Seed Enterprise Management Institute (SEMIs)

UNIVERSITY OF NAIROBI, CAVS

Professor Florence Olubayo
Project Implementation

Alliance for a Green Revolution in Africa-AGRA
Total funding: 4,495,432.00 USD
Phase 1: 3 years (2010-2013)

Institutions

University of Nairobi
PI: Prof. A.W. Mwang’ombe
Management: Prof. F. Olubayo, Dr. Kiarie Njoroge
Dr. D.K. Ndung’u – Project Manager, Florence Kiwunja-Admin. Asst.,
Rosebena Cherono – Field Asst, Francis Maina, Caroline Ndumi, B. Kirangu

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

KEPHIS: DR. Onsando-Director
KEPHIS
Mr. Kibet

KARI: Dr. Riungu-Director KARI
Muguga

Consultants Aline O’Connor Funk
Paul Seaward
Paul Okete

ISU Dr. Misra
Dr. Y. Shyy
Dr. Joe Cortes
Dr. Mike Stahr

KEPHIS
Mr. Kibet

KARI
Muguga
SEED ENTERPRISE MANAGEMENT INSTITUTE (SEMI's)

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
SEMIs PARTNERSHIPS

- agra-alliance.org
- uonbi.ac.ke
- cimmyt.org
- iastate.edu
- kephis.org
- kenya.seed.com

SEMIs
- UoN
- ISU
- KARI, KEPHIS, KENYA SEED
- AGRA
- CONSULTANTS

GROWING THE SEED INDUSTRY IN AFRICA
Over 15 African Countries!!
## SEMIs COURSES AT UON:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>MAIN FACILITATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEED PRODUCTION</strong></td>
<td>UoN/CIMMYT/KARI/KEPHIS, Leldet, Kenya Seed, KEPHIS-Dr. John MacRobert, Dr. Kiarie</td>
</tr>
<tr>
<td><strong>SEED DRYING PROCESSING ND STORAGE</strong></td>
<td>UoN/IOWA STATE UNIVERSITY/KARI/KEPHIS/SEED COMPANIES-Dryland seed company, KARI Katumani; Dr. Shyy</td>
</tr>
<tr>
<td><strong>SEED BUSINESS MANAGEMENT</strong></td>
<td>UoN/SCH. OF BUSINESS, ALINE O’CONNOR FUNK, DILIP GOKHALE, SEED COMPANIES</td>
</tr>
<tr>
<td><strong>SEED MARKETING</strong></td>
<td>UoN/SCH. OF BUSINESS, CONSULTANTS, DRYLAND SEED COMPANY, LELDET</td>
</tr>
<tr>
<td><strong>SEED QUALITY ASSURANCE AND SEED ENTERPRISE QUALITY MANAGEMENT</strong></td>
<td>UoN/ISU/KEPHIS/KARI/SEED COMPANIES-Dr. J. Cortes, Mike Stahr</td>
</tr>
<tr>
<td><strong>SEED PRODUCTION FIELD DIAGNOSTIC</strong></td>
<td>UON/KEPHIS/KARI/Seed companies (New for 2014)</td>
</tr>
<tr>
<td><strong>PLANT PROTECTION ORGANIZATIONS (NPPO’S) QUALITY REGULATORS</strong></td>
<td>UON/KEPHIS/KARI/Seed companies (New for 2014)</td>
</tr>
<tr>
<td>Course</td>
<td>2010</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Seed Production</td>
<td>29</td>
</tr>
<tr>
<td>Seed Drying Processing and Storage</td>
<td>31</td>
</tr>
<tr>
<td>Seed Business Management</td>
<td>29</td>
</tr>
<tr>
<td>Seed Marketing</td>
<td>28</td>
</tr>
<tr>
<td>Seed Quality Assurance</td>
<td>30</td>
</tr>
<tr>
<td>Seed Legislation and Accreditation</td>
<td>25</td>
</tr>
<tr>
<td>Seed Quality Assurance and Seed Enterprise Quality Management</td>
<td></td>
</tr>
<tr>
<td><strong>Total (Yearly)</strong></td>
<td>172</td>
</tr>
</tbody>
</table>
## Students trained at SEMIs

<table>
<thead>
<tr>
<th>Institution</th>
<th>Qualifications of Students</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haramaya University</td>
<td>MSc.</td>
<td>2</td>
</tr>
<tr>
<td>Kwame Nkrumah University of Science and technology</td>
<td>MSc.</td>
<td>2</td>
</tr>
<tr>
<td>Makerere University</td>
<td>Msc.</td>
<td>2</td>
</tr>
<tr>
<td>University of KwaZulu Natal (ACCI)</td>
<td>PhD</td>
<td>2</td>
</tr>
<tr>
<td>West Africa Center for Crop improvement</td>
<td>2 PhD, 2 Msc</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
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</table>
Unique SEMIs Curricula:

- Involvement of stakeholders in the development;
- ISU, Consultants, CIMMYT, UON, KARI, Seed Companies
- Annual Review every year to keep abreast on seed Issues and changing trends in the seed industry

Result

One of the best “thought-through” and relevant curricula in Africa focused on seed
World Class Facilitators:

John MacRobert - CIMMYT

Kiarie Njoroge - UON CAVS

Aline O’Connor - Seed Business mgt

Jenny Leakey - Leldet

Dr. Yuan Shyy - ISU

Dr. Joe Cortes - ISU

KEPHIS
SEMIs Graduates are big asset to Seed Companies in Africa today!

- The training at SEMIs is helping in scaling up production of high quality seed for farmers around Africa!

- SEMIs graduates together with AGRA have contributed greatly in the increased seed production being experienced in Africa Today!

- So far over 120 seed companies from over 15 African Countries have benefited from training at SEMIs

Participants visit Dry Land Seed co. in Kenya
Long Term courses in Seed Technology and Business:

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

Expected Rollout of Programme in 2014!
Other Activities at SEMIs:

Foundation seed production at CAVS:

Varieties:
• Meizi mbili
• Kenya Wonder
• Kenya Red Kidney
• Kabete Super
• Kenya Sugar Bean
• Super Rosecocco
Provision of foundation seed for seed Co.

White label seed produced at SEMIs

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonnage</th>
<th>Variety</th>
</tr>
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<tbody>
<tr>
<td>2011</td>
<td>700 Kgs</td>
<td>Kenya Umoja</td>
</tr>
<tr>
<td>2012</td>
<td>1.7 tonnes</td>
<td>Meizi mbili, Kenya wonder, Kabete super</td>
</tr>
<tr>
<td>2013</td>
<td>1.76 tonnes</td>
<td>Kenya Red Kidney, Meizi Mbili</td>
</tr>
</tbody>
</table>

“A major constraint for seed production in Africa is access to foundation seed”!

Professor Mwan’gombe presenting White label breeder’s seed to Kenya seed company

Elgon Kenya Seed company Picking up their White label seed
**Phase 1:** Seed Processing Unit.
- Seed from UNISEED and other seed companies to be processed

**Phase 2:** Modern Seed Laboratory for Seed Quality Assurance
- Seed Quality Laboratory
Phase 1: Seed Processing Unit

Once complete, the Seed processing factory will be able to process over 5000 MT of seed:

- Utilization by UON and other seed companies
SEMI's Seed Processing Unit under construction:

Seed Processing unit to be operational by end of 2014

SEMI's Seed Processing Line under Construction in China

Seed Sheller Under construction in USA
SEMIs participates in National and Regional Workshops and Meetings on Seed Issues!

Agricultural Sector Development forum - President Kibaki in attendance

Kenya-Agricultural transformation Day in Nairobi

<table>
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<tr>
<th>Other meetings</th>
<th>Year</th>
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<tbody>
<tr>
<td>Iowa state University (ToT)</td>
<td>2010</td>
</tr>
<tr>
<td>FARA Meeting</td>
<td>2011/13</td>
</tr>
<tr>
<td>KARI congress</td>
<td>2012</td>
</tr>
<tr>
<td>STAK congress</td>
<td>2012/2013</td>
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</table>

H.E. Mohamed Shein Pres. Of Zanzibar at the AFSTA-Congress Zanzibar
SEMIs at the ASK show in Nairobi

Rosebenna from SEMIs talks to farmers on the New Bean Varieties
SEMI is a “Port” of call for seed sector players:

- Agricultural /Seed Institutions visit SEMIs to share experiences and learn from SEMIs.
- Point of reference for seed trends.
- In the future SEMIs is to be platformed to become the leading seed reference point in Africa.

Seed company personnel from Tanzania with STAK officials visiting SEMIs in 2013.
SEMIs Course Highlights ..

Experiential training - Visit to the seed industry

Training on Finance and capital acquisition:
- Root capital and ASIF funding

Experts at SEMIs
Collaboration with Stakeholders and Experts:

Dr. Julius Kipng’etich-Director, Kenya Wildlife Services (KWS)

Guest lecture at the seed business module course

Observed Changing trends in the Seed Industry in Africa.....

"as I move across Africa, I see African Farmers have changed their strategy to improved seed”

Dr. Joe DeVries-Director, PASS
Activities Highlights...

Seed Company CEO’s- Seed Business Management Course 2011

SEMIs is nurturing competence in Strategic Seed Business management in Africa
Visit to KARI Wheat Rust Resistance Breeding Station-Njoro
Highlights conts:
Seed marketing course 2011

Well Done! Certificate presentation upon completion of SEMIs courses

SEMI's participants visiting the seed in Kenya
Participants visit Dry land Seed company seed store in Machakos
Activities highlights contd…..:
Seed Marketing Course-July 2012

Participants with the MD-Simlaw Seed company Mr. Soi
Seed Processing Course 2012

Familiarization with Certified seed packaging at a seed company in Kenya
Seed business training at its best in Africa!

- SEMIs is working with highly experienced consultants to enhance capacity building in the seed sector!
Seed Business Course 2013:

Seed Business course participants being addressed by Dr. Joe DeVries of AGRA
Graduation – Certificate presentations:

Joe DeVries - Director Pass presents certificate and books to participants.

Prof. Mwang’ombe - SEMIs PI presenting a certificate to Janet Gyima from Ghana.

Rewarding our Participants with certificates at the end of each course motivates them to be better “seed men”.
Comments from Participants:

“I like every topic we did in this course especially seed certification and de-taselling”
Anonymous.

“Previously I did not know how to project seed requirements and co-ordinate backwards for procurement of basic, pre-basic seed…” Now I know.”
Mr Omari Mduruma-
Aminata seed company Tanzania

“The knowledge I have acquired through the course will be highly valued not only in our seed company but in the whole of Zambia”
Dorica Banda
Indigenous seed company Zambia
Monitoring and Evaluation:

A monitoring and Evaluation team from AGRA visited SEMIs on 19th February 2012 to assess the project.
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
## Proposed Dates for SEMIs Seed Courses in 2014

<table>
<thead>
<tr>
<th>Course</th>
<th>Suggested Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Production</td>
<td>26-31&lt;sup&gt;st&lt;/sup&gt; May, 2014</td>
</tr>
<tr>
<td>Seed Drying, Processing and Storage</td>
<td>01-07&lt;sup&gt;th&lt;/sup&gt; June, 2014</td>
</tr>
<tr>
<td>Seed Business Management</td>
<td>20-26&lt;sup&gt;th&lt;/sup&gt; July, 2014</td>
</tr>
<tr>
<td>Seed Marketing</td>
<td>27&lt;sup&gt;th&lt;/sup&gt; July-02 August, 2014</td>
</tr>
<tr>
<td>Seed Production Field Diagnostic</td>
<td>01-07&lt;sup&gt;th&lt;/sup&gt; September, 2014</td>
</tr>
<tr>
<td>Plant Protection Organizations (NPPO’s) Quality Regulators</td>
<td>08-14&lt;sup&gt;th&lt;/sup&gt; September, 2014</td>
</tr>
<tr>
<td>Seed Quality Assurance and Seed Enterprise Quality Management</td>
<td>27&lt;sup&gt;th&lt;/sup&gt; Oct-08&lt;sup&gt;th&lt;/sup&gt; November, 2014</td>
</tr>
</tbody>
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Thank you for your attention.

Seed Enterprises Management Institute
University of Nairobi