledge and tools to effectively manage and sustain these vital agricultural resources.

Using This Handbook

To maximize the utility of this handbook, engage in participatory learning methods that foster active dialogue and collaboration among learners. This manual encourages the minimization of traditional lecturing, focusing instead on dynamic exercises, hands-on activities, and case studies that ground theoretical knowledge in practical, real-world situations. Users are encouraged to reflect on personal experiences in seed banking and agricultural development to gain deeper insights, and to adapt exercises to their local context by incorporating local case studies, examples, and stories. This approach ensures a learning environment that is both diverse and context-specific, enriching the overall learning experience.

Organization of the Manual

The manual is structured into eight detailed modules, each addressing a different aspect of community seed bank management:

1. **Multiple Functions and Services of Community Seed Banks** - Understanding the core importance and functions.
2. **Trends in Agricultural Biodiversity** - Assessing and monitoring local agricultural biodiversity.
3. **Establishing and Supporting Community Seed Banks** - Logical organization of the necessary steps.
4. **Technical Issues in Operating Community Seed Banks** - Addressing technical challenges and outlining best practices.
5. **Governance and Management** - Developing effective governance structures and management practices.
6. **Support and Networking** - Highlighting the importance of technical and organizational support and the role of networking.
7. **Policies and Laws Impacting Community Seed Banks** - Enhancing awareness of the regulatory environment and key legal requirements.
8. **Viability and Sustainability** - Focusing on long-term planning and the resilience of community seed banks.

The final section includes two annexes designed to aid both learners and facilitators: **Annex 1** contains learner instructions to be distributed among participants, while **Annex 2** provides facilitator instructions.

Through this handbook, we aim to empower you to contribute effectively to the preservation of agricultural biodiversity and the enhancement of food security through community seed banks. We hope it serves as a valuable resource in your endeavors to support sustainable agriculture practices within your communities.

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- **Abdihakim Hassan**, from the Department of Seed Sectors for his expertise and input.
- **Mohamud Abdilahi**, from the Ministry of Agriculture and Environment for his valuable contributions.

Together, their collaborative efforts have shaped a comprehensive and impactful training program on community seed banks.



List of abbreviations and acronyms

WCDI - Wageningen Centre for Development Innovation, Wageningen University & Research

WUR - Wageningen University & Research

CSB - Community Seed Bank

E4FSR - Entrepreneurship for Food System Resilience

FNS - Food and Nutrition Security

NUFFIC - Netherlands Organization for International Cooperation in Higher Education

CIAT - International Center for Tropical Agriculture

FAO - Food and Agriculture Organization of the United Nations

NGO - Non-Governmental Organization

FGD - Focus Group Discussion

SWOT - Strengths, Weaknesses, Opportunities, Threats

IP - Intellectual Property

Summary

The Community Seed Bank Handbook is a comprehensive guide designed to assist agricultural professionals in establishing and managing community seed banks (CSBs). Developed by the team at Nugaal University, the handbook is a key component of the broader project "Entrepreneurship for Food System Resilience," supported by NUFFIC and the Netherlands. This initiative, coordinated by the Wageningen Centre for Development Innovation along with the Alliance of Bioversity International and CIAT, aims to enhance the capabilities of agricultural professionals in Somaliland and South Sudan through specialized training.

The handbook is structured into eight detailed modules, covering various aspects of CSB operations. These modules include:

1. **The Multiple Functions and Services of Community Seed Banks** - Highlights the importance and functions of CSBs.
2. **Trends in Agricultural Biodiversity** - Focuses on assessing and monitoring local agricultural biodiversity.
3. **Steps and Processes in Establishing and Supporting Community Seed Banks** - Guides on the practical steps required for CSB establishment.
4. **Technical Issues in Operating Community Seed Banks** - Addresses the technical challenges and best practices.
5. **Governance and Management** - Emphasizes developing effective governance structures and management practices.
6. **Support and Networking** - Stresses the importance of technical and organizational support and networking.
7. **Policies and Laws Impacting Community Seed Banks** - Enhances awareness of the regulatory environment and key legal requirements.
8. **Viability and Sustainability** - Focuses on long-term planning and the resilience of CSBs.

This manual is intended for NGO staff, researchers, government extension agents, and professionals working directly with farmers. It promotes a participatory learning approach, encouraging active dialogue, hands-on activities, and the adaptation of exercises to local contexts. This approach ensures a diverse and context-specific learning environment, enriching the overall educational experience.

The handbook also includes detailed facilitator instructions and learner exercises to ensure effective training delivery. The annexes provide additional resources and guidance for both learners and facilitators. By empowering agricultural professionals with the knowledge and tools to manage CSBs effectively, this handbook aims to foster resilient agricultural practices and enhance food security and biodiversity conservation at the community level.

Community Seed Bank Training Manual: Course Schedule

Course Duration: 6 days (30.3 hrs.)

Day	Module	Contents	Duration
1	Module 1: The Multiple Functions and Services of Community Seed Banks	Introduction to Community Seed Banks, Functions, Services, Group Discussion, Plenary, Conclusion, Summarization, Training Evaluation	3 hrs
1	Module 2: Trends in Agricultural Biodiversity	Importance of Agricultural Biodiversity, Assessment Activity, Trends Analysis, Importance of Community Seed Banks, Group Discussion, Training Evaluation	3 hrs
2	Module 3: Steps and Processes in Establishing and Supporting a Community Seed Bank	Needs Assessment, Site Selection, Capacity Building, Seed Collection, Infrastructure Setup, Seed Testing, Outreach, Maintenance, Networking, Training Evaluation	6 hrs
3	Module 4: Technical Issues Involved in Operating Community Seed Banks	Seed Collection, Genetic Diversity Management, Climate Considerations, Record-keeping, Community Engagement, Key Principles, Training Evaluation	6 hrs
4	Module 5: Governance and Management of Community Seed Banks	Governance Needs Assessment, Curriculum Development, Interactive Sessions, Case Studies, Workshops, Feedback, Follow-up Support, Monitoring and Evaluation, Training Evaluation	4 hrs
5	Module 6: Support and Networking for Community Seed Banks	Pre-training Communication, Interactive Workshops, Networking Sessions, Case Studies, Training Evaluation	2.5 hrs
6	Module 7: Policies and Laws Impacting Community Seed Banks	Introduction to Seed Bank Policies, Key Legal Requirements, Institutional Environments, Regulatory Challenges, Evaluation for Training	3 hrs
6	Module 8: Viability and Sustainability of Community Seed Banks	Assessment of Current Status, Interactive Workshops, Stakeholder Collaboration, Evaluation	3 hrs

Total Duration: 6 days, 30.3 hours

Introduction

Seeds form the foundation of any agricultural system, with farming communities historically engaged in developing, saving, and exchanging seeds. In contemporary times, in many countries around the world this practice has evolved into the collective organization of community seed banks. These seed banks offer an alternative to the corporate-led seed supply system, contributing not only to food and ecological security but also empowering communities economically, politically, and socially.

In Somaliland, the preservation of original seed varieties becomes imperative due to the loss of indigenous seeds. This handbook for community seed banks plays a vital role in restoring local seed diversity, recognizing that without local seed improvement, food security is jeopardized. The handbook emphasizes the significance of conserving native seeds and underscores the role of community seed banks in achieving sustainable agriculture.

The Community Seed Bank handbook for Somaliland focuses on:

- Seed Systems Improvement, Storage, and Preservation
- Capacity Building for Farmers, Extension Agents, Students, and Professionals
- Enabling access and sustaining quality seeds
- Food and Nutrition Security Improvements in the Country

Objectives of the training handbook are to strengthen the knowledge about:

- Conserving indigenous seeds through collective action (the community seed bank)
- Promoting traditional farming practices
- Ensuring seed and food security
- Documenting traditional knowledge and facilitating knowledge transfer to future generations



Photo: CSB training NU, Lascanod. Credit: Abdihakim Hassan

Module1

THE MULTIFUNCTIONS AND SERVICES OF COMMUNITY SEED BANK

1 MODULE 1. THE MULTIFUNCTIONS AND SERVICES OF A COMMUNITY SEED BANK

Objectives: By the end of this 2-hour and 30-minute training, participants will be able to articulate the significance and roles of community seed banks.

Contents:

1.1 Getting to Know Community Seed Banks:

- Definition and Purpose
- Historical Context

1.2 Roles of Community Seed Banks:

- Preservation of Seeds
- Preserved genetic diversity
- Plant breeding purpose and historical studies
- Evaluation of studies and supporting farmers
- Conservation of Biodiversity
- Safeguarding Local Crop Varieties
- Services Offered by Community Seed Banks:
 - Distribution and Exchange of Seeds
 - Training and Capacity Building

1.3 Target Participants:

- Farmers engaged in seed-saving and community seed bank initiatives
- Students pursuing studies in agriculture or related fields
- Extension agents collaborating with farming communities
-

1.4 Equipment and Materials Needed:

- Projector and Screen
- Flipcharts presentations
- Whiteboard markers
- Training Modules and Handouts
- Power point presentations
- Evaluation Forms
- Photographer

1.5 Process:

Step 1: Introduction to Community Seed Banks

Present a concise definition of community seed banks.

Outline the historical context of seed banks, emphasizing their significance.

Step 2: Functions of Community Seed Banks

Delve into the fundamental functions of community seed banks, covering seed preservation, biodiversity conservation, disaster recovery, and the preservation of local crop varieties.

Step 3: Services Provided by Community Seed Banks

Investigate the diverse services offered by community seed banks, encompassing seed distribution, training, and community support.

Step 4: Group Discussion and Research

Organize learners into small groups.

Allocate each group a specific function or service for in-depth research.

Step 5: Conclusion and Summary

Summarize the key points discussed.

Emphasize the vital role of community seed banks in agriculture and biodiversity conservation.

1.6 Day One: Facilitator Instructions

Morning Session: Module 1 - The Multiple Functions and Services of Community Seed Bank (2.30 hrs.)

Introduction to Community Seed Banks (30 mins):

- Begin with a brief overview of the training objectives and schedule.
- Define community seed banks, highlighting historical context and importance.
- Encourage questions and engage participants in a discussion.

Functions of Community Seed Banks (1 hour):

- Dive into the core functions of community seed banks: seed preservation, biodiversity conservation, disaster recovery, and local crop variety preservation.
- Use real-world examples to illustrate each function.
- Facilitate a brief group discussion to share insights and experiences.

Services Provided by Community Seed Banks (30 mins):

- Explore the various services offered, such as seed distribution, training, and community support.
- Encourage participants to share any experiences related to these services.
- Clarify doubts and questions from participants.

Group Discussion and Research (30 mins):

- Divide participants into small groups for focused research on specific functions or services.
- Provide clear instructions and resources for their research.
- Circulate among groups to offer guidance and answer questions.

1.7 Module One: Conclusion

In wrapping up Module One, we have uncovered the vital role of community seed banks in preserving agricultural heritage. From defining their significance to exploring core functions and services, we have set the stage for understanding the pivotal role these banks play in securing our agricultural future. As we progress, let us continue to unravel the intricacies and collective impact of community seed banks. Stay engaged, and together, we will cultivate sustainable practices and resilient communities.



Module 2

TRENDS IN AGRICULTURE BIODIVERSITY

Photo: Seed safekeeping participatory assessment. Credit: Abdihakim Hassan



2 MODULE 2: TRENDS IN AGRICULTURAL BIODIVERSITY

2.1 Objectives:

By the end of this training, participants will be able to:

1. Understand the Importance of Agricultural Biodiversity:
 - Appreciate the critical role that biodiversity plays in the sustainability of agriculture.
2. Recognize the Role of Community Seed Banks in Preserving Biodiversity:
 - Understand how community seed banks contribute to the preservation and promotion of agricultural biodiversity.
3. Assess Abundance and Distribution of Crop Species and Varieties:
 - Develop skills in assessing and analyzing the abundance and distribution of different crop species and varieties.
4. Analyze Trends in Agricultural Biodiversity:
 - Gain insights into the current trends affecting agricultural biodiversity globally and locally.
5. Appreciate the Importance of Community Seed Banks in Addressing Biodiversity Challenges:
 - Identify how community seed banks can address challenges related to declining agricultural biodiversity.
6. Participate Actively in Group Discussions:
 - Engage in meaningful discussions to share perspectives and insights on trends in agricultural biodiversity.
7. Understand Reasons for Establishing a Community Seed Bank:
 - Comprehend the various reasons and motivations behind the establishment of community seed banks.
8. Evaluate the Impact of Community Seed Banks on Biodiversity Conservation:
 - Assess the impact of community seed banks in conserving and enhancing agricultural biodiversity.
9. Apply Knowledge in Assessing Biodiversity Trends:
 - Gain practical skills in applying acquired knowledge to assess and monitor trends in agricultural biodiversity.
10. Contribute to a Plenary Discussion:
 - Actively contribute to a collective discussion, sharing findings and insights from group activities.

2.2 Duration (3:30 hrs.)

2.3 Contents

Introduction to agriculture biodiversity

- Define agricultural biodiversity and its significance in sustainable farming.
- Explore the various components of agricultural biodiversity, including crops, livestock, and ecosystems.
- Discuss the ecological and economic importance of maintaining diverse agricultural systems.

2.4 Process:

Step 1: Needs Assessment:

- Identify the knowledge and skills participants already possess.
- Understand their learning preferences and any specific areas of interest or concern.

Step 2: Objective Definition:

- Clearly define the training objectives to guide the content development.
- Ensure that objectives align with the overall goals of the training program.

Step 3: Content Development:

- Create relevant and engaging content based on the defined objectives.
- Organize the material logically, considering the sequence of topics.

Step 4: Module Structure:

- Divide the training into modules or sessions, each addressing specific aspects.
- Allocate time for each module, considering the overall duration of the training.

Step 5: Interactive Elements:

- Include interactive elements such as group discussions, hands-on activities, and case studies.
- Foster engagement to enhance participants' understanding and retention.

Step 6: Training Materials:

- Develop or gather training materials, including presentations, handouts, and supporting resources.
- Ensure materials are accessible and align with the learning objectives.

Step7: Facilitator Preparation:

- Train facilitators or trainers on the content, ensuring they have a deep understanding of the subject matter.

-
- Provide guidance on facilitating discussions, managing group dynamics, and addressing participant queries.

Step 8: Participant Registration and Communication:

- Register participants for the training program.
- Communicate logistical details, including the schedule, required materials, and any pre-training assignments.

Step 9: Training Delivery:

- Conduct the training sessions following the outlined schedule.
- Encourage active participation, discussion, and engagement.
- Address questions and provide clarifications as needed.

2.5 Assessment and Feedback:

- Incorporate assessment tools such as quizzes or discussions to evaluate participants' understanding.
- Gather feedback on the training content, delivery, and overall experience.

2.6 Adjustments and Improvements:

- Use participant feedback and assessment results to make necessary adjustments.
- Continuously improve the training process for future sessions.

2.7 Evaluation:

- Evaluate the overall success of the training against the defined objectives.
- Identify areas of improvement for future training programs.
- By following a structured process, you can ensure that the training is effective, engaging, and meets the learning needs of the participant
-

2.8 Equipment and Materials Needed:

Projector and Screen

Flipcharts presentations

Whiteboard markers

Training Modules and Handouts

Power point presentations

Evaluation Forms

Photographer

2.9 Day two: Facilitator Instructions

2.9.1 Morning Session

Module 2 - Trends in Agricultural Biodiversity (3.30 hrs.) Trends in Agricultural Biodiversity (2 hours):

- Introduce the importance of agricultural biodiversity and the role of community seed banks.
- Conduct the assessment activity on the abundance and distribution of crop species and varieties.
- Analyze trends in agricultural biodiversity and discuss reasons for establishing a community seed bank.

2.9.2 Group Discussion (1. hour):

- Facilitate a group discussion on the reasons for establishing a community seed bank.
- Encourage participants to share insights and considerations.
- Summarize key points and transitions to the training evaluation.

2.9.3 Training Evaluation (30 mins):

- Administer the training evaluation, including pre-and post-assessments and feedback surveys.
- Emphasize the importance of honest feedback for continuous improvement.
- Thank participants for their engagement and commitment.

End of Day Two: Ensure all participants are clear on the schedule for the next day, and address any logistical concerns.

2.10 Module two: Conclusion:

In conclusion, this training on **agricultural biodiversity trends** has equipped participants with insights into the importance of biodiversity and the role of community seed banks. With a focus on assessing trends and understanding reasons for seed bank establishment, participants are now poised to actively contribute to sustainable agriculture and community resilience. Next, we'll delve into practical steps for establishing and supporting community seed banks. Stay engaged for further knowledge application



Module 3

STEPS AND PROCESS OF ESTABLISHING AND SUPPORTING A COMMUNITY SEED BANK

Photo Credit: Abdihakim/ N.U.

3 Module 3: Steps and Process of Establishing and Supporting a Community Seed Bank

3.1 Objectives:

1. Needs Assessment and Resource Identification:

- Equip participants with the ability to conduct a thorough needs assessment within their communities.
- Enable them to identify available resources, both human and material, for effective seed-saving initiatives.

2. Site Selection and Infrastructure Setup:

- Provide participants with the knowledge to choose an optimal location for a community seed bank, considering climate and accessibility.
- Guide them in establishing essential infrastructure, including storage facilities and record-keeping systems.

3.2 3. Capacity Building and Outreach:

- Train participants in seed collection, storage, and documentation, enhancing their capacity to lead community initiatives.
- Empower them with outreach and education skills to engage the community, raising awareness about the importance of seed saving.

3.3 Duration:

5.30 hrs.

3.4 Process:

Step 1: Needs Assessment and Resource Identification (1 hrs):

- Understand the importance of needs assessment in seed-saving initiatives.
- Learn techniques to identify and leverage available resources.

Step 2: Site Selection and Infrastructure Setup (2.5 hrs):

- Explore factors influencing site selection, considering climate and accessibility.
- Discuss the essentials of establishing infrastructure, focusing on storage and record-keeping.

Step 3: Capacity Building and Outreach (1 hrs):

- Dive into training on seed collection, storage, and documentation.
- Develop outreach and education skills for engaging the community in seed saving practices.

Step 4: Group Activity and Discussions (30 mins):

- Engage participants in hands-on group activities related to site selection or infrastructure planning.
- Facilitate discussions to share insights and experiences.

Step 5: Training Evaluation (30 mins):

- Assess participants' comprehension through a brief training evaluation.
- Encourage feedback on the module content and delivery.

3.5 Equipment and Materials Needed:

Projector and Screen

Flipcharts presentations

Whiteboard markers

Training Modules and Handouts

Power point presentations

Evaluation Forms

Photographer

3.6 Facilitator instructions

3.6.1 1: Preparation

- Illustrating the steps and process in establishing and supporting a community seed bank.
- If feasible, take your own photos reflecting these steps in your region or obtain them from colleagues or the Internet. Alternatively, copy the photographs provided here; you will then need to explain cultural and regional differences in your own region.
- Allow the necessary time to print as many copies as you will need for this exercise.

3.6.2 2: Process

Introduction

- Explain the objective of the learning activity

Part 1

- Randomly divide the participants into groups of 4 or 5 people.
- Give each of the groups an envelope containing a set of the photographs.
- Ask the participants to have a look at the photographs and put them in order, using collective decision-making process, and tape them on a large piece of paper.
- Ask each group to write down the logic behind the ordering of the photographs.
- Select someone from each group to briefly present the order and explain the logic in a plenary session.

Part 2

- Allow for brief presentations of the ordered photographs and some time for feedback from the whole group.

3.7 Conclusion and evaluation

1. Wrap up the session with a presentation of the actual steps that have been followed at two pilot sites in South Africa and explain the logic (see the text below). You may also refer to the creation of other community seed banks that you may be familiar with. Mention that in the following modules each of the steps will be presented in more detail.

2. Evaluate the session. A good indicator of success is the degree to which the groups have come up with a well-reasoned, logical sequence.



Module 4

Technical Issues Involved in Operating Community Seed Banks

Photo Credit: Abdihakim/ N.U.

4 Module 4: Technical Issues Involved in Operating Community Seed Banks

4.1 Objectives:

Seed Collection and Preservation:

- Equip participants with the technical knowledge required for effective seed collection and preservation.
- Emphasize best practices in maintaining seed viability and quality.

Genetic Diversity Management:

- Provide an understanding of the importance of genetic diversity in seed banks.
- Instruct participants on techniques for managing and preserving genetic diversity within seed collections.

Climate and Environment Considerations:

- Explore the technical aspects of climate and environmental factors impacting seed bank operations.
- Guide participants in developing strategies to address challenges related to climate variations.

Record-keeping and Documentation:

- Stress the significance of meticulous record-keeping in seed banks.
- Instruct participants on effective documentation methods to ensure traceability and quality control.

These objectives aim to enhance participants' technical proficiency in operating community seed banks, covering crucial aspects from seed preservation to genetic diversity management and environmental considerations.

4.2 Duration

5 hrs.

4.3 Process:

Step 1: Seed Collection and Preservation (1.5 hrs):

- Introduction (15 mins): Emphasize importance.
- Techniques (45 mins): Dive into preservation methods.
- Activity (30 mins): Hands-on practice.
- Wrap-Up (20 mins): Summarize and transition.

Step 2: Genetic Diversity Management (1.5 hrs):

- Understanding (30 mins): Significance of genetic diversity.

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- Management Techniques (45 mins): Strategies.
 - Case Studies & Discussion (30 mins): Real-world examples.
 - Activity (15 mins): Hands-on engagement.
 - Wrap-Up (20 mins): Summarize and transition.

Step 3: Climate and Environment Considerations (1 hr):

- Climate Impact (30 mins): Explore technical aspects.
- Strategies (30 mins): Address challenges.
- Q&A and Wrap-Up (15 mins): Clarify and summarize.

Step 4: Record-keeping and Documentation (1 hr):

- Importance (30 mins): Stress significance.
- Methods (30 mins): Instruction on effective documentation.
- Interactive Activity (15 mins): Hands-on documentation.
- Q&A and Wrap-Up (15 mins): Clarify and summarize.

Step 5: Training Evaluation and Conclusion (30 mins):

- Assessment and Feedback (20 mins): Evaluate understanding and gather feedback.
- Conclusion (10 mins): Summarize key points, express appreciation, and provide additional resources.

4.4 Equipment and Materials Needed:

- Projector and Screen
- Flipcharts presentations
- Whiteboard markers
- Training Modules and Handouts
- Power point presentations
- Evaluation Forms
- Timer or clock
- Photographer

4.5 Facilitator Instructions: Traditional Seed Management Practices

A: Preparation

1. Presentation on Traditional Seed Management:
 - Develop a concise presentation on traditional seed practices with local and global examples.
2. Poor-Quality Seed Samples:
 - Prepare several poor-quality seed samples for practical demonstration.
3. Technical Functions Overview:
 - Prepare a presentation covering key technical functions in seed management.

B: Process

4.6 Introduction

1. Objective Explanation:
 - Clearly outline the objective and dynamics of the learning activity.

Part 1

1. Review Practices (30 mins):

- Recap traditional seed practices for major crops, emphasizing different types.

2. Principles Discussion (20 mins):

- Identify rationale and principles behind sound technical practices.

3. Participant Engagement (30 mins):

- Prompt participants to discuss problems, constraints, and knowledge gaps in seed management.

4. Poor-Quality Seed Analysis (30 mins):

- Distribute poor-quality seed samples for participants to assess.
- Discuss issues, causes, and potential solutions.

C: Conclusion

Group Discussion (15 mins):

- Facilitate a discussion on identified problems and potential solutions.

Summarization (10 mins):

- Summarize key learnings and stress the importance of addressing challenges.

Practical Application (15 mins):

- Discuss how acquired knowledge can be practically applied.

4.7 Conclusion for Module 4:

Technical Issues: Recap key technical aspects, stress their interconnectedness, and encourage practical application, addressing any questions, expressing appreciation, and transitioning to Module 5.



Module 5 GOVERNANCE AND MANAGEMENT OF COMMUNITY SEED BANK TRAINING

Photo Credit: Abdihakim/ N.U.

5 Module 5: Governance and Management of Community Seed Bank Training

5.1 Objective:

- Enable participants to understand the principles and practices of effective governance and management for community seed banks, emphasizing transparency, inclusivity, and sustainability.

5.2 Duration

4.30 hrs:

5.3 Process and Steps:

5.3.1 Introduction (15 mins):

Step 1: Objective Reinforcement:

- Reiterate the objective of understanding governance and management principles.

Step 2: Importance Explanation:

- Highlight the significance of effective governance and management in sustaining community seed banks.

Step 3: Part 1: Governance Principles (1 hr):

5.3.2 Definition and Scope (20 mins):

- Define governance in the context of community seed banks and outline its scope.

5.3.3 Principles Discussion (30 mins):

- Discuss key governance principles, including transparency, inclusivity, and accountability.

5.3.4 Case Studies (10 mins):

- Present case studies illustrating successful governance practices in community seed banks.

5.3.5 Q&A and Discussion (15 mins):

- Engage participants in a Q&A session and encourage discussion on governance principles.

Step 4: Part 2: Management Practices (1.5 hrs):

5.4 Introduction to Management (15 mins):

5.4.1 Introduction to Management (15 mins)

- **Concept Overview:** Introduce the concept of management within the context of community seed banks. Highlight its significance in ensuring the sustainability and efficiency of seed banks.

5.4.2 Planning and Strategy (30 mins)

- **Strategic Planning:** Discuss the importance of planning and developing a strategic approach in managing seed banks. Emphasize the need for clear goals, objectives, and action plans.
- **Implementation:** Provide guidelines on how to effectively implement strategic plans, ensuring alignment with the community's needs and resources.

5.4.3 Resource Allocation (20 mins)

- **Effective Allocation:** Explore effective ways of allocating resources for sustainable seed bank operations. Cover financial management, human resources, and material resources.
- **Optimization Techniques:** Discuss techniques to optimize resource use, ensuring maximum benefit and minimal waste.

5.4.4 Monitoring and Evaluation (30 mins)

- **Performance Assessment:** Emphasize the role of monitoring and evaluation in assessing seed bank performance. Discuss various metrics and indicators that can be used.
- **Continuous Improvement:** Highlight the importance of feedback loops and continuous improvement processes to adapt and enhance operations.

5.4.5 Interactive Activity (15 mins)

- **Hands-On Exercise:** Conduct an interactive activity related to resource allocation or planning. This could include case studies, role-playing scenarios, or group exercises to apply theoretical knowledge to practical situations.
- **Group Collaboration:** Encourage collaboration among participants to foster a shared understanding and collective problem-solving.

5.4.6 Q&A and Discussion (20 mins)

- **Facilitated Discussion:** Facilitate a Q&A session to address any questions from participants. Encourage them to share their experiences and insights related to governance and management practices.
- **Peer Learning:** Promote peer learning by allowing participants to discuss challenges and solutions they have encountered in their own contexts.

Step 5: Part 3: Inclusivity and Community Engagement (1 hr)

5.4.7 Inclusivity Principles (20 mins)

- **Importance of Inclusivity:** Discuss the importance of inclusivity in seed bank governance and management. Highlight how diverse perspectives and participatory approaches can enhance decision-making and community buy-in.

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- **Strategies for Inclusivity:** Provide practical strategies for fostering inclusivity, such as engaging marginalized groups, ensuring transparent communication, and creating inclusive policies and practices.

By following these structured steps and incorporating interactive elements, this module aims to equip participants with the knowledge and skills needed to effectively govern and manage community seed banks, ensuring their sustainability and positive impact on agricultural biodiversity and community resilience.

5.5 Community Engagement Strategies (30 mins):

- Explore effective strategies for engaging the community in seed bank activities.

Group Activity (10 mins):

- Facilitate a group activity focusing on community engagement scenarios.

Q&A and Discussion (15 mins):

- Encourage participants to share their insights on inclusivity and community engagement.

Step 6: Conclusion and Practical Application (30 mins):

Step 7: Summary of Key Points (15 mins):

- Summarize key governance and management principles discussed.

Step 8: Practical Application Discussion (15 mins):

- Facilitate a discussion on how participants can apply these principles in their seed bank initiatives.

Step 9: Closing Remarks and Transition (15 mins):

- Express appreciation for participation and provide an overview of the next training session.

Step 10: Training Evaluation and Feedback (20 mins):

Step 11: Assessment Tools (15 mins):

- Administer a brief evaluation to gauge participants' understanding.

Step 12: Feedback Collection (5 mins):

- Create an open space for feedback on the module content and delivery.

5.6 Equipment and Materials Needed:

- Projector and Screen
- Flipcharts presentations
- Whiteboard markers
- Training Modules and Handouts
- Power point presentations

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- Evaluation Forms
 - Timer or clock
 - Photographer

5.7 Facilitator instructions

A: Preparation

- Prepare some examples of outstanding and successful seed banks, as well as cases of average and poorly operated ones.
- Prepare a chart of good and poor governance and management practices.
- Use the definition for governance and management provided in the book *Community Seed Banks: origins, evolution and prospects*.
- Use the framework of key governance and management practices provided in the book.

B: Process

5.8 Introduction

- Explain the objective and the dynamics of the learning activity.

Part 1

1. Introduce this section: Review of community seed banks.
2. Present some cases of outstanding and successful seed banks, as well as cases of average and poorly operated ones.
3. Illustrate the importance of governance and management issues.

Part 2

1. Introduce this section: Definition of governance and management.
2. Ask participants to describe good and bad governance.
3. Compare their descriptions with the good and poor practices listed on the chart for visual reference.
4. Do the same for the concept of good and bad management.
5. Then use the inputs to propose succinct definitions for both terms(as used in Vernooij et al. 2015).

Part 3

1. Introduce this section: Key governance and management practices.
2. In plenary, invite participants to identify key governance and essential operational
3. Management practices that must be considered and collectively agreed on to legitimize the process.

4. Write the answers, in concise form, on cards, one principle per card. In the process, explore whether the answers can be grouped in a logic way.

5. compare the results of the group exercise with the framework developed by Vernooy et al. (2015).

5.9 Conclusion and evaluation

Wrap up the session with a recapitulation of what has been covered and invite participants to think about what farmers in their work region would see as the main governance and management components of a community seed bank.

Evaluate the session. A good indicator of success is whether participants are able to see how to apply the concepts of good governance and management in their working modality.



Module 6: Support and Networking Training for Community Seed Banks

Photo Credit: Abdihakim Hassan

6 Module 6: Support and Networking Training for Community Seed Banks

6.1 Objective:

Equip participants with the skills and knowledge to establish and maintain effective support systems and networks for community seed banks, fostering collaboration, resource sharing, and resilience.

6.2 Duration

2.30 hrs Contents:

6.3 Introduction (15 mins):

1. Objective Reinforcement:

- Reiterate the objective of establishing effective support systems and networks.

2. Significance Explanation:

- Emphasize the importance of collaborative networks in enhancing the resilience of community seed banks.

6.3.1 Part 1: Building Support Systems (1 hr):

Identifying Key Stakeholders (20 mins):

- Discuss the identification of crucial stakeholders and potential supporters.

Collaborative Partnerships (30 mins):

- Explore strategies for establishing collaborative partnerships with local organizations, farmers, and institutions.

Resource Mobilization (20 mins):

- Discuss effective ways of mobilizing resources to support seed bank activities.

Interactive Activity (10 mins):

- Conduct an interactive activity related to identifying stakeholders or initiating partnerships.

Q&A and Discussion (15 mins):

- Facilitate a Q&A session and encourage participants to share their experiences.

6.3.2 Part 2: Networking Strategies (1 hr):

Introduction to Networking (15 mins):

- Introduce the concept of networking within the context of community seed banks.

Online and Offline Networking (30 mins):

- Discuss strategies for both online and offline networking, considering the digital era.

Group Networking Activity (15 mins):

- Facilitate a group activity focusing on creating a networking plan for a seed bank.

Q&A and Discussion (15 mins):

- Encourage participants to share their thoughts on effective networking strategies.

Conclusion and Application (30 mins):

Summary of Key Points (15 mins):

- Summarize essential elements of building support systems and effective networking.

Practical Application Discussion (15 mins):

- Facilitate a discussion on how participants plan to implement support systems and networking in their seed banks.

Closing Remarks and Transition (15 mins):

- Express appreciation for participation and provide a preview of the next training session.

Training Evaluation and Feedback (15 mins):

Assessment Tools (10 mins):

- Administer a brief evaluation to gauge participants' understanding.

Feedback Collection (5 mins):

- Create an open space for feedback on the module content and delivery.

6.4 Equipment and Materials Needed:

- ✓ Projector and Screen
- ✓ Flipcharts presentations
- ✓ Whiteboard markers
- ✓ Training Modules and Handouts
- ✓ Power point presentations
- ✓ Evaluation Forms
- ✓ Timer or clock
- ✓ Photographer

6.5 Facilitator Instructions:

A: Preparation:

- Create a Venn diagram slide for visualization during the session.

B: Process:

Introduction:

- Clearly communicate the objective and purpose of the activity.
- In a plenary session, illustrate the use of a Venn diagram with a nonseed-related example.

6.5.1 Part 1: Mapping Stakeholders (Group Activity):

- Introduce the first phase: Mapping key seed-related stakeholders and understanding their relationships within the local community.
- Assign participants to small groups or pairs, tasking them with utilizing the provided Venn diagram to map seed actors in their respective areas.
- Facilitate group presentations in the plenary session, encouraging feedback and discussion.

6.5.2 Part 2: Analyzing Relationships (Group Discussion):

- Introduce the second phase: Identifying the nature of the emerging web of relationships.
- Explain the concepts of "dense" and "light" webs of stakeholders and discuss their implications for the strength of the local seed network.
- Analyze organizations and individuals supporting farmers and the community regarding seeds. Address gaps and brainstorm potential solutions if support is lacking.

6.6 Conclusion for Module 6: Support and Networking Training:

Recap key strategies, emphasize practical application, encourage networking plans, express appreciation, and transition to the next module.



Module 7

Policies and Laws Impacting Community Seed Banks Objectives

Photo Credit: Abdihakim Hassan

7 Module 7: Policies and Laws Impacting Community Seed Banks Objectives:

- Equip participants with an understanding of the policies and laws affecting community seed banks, enabling them to navigate legal frameworks, advocate for supportive regulations, and ensure compliance for sustainable seed banking initiatives.

7.1 Duration

3.3 hrs

7.2 Contents:

- 1.** Introduction to Seed Bank Policies (45 mins):
 - Define the scope and significance of seed bank policies.
 - Highlight the role of policies in shaping community seed bank initiatives.
 - Discuss key terms and concepts related to seed bank regulations.

7.3 Process and Steps:

7.3.1 Introduction (15 mins):

1. Objective Reinforcement:

- Reiterate the objective of understanding policies and laws impacting community seed banks.

2. Significance Explanation:

- Emphasize how policies play a crucial role in the success and sustainability of seed banks.

7.3.2 Part 1: Introduction to Seed Bank Policies (45 mins):

1. Definition and Scope (15 mins):

- Define seed bank policies and outline their scope within the broader legal landscape.

2. Role of Policies (20 mins):

- Discuss the pivotal role policies play in influencing community seed bank activities.

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3. Key Terms and Concepts (10 mins):
 - Introduce essential terms and concepts related to seed bank regulations.
 4. Q&A and Discussion (15 mins):
 - Encourage participants to ask questions and engage in a discussion on the introduced concepts.
 5. Conclusion and Transition (15 mins):
 6. Summary of Key Points (10 mins):

7.4 Equipment and Materials Needed:

- Projector and Screen
- Flipcharts presentations
- Whiteboard markers
- Training Modules and Handouts
- Power point presentations
- Evaluation Forms
- Timer or clock
- Photographer

7.5 Facilitator Instructions:

A: Preparation:

- Create slides showcasing policy and legislation examples from Vernooy et al. (2015) Chapter 7.
- Arrange for a policy expert to provide insights during the session.
- Prepare copies of a table outlining policies and laws and their potential impacts on community seed banks.

Here's a simple table template for recording policies and laws and their potential impacts on community seed banks:

Policy or Law	How it will affect community seed banks	Positive Impact	Negative Impact
Example 1	Description of impact	Yes/No	Yes/No

Example 2	Description of impact	Yes/No	Yes/No
Example 3	Description of impact	Yes/No	Yes/No

7.6 B: Process:

Introduction:

- 1.** Objective Explanation:
 - Clearly articulate the objective and purpose of the learning activity.
- 2.** Policy Examples Presentation:
 - Showcase examples of policies and legislation affecting community seed banks.

7.6.1 Part 1: Policy Impact Table Activity (Group Work):

- 1.** Handout Distribution:
 - Distribute the prepared handout to participants.
- 2.** Small Group Activity:
 - Instruct participants to form small groups and collaboratively fill in the table, drawing from their experiences and knowledge of policies and laws.

7.6.2 Part 2: Plenary Presentation and Discussion:

- 1.** Group Reporting:
 - Invite group rapporteurs to present their findings in the plenary session.
- 2.** Comparative Analysis:
 - Facilitate a discussion comparing the results from different groups.
- 3.** Synthesis and Feedback:
 - Summarize the key points and gather feedback from participants.

7.7 Conclusion and Evaluation:

Wrap-up with Policy Expert:

- Conclude the session by inviting the policy resource person to provide insights and comments on the exercise.

Evaluation:

-
- Assess the success of the session by gauging participants' utilization of the exercise method and resulting information in subsequent discussions on conservation and development decisions affecting community seed banks.



Module 8

Viability and Sustainability of Community Seed Banks Objectives

Photo Credit: Abdihakim Hassan

8 Module 8: Viability and Sustainability of Community Seed Banks Objectives

- Enable participants to assess and enhance the viability and sustainability of community seed banks by understanding key factors such as genetic diversity, community engagement, funding mechanisms, and long-term planning.
- Equip participants with practical strategies to ensure the long-term success and resilience of community seed banks in their respective contexts. **Duration: 3 hrs Contents:**
 - 1. Genetic Diversity (45 mins):**
 - Understanding the significance of genetic diversity in seed banks.
 - Strategies for maintaining and enhancing genetic diversity.
 - 2. Community Engagement (45 mins):**
 - Importance of community involvement in sustaining seed banks.
 - Building effective community engagement strategies.
 - 3. Funding Mechanisms (45 mins):**
 - Exploring diverse funding sources for community seed banks.
 - Developing sustainable funding models.
 - 4. Long-Term Planning (45 mins):**
 - Emphasizing the role of long-term planning in seed bank sustainability.
 - Creating effective and adaptable long-term plans.

8.1 Process and Steps:

Introduction (15 mins):

- 1. Objective Reinforcement:**
 - Reiterate the objectives of understanding and enhancing the viability and sustainability of community seed banks.
- 2. Overview of Contents:**
 - Provide a brief overview of the topics to be covered – genetic diversity, community engagement, funding mechanisms, and longterm planning.

8.1.1 Part 1: Genetic Diversity (45 mins):

- 1. Significance of Genetic Diversity (20 mins):**
 - Explain why genetic diversity is crucial for the success of community seed banks.
- 2. Strategies for Maintenance (25 mins):**
 - Discuss practical strategies for maintaining and enhancing genetic diversity within seed banks.

8.1.2 Part 2: Community Engagement (45 mins):

- 1. Importance of Community Involvement (20 mins):**
 - Emphasize the role of community engagement in the sustainability of seed banks.
- 2. Building Engagement Strategies (25 mins):**

-
- Explore effective strategies for involving the community in seed bank activities.

8.1.3 Part 3: Funding Mechanisms (45 mins):

- 1.** Diverse Funding Sources (20 mins):
 - Present various funding sources available for community seed banks.
- 2.** Developing Sustainable Models (25 mins):
 - Guide participants in developing sustainable funding models for their seed banks.

8.1.4 Part 4: Long-Term Planning (45 mins):

- 1.** Role of Long-Term Planning (20 mins):
 - Stress the importance of long-term planning for seed bank sustainability.
- 2.** Creating Effective Plans (25 mins):
 - Assist participants in developing effective and adaptable long-term plans for their seed banks.

8.2 Conclusion and Application (15 mins):

- 1.** Summary of Key Points (10 mins):
 - Summarize key takeaways from each content area.
- 2.** Practical Application Discussion (5 mins):
 - Facilitate a discussion on how participants plan to apply the strategies learned in their seed banks.

8.3 Equipment and Materials Needed:

Projector and Screen
Flipcharts presentations
Whiteboard markers
Training Modules and Handouts
Power point presentations
Evaluation Forms
Timer or clock
Photographer

8.4 Conclusion:

Recap the crucial role of genetic diversity, community engagement, diverse funding sources, and long-term planning in ensuring the viability and sustainability of community seed banks.

Empower participants to apply these strategies in their respective contexts, fostering resilient and enduring seed bank initiatives.

References and Resources

1. Alvarenga, A. C., & Dayrell, C. A. (2015). Brazil: the Minas Gerais seed houses for conservation in times of climate crisis. In R. Vernooy, P. Shrestha, & B. Sthapit (Eds.), *Community seed banks: origins, evolution, and prospects* (pp. 85–87). Routledge. Available: <https://hdl.handle.net/10568/68708> (accessed 21 January 2020).
2. Andersen, R., & Winge, T. (2011). Linking community seedbanks and farmers' rights. In *Banking for the future: savings, security, and seeds* (pp. 5–6). Development Fund. Available: https://www.utviklingsfondet.no/files/uf/documents/Rapporter/Banking_for_the_future.pdf (accessed 21 January 2020).
3. Biodiversity International. (n.d.). Community seed banks. Available: <https://www.biodiversityinternational.org/seedbanks/> (accessed 21 January 2020).
4. Clancy, E. (2016). Supporting community seed banks to realize farmers' rights. Biodiversity International. Available: <https://hdl.handle.net/10568/78756> (accessed 22 January 2020).
5. FAO (Food and Agriculture Organization of the United Nations). (2014). Community seed banks: Junior Farmer Field and Life School—facilitator's guide. FAO. Available: <http://www.fao.org/3/a-i3987e.pdf> (accessed 21 January 2020).
6. Vernooy, R., Shrestha, P., Gauchan, D., Bhusal, A., Gurung, R., Pudasaini, N., & members of the Community Seed Banks Association of Nepal. (2019). Let us conserve and exchange seeds: Celebrating traditional crop diversity of the Nepali lowlands. Bioversity International; LI-BIRD; Association of Community Seed Banks of Nepal. Available: <https://hdl.handle.net/10568/102365> (accessed 21 January 2020).
7. Vernooy, R., Shrestha, P., Sthapit, B. (Eds.). (2015). Community seed banks: origins, evolution, and prospects. Routledge. Available: <https://hdl.handle.net/10568/68708> (accessed 21 January 2020).
8. Vernooy, R., Shrestha, P., Sthapit, B. (2017). Seeds to keep and seeds to share: The multiple roles of community seed banks. In D. Hunter, L. Guarino, C. Spillane, & P.C. McKeown (Eds.), *Routledge handbook of agricultural biodiversity* (pp. 580–591). Routledge. Available: <https://hdl.handle.net/10568/82995> (accessed 21 January 2020).
9. Vernooy, R., Sthapit, B., Dibiloane, M.A., Maluleke, N.L., Mukoma, T., & Tjikana, T.T. (2015). South Africa: A new beginning for community seed banks. In R. Vernooy, P. Shrestha, & B. Sthapit (Eds.), *Community seed banks: origins, evolution, and prospects* (pp. 254–258). Routledge. Available: <https://hdl.handle.net/10568/68708> (accessed 21 January 2020).
10. Vernooy, R., Sthapit, B., Galluzzi, G., & Shrestha, P. (2014). The multiple functions and services of community seed banks. *Resources*, 3(4), 636–656. doi:10.3390/resources3040636. Available: <https://hdl.handle.net/10568/65196> (accessed 21 January 2020).
11. Vernooy, R., Sthapit, B., Tjikana, T., Dibiloane, A., Maluleke, N., Mukoma, T. (2013). Embracing diversity: Inputs for a strategy to support community seedbanks in South Africa's smallholder farming areas. Bioversity International; Department of Agriculture, Forestry and Fisheries. Available: <https://hdl.handle.net/10568/105076> (accessed 21 January 2020).
12. Vernooy, R. (2020). CSB Facilitator Handbook. Available: https://cgspace.cgiar.org/bitstream/handle/10568/81286/CSB_FacilitatorHandook_Vernooy_2020_last.pdf (accessed 21 January 2020).



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