

Seed Enterprise Management Institute (SEMI)

UNIVERSITY OF NAIROBI, CAVS



Professor Agnes Mwang'ombe



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

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



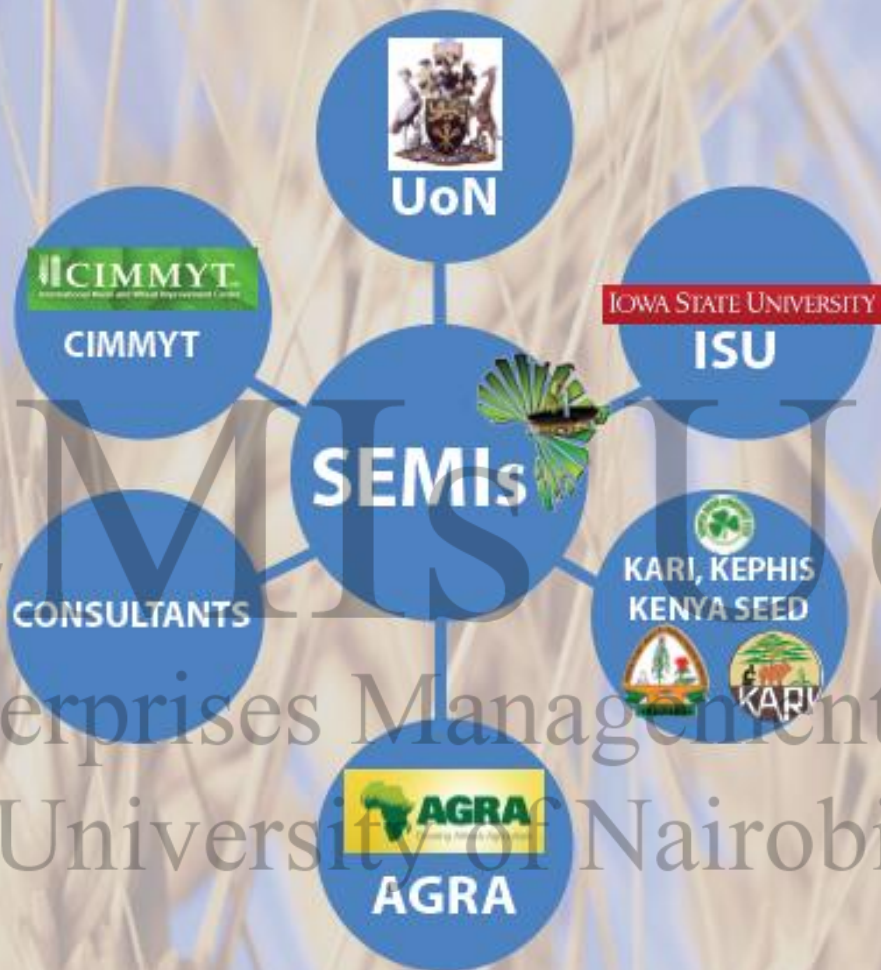
agra-alliance.org



cimmyt.org



kephis.org



uonbi.ac.ke



iastate.edu



kenyaseed.com

Seed Enterprises Management Institute
University of Nairobi

GROWING THE SEED INDUSTRY IN AFRICA

SEMs 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!!

SEMI_s 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
SEED PRODUCTION FIELD DIAGNOSTIC	UON/KEPHIS/KARI/Seed companies (New for 2014) 
PLANT PROTECTION ORGANIZATIONS (NPPO'S) QUALITY REGULATORS	UON/KEPHIS/KARI/Seed companies (New for 2014) 

SEMIS SUMMARY: TRAINED PERSONNEL-2010, 2011, 2012, 2013, 2014

Course	2010	2011	2012	2013	2014	Total
Seed Production	29	27	30		23	109
Seed Drying Processing and Storage	31	28	31			90
Seed Business Management	29	26	29	25		109
Seed Marketing	28	25	30	27		110
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	52	23	528

Students trained at SEMIs

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



Unique SEMIs Curricula:

- Involvement of stakeholders in the development:
 - ISU, consultants, CIMMYT, UON, KARI, KEPHIS, 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



Prof. Kiarie Njoroge-UON CAVS



Jenny Leakey-Leldet



Dr. Yuan Shyy-Processing-ISU



Aline O'Connor –Seed
Business mgt/Seed
Marketing



Dr. Joe Cortes-Seed Quality-ISU



KEPHIS for Seed quality

SEMI Graduates: at the Helm of the Seed Industry in Africa Today!

- Graduates are using the knowledge acquired at SEMIs to scale up production of high quality seed, benefitting farmers and helping alleviate hunger in the continent
- SEMI 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 at UON:

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

- The long term courses will complement the short term courses for those who want to learn more on seed systems
- The University is currently in the process of rolling out the programme



Other Activities at SEMIs:

- **Foundation/Breeders' seed production:** Lack of foundation seed is a major constraint to seed production in Africa today

Varieties currently under production by SEMIs

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

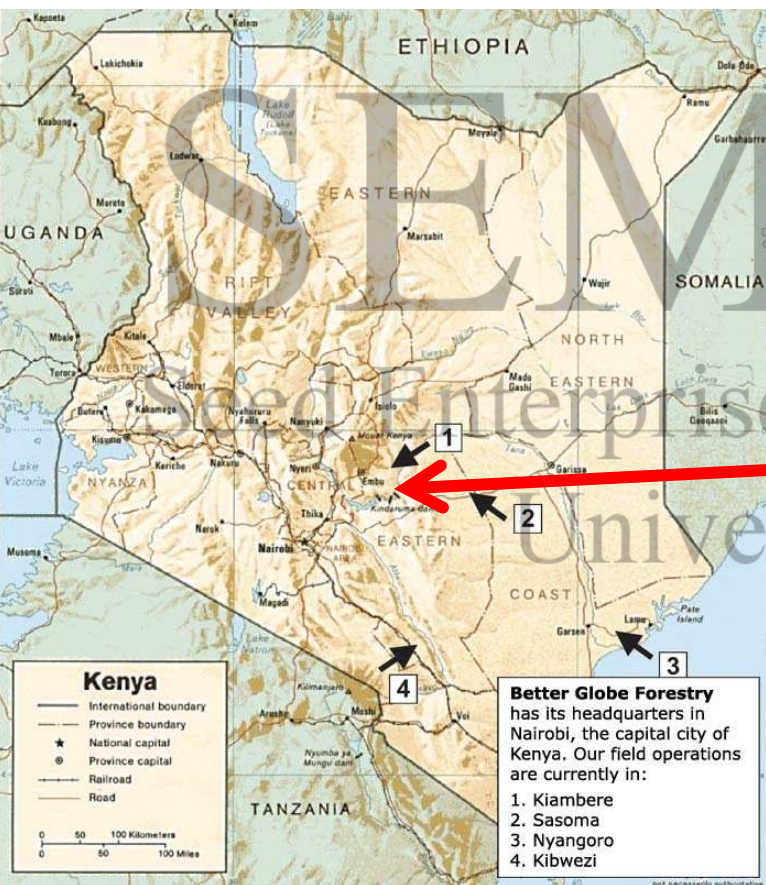


Seed crop at the University Field farm at CAVS



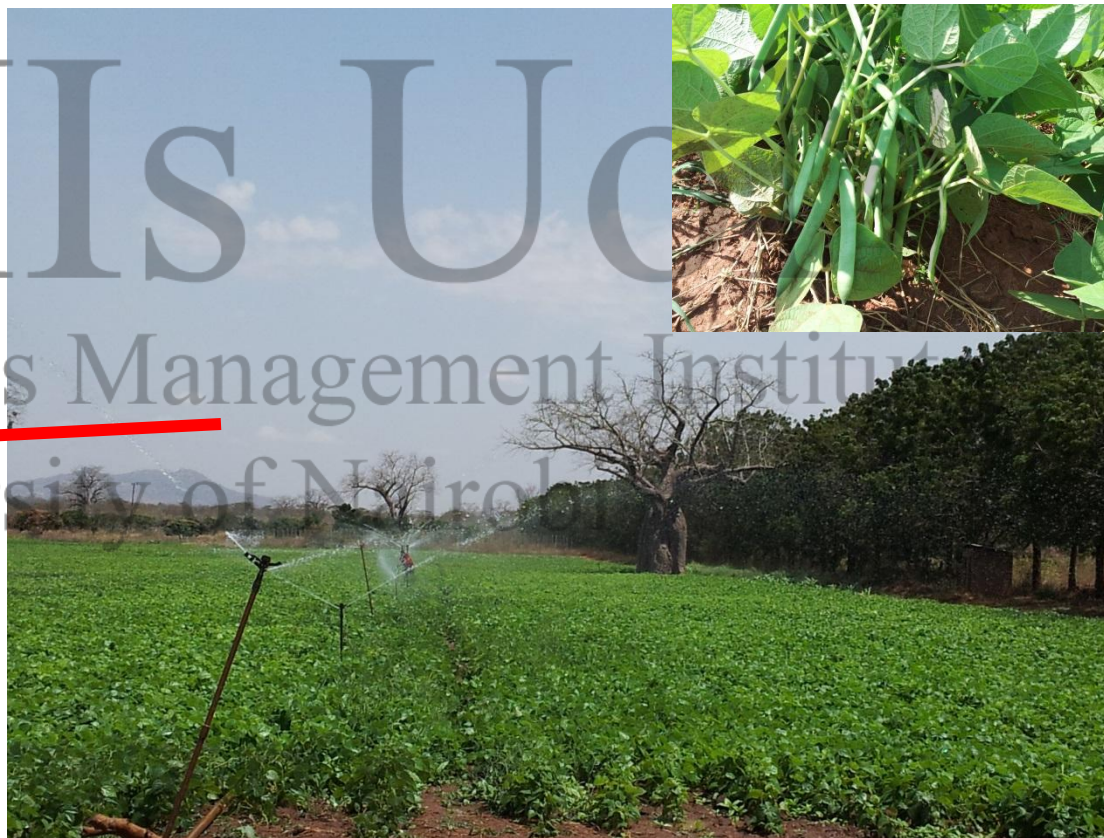
Breeders seed production at Kibwezi

- University has over 12,000 Acres of land in Kibwezi in Eastern Kenya
- Kibwezi is ideal for seed production due to its aridity meaning less disease pressure
- River Kibwezi for irrigation
- SEMIs is using the land for breeders' seed production



Better Globe Forestry has its headquarters in Nairobi, the capital city of Kenya. Our field operations are currently in:

1. Kiambere
2. Sasoma
3. Nyangoro
4. Kibwezi



Other Bean Varieties developed at UON



Climbers from UON: Currently under licensed to Kenya seed company

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
2013	1.76 tonnes	Kenya Red Kidney, Meizi Mbili

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



Professor Mwang'ombe presenting White label breeder's seed to Kenya seed company



Elgon Kenya Seed company Picking up their White label seed

SEMI's INFRASTRUCTURE DVPT

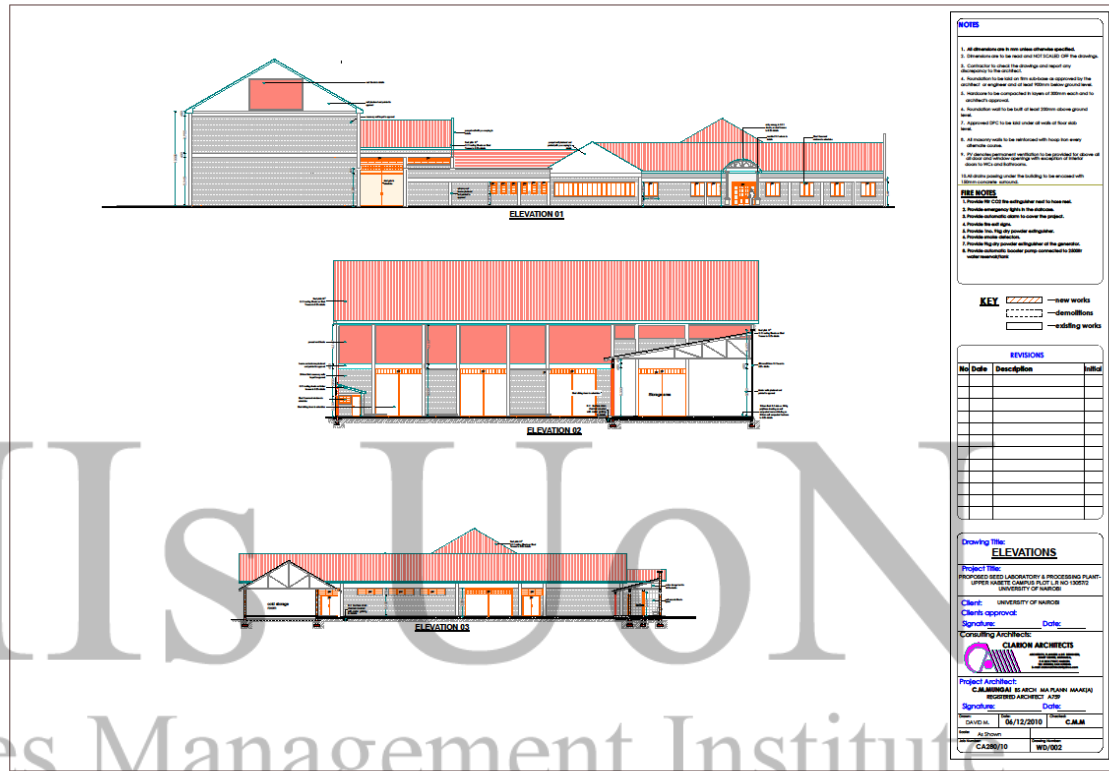
Modern Seed laboratory and Seed Processing facility being constructed at CAVS with SEMI's funds

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
- The Processing Unit will be utilized by UON for processing seed from UON and other seed companies and also for training



SEMI's Seed Processing Unit under Construction:



SEMI's Seed Processing Line under Construction in China

Seed Processing unit to be operational by end of 2014



Seed Sheller Under construction in USA

SEMI's 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



H.E. Mohamed Shein Pres. Of Zanzibar
at the AFSTA-Congress Zanzibar

Other meetings	Year
Iowa state University (ToT)	2010
FARA Meeting	2011/13
KARI congress	2012
STAK congress	2012/2013

SEMIIs at the ASK show in Nairobi



Rosebenna from SEMIIs 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 plat-formed 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



University of Nairobi
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

UoN

Seed Enterprises Management Institute
University of Nairobi

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



SEMI is nurturing competence in Strategic Seed Business management in Africa

SEMI's Highlights contd:

Seed Production Course: May 2012:

Visit to KARI Wheat Rust Resistance Breeding Station-Njoro



Highlights conts: Seed marketing course 2011



SEMI's participants visiting the seed in Kenya



Well Done!-Certificate presentation upon completion of SEMI's courses

Seed Business Management-2012



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!



SEMI is working with highly experienced consultants to enhance capacity building in the seed sector !

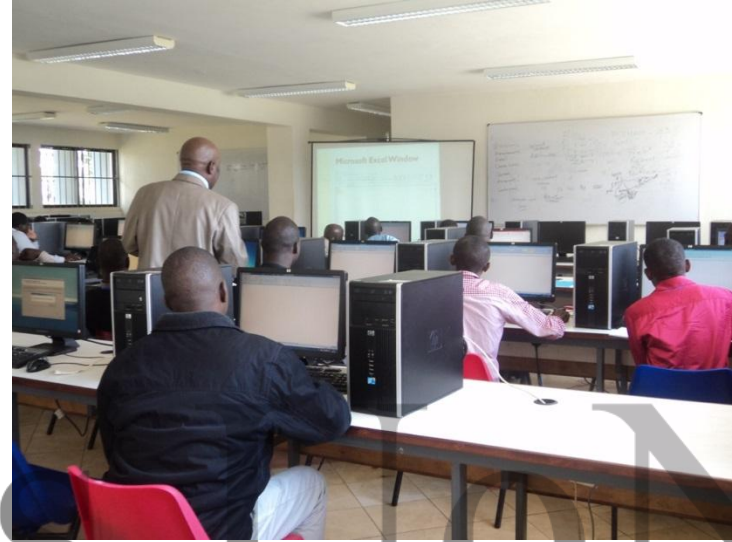
Seed Business Class with Dilip Gokhale-consultant from India

Seed Business Course 2013:



Seed Business course participants being addressed by Dr. Joe DeVries of AGRA

SEED PRODUCTION 2014



SEEDS FOR THE FUTURE
Seed Enterprises Management Institute
University of Zimbabwe

SEED PRODUCTION 2014



Graduation –Certificate presentations:



Dr. 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:

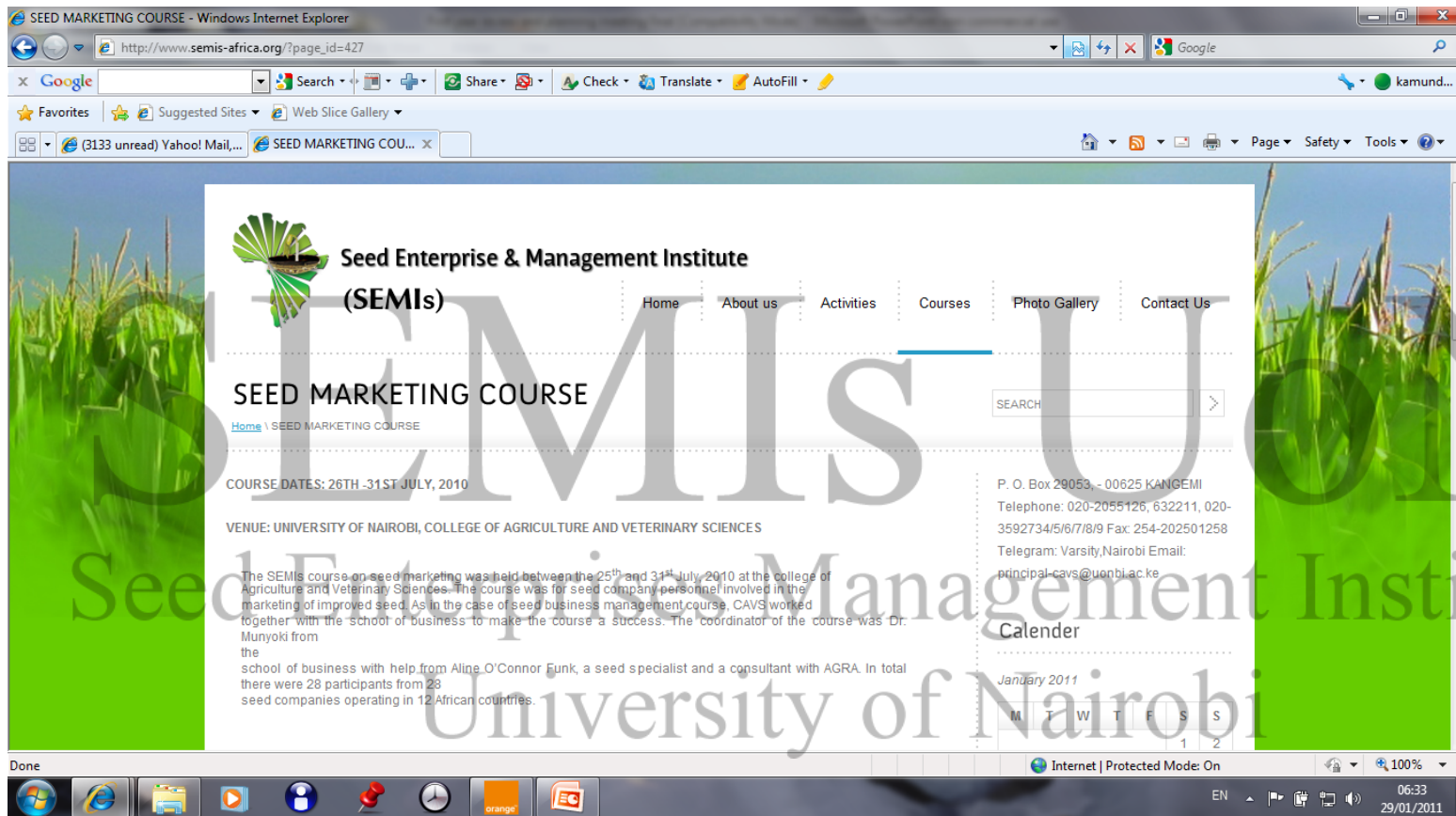
A monitoring and Evaluation team from AGRA visited SEMIs on 19th February 2012 to assess the project



Seed Enterprises Management Institute
University of Nairobi

SEMIs Website:

www.semis-africa.org



The screenshot shows a Windows Internet Explorer browser window displaying the SEMI's website. The page features a green background with a cornfield image. The main content area is titled 'SEED MARKETING COURSE' and includes the following information:

- SEED MARKETING COURSE**
- COURSE DATES:** 26TH -31ST JULY, 2010
- VENUE:** UNIVERSITY OF NAIROBI, COLLEGE OF AGRICULTURE AND VETERINARY SCIENCES
- Description:** The SEMI's course on seed marketing was held between the 25th and 31st July 2010 at the college of Agriculture and Veterinary Sciences. The course was for seed company personnel involved in the marketing of improved seed. As in the case of seed business management course, CAVS worked together with the school of business to make the course a success. The coordinator of the course was Dr. Munyoki from the school of business with help from Aline O'Connor Funk, a seed specialist and a consultant with AGRA. In total there were 28 participants from 23 seed companies operating in 12 African countries.

Navigation links include Home, About us, Activities, Courses, Photo Gallery, and Contact Us. A search bar is also present. Contact information for SEMI's is provided, including a P.O. Box, telephone, fax, telegram, and email addresses. A calendar for January 2011 is also visible.

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

Proposed Dates for SEMIs Seed Courses in 2014

Course	Suggested Dates
Seed Production	26-31 st May, 2014
Seed Drying, Processing and Storage	01-07 th June, 2014
Seed Business Management	20-26 th July, 2014
Seed Marketing	27 th July-02 August, 2014
Seed Production Field Diagnostic	01-07 th September, 2014
Plant Protection Organizations (NPPO's) Quality Regulators	08-14 th September, 2014
Seed Quality Assurance and Seed Enterprise Quality Management	27 th Oct-08 th November, 2014



**Thank you
for your
attention**

