

Establishment of Seed Enterprise Management Institute (SEMI) in the University of Nairobi, Kenya to facilitate skills Development and Enhancement of private seed sector to support quality seed production for increased food security and poverty alleviation in Sub Saharan Africa.

Prof. Agnes W. Mwang'ombe, EBS,

University of Nairobi, Kenya
Seed Enterprises Management Institute

University of Nairobi



UNIVERSITY OF NAIROBI



GROWING THE SEED INDUSTRY THROUGH CAPACITY BUILDING – SEMIS OVERVIEW

Field Pests and Disease Diagnostics in Seed Crops

4th February 2018

Prof. Agnes W. Mwang'ombe, EBS

SEMIS BUILDING FACILITY AT CAVS





SEMI's Launch!



02/08/2018

A. W. Mwangombe



Project Implementation

Alliance for a Green Revolution in Africa-AGRA

Phase 1: 3 years (2010-2013), Phase I-2014-2016; Phase III-
2016-2018

Institutions

University of Nairobi

PI: Prof. A.W. Mwang'ombe

Team Member: Prof. F. Olubayo

Florence Kiwunja-Admin. Asst., Sylvester Kimaiyo – Factory Manager

Ben Kimbio, S. Wenyuli, B. Kirangu, Linah Mwakio

CIMMYT:

Dr. J. MacRobert
(Author-Seed
Business Mgt In
Africa)

02/08/2018

KEPHIS:

DR. E. Kimani –
Director KEPHIS
Mr. S. Kibet

KALRO:

Dr. T. Riungu
and Dr. L.
Ragwa

A. W. Mwang'ombe

Consultants

Aline O'Connor,
Paul Seaward,
Paul Okete,
Dillip

ISU

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

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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.

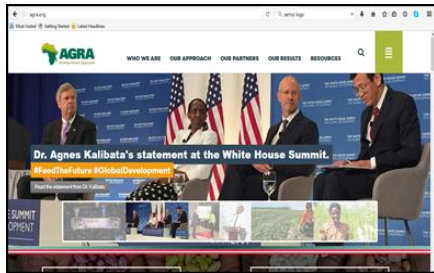


- 3.To enhance production of seed of improved varieties for the SSA
 - Efficient production
 - Marketing
 - Good distribution

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.⁷

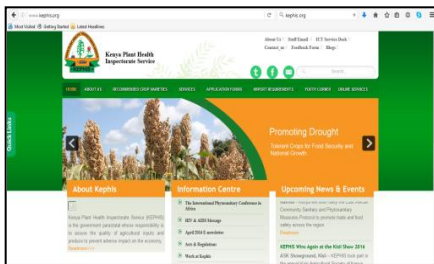
SEMI_s PARTNERSHIPS UNDER PHASE I



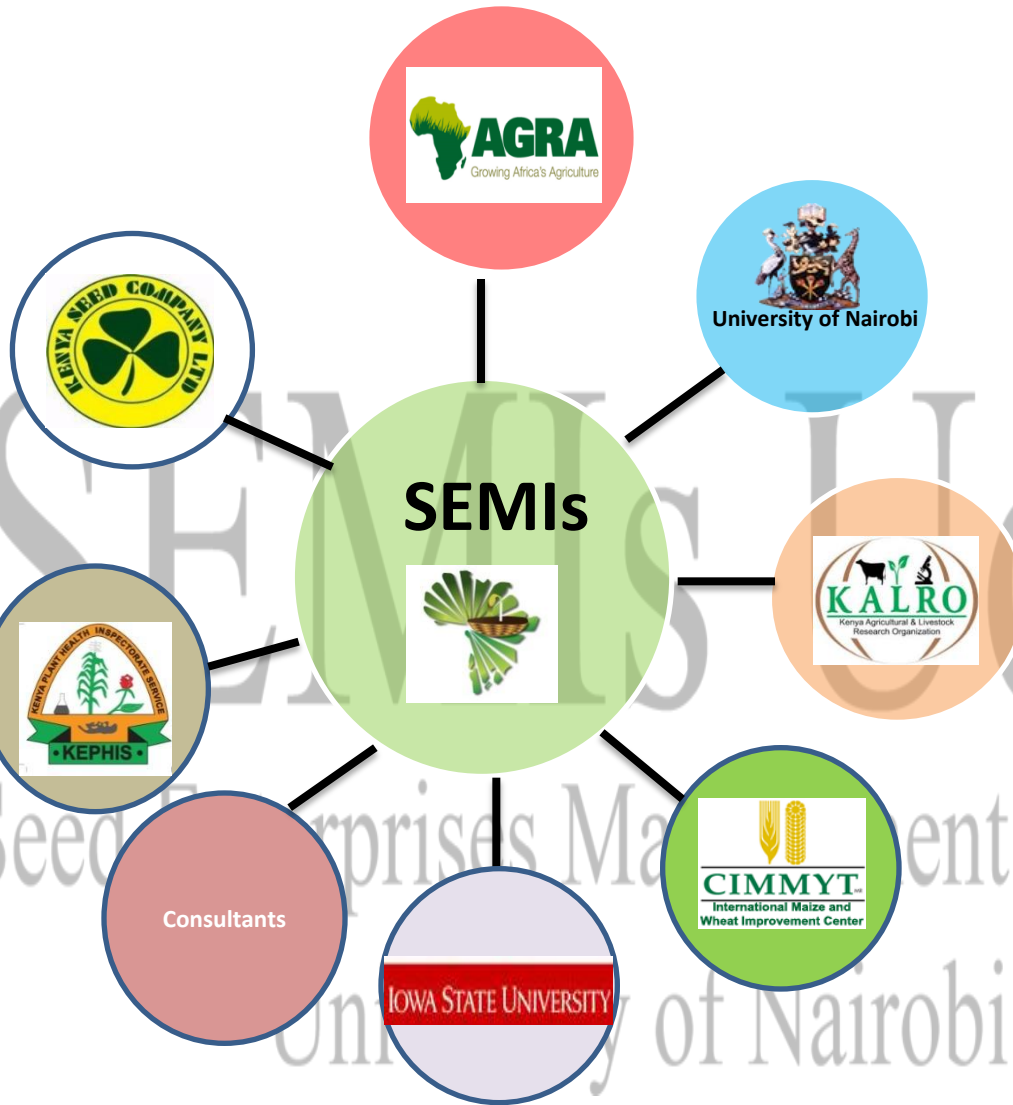
agra.org



kenyaseed.com



kephis.org



uonbi.ac.ke



kalro.org



cimmyt.org



lastate.edu

SEMI_s IN AFRICA

MALI

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	8	3	8	2	1	10	32
Seed companies Trained	4	2	3	1	1	4	15



NIGER

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	8	15	2	1	13	14	53
Seed companies Trained	4	4	1	1	4	3	17



SOUTH SUDAN

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	0	10	4	10	22	46
Seed companies Trained	0	0	3	3	7	5	18



BURKINA FASO

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	5	4	9	3	7	17	45
Seed companies Trained	3	2	3	3	3	3	17



SENEGAL

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	0	0	0	2	0	2
Seed companies Trained	0	0	0	0	1	0	1



GUINEA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	0	4	0	0	0	4
Seed companies Trained	0	0	1	0	0	0	1



SIERRA LEONE

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	10	11	2	8	0	31
Seed companies Trained	0	3	2	1	4	0	10



LIBERIA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	10	6	1	0	3	20
Seed companies Trained	0	2	2	1	0	2	7



GHANA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	16	12	24	8	14	14	88
Seed companies Trained	7	3	7	6	7	5	35



NIGERIA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	23	4	8	12	9	21	77
Seed companies Trained	8	3	3	5	3	5	27



CAMEROON

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	0	2	0	0	0	2
Seed companies Trained	0	0	1	0	0	0	1



DRC CONGO

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	0	0	0	0	2	2
Seed companies Trained	0	0	0	0	0	5	5



ETHIOPIA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	14	17	4	4	13	13	65
Seed companies Trained	5	4	1	3	8	6	27



UGANDA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	17	9	9	2	16	15	68
Seed companies Trained	7	3	2	1	7	4	24



KENYA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	19	4	1	0	9	4	37
Seed companies Trained	6	3	1	0	6	4	20



TANZANIA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	17	23	10	12	26	12	100
Seed companies Trained	7	5	2	5	8	5	32



RWANDA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	6	5	5	1	5	6	28
Seed companies Trained	2	1	1	1	4	1	10



MALAWI

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	12	7	14	0	4	13	50
Seed companies Trained	5	2	5	0	4	4	20



ZAMBIA

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	17	5	6	0	3	1	32
Seed companies Trained	4	1	2	0	2	1	10



MOZAMBIQUE

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	10	4	14	0	2	12	42
Seed companies Trained	5	1	4	0	2	4	16



ZIMBABWE

Year	2010	2011	2012	2013	2014	2015	Total
Personnel Trained	0	0	1	0	1	0	2
Seed companies Trained	0	0	1	0	1	0	2



S.Africa

02/08/2018

22 COUNTRIES HAVE BENEFITED FROM TRAINING AT SEMIS

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 Management and Control Processes
- VI. Field Pests and Disease Diagnostics in Seed Crops
- 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 Management.

The MSc. Seed Technology and Business Management program is currently in its 5th year since inception in 2014

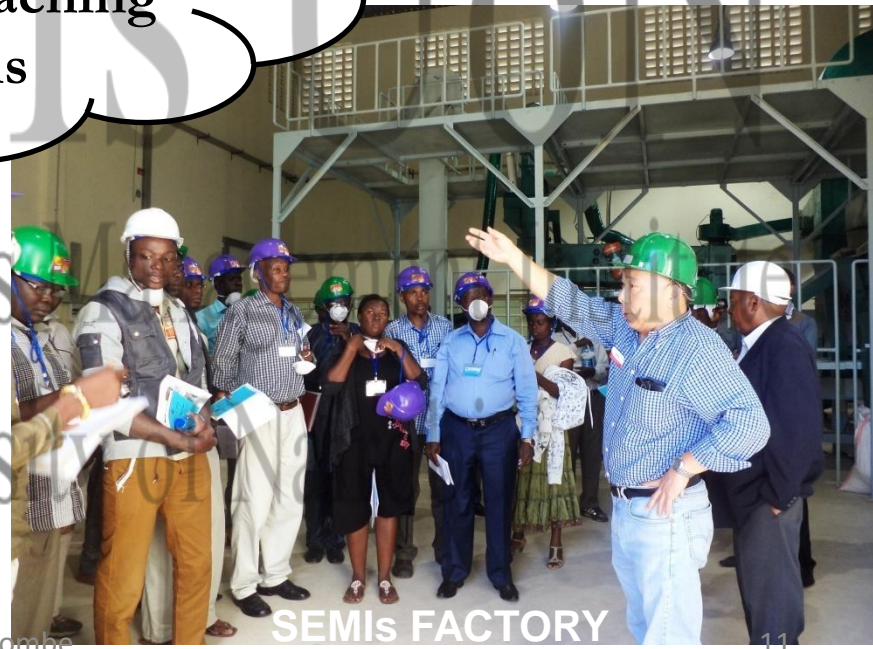


KEPHIS LANET

**Lecture and
Practical Teaching
sessions**



TISSUE CULTURE LAB



SEMI'S FACTORY

02/08/2018

NATIONAL PLANT PROTECTION ORGANIZATIONS (NPPOS) AND SEED QUALITY REGULATORS COURSE: 16th – 21st January, 2017

NPPO participants engaged in group discussions



02/08/2018

Prof. J. Muthomi guiding participants in a laboratory practical exercise



A. W. Mwang'ombe

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SEED BUSINESS MANAGEMENT COURSE: 5TH – 12TH MARCH 2017



Seed Crop Production(SCP): 29th May -3rd June 2017

**SCP photo with Dr. J. DeVries,
AGRA**



Field demos during SCP course



SUMMARY OF TRAINED PERSONNEL IN BY COURSE AT SEMIs IN PHASE I AND II

Course	Phase I (2010 -2013)					Phase II (2014 -2016)			Phase III
	2010	2011	2012	2013	Total Per Course	2014	2015	Total Per Course	2017
Crop Seed Production	29	27	30	0	86	23	26	49	19
Seed Drying Processing and Storage	31	28	30	0	89	23	25	48	
Seed Business Management	29	26	29	25	109	19	30	49	20
Seed Marketing	28	25	30	27	110	20	31	51	
Seed Legislation and Accreditation	25	0	0	0	25	0	0	0	20
Seed Quality Assurance Management and Control Process	30	26	29	0	85	19	30	49	19
NPPOs	0	0	0	0	0	21	23	44	19
Field Pests and Disease Diagnostics in Seed Crops	0	0	0	0	0	18	24	42	
Total (Yearly)	172	132	148	52	504	143	189	332	97

SEED BUSINESS MANAGEMENT-LIST OF PARTICIPANTS- February 2017

Name	Country	Seed Company
Abukari Abdulai	Ghana	Heritage Seed Co Ltd
Oxford Korsi Agboli	Ghana	M&B seeds And Agricultural Sevices Ltd
Eugenia Oduro	Ghana	Legacy Crop Improvement Center
Ibitoye Oyewale Olumide	Nigeria	Premier Seed
Okolo Samson Ayegba	Nigeria	Value Seeds Limited

SEED BUSINESS MANAGEMENT-LIST OF PARTICIPANTS

Name	Country	Seed Company
Isah Rablu Umar	Nigeria	Maina Seeds Ltd
Samaila Abdullahi Dansadau	Nigeria	Deep-Rooted Seed Ltd
Amb Jaiyeola . J.Lewu	Nigeria	Evergreen International Ltd.
Abdulsalam Lamido	Nigeria	Tirendin Seeds Ltd.
Yves Mbusa Kamavu	DRC	APROMA DR Congo

SEED BUSINESS MANAGEMENT-LIST OF PARTICIPANTS

Name	Country	Seed Company
Evans Kirui	Kenya	Dryland
Bruno Bakasambe	Uganda	Kinoni Seed Limited
Masagazi Allen	Uganda	Pearl Seeds Ltd
Charu Chandra	South Sudan	Global Agriculture Innovation And Solutions (GAIS)
Stevin Stafford Kamwendo	Malawi	Funwe Seed Limited

SEED BUSINESS MANAGEMENT-LIST OF PARTICIPANTS

Name	Country	Seed Company
Bonfansio A.Chiziwa	Malawi	Global Seeds Company
Ibrahim R.M. Benesi	Malawi	Multi Seeds Company Limited(MUSECO)
Hassan Rajab Kinemo	Tanzania	Meru Agro
Emmanuel Angomwile	Zambia	Stewards Globe /Afriseed
Elie Musanganya	DRC	Est. BUHENDWA

Participants of Seed Production training workshop: 29th May -3rd June 2017

Country	Company	Name
Uganda	Pearl Seeds Limited	Atine Denis Ongom
Uganda	Naseco 1996 LTD	Steven Apangu Adrole
Tanzania	Aminata Seed Production	Anthony Sadala
Tanzania	Suba Agro	James Chacha Muya
Tanzania	Meru agro-Tours and Consultants Co Ltd	Gwamaka Mlekwa

Participants of Seed Production training workshop: 29th May -3rd June 2017

Country	Company	Name
Malawi	Peacock Seeds	Innocent Jumbe
Zambia	Stewards Globe/Afriseed	Request Mashebe
South Sudan	Global Agriculture Innovation and Solutions (GAIS)	Mike Gaga Abe Lubari
South Sudan	Green Horizon seed company	Lukujo Lawrence Morris Daniel
Rwanda	SOZO Seed Company	Jean Paul Gafigi

Participants of Seed Production training workshop: 29th May -3rd June 2017

Country	Company	Name
Rwanda	Ebenezer Mixed Farming and Merchandised Ltd	Celestin Gashayija
Ghana	Bruckner Farms	Judith Ahiagble Ampoma
Ghana	Legacy Crop Improvement Centre (LCIC)	Francis Yao Gankui
Ghana	Antika Seed Company	Lukman Ibn Bome Musah
Ghana	M & B Seed Company	Saviour Dzidzienyo

Participants of Seed Production training workshop: 29th May -3rd June 2017

Country	Company	Name
Ghana	Pee Farms	Mohammed Issifu Pangabu
Ghana	Heritage Seeds Company limited	Haruna Abdulai Iddrisu
Ghana	Sparkx Ghana Limited	Asiedu Seth Obugyei
Kenya	Dryland Seeds Limited	Eli Kirui

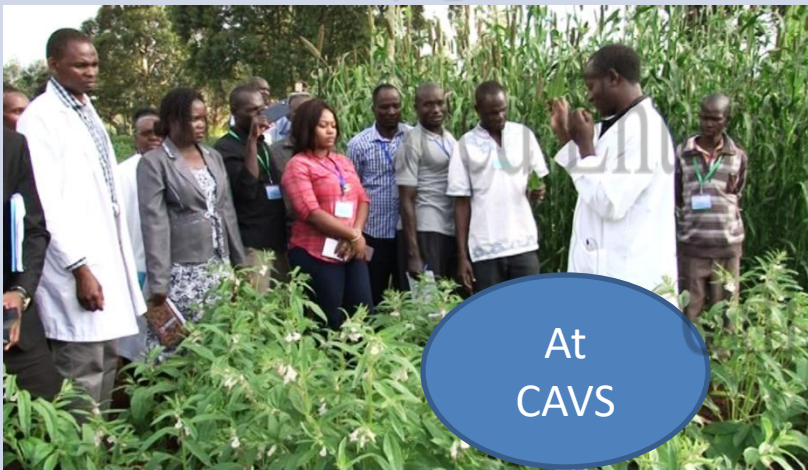
Participants of Seed Production training workshop: 29th May -3rd June 2017



KALRO-
Njoro



KALRO-
Njoro



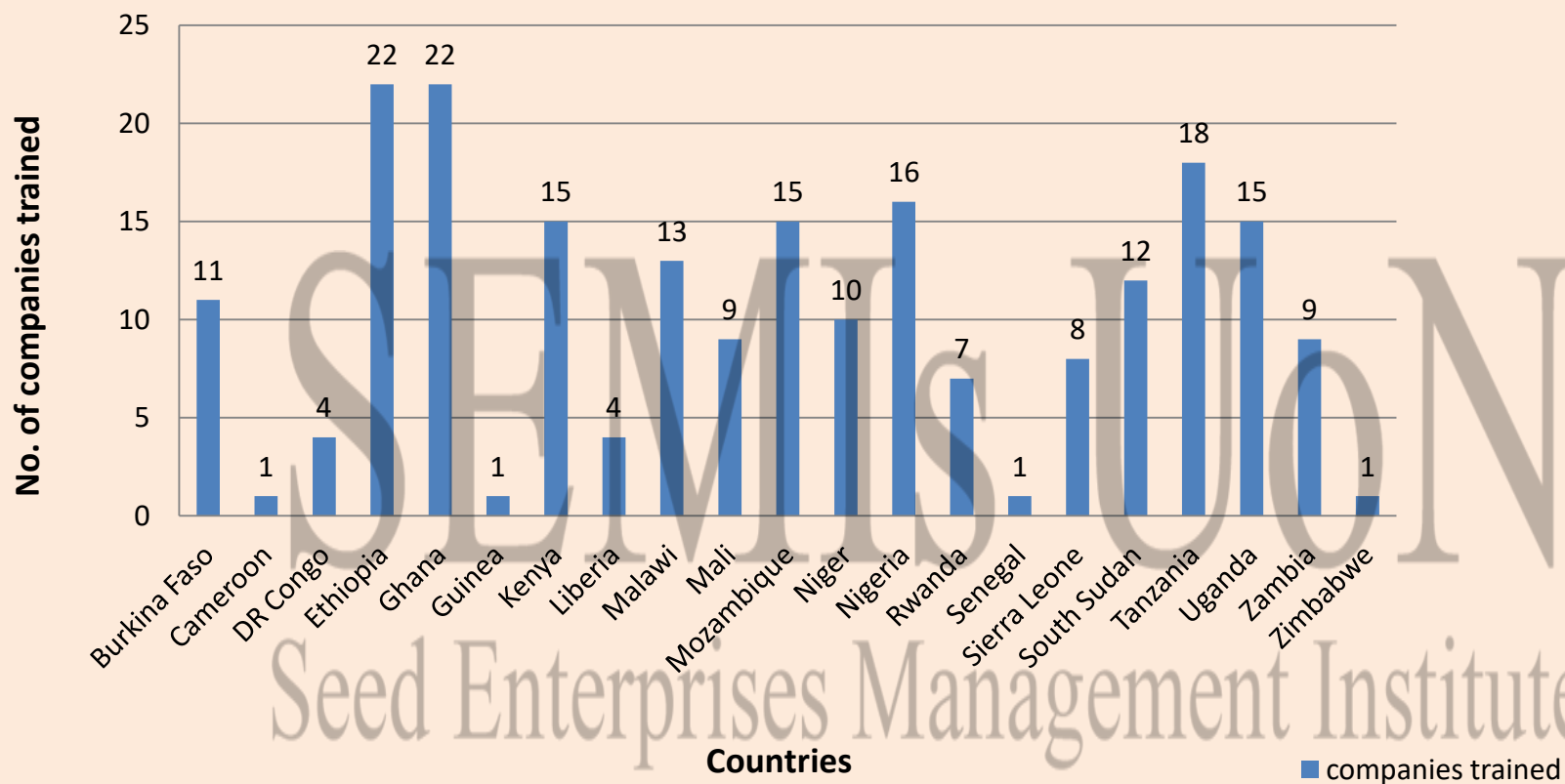
At
CAVS



At
CAVS

SEED COMPANIES TRAINED AT SEMIs

Companies trained by country under SEMIs-Phase 1 & 2 (2010-2015)



❖ Total of 214 seed companies in SSA have their personnel trained at SEMIs

NPPOs-Workshop-15-22.1.2017





Seed Business Management Course

02/08/2018

A. W. Mwang'ombe

5th - 12th March 2017

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UNIVERSITY OF NAIROBI
SEED ENTERPRISE MANAGEMENT INSTITUTE
(SEMIs)





UNIVERSITY OF NAIROBI
SEED ENTERPRISE MANAGEMENT INSTITUTE
(SEMI)

University of Nairobi

SEMI's SEED PROCESSING FACTORY



Seed processing line



Packing on progress



Factory building



Corn sheller



Processed seed in warehouse



Collection of processed seed

- Factory machines comprise of air-screen cleaner, gravity separator, seed coating machine and packaging machine.
- The factory has a processing capacity 5t/hr.
- Service provision for smaller seed companies on contract agreement.
- **480 metric tons** of seeds processed in 2015.

Provision of foundation seed-CAVS

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

Varieties:

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

- White label seed produced at SEMIs.
- Seed varieties are licensed to registered Seed companies e.g Kenya Seed Company and Elgon Kenya Ltd for Multiplication and sale.

Year	Tons of bean seed produced
2014	4.3
2015	3.5



02/08/2018

W. Mwa...ombe

Participation in National and Regional Workshops and Meetings on Seed Issues

Exhibitions/conferences	Year
FARA Meeting	2011
KARI congress	2012
STAK congress	2013
ASK Show	2014
AGRF	2015
AFSTA Congress	2016



SEMI's Trainers of Trainers Workshop in Mbour, senegal- 2016



Seed Marketing course-Certification function-18.3.2017



Rewarding our Participants with certificates at the end of each course motivates them to be better “seed men/Women ”



Thank You!

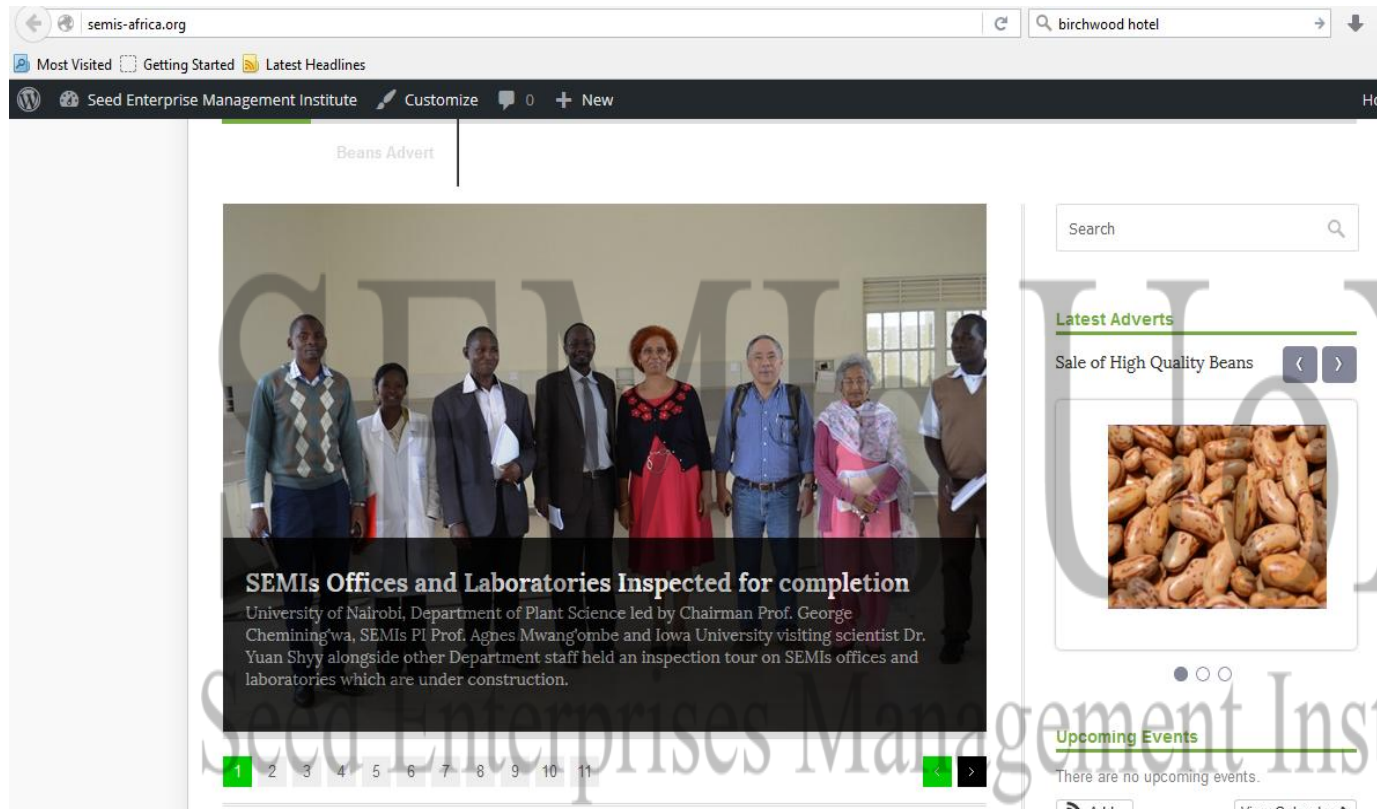


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SEMI's Website:

www.semis-africa.org



The screenshot shows the website www.semis-africa.org in a browser. The main content area features a large image of a group of people standing in front of a building. Below the image is a news article titled "SEMI's Offices and Laboratories Inspected for completion". The article text reads: "University of Nairobi, Department of Plant Science led by Chairman Prof. George Chemining'wa, SEMI's PI Prof. Agnes Mwang'ombe and Iowa University visiting scientist Dr. Yuan Shyy alongside other Department staff held an inspection tour on SEMI's offices and laboratories which are under construction." To the right of the main content is a sidebar with a search bar, a "Latest Adverts" section featuring a "Sale of High Quality Beans" with an image of beans, and an "Upcoming Events" section stating "There are no upcoming events." The website header includes the logo for "Seed Enterprise Management Institute" and navigation links for "Most Visited", "Getting Started", and "Latest Headlines".

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