Seed Enterprise Management Institute (SEMI s)

Project Highlights 2010-2013

UNIVERSITY OF NAIROBI, CAVS

PI: Professor A. W. Mwang’ombe

CAVS, 21 February 2013
Alliance for a Green Revolution in Africa-AGRA
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
**SEED ENTERPRISE MANAGEMENT INSTITUTE (SEMI)**

**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
agral-alliance.org

CIMMYT
cimmyt.org

UoN
uonbi.ac.ke

IOWA STATE UNIVERSITY

ISU
iastate.edu

KARI, KEPHIS
KENYA SEED

AGRA

GROWING THE SEED INDUSTRY IN AFRICA
Over 17 African Countries!!

Growing the Seed Industry in Africa
<table>
<thead>
<tr>
<th>COURSE</th>
<th>MAIN FACILITATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEED PRODUCTION</td>
<td>UoN/CIMMYT/KARI/KEPHIS, Leldet, Kenya Seed, KEPHIS-Dr. John MacRobert, Dr. Kiarie</td>
</tr>
<tr>
<td>SEED DRYING PROCESSING AND STORAGE</td>
<td>UoN/IOWA STATE UNIVERSITY/KARI/KEPHIS/SEED COMPANIES-Dryland seed company, KARI katumani; Dr. Shyy</td>
</tr>
<tr>
<td>SEED BUSINESS MANAGEMENT</td>
<td>UoN/SCH. OF BUSINESS, ALINE O’CONNOR FUNK, DILIP GOKHALE, SEED COMPANIES</td>
</tr>
<tr>
<td>SEED MARKETING</td>
<td>UoN/SCH. OF BUSINESS, CONSULTANTS, DRYLAND SEED COMPANY, LELDET</td>
</tr>
<tr>
<td>SEED QUALITY ASSURANCE AND SEED ENTERPRISE</td>
<td>UoN/ISU/KEPHIS/KARI/SEED COMPANIES-Dr. J. Cortes, Mike Stahr</td>
</tr>
<tr>
<td>QUALITY MANAGEMENT</td>
<td></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>Total (Yearly)</td>
<td>172</td>
</tr>
<tr>
<td>No.</td>
<td>Country</td>
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</tr>
<tr>
<td>1</td>
<td>Ghana</td>
</tr>
<tr>
<td>2</td>
<td>Tanzania</td>
</tr>
<tr>
<td>3</td>
<td>Ethiopia</td>
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<tr>
<td>4</td>
<td>Nigeria</td>
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<td>5</td>
<td>Uganda</td>
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<tr>
<td>6</td>
<td>Malawi</td>
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<td>7</td>
<td>Mozambique</td>
</tr>
<tr>
<td>8</td>
<td>Zambia</td>
</tr>
<tr>
<td>9</td>
<td>Niger</td>
</tr>
<tr>
<td>10</td>
<td>Kenya</td>
</tr>
<tr>
<td>11</td>
<td>Sierra leone</td>
</tr>
<tr>
<td>12</td>
<td>Mali</td>
</tr>
<tr>
<td>13</td>
<td>Burkina</td>
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<tr>
<td>14</td>
<td>Liberia</td>
</tr>
<tr>
<td>15</td>
<td>Rwanda</td>
</tr>
<tr>
<td>16</td>
<td>South Sudan</td>
</tr>
<tr>
<td>17</td>
<td>Guinee</td>
</tr>
<tr>
<td>18</td>
<td>Cameroon</td>
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<tr>
<td>19</td>
<td>Zimbabwe</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
### Students trained at SEMIs-2012

<table>
<thead>
<tr>
<th>Institution</th>
<th>Qualifications of Students</th>
<th>No</th>
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<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>
</tr>
</tbody>
</table>

### Self-sponsored candidates-2012

<table>
<thead>
<tr>
<th>Course</th>
<th>Institutions</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Production</td>
<td>FAO-Sierra Leone, CIAT (Harvest Plus)</td>
<td>3</td>
</tr>
<tr>
<td>Seed Drying, processing and storage</td>
<td>FAO Sierra Leone</td>
<td>2</td>
</tr>
<tr>
<td>Seed marketing</td>
<td>FAO Sierra Leone</td>
<td>2</td>
</tr>
<tr>
<td>Seed Business Management</td>
<td>FAO Sierra Leone</td>
<td>2</td>
</tr>
<tr>
<td>Seed quality assurance</td>
<td>FAO Sierra Leone</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>
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 2013!
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
Trained personnel are a Great asset for Seed companies:

The training at SEMIs is helping Scaling up production of high quality seed for farmers around Africa

So far over 100 seed companies from over 15 African Countries have benefited from training at SEMIs
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>
</thead>
<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>
</tbody>
</table>

“Seed companies all over Africa indicate foundation seed availability and access as a major contributor to low seed production”

Presentation of White label breeder seed to Kenya seed company CEO. Mr. Soi at a ceremony at CAVS
SEMIs INFRASTRUCTURE DVPT

Modern Seed laboratory and Seed Processing facility being constructed at CAVS with SEMIs funds

**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
- 90% complete (Currently painting going on)
- Expected Handover Date: Mid March 2013
Participation in National and Regional Workshops and Meetings on Seed Issues

Agricultural Sector Development forum- Kibaki in attendance

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

Kenya-Agricultural transformation Day in Nairobi

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's is a point of call for seed companies:

- Agricultural / Seed Institutions are using SEMI's as a port of call during meetings and visits.
- Point of reference for seed trends.
- Need to platform this to become the leading seed reference point in Africa.

Seed company personnel with STAK officials call in at SEMI's
Highlights ..

Experiential training-Visit to the seed industry

Training on Finance and capital Acquisition:
-Root capital and ASIF funding
Experts at SEMI's
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
Highlights...

Seed Company CEO’s- Seed Business Management Course 2011

Nurturing competence in Strategic Seed Business management in Africa
Highlights contd:
Seed Production May 2012:

Visit to KARI Wheat Rust Resistance Breeding Station-Njoro
Visiting the seed industry-
Visit to SIMLAW seeds

Certificate presentation on
Graduation
Visit to Dry land Seed company seed store in Machakos
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
Working with consultants to enhance capacity Building

Seed Business Class with Dilip Gokhale
Graduation – Certificate presentations:

Joe DeVries - Director Pass presents certificate and books to participants

Prof. Mwang’ombe - SEMI’s 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 “ Annonymous.

“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 SEMI's on 19th February 2012 to assess the project.
Sharing information on seed issues, current happenings in the seed industry in Africa
Staying in touch with SEMIs participants
Online registration of Students
Thank you for your attention