SEED ENTERPRISE MANAGEMENT INSTITUTE (SEMIS)

OVERVIEW OF SEMIS TRAINING MODULES

6th April 2016

Prof. Agnes W. Mwang’ombe, EBS, Prof. F. Olubayo, D. Wasonga
Project Implementation

Alliance for a Green Revolution in Africa-AGRA
Phase 1: 3 years (2010-2013), Phase 2-2014-2016

Institutions

University of Nairobi
PI: Prof. A.W. Mwang’ombe’ EBS
Management: Prof. F. Olubayo
Daniel Wasonga – Project Manager, Florence Kiwunja- Admin. Asst., Sylvester Kimaiyo – Factory Manager

CIMMYT:
Dr. John MacRobert (Author-Seed Business Mgt In Africa)

KEPHIS:
DR. Esther Kimani – Ag. Director KEPHIS
Mr. Simeon Kibet

KALRO:
Dr. Teresio Riungu and Dr. Lawrence Ragwa

Consultants
Aline O’Connor Funk
Paul Seaward
Paul Okete

ISU
Dr. Misra
Dr. Y. Shyy
Dr. Joe Cortes
Dr. Mike Stahr
**Overall Goal**

- Eradication of food and nutrition insecurity through capacity building of seed actors.
  - Quality seed
  - Affordable seed

**Objectives:**

1. To produce seed production and marketing management expertise in SSA region
2. To train seed industry practitioners on the best practices to efficiently produce adequate high quality seed for farmers.
3. To enhance production of seed of improved varieties for the SSA
   - Efficient production
   - Marketing
   - Good distribution
4. To strengthen the capacity of the SSA region to train on seed production and marketing management strategies
   - Enhanced technology
5. To develop a regional capacity to facilitate information sharing on seed issues and related disciplines in SSA.

**Growing the Seed Industry in Africa**
Growing the Seed Industry in Africa

21 African Countries including Congo DRC and South Sudan, S.Afr, Senegal

A.W. Mwang’ombe et. al
PHASE I

SEED COURSES

CURRICULA REVIEW MEETINGS

CONSTRUCTION-SEED PROCESSING FACTORY

PARTICIPATION IN EXHIBITION AND CONFERENCES

FIELD PRACTICALS

4/11/2016

A.W. Mwang’ombe et. al
SEMIs COURSES AT UON

Short term courses
I. Seed Production
II. Seed drying processing and storage
III. Seed marketing
IV. Seed Business Mgt.
V. Seed Quality assurance and Seed Enterprise Quality Management
VI. Seed Production and Field Pests Diagnostics
VII. National Plant Protection Organizations (NPPO)

Long Term courses
Curriculum already in place for:
I. Certificate-Seed Technology and Business
II. Diploma -Seed Technology and Business
III. Post-graduate Diploma-Seed Technology and Business
IV. MSc.-Seed Technology and Business Mngt.

- 10 students currently enrolled for MSc. Seed Technology and Business Mngt.
SEMI's group photo during a training session at UoN
# SUMMARY OF TRAINED PERSONNEL IN PHASE I AND II

<table>
<thead>
<tr>
<th>Course</th>
<th>Phase I (2010 -2013)</th>
<th>Phase II (2014 -2016)</th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>Seed Production</td>
<td>29</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Seed Drying Processing and Storage</td>
<td>31</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>Seed Business Management</td>
<td>29</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Seed Marketing</td>
<td>28</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Seed Legislation and Accreditation</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Seed Quality Assurance</td>
<td>30</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>NPPOs</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Seed Production Field Diagnostics</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total (Yearly)</strong></td>
<td>172</td>
<td>132</td>
<td>148</td>
</tr>
</tbody>
</table>

**Total** 866

*4/11/2016 A.W. Mwang'ombe et. al*
Participants trained by country in Phase I

- 504 personnel from 143 Seed Companies trained
PHASE II

Seed Courses

Seed Processing Factory

Service to Elgon Kenya

Conferences and Exhibition

Bean production

4/11/2016

A.W. Mwang’ombe et al.
Trained personnel under SEMIs Phase II

- Total 362 persons trained from 114 Seed Companies/Institutes
Participants trained by country in Phase II

<table>
<thead>
<tr>
<th>Country</th>
<th>Participants trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>22</td>
</tr>
<tr>
<td>DR Congo</td>
<td>9</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>24</td>
</tr>
<tr>
<td>Ghana</td>
<td>25</td>
</tr>
<tr>
<td>Kenya</td>
<td>13</td>
</tr>
<tr>
<td>Liberia</td>
<td>3</td>
</tr>
<tr>
<td>Malawi</td>
<td>16</td>
</tr>
<tr>
<td>Mali</td>
<td>8</td>
</tr>
<tr>
<td>Mozambique</td>
<td>12</td>
</tr>
<tr>
<td>Niger</td>
<td>24</td>
</tr>
<tr>
<td>Nigeria</td>
<td>26</td>
</tr>
<tr>
<td>Rwanda</td>
<td>29</td>
</tr>
<tr>
<td>South Sudan</td>
<td>10</td>
</tr>
<tr>
<td>Senegal</td>
<td>2</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>8</td>
</tr>
<tr>
<td>Tanzania</td>
<td>37</td>
</tr>
<tr>
<td>Uganda</td>
<td>29</td>
</tr>
<tr>
<td>Zambia</td>
<td>4</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1</td>
</tr>
</tbody>
</table>

Total - 19 countries
Field and Practical sessions
• Comprises of air-screen cleaner, gravity separator, seed coating machine and packaging machine.
• Seed Processing capacity 5t/hr
• UoN signs annual agreements for seeds processing.
LABORATORY CONSTRUCTION

- Construction of seed laboratories is complete
- Equipping Labs ongoing

4/11/2016
Provision of foundation seed

“Seed companies all over Africa indicate that foundation/breeder seed availability and access is a major contributor to low seed production” in the continent.

White label seed produced at SEMIs

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonnage</th>
<th>Variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>4.3</td>
<td>Kenya Red Kidney, Meizi Mbili, Kabete Super, Kenya Wonder</td>
</tr>
<tr>
<td>2015</td>
<td>3.5</td>
<td>Kenya Red Kidney, Meizi Mbili, Kabete Super, Kenya Wonder</td>
</tr>
</tbody>
</table>

Varieties:
- Meizi mbili
- Kenya Wonder
- Kenya Red Kidney
- Kabete Super
- Kenya Sugar Bean
- Super Rosecocco

Presentation of White label breeder seed by Prof. A. W. Mwang’ombe to Simlaw Seed Company CEO. Mr. Azaria Soi at a ceremony at CAVS.
### Participation in National and Regional Workshops and Meetings on Seed Issues

<table>
<thead>
<tr>
<th>Exhibitions/conferences</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FARA Meeting</td>
<td>2011</td>
</tr>
<tr>
<td>KARI congress</td>
<td>2012</td>
</tr>
<tr>
<td>STAK congress</td>
<td>2013</td>
</tr>
<tr>
<td>ASK Show</td>
<td>2014</td>
</tr>
<tr>
<td>AGRF</td>
<td>2015</td>
</tr>
<tr>
<td>AFSTA Congress</td>
<td>2016</td>
</tr>
</tbody>
</table>
Seed Enterprise Management Institute (SEMIs) in Francophone West Africa

• (SEMIs) conducts ToT workshop in Mbour, Senegal.

• USAID has provided support to ENSA, Thies University to host SEMIs for capacity building for small seed companies in Senegal.

• Other participating seed companies will be from Mali, Niger and Burkina Faso.
Seed Enterprise Management Institute (SEMI)s in Francophone West Africa

• ToT workshop trainers were
  ➢ Prof. Agnes W. Mwang’ombe (PS &CP), UoN
  ➢ Prof. Evans Aosa (Business School), UoN
  ➢ Prof. Florence Olubayo (PS &CP), UoN
  ➢ Prof. Justus Munyoki (Business School), UoN and
  ➢ Dr. Lawrence Ragwa (KALRO).

• Dates: 14-18th March 2016
ToT Workshop focused the listed course modules

• 1. Seed production and associated Crop Pests.

• 2. Seed Business Management

• 3. Seed Marketing

• 4. Seed processing, drying and storage.
Seed Enterprise Management Institute (SEMI)s in Francophone West Africa
Field trip: Tool Baye Seed Company in Kaolack, Senegal
SEMIs Website: www.semis-africa.org

- Sharing information on seed issues, current happenings in the seed industry in Africa
- Staying in touch with SEMIs participants
- Online registration of Students
Certification Ceremony : Dr. Ngongi-1\textsuperscript{st} AGRA President
Certification Ceremony: In Kenya & Senegal
Rewarding our Participants with certificates at the end of each course motivates them to be better “seed men/women”

Thank You!