



UNIVERSITY OF BURAO
FACULTY OF AGRICULTURE
AND ENVIRONMENTAL SCIENCE.



كلية الزراعة والعلوم البيئية

REPORT ON VALIDATION MEETING FOR SEED LABORATORY TRAINING
MANUAL



29TH APRIL, 2024

BURAO, TOGDHEER REGION, SOMALILAND

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1. Introduction

The validation meeting for the Seed Laboratory Training Manual was convened on April 29, 2024, with the participation of 35 participants from diverse institutions **including FAO, GIZ, Taakulo, UNITA, Candlelight, ADO, World Vision, Ministry of Agriculture, Ministry of Environment and Climate Change, University of Burao (Agriculture Students), and private agribusiness groups**. The primary aim was to introduce and share insights on a seed laboratory training manual developed by the University of Burao. The meeting commenced with the reading of Koranic verses by Ahmed Bashir, followed by participants' introductions, where each participant was asked to tell his/her name and organization.

Dr. Ibrahim provided an insightful overview of the importance of seeds in agriculture productivity and food security. He emphasized that Somaliland faces challenges due to poor quality seeds and highlighted the critical significance of quality seeds in ensuring food security and socioeconomic development. He stressed the pivotal role of seed laboratories in ensuring the availability of quality seeds, which are essential for improved agriculture production, high yields, and enhanced food security.

This necessitated setting up a seed laboratory initiated by the University of Burao with the support of the Wageningen Center for Development Innovation (WCIDI) in the Netherlands. Consequentially, the seed manual was developed to provide and serve as a training tool for those employed in the agriculture and seed industries, as well as to guide managing a seed laboratory

Seed laboratories play a pivotal role in ensuring the quality and viability of seeds, which are essential for agricultural productivity, crop yields, and food security (Dr. Ibrahim and Ms. Nimo (Seed Lab Training Manual March 2024))

Dr. Isse, the president of the University of Burao, officially opened the validation meeting. He deeply expressed concerns about the crisis of food insecurity globally and discussed the specific challenges faced by Somaliland in combating food crises

Key Workshop Achievements:

- Organized a two-way stimulus-response situation where we presented the Seed lab Training Manual to the audience (panel)
- and response back from the audience (panel) presenters conveyed a manual message and received a response from the audience Fruitful discussion
- Enhanced understanding of the importance of the seed lab training manual.
- Successful introduction and networking among participants.
- Acceptance of the manual by stakeholders.
- Strengthening networking system between different stakeholders working in the agriculture sector.

1. Validation meeting Proceedings



Registration and Welcoming

Participants were registered and warmly welcomed by Ms. Nimo Abdirahman and Dr. Ibrahim Osman Ismail to the workshop venue who thanked participants for their participation.

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Opening Remarks: (Dr Ibrahim, Dean of Faculty of Agriculture and Environmental Science, University of Burao) The meeting commenced with a warm welcome to participants by Dr. Ibrahim and Ms. Nimo and opened with the gracious reading of a Quran verse by Mr. Ahmed Bashir, setting a solemn tone for the proceedings. This meeting allowed the various stakeholders to discuss, comment, question, and reflect on the seed lab training manual.

Objectives of the Seed Laboratory Training Manual

The objectives of the Seed Lab Training Manual have been clearly outlined for all participants. It was emphasized that validating this seed lab manual developed by The University of Burao is crucial for numerous reasons, each justifying its importance and positively impacting end-users' needs. We strongly provided details that the manual responds to the critical need for building the capacity of employees in agriculture, equipping them with the necessary skills and knowledge to contribute effectively to seed quality and agricultural sustainability.

The manual meets regulatory requirements and industry standards, facilitating compliance with legal obligations and maintaining accreditation status for the seed laboratory. This ensures that the valuable information contained within the manual is readily available and utilized to its fullest potential, further enhancing seed testing capabilities and promoting agricultural development.

Objectives of the Seed Lab Training Manual

The objective of the Seed Laboratory Manual is to establish standardized testing procedures, fostering consistency in seed quality assessment across various laboratories. Testing, supporting the reliability and comparability of results.

Who are the Intended Users of this Training Manual

It was stressed that the seed laboratory manual is intended for a wide range of stakeholders involved in seed testing and quality assurance, including: - Seed laboratory technicians - Agricultural extension workers - Seed producers and distributors - Regulatory authorities and policymakers - Academic institutions, and research organizations.

5. Components of Seed Laboratory Manual

In this session, a concise overview of the key components and their functions was presented. However, we stood on the following two key components:

1. **Testing Protocol:** We presented a testing protocol that is used to test seeds in terms of purity analysis, germination testing, moisture content determination, and genetic purity analysis, all conducted with stringent adherence to standardized procedures.

2. **Quality Control Measures:** we noted that this encompasses calibration, and proficiency testing, ensuring the accuracy and consistency of results.

Furthermore, we provided a clear explanation of the function of the seed laboratory and how it supports agriculture productivity, yields, and seed quality. On the other hand, we focused on responding to the following questions to justify the seed laboratory's operations.

- What tests are performed in seed laboratories? We've detailed the process for tests crucial for determining seed quality.
- How are test results interpreted? We've clarified the process of comparing results against established standards to ascertain seed viability.
- How do farmers benefit? We've highlighted the positive impact on crop yield and performance through the procurement of high-quality seeds.

6. Strategies for Running Seed Laboratory Manual

In this section, we delved deep into the three areas for strategies to optimize laboratory operations and ensure the highest standards of quality and success. Our discussions revolved around three key areas:

- 1) **Training and Certification:** We emphasized the importance of developing comprehensive training programs aimed at building the capacity of laboratory staff. These programs will not only equip them with the necessary skills and knowledge but also ensure adherence to standardized protocols, thereby enhancing the quality and success of laboratory work.
- 2) **Regular Updates:** Recognizing the rapid advancements in testing technologies, we underscored the need for regular updates to protocols and procedures. By staying abreast

of the latest developments in the field, we can leverage cutting-edge technologies to improve efficiency and accuracy in seed testing processes.

- 3) **Collaboration:** We highlighted the significance of fostering collaborations between seed laboratories and agricultural institutions. Such partnerships facilitate the sharing of knowledge, skills, and best practices, ultimately enhancing the overall effectiveness of seed testing and certification processes.

Training and Certification: Emphasize comprehensive training programs for laboratory personnel, ensuring proficiency in executing seed testing procedures.

Regular Updates: Continuously update protocols and methodologies to incorporate advancements in seed testing technologies, keeping guidelines current and relevant.

Collaboration: Foster collaboration between seed labs, agricultural institutions,

How is the Training Manual organized

The seed laboratory manual is organized in a structured manner, following a sequential learning approach: - Introduction and background information - Detailed explanations of seed testing procedures and methodologies - Practical exercises and case studies for hands- on learning - Appendices containing supplementary information, references, and resources. However, the seed laboratory training manual has five modules.

Topic One: Seed quality assurance vs seed quality control

Topic Two: Seed testing international organization

Topic Three: Seed Testing Methods

Topic Four: Labelling standard and Implications in the international

Conclusion: Reflections from Participants on the Seed Laboratory Training Manual



- Participants from various institutions shared their reflections on the Seed Laboratory Training Manual, expressing enthusiasm and interest in its contents. The manual was warmly welcomed as a valuable resource that addresses the need for standardized training materials in seed laboratory operations.
- As participants delved into the manual, they found themselves becoming increasingly excited about the wealth of information it contained. From detailed protocols and procedures to comprehensive training modules, the manual provided a roadmap for enhancing the quality and efficiency of seed testing processes.
- Participants appreciated the clarity and accessibility of the manual, which allowed them to familiarize themselves with its contents quickly. They expressed confidence that the manual would serve as an invaluable tool for both novice and experienced laboratory staff, providing guidance and support in their day-to-day operations.
- Overall, the participants' positive reactions to the Seed Laboratory Training Manual underscored its importance as a foundational resource for advancing seed laboratory practices. With their enthusiastic endorsement, the manual is poised to become an indispensable asset in the pursuit of excellence in seed testing and certification.

Invitation Letter to Seed Manuals Validation Events



Ref: UoB/288/DVCO/2024

Date: 23/04/2024

To: SOS, Taakulo, ADO, GIZ, MoAD, MoED, Candlelight, WHH, Acted, Oxfarm, World Vision, FAO, Care international

Subject: Invitation to Seed Manuals Validation Events

Dear Partner representatives,

We are excited to invite you to participate in the validation events for the developed Seed Lab and Community Seed Bank Manuals, organized by FAES with the guiding support from WCDI/Alliance Biodiversity and CIAT.

These validation events are crucial steps towards ensuring the efficacy and applicability of the manuals in real-world scenarios. Your organization's expertise will greatly contribute to the implementation of these resources.

The validation events will take place on the following dates:

1. Seed Lab Manual Validation Event:

Date: April 29th, 2024
Venue: UoB Meeting Hall

2. Community Seed Bank Manual Validation Event:

Date: April 30th, 2024
Venue: Daalo Hotel

Each validation meeting will last approximately 3 hours, during which participants will have the opportunity to review and provide feedback on the manuals.

It is imperative that your organization participates in these events to ensure that the manuals meet the diverse needs and requirements of stakeholders in the seed sector.

The significance of these manuals cannot be overstated. They will serve as comprehensive guides for promoting best practices in seed management, enhancing seed quality, and ultimately contributing to food security and agricultural sustainability.

Quality seeds are the cornerstone of successful agricultural endeavors. By validating these manuals, we are taking a proactive step towards ensuring that farmers have access to the knowledge and resources necessary to produce and utilize high-quality seeds effectively.

We sincerely hope that you will join us in this important endeavor. Your participation is invaluable to the success of this initiative.

Please confirm your attendance by email to ismail@uob-edu.net or nimosharaf@gmail.com. If you have any questions or require further information, please do not hesitate to contact us.

Thank you for your attention, and we look forward to your participation.

Best Regards,
Prof. Omar Osman Hersi
Deputy Vice Chancellor

