

Seed Enterprise Management Institute (SEMIs)

Project Highlights 2010-2013

UNIVERSITY OF NAIROBI, CAVS



PI: Professor A. W. Mwang'ombe

CAVS, 21 February 2013



Project Implementation

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 Cheronu –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 (SEMIs)

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

SEMI_s PARTNERSHIPS



agra-alliance.org



cimmyt.org



kephis.org



UoN



CIMMYT



ISU



CONSULTANTS



SEMI_s



KARI, KEPHIS
KENYA SEED



AGRA



uonbi.ac.ke



iastate.edu



kenyaseed.com

GROWING THE SEED INDUSTRY IN AFRICA

SEMIs In Africa

MALI

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 3 | 2 | 5 |
| Trained Personnel | 8 | 3 | 11 |

BURKINA FASO

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 3 | 2 | 5 |
| Trained Personnel | 5 | 4 | 9 |

SIERRA LEONE

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 3 | 3 | 6 |
| Trained Personnel | 10 | 10 | 20 |

LIBERIA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 2 | 2 | 4 |
| Trained Personnel | 10 | 10 | 20 |

GHANA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 7 | 3 | 10 |
| Trained Personnel | 16 | 12 | 28 |

NIGERIA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 8 | 2 | 10 |
| Trained Personnel | 23 | 4 | 27 |

ZAMBIA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 4 | 1 | 5 |
| Trained Personnel | 17 | 5 | 22 |

NIGER

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 4 | 4 | 8 |
| Trained Personnel | 8 | 15 | 23 |

ETHIOPIA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 5 | 4 | 9 |
| Trained Personnel | 14 | 17 | 31 |

UGANDA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 8 | 3 | 11 |
| Trained Personnel | 17 | 9 | 26 |

KENYA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 7 | 2 | 9 |
| Trained Personnel | 19 | 4 | 23 |

RWANDA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 2 | 1 | 3 |
| Trained Personnel | 5 | 5 | 10 |

TANZANIA

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 7 | 5 | 12 |
| Trained Personnel | 17 | 23 | 40 |

MALAWI

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 5 | 2 | 7 |
| Trained Personnel | 12 | 7 | 19 |

MOZAMBIQUE

| | 2010 | 2011 | Total |
|-----------------------------|------|------|-------|
| Seed Companies/Institutions | 5 | 4 | 9 |
| Trained Personnel | 10 | 17 | 27 |

Growing the Seed Industry in Africa

Over 17 African Countries!!



SEMIs COURSES AT UON:



| COURSE | MAIN FACILITATORS |
|---|--|
| SEED PRODUCTION | UoN/CIMMYT/KARI/KEPHIS, Leldet, Kenya Seed, KEPHIS-Dr. John MacRobert, Dr. Kiarie |
| SEED DRYING PROCESSING AND STORAGE | UoN/IOWA STATE UNIVERSITY/KARI/KEPHIS/SEED COMPANIES-Dryland seed company, KARI katumani; Dr. Shyy |
| SEED BUSINESS MANAGEMENT | UoN/SCH. OF BUSINESS, ALINE O'CONNOR FUNK, DILIP GOKHALE, SEED COMPANIES |
| SEED MARKETING | UoN/SCH. OF BUSINESS, CONSULTANTS, DRYLAND SEED COMPANY, LEDET |
| SEED QUALITY ASSURANCE AND SEED ENTERPRISE QUALITY MANAGEMENT | UoN/ISU/KEPHIS/KARI/SEED COMPANIES-Dr. J. Cortes, Mike Stahr |

SEMIS SUMMARY: TRAINED PERSONNEL- 2010, 2011, 2012

| Course | 2010 | 2011 | 2012 | Total |
|---|------------|------------|------------|------------|
| Seed Production | 29 | 27 | 30 | 86 |
| Seed Drying Processing and Storage | 31 | 28 | 31 | 90 |
| Seed Business Management | 29 | 26 | 29 | 84 |
| Seed Marketing | 28 | 25 | 30 | 83 |
| Seed Quality Assurance | 30 | | | 30 |
| Seed Legislation and Accreditation | 25 | | | 25 |
| Seed Quality Assurance and Seed Enterprise Quality Management | | 26 | 29 | 55 |
| Total(Yearly) | 172 | 132 | 149 | 452 |

| No. | Country | Total No. | % | Seed companies | other Institutions |
|--------------|--------------|------------|------|----------------|--------------------|
| 1 | Ghana | 52 | 11.5 | 11 | 4 |
| 2 | Tanzania | 50 | 11.1 | 11 | 3 |
| 3 | Ethiopia | 35 | 7.7 | 9 | 1 |
| 4 | Nigeria | 35 | 7.7 | 8 | 3 |
| 5 | Uganda | 35 | 7.7 | 6 | 4 |
| 6 | Malawi | 33 | 7.3 | 7 | 3 |
| 7 | Mozambique | 28 | 6.2 | 8 | 2 |
| 8 | Zambia | 28 | 6.2 | 5 | 2 |
| 9 | Niger | 25 | 5.5 | 5 | 2 |
| 10 | Kenya | 24 | 5.3 | 8 | 1 |
| 11 | Sierra leone | 22 | 4.9 | 3 | 1 |
| 12 | Mali | 19 | 4.2 | 4 | 3 |
| 13 | Burkina | 18 | 4.0 | 6 | |
| 14 | Liberia | 16 | 3.5 | 3 | 1 |
| 15 | Rwanda | 16 | 3.5 | 3 | |
| 16 | South Sudan | 9 | 2.0 | 2 | |
| 17 | Guinee | 4 | 0.9 | 1 | 1 |
| 18 | Cameroon | 2 | 0.4 | | 1 |
| 19 | Zimbabwe | 1 | 0.2 | | 1 |
| Total | | 452 | | 100 | 33 |

Students trained at SEMIs-2012

| Institution | Qualifications of Students | No |
|--|----------------------------|-----------|
| Haramaya University | MSc. | 2 |
| Kwame Nkrumah University of Science and technology | MSc. | 2 |
| Makerere University | Msc. | 2 |
| University of KwaZulu Natal (ACCI) | PhD | 2 |
| West Africa Center for Crop improvement | 2 PhD, 2 Msc | 4 |
| Total | | 12 |

Self-sponsored candidates-2012

| Course | Institutions | No |
|-------------------------------------|---------------------------------------|-----------|
| Seed Production | FAO-Sierra leone, CIAT (Harvest Plus) | 3 |
| Seed Drying, processing and storage | FAO Sierra Leone | 2 |
| Seed marketing | FAO Sierra leone | 2 |
| Seed Business Management | FAO Sierra leone | 2 |
| Seed quality assurance | FAO Sierra leone | 2 |
| Total | | 11 |

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 !



SEMI's 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



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



World Class Facilitators:



John MacRobert-
CIMMYT



Kiarie Njoroge-UON CAVS



Jenny Leakey-Leldet



Aline O'Connor –Seed
Business mgt



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



Dry Land Seed co.

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

| Year | Tonnage | Variety |
|------|------------|---|
| 2011 | 700 Kgs | Kenya Umoja |
| 2012 | 1.7 tonnes | Meizi mbili, Kenya wonder, Kabete super |



“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

SEMI's INFRASTRUCTURE DVPT

Modern Seed laboratory and Seed Processing facility being constructed at CAVS with SEMI's 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



Kenya-Agricultural transformation Day in Nairobi

| Other meetings | Year |
|-----------------------------|------|
| Iowa state University (ToT) | 2010 |
| FARA Meeting | 2011 |
| KARI congress | 2012 |
| STAK congress | 2012 |



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 point of call for seed companies:



Seed company personnel with STAK officials call in at SEMI

- Agricultural /Seed Institutions are using SEMI 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

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



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



Seed marketing course 2011



Visiting the seed industry-
Visit to SIMLAW seeds



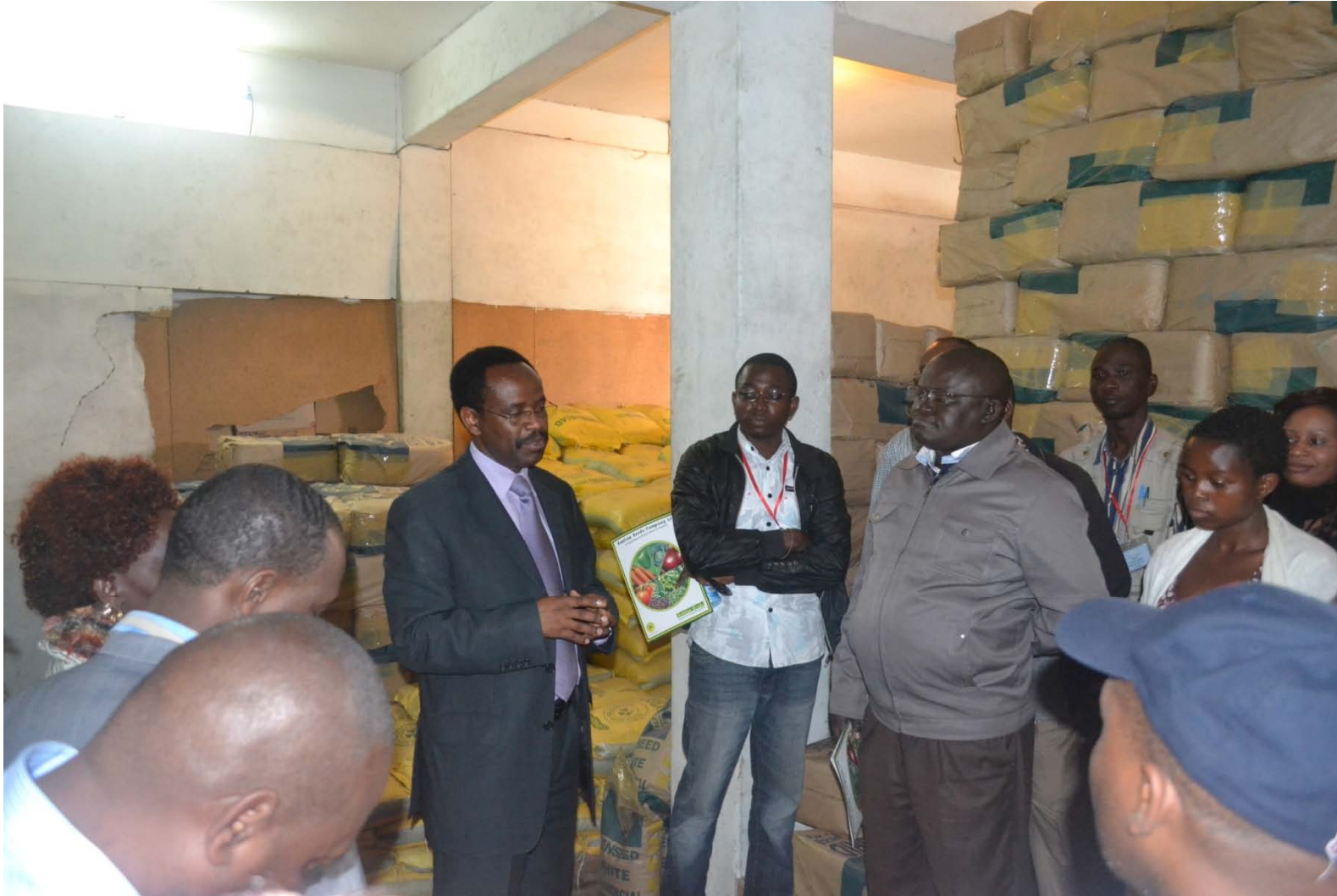
Certificate presentation on
Graduation

Seed Business Management-2012



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 .



"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



"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

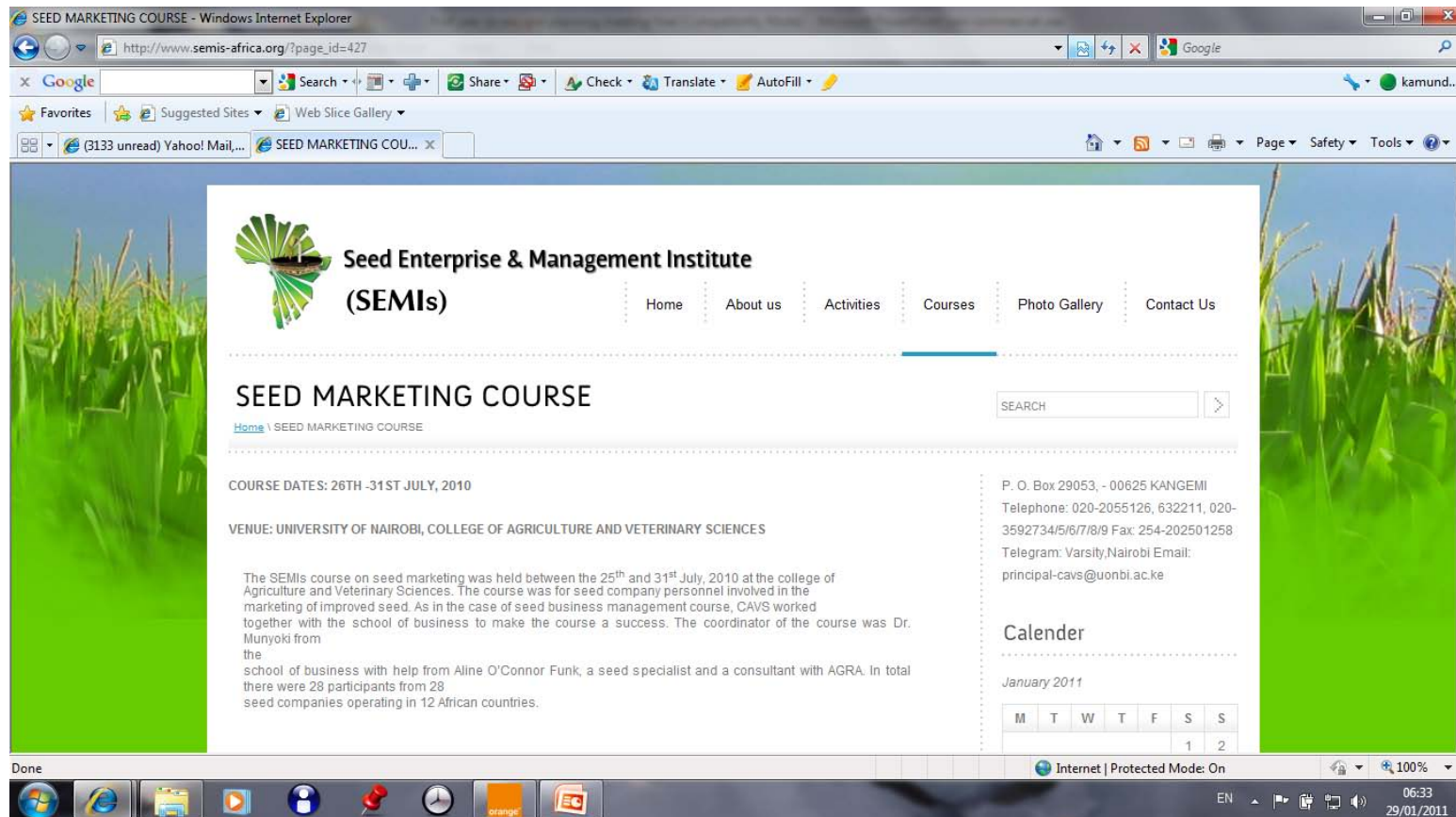
Monitoring and Evaluation:

A monitoring and Evaluation team from AGRA visited SEMIs on 19th February 2012 to assess the project



SEMI's Website:

www.semis-africa.org



- Sharing information on seed issues, current happenings in the seed industry in Africa
- Staying in touch with SEMI's participants
- Online registration of Students



**Thank you
for your
attention**

