



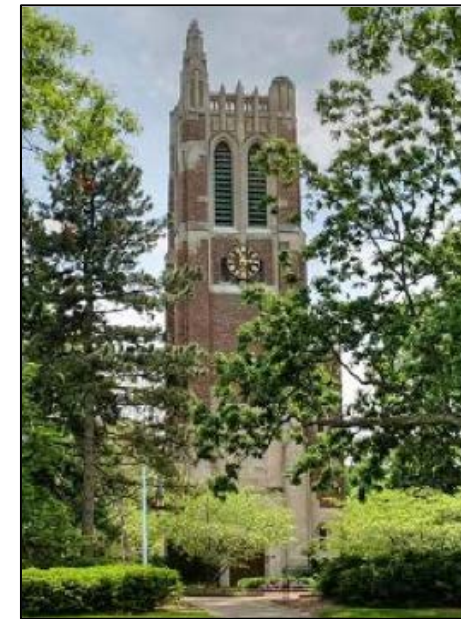
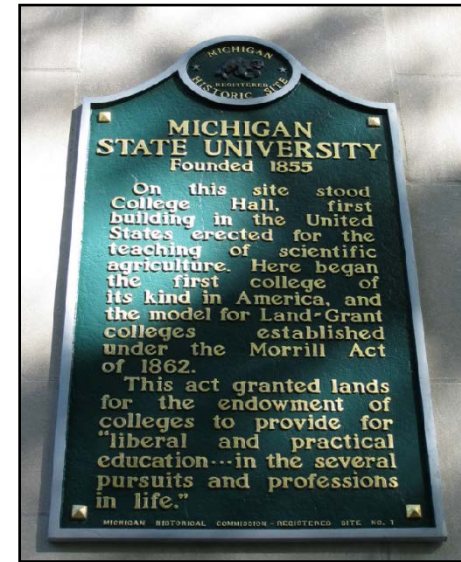
Michigan State University Partnership with AU/NEPAD Agency in Africa

Karim Maredia, Ruth Mbabazi,
Hashini Galhena and Cholani Weebadde
Michigan State University

Michigan State University:

Advancing Knowledge, Transforming Lives....

- Land-Grant University with a vision towards building **global knowledge partnerships**
- Three fold mission:
 - Research
 - Teaching
 - Extension/Outreach
- Outreach Mission goes beyond the boundaries of Michigan and USA to all over the world – **World-Grant University**



Website: www.msu.edu



MICHIGAN STATE
UNIVERSITY



Michigan State University: A World-Grant University

- MSU's International Agriculture Development Programs:
 - Natural resources management
 - Science & Technology
 - Technology Transfer & Linking Farmers to Markets
 - Social Sciences
 - Education Training, Capacity building, Outreach, Networking
 - Others



World Technology Access Program (WorldTAP) of MSU College of Agriculture and Natural Resources

- Accessing knowledge, information & technologies through training, networking and capacity building
 - Short Courses
 - Workshops
 - Internships
 - Study Tours
 - Technology Transfer

Training Programs offered both at MSU and Internationally



Investments in Modern Biotechnology to Enhance Agriculture Productivity, Food and Nutritional Security

- In the last decade more than \$100 Million invested in Africa for improvements of food security crops – Maize, Cassava, Banana, Cowpea, Sorghum, Sweet Potato, Rice, Potato, etc. through modern biotechnology
- To address key constraints: Insect and Disease Resistance, Drought Tolerance, Nutritional enhancement, Nitrogen use Efficiency and Salt Tolerance, etc.



Many challenges in taking Biotech Crops to Small-holder farmers

Key challenge:

Lack of functional biosafety regulatory systems

Laboratory
Biosafety

Greenhouse
Biosafety

Confined
Field Trials

Application
for Release

General
Release

Food
imports

Institutional Biosafety
Committees (IBCs)

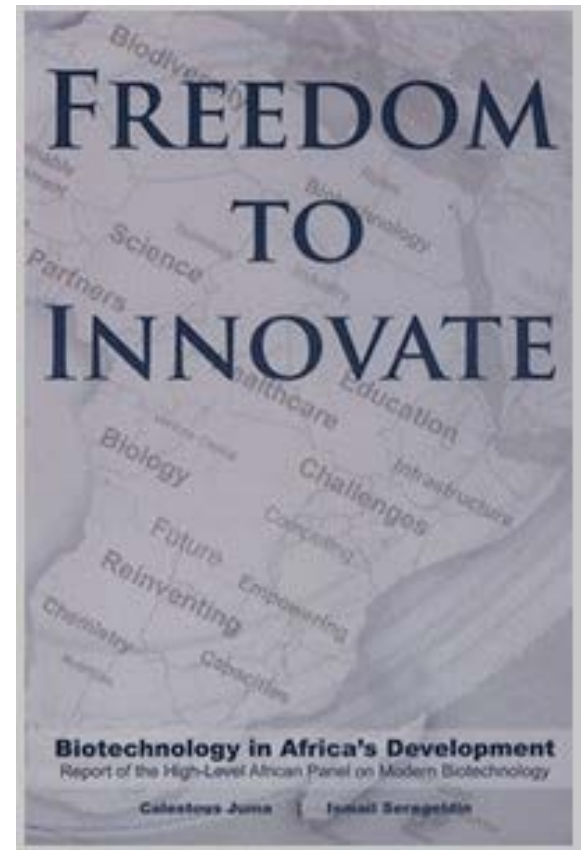
National Biosafety
Committees (NBCs)

Plant Quarantine Officers
(PQs)



Recommendation of the AU/NEPAD African High level panel on modern biotechnology

- Recommendation of a High-level Panel in 2007: *co-evolution of science and regulation*
- Empowering African Policy Makers and Regulators for Safe and Responsible Access/Use and Manangement of Biotech Crops and Products



NEPAD – MSU Partnership

African Biosafety Network of Expertise (ABNE)

NEPAD-MSU Partnership: Empowering African Policy Makers and Regulators for Safe and Responsible Use of new Science, Technology and Innovations

Focus on Modern Biotechnology



AU NEPAD-MSU Partnership: Initiated in 2007to Build the African Biosafety Network of Expertise

- Funding from the Bill and Melinda Gates Foundation



The ABNE Network – Launched in 2009

- Presence in Africa - three Nodes
 - Ouagadougou, Burkina Faso (2009)
 - Kampala, Uganda (2012)
 - Dakar, Senegal (2016)
- A team of 16 experts and specialists from Africa from various countries
- Focus in 14 countries in Sub-Saharan Africa
- MSU is the international partner of ABNE network
- Collaborative linkages with other partners and programs in Africa and around the world



ABNE – Biosafety Service Network

- ABNE Network offers Biosafety Services to regulators/policy makers and their support structure
- **Biosafety services:**
 - Information
 - Technical Assistance
 - Training
 - Networking
 - Policy Advocacy

Empowering African Regulators towards building functional Biosafety systems



Key Focus Areas of ABNE Biosafety Services

- Environmental Safety
- Food Safety
- Legal Issues
- Socioeconomic Issues
- Communication

Through links with MSU, ABNE harnesses biosafety resources and expertise from all over the world



2016 MSU Agricultural Biotechnology and Biosafety Short Course



ABNE Programs

- Short courses offered in Africa and at MSU
- Study tours
- Workshops
- One-on-one Technical Assistance



More information on ABNE Network

Visit ABNE website: www.nepadbiosafety.net

Home About us Contact us English French +226 25 33 15 01 abne@nepadbiosafety.net

NEPAD ABNE | African Biosafety Network of Expertise Home About us Editorial board News & Events Additional resources

Burkina Faso farmers
Status of crop biotechnology in Africa [Read more](#)

Biosafety Network in Africa | ABNE latest Newsletter April - June 2016 | NEPAD Agency ABNE welcomes new Regional Head of Office | ANALYSES: Africa's future

What information resource are you looking for?

Biosafety Profile of Countries >	Food Safety Issues >	Legal and Policy Issues >	Biosafety Administration >
Intro. to Agric. Biotechnology >	Environmental Safety Issues >	Public Awareness >	Biosafety Decision Making >
Risk / Safety Assessment >	Socio-economic Issues >	Biosafety Communication >	Sample Technical Dossiers >

Recent Posts

- [First African biosafety leadership summit organized by the Association of](#)

Status of Crop Biotechnology in Africa

Upcoming Events

- [African Biosafety lawyers Training: West and Central African countries](#)



WorldTAP

Partnering with African Universities to offer Regional training programs in Africa University of Ghana – Legon (July 2015)



Partnering with other programs and organizations – Not doing it alone

- USAID Program for Biosafety Systems (PBS) at IPFRI
- USDA – Foreign Agriculture Service (FAS)
- Government agencies: USDA/APHIS, EPA, FDA
- Not for profit organizations – ICGEB, AATF, ISAAA, CropLife International, IFIC
- Donald Danforth Plant Science Center
- Gent University – IPBO in Belgium
- African Universities
- European Food Safety Agency
- Private Sector



Scaling up: Expanding Expertise-base and biosafety services in Africa

Five ABNE Resource networks

- Environmental Safety
- Food Safety
- Legal Issues
- Socio-economic issues
- Communication



Scaling-up of Expertise-base in Africa

ABNE Lawyers' Network



Representation in High-level Policy Advocacy

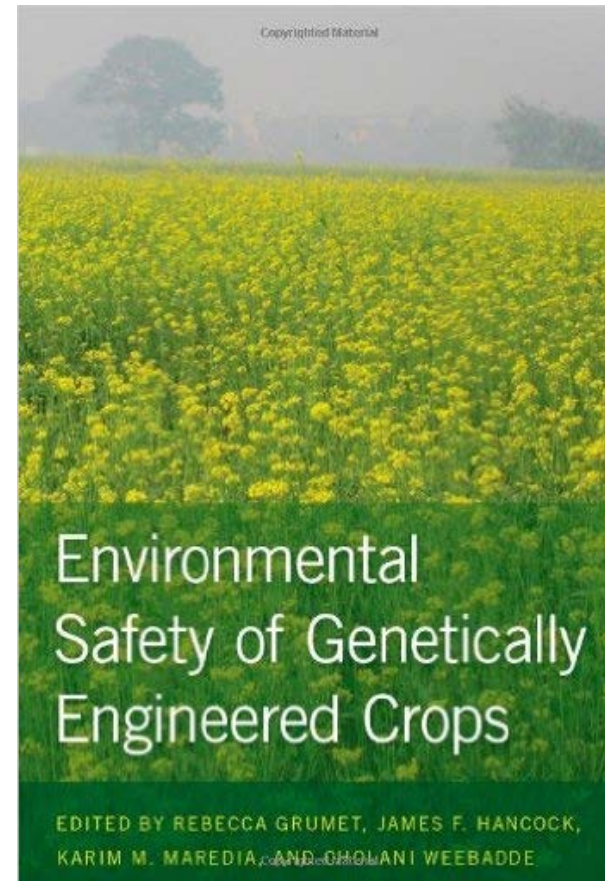
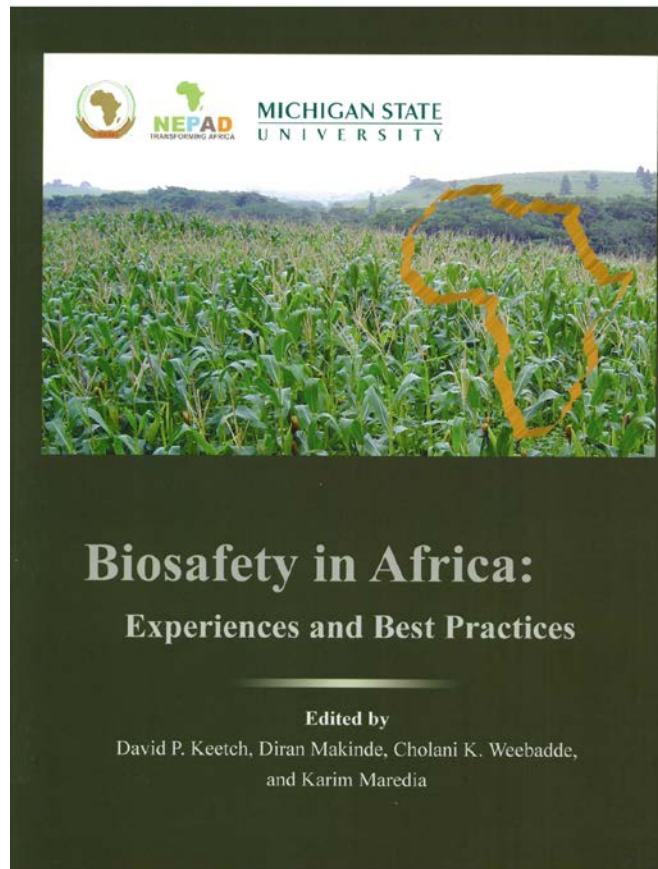


**High level policy advocacy with the Minister of Science and Technology
In Mozambique May, 2016**



Joint publications

Biosafety in Africa and Environmental Safety of Genetically Engineered Crops



WorldTAP

Summary: Role of MSU as an International Partner

- Training, education, and experiential learning
- Technical assistance and Mentoring
- Networking
- Information access
- Curriculum Enhancement through ToT Programs
- Collaborative Research and Joint Publications
- Outreach to Various Stakeholders
- Facilitating Access to Technology from International Community
- Resource mobilization



What three factors are key to assess performance, relevancy and appropriateness of partnerships

- Capacity Building/Impacts
- Mutual Benefits
- Sustainability

