

Overview of Current Status of Biosafety Regulatory Frameworks in fifty- four African Countries and potential future challenges

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Nepad Agency African Biosafety Network of Expertise

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Africa Union Agenda 2063

- It is a strategic framework for the socio-economic transformation - over the next 50 years.
- It builds on, and seeks to accelerate the implementation of **past** and **existing** continental initiatives for **growth** and **sustainable** development.
- Some of the past and current initiatives it builds on include:
 - The Lagos Plan of Action,
 - The Abuja Treaty,
 - The Minimum Integration Programme,
 - Programme for Infrastructural Development in Africa (PIDA),
 - Comprehensive Africa Agricultural Development Programme (CAADP),
 - The New partnership for Africa's Development (NEPAD),
 - Regional Plans and Programmes and National Plans.
- It is also built on national, regional, continental best practices in its formulation.



VISION AU Agenda 2063: THE AFRICA WE WANT

ZAMBIA- VISION 2030, A PROSPEROUS
MIDDLE-INCOME NATION.

Nigeria 2030- Nigeria of our **Dream**



Seven Aspirations of the Africa we Want

1. **ASPIRATION 1:** A prosperous Africa based on **INCLUSIVE GROWTH** and **SUSTAINABLE** development.
2. **ASPIRATION 2:** An integrated continent, politically united, based on the ideals of Pan-Africanism and the vision of Africa's Renaissance.
3. **ASPIRATION 3:**
An Africa of good governance, democracy, respect for human rights, justice and the rule of law.
4. **ASPIRATION 4:** A peaceful and secure Africa.
5. **ASPIRATION 5:** An Africa with a strong cultural identity, common heritage, values and ethics.
6. **ASPIRATION 6:** An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children.
7. **ASPIRATION 7:** Africa as a strong, united, resilient and influential global player and partner. <http://au.int/en2/agenda2063>



A prosperous Africa based on inclusive growth and sustainable development

1. We are determined to eradicate **poverty** in **one generation** and build shared prosperity through **social** and **economic** transformation of the continent.
2. We aspire that by **2063**, Africa shall be a **prosperous continent**, with the means- and resources to drive its own development, with **sustainable** and long-term, stewardship of its resources

<http://www.un.org/en/africa/osaa/pdf/au/agenda2063.pdf>



A prosperous Africa based on inclusive growth and sustainable development

1. By 2063, African countries will be amongst the **best performers** in global quality of life measures.
2. Africa's **collective GDP** will be proportionate to her share of the **world's population** and **natural resource endowments**.



Aspiration 1- No 13

13. Africa's agriculture will be modern and productive, using science, technology, innovation and indigenous knowledge. **The hand hoe will be banished by 2025** and the sector will be modern, profitable and attractive to the continent's youths and women.



NEPAD Agency ABNE

- NEPAD Agency African Biosafety Network of Expertise (NEPAD/ABNE) is a biosafety resource network for African regulators and policy makers.
- Conceptualized by NEPAD Consolidated Plan of Action
- Freedom to Innovate-Biotechnology in Africa's Development, Report of the High-Level African Panel on Modern Biotechnology- Calestous Juma and Ismail Serageldin (2007)
 - **THIS REPORT IS ABOUT THE ROLE OF BIOTECHNOLOGY IN THE TRANSFORMATION OF AFRICAN ECONOMIES.**



Freedom To Innovate

- Request of Africa heads of state and government-build capacity to harness and apply **biotechnologies**-agricultural productivity, public health, industrial development, economic competitiveness, and **environmental sustainability -biodiversity conservation** in Africa.
- Systemic considerations- role of innovation in economic transformation.
- Challenges Africa's heads of state and government-importance of a coordinated approach in promoting technological innovation in development.



NEPAD/ABNE

- Approved officially in 2008 by the African Ministerial Council on Science and Technology (AMCOST)
- To promote advancement of science and technology for agricultural development in Africa.
- Provide farmers with choice in using improved convention and Biotechnology seeds through developing functional Biosafety Regulatory Frameworks

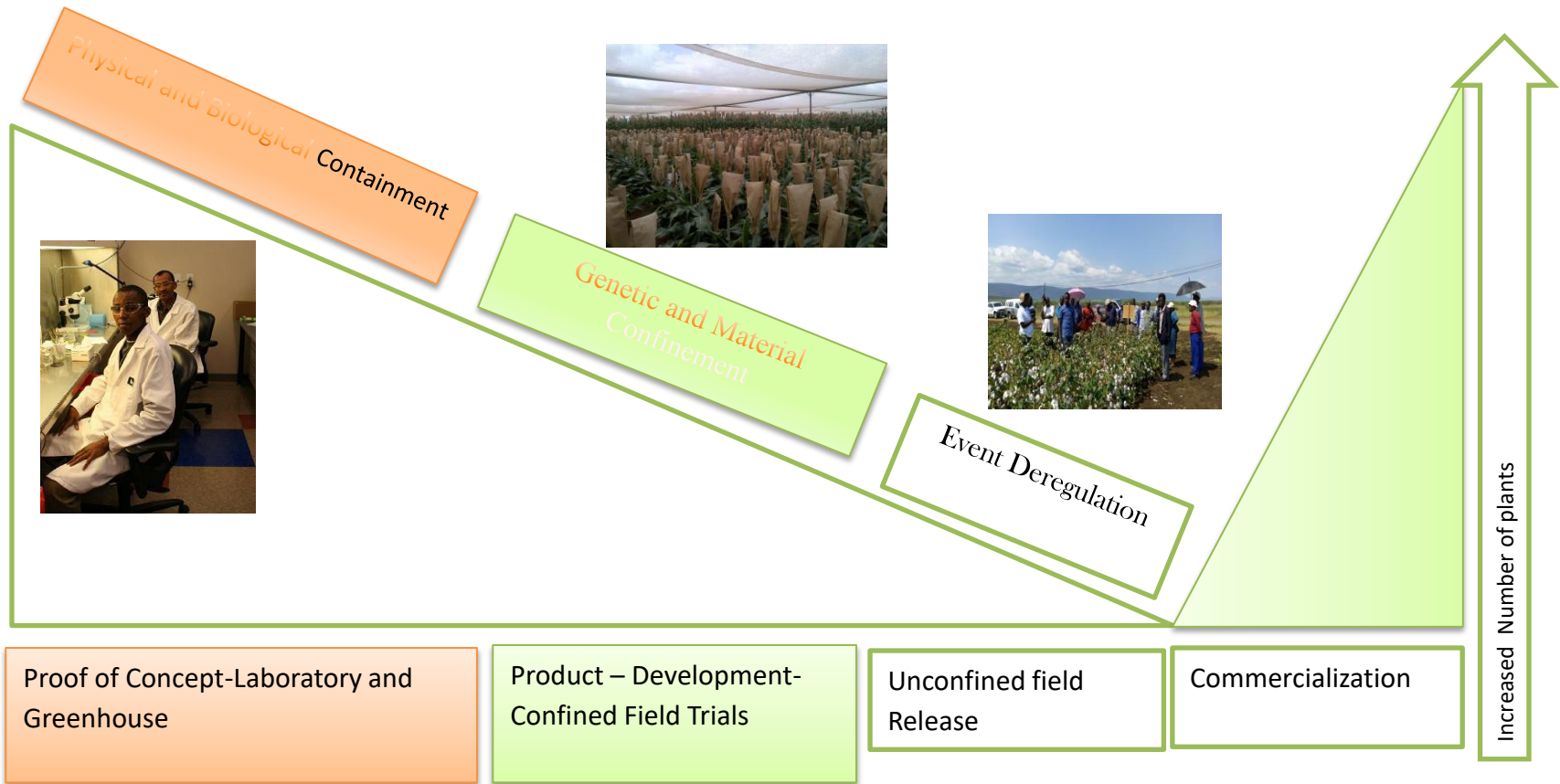


Functional Biosafety Regulatory Framework

- Biosafety/Biotechnology Policy
- Regulatory Systems- Biosafety Act, Implementing Regulations
- Administrative System- NBA Secretariat, Inspectors and Monitoring
- Mechanism for public participation and Information's sharing



Biotech Product Development Pathway



NEPAD/ABNE

- It is an Africa-based, Africa-led initiative established by the **AU/NEPAD Agency's Science, Technology and Innovation Hub**.
- ABNE's biosafety capacity building services target the members of National Biosafety Committees (NBCs), Institutional Biosafety Committees (IBCs), Plant Quarantine Officers (PQs), and policy makers.

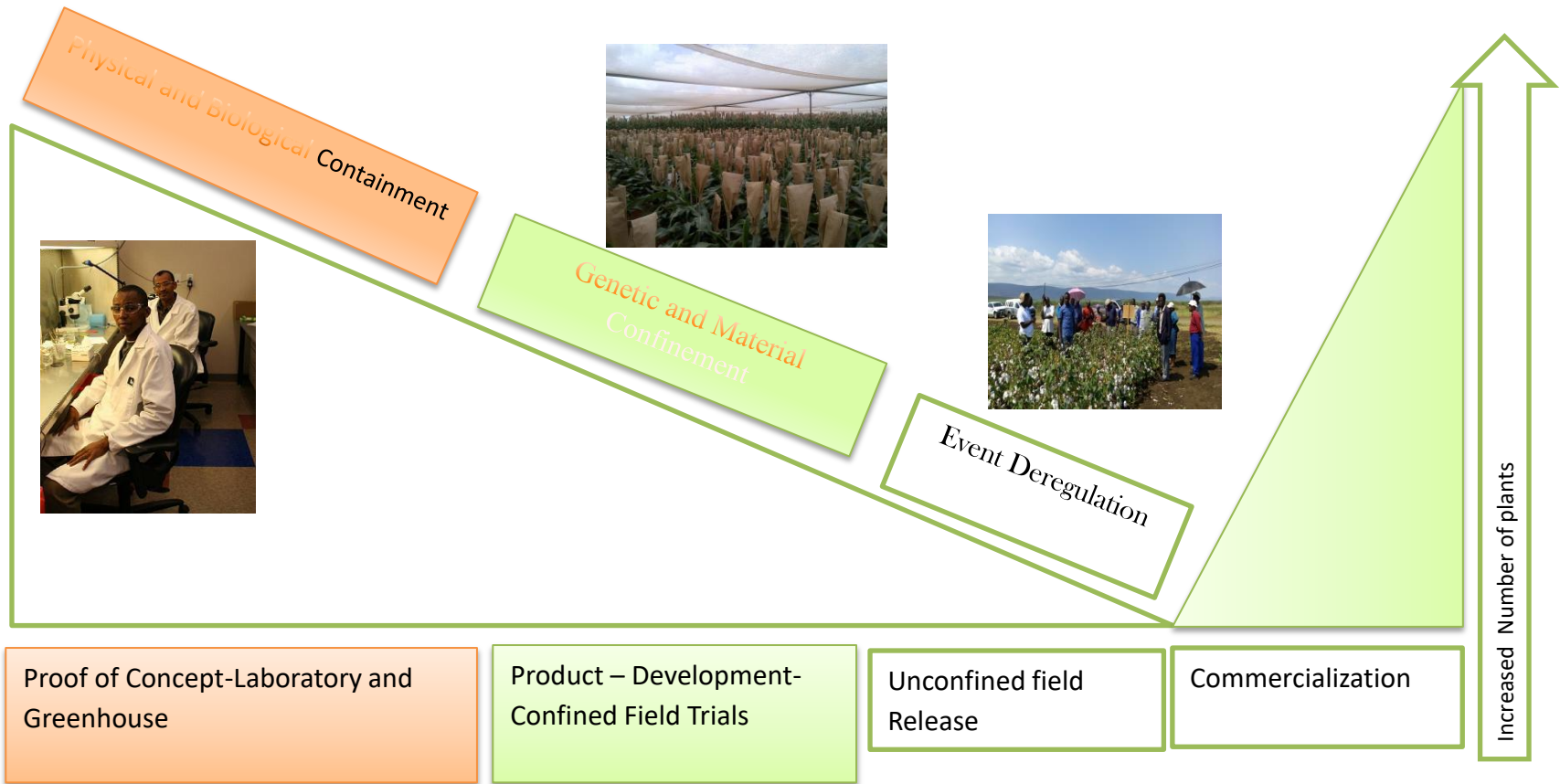


NEPAD/ABNE

- The network draws on available expertise, resources and infrastructure, and develops capacity and linkages with institutions within Africa and globally.
- Key partners is Michigan State University, Program for Biosafety Systems, National Biosafety Authorities, AATF, ISAAA

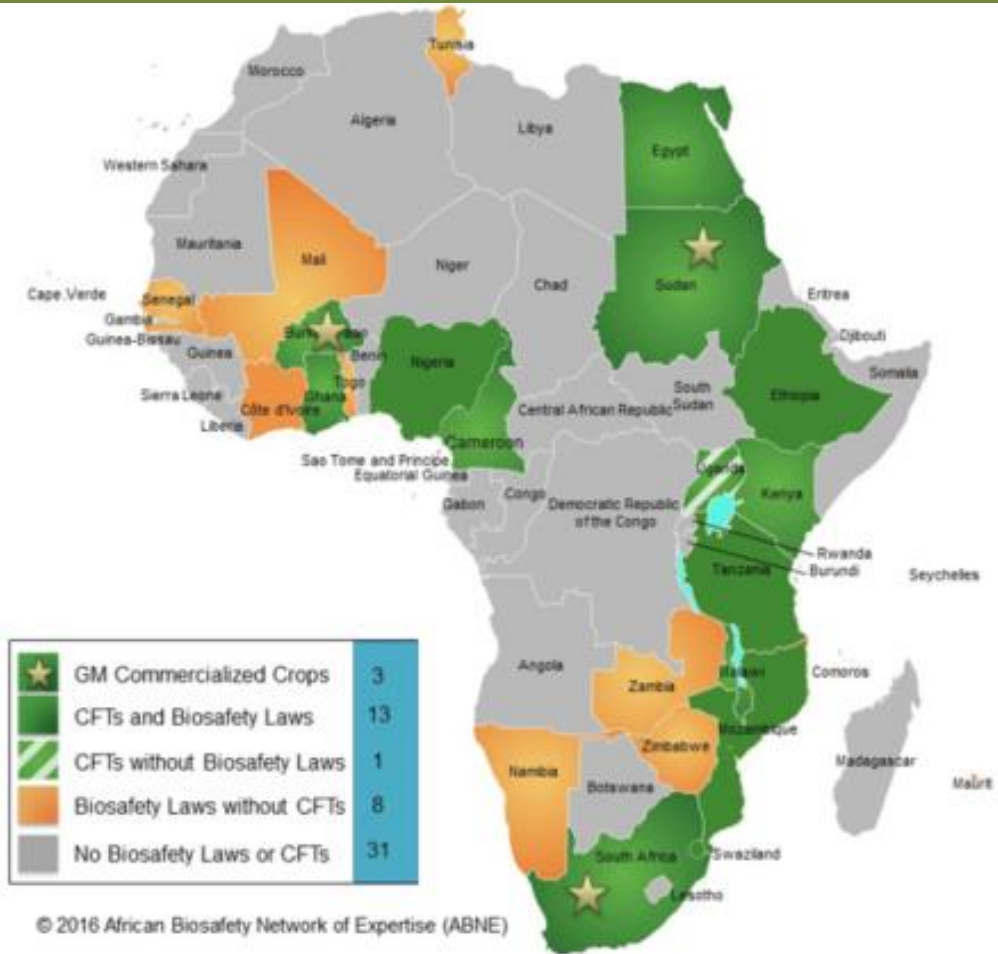


Biotech Product Development Pathway



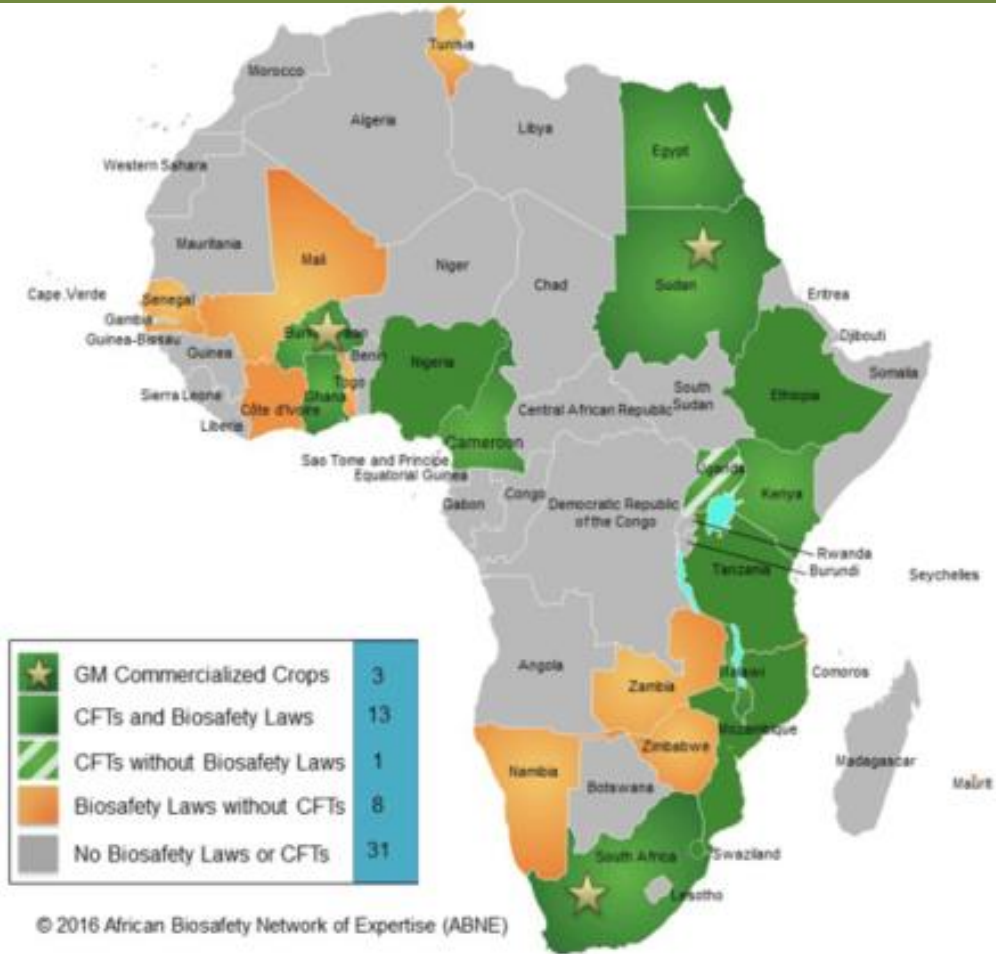
Two Countries with Functional Framework and Commercialized

- Sudan
- South Africa



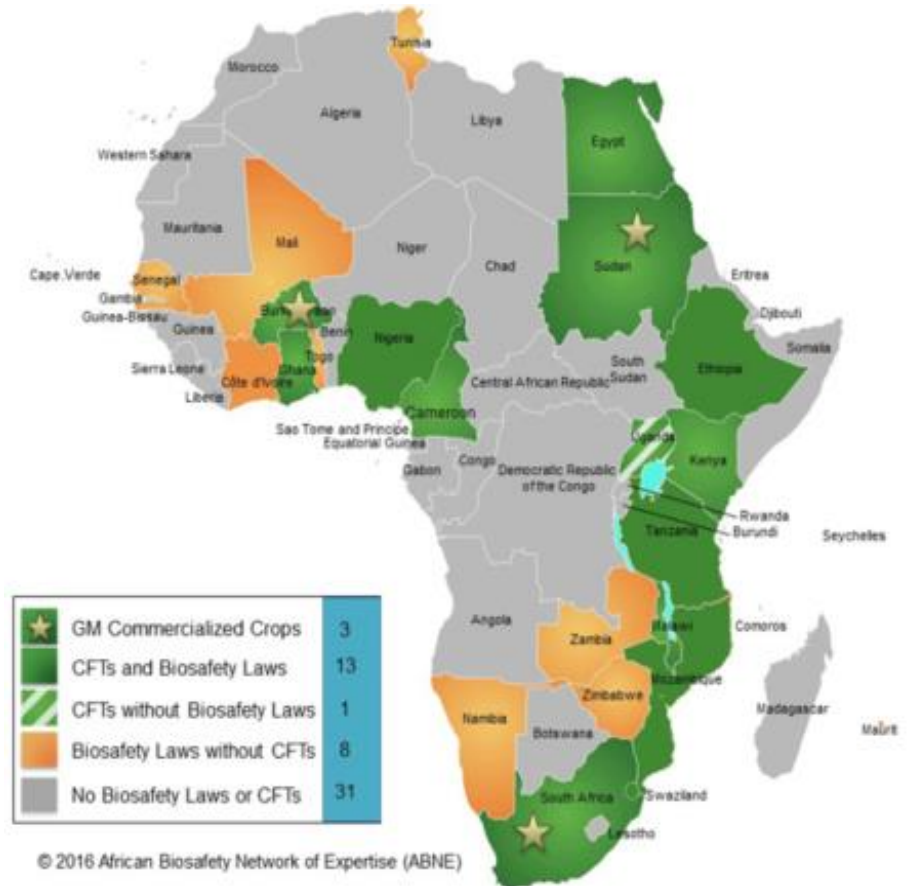
Five new African countries and general Release

- Nigeria
- Malawi
- Swaziland
- Ethiopia
- Kenya



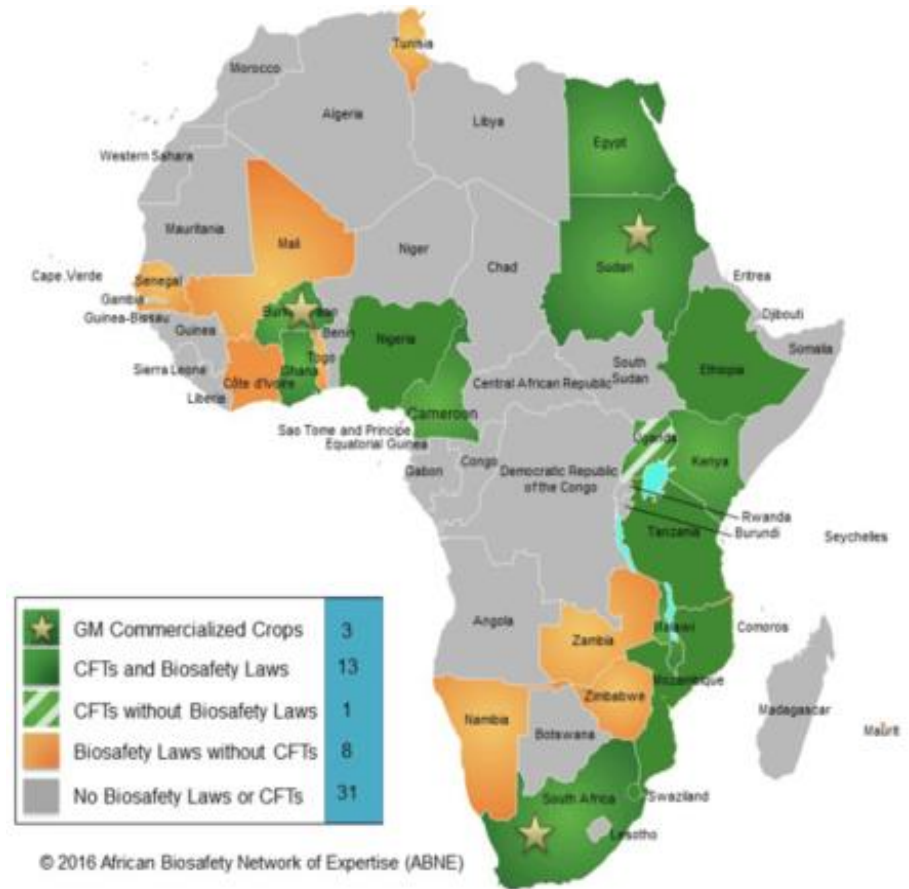
Countries with Laws and CFT

- Cameroon
- Ghana
- Burkina Faso
- Egypt
- Mozambique
- Tanzania
- **Uganda**



Countries with Laws but no CFTs

- Tunisia
- Mali
- Senegal
- Zambia
- Zimbabwe
- Namibia
- Togo
- Cote D'Ivoire



North African Countries

Morocco

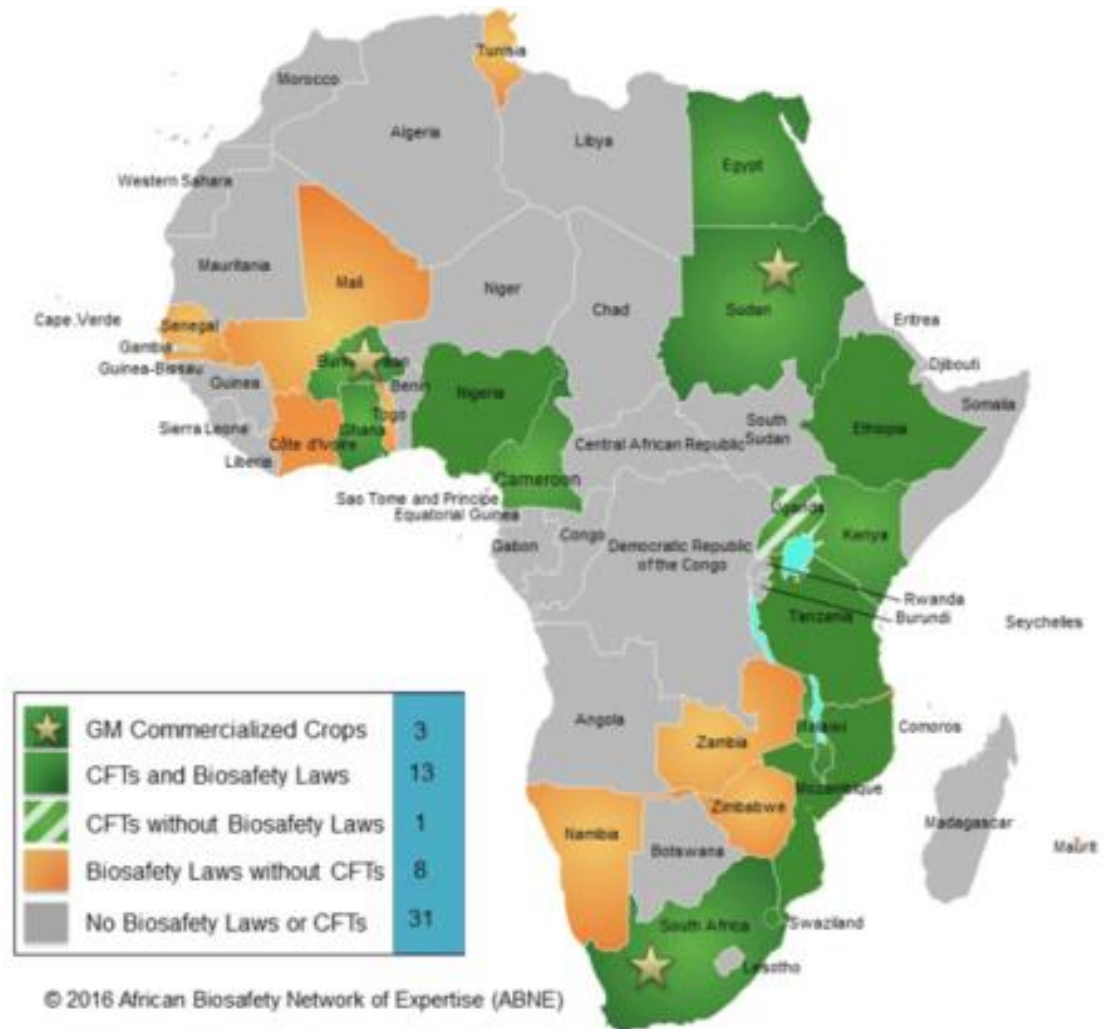
Algeria

Libya

Mauritania

Niger

Sao Tome Principe



West African Countries

Mauritania,

Sierra Leone

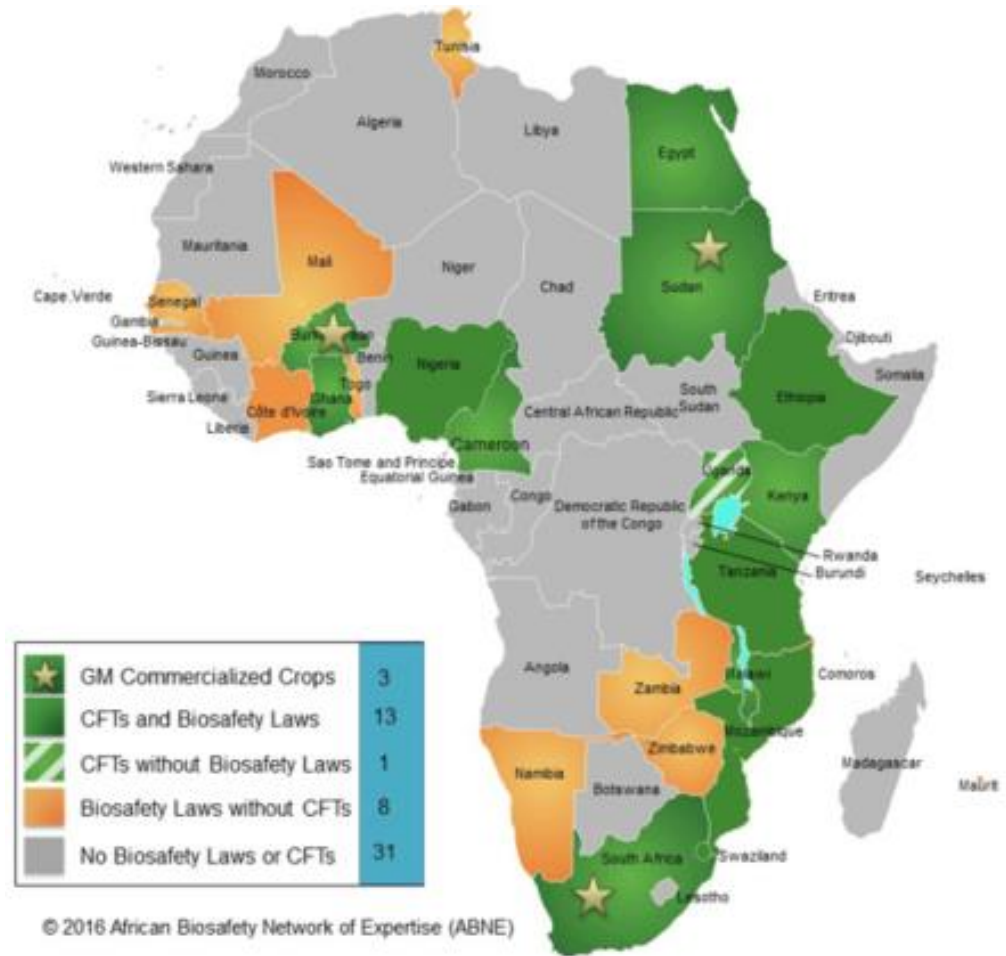
Benin

Gambia

Guinea

Guinea Bissau

Liberia



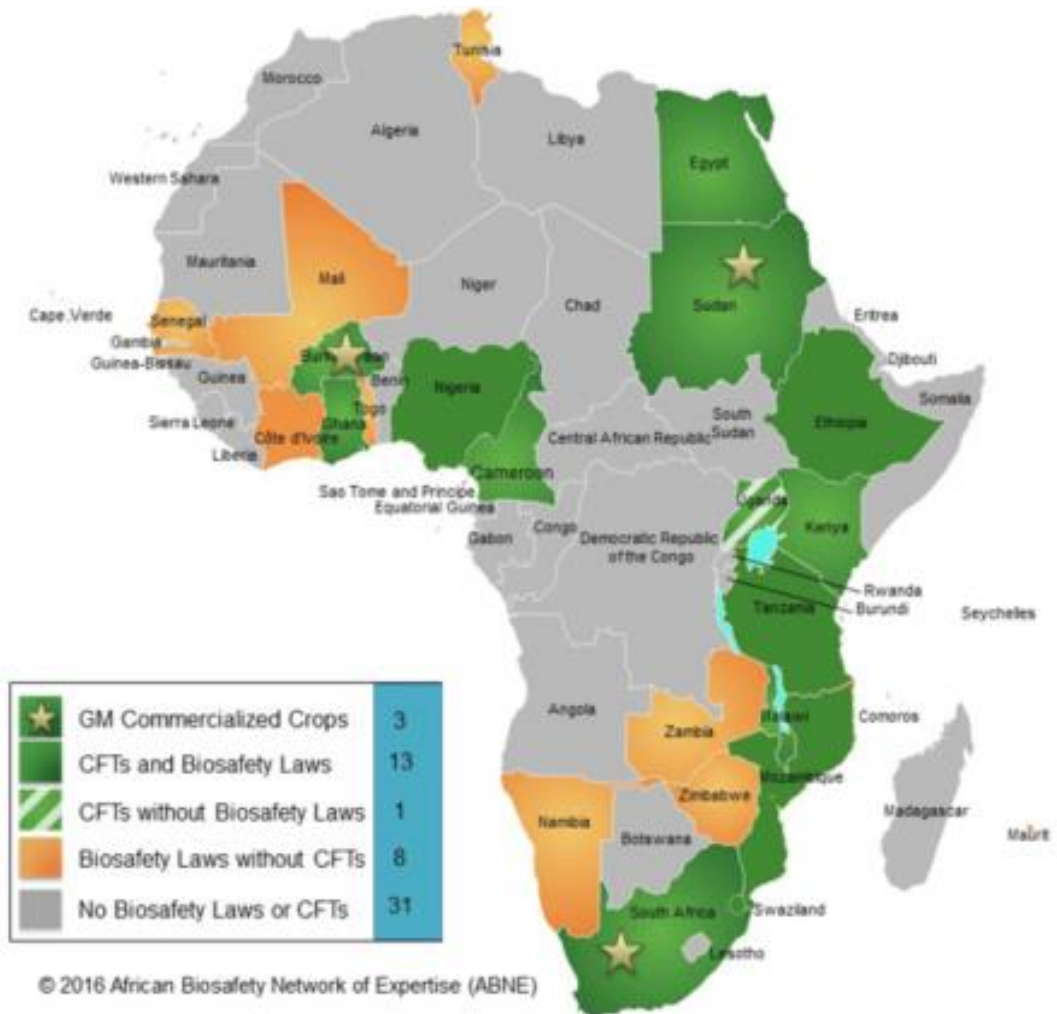
North Eastern African Countries

Djibouti

South Sudan

Eritrea

Somalia



CENTRAL AFRICAN COUNTRIES

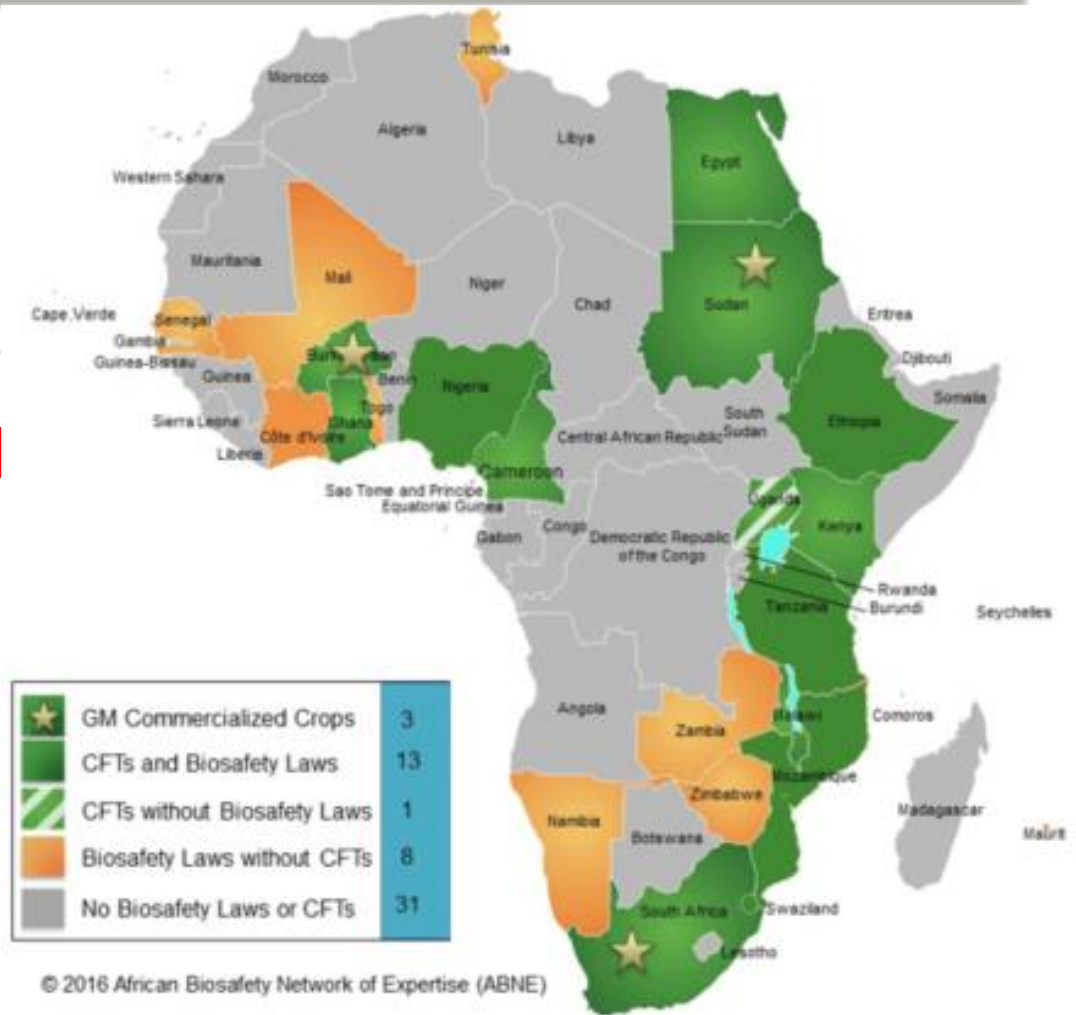
Chad,

Congo,

Democratic Rep Congo

Central African Republ

Gabon



Other African Countries

Madagascar

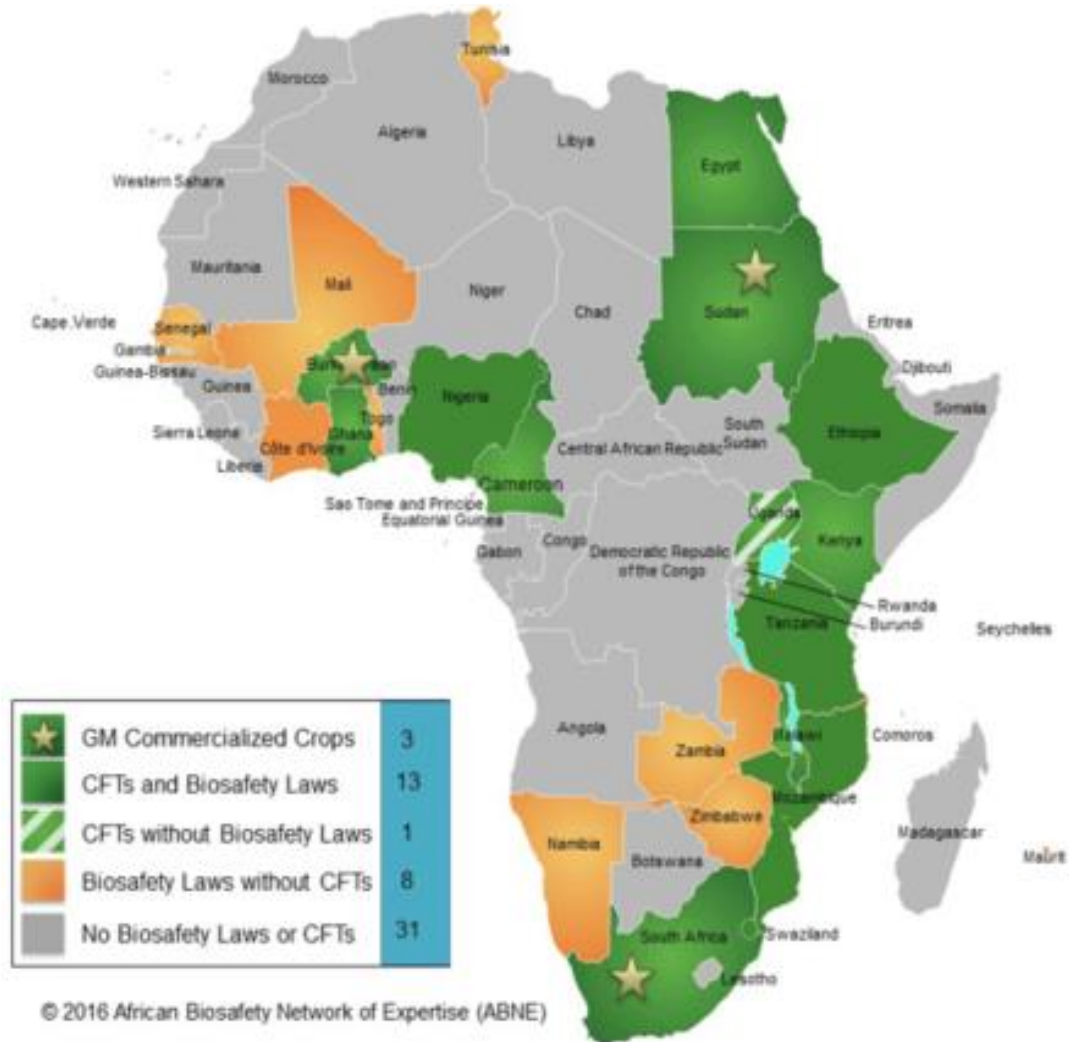
Cape Verde

Comoros

Union of Comoros

Mauritius

Seychelles



Leveraging on Regional Economic Communities

1. **EAC**- East African Community
2. **COMESA**-The Common Market for Eastern and Southern Africa is a free trade area with twenty member states (COMESA (19 Member Countries),
3. **SADC- Southern African Development Community (SADC)** is 15 Member States REC.
4. **ECOWAS**- Economic Community of West Africa Countries (ECOWAS) 15 member regional Program,
5. **WAEMU**- West African Economic and Monetary Union (WAEMU)- French acronym, UEMOA)
6. **CILSS**: Comité Inter-Etate pour la Lutte contre la Sécheresse au Sahel (French: Permanent Inter-State Committee for Drought Control *in* the Sahel)



COMESA REGIONAL BIOTECHNOLOGY AND BIOSAFETY POLICY

1. Approval and adoption of COMESA policy on **commercial planting, trade** and emergency **food** assistance involving GMOs, by the 32nd Meeting of the COMESA Council of Ministers in February **2014**
2. ACTESA, COMESA is committed to assist Member States to continue building institutions and regulatory frameworks that will guide the use of biotechnology in Agriculture.
3. **ABNE-Partnership with COMESA/ACTESA-** in Zambia, Sudan and Swaziland

ISAAA Ref 2015



Regional Initiatives-WAEMU

Ministries from WEAMU countries in charge of environment, agriculture, animal resources and fisheries, and scientific research met in Ouagadougou in February 2015 and adopted the **Regional Biosafety Law** with an amendment on Article 25 to read “Any who wishes to do **confined testing, develop, import, disseminate or introduce to the market LMOs and / derived product** should submit a **written request** to the competent national authority of the concerned **WAEMU country member**” instead of written request to the **WAEMU Commission**.

~~Gain Report (2015) - [https://gain.fas.usda.gov/Recent%20GAIN%](https://gain.fas.usda.gov/Recent%20GAIN%20Reports)~~



WAEMU-ECOWAS AND CILLS

- WAEMU (UEMOA) - West African Economic and Monetary Union members includes: **Benin, Burkina Faso, Cote d'Ivoire, Guinea Bissau, Mali, Niger, Senegal** and **Togo**.
- ECOWAS members include: **Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone** and **Togo**
- CILSS members include **Benin, Côte d'Ivoire, Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal, Togo, Burkina Faso, Mali, Niger, Chad, Cape Verde**



COMESA, SADC AND EAC

- **COMESA** of 19 member states – **Burundi, Comoros, the Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, Zimbabwe, Egypt** and **Malawi**.
- **SADC** (Southern African Development Community) is a regional organisation consisting of 14 Member Countries- **Angola, Botswana, Congo (DR), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia** and **Zimbabwe**.
- **EAC**-East African Community- six countries in the African Great Lakes region in eastern Africa: **Burundi, Kenya, Rwanda, South Sudan, Tanzania** and **Uganda**



WAEMU, ECOWAS AND CILSS3

- WEAMU Ministers have adopted a regional biosafety law.
- Ministries recommended that the three organizations WAEMU , ECOWAS, and CILSS continue their collaboration to finalize the regional biosafety law, which they believe benefit to all members states.

Gain Report (2015)- [https://gain.fas.usda.gov/Recent%20GAIN%](https://gain.fas.usda.gov/Recent%20GAIN%20Reports)



CONCLUSIONS

- Regional Economic Communities- CILSS, SADC, EAC, COMESA, ECOWAS, WAEMU (UEMOA)
- Sovereign- National Governments
- Africa- Union NEPAD Agency ABNE
- Two Prong Approach- adoption by small scale farmers- and placing on the Market
- Development Partners- PBS, USDA
- Policy- Options
- Diversification into Animal, Health, Industrial and Environmental Biotechnology



Acknowledgements

- **COMESA /ACTESA- Swaziland, Zambia, Sudan**
- **Program for Biosafety Systems- Ethiopia, Malawi, Kenya and Uganda**
- **African Agricultural Technology Foundation - Kenya, Mozambique, Tanzania**
- **ISAAA- Coordination Meeting- Cameroon**
- **Several National Biosafety Authorities/ Agencies about 16 Countries**
- **Michigan State University**
- **Bill Melinda Gates Foundation, USDA**
- **Conference Participants**

