



3 COUNTRIES, 3 CROPS, 3.3 MILLION HECTARES

AFRICA RISING

TOP TEN FACTS ABOUT BIOTECH/GM CROPS IN AFRICA

2014
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FACT 1



2014 was the 17th Year of Successful Commercialization of Biotech Crops in Africa

Africa continued to demonstrate a keenness for modernized agriculture through the slogan "Ripe for change: The promise of Africa's Agricultural Transformation". Calls to embrace science, technology and innovation intensified and the calls to adopt biotech tools in agricultural development featured prominently. The growth momentum for GM/biotech crops was maintained and three countries namely, South Africa, Burkina Faso and Sudan continued taking the lead in commercialization of biotech cotton, maize and soybean.

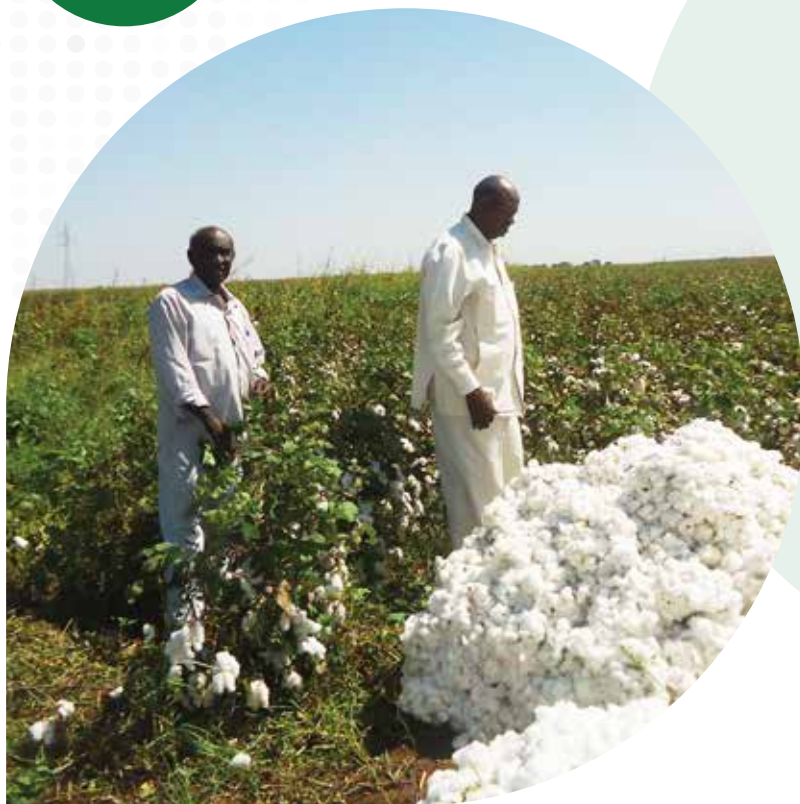
Seven African Countries Continued to Conduct Field Trials on Biotech Crops

Cameroon, Egypt, Ghana, Kenya, Malawi, Nigeria and Uganda continued to conduct field trials of biotech crops in 2014. The on-going trials focus on traits of high relevance to the challenges facing Africa, key among them drought, nitrogen use efficiency, salt tolerance and nutritional enhancement, as well as tolerance to tropical pests and diseases.

The expansion of multi-location trials for these important cash and food crops is attributed to the promising results, indicating that Africa is progressively moving towards adopting important food security biotech crops such as banana, cassava, potato, cowpea, maize, rice, sorghum, wheat and sweet potato.



FACT 3



Sudan Increased its Biotech Crop Hectarage by 46%

Sudan increased its Bt cotton hectarage substantially to a total of 90,000 hectares, up from 61,530 hectares in 2013. 2014 was the third year of commercial planting of Bt Cotton in Sudan and close to 30,000 farmers planted Bt cotton, a three-fold increase from the initial 10,000 beneficiaries. This rapid increase can be explained by the economic gains given that Bt cotton saved the farmers 37% of the direct cost of cotton production, giving them a net profit of US\$170.

The First Deployment of Stacked Drought Tolerant and Insect Resistant Maize Hybrids is Expected in 2017

The Water Efficient Maize for Africa (WEMA) project is still on track and is scheduled to deliver its first stacked biotech drought tolerant (DT) maize with insect control (Bt) as early as 2017, subject to regulatory approval. South Africa is expected to be the first country to commercialize the technology in 2017, followed by Kenya and Uganda which plan to conduct confined field trials (CFT) of the stack in 2015.

It is projected that the WEMA stacked Bt/DT maize hybrid may yield up to 20 to 35% more grain than other commercial hybrids under moderate drought, resulting in an additional 2 to 5 million MT of maize to feed 14 to 21 million Africans.



FACT 5



Farmers Continued with Calls for Access to the Technology

Due to heightened awareness of the benefits accrued from growing biotech crops, farmers continued to call for access to the technology for competitiveness either through their leaders or individually. This was largely witnessed in countries neighboring Burkina Faso such as Benin, Cote de Ivoire, Ghana, Nigeria and Togo, indicating that the Burkina Faso experience is inspiring farmers and resulting in demand for the technology.

Ghanaian farmers raised concerns that they were lagging behind compared to their counterparts in Burkina Faso whose "lives are slowly improving from abject poverty to some level of decency," as narrated by Mrs. Zouma Salimata, a woman farmer from Burkina Faso.

Political Will in Support of Biotechnology Intensified

A good number of policy makers from across the continent openly acknowledged the role of science and technology, and more specifically the role of modern biotechnology, in agricultural development. For instance, in her address during 3rd Annual African First Ladies discussions on science, technology, engineering and mathematics in September 2014, the African Union Commission Chairperson, Nkosazana Dlamini Zuma recognized biotechnology as an important tool in achieving food security goals.

Dr. Zuma said "Africa's capacity to feed itself now and in the future requires increasing investment in climate change research, biotechnology research and development, and innovation." Ethiopia's State Minister in the Ministry of Environment and Forest Mr. Kare Chawecha called upon governments to "rise above the ideological divide and work in partnership towards what is rational and beneficial to our common future."

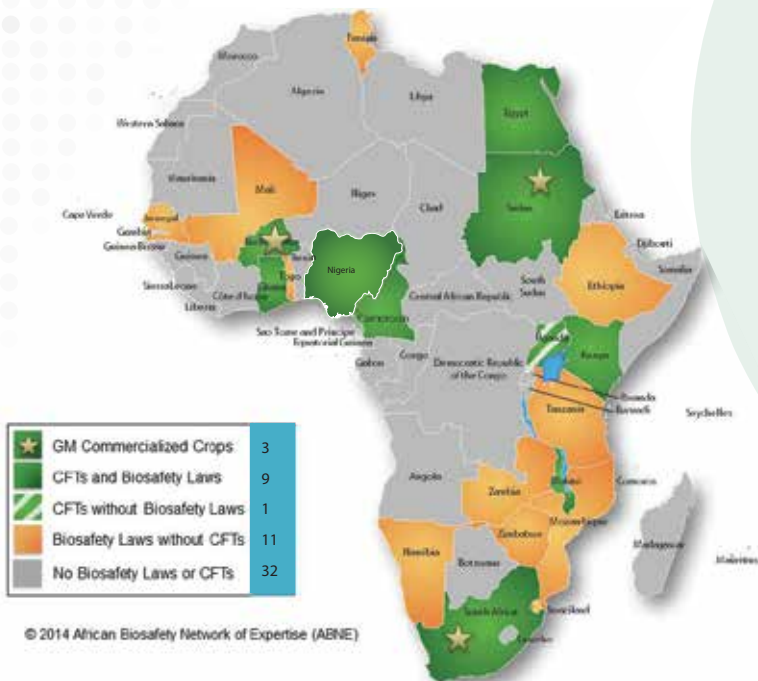


FACT 7

Mozambique Approved a Revised Biosafety Decree and Implementing Regulations to Open way for Biotech Research and Commercialization of Biotech Crops

In 2014, the Council of Ministers in Mozambique approved a revised biosafety decree and biosafety implementing regulations to allow for biotech research and field trials for eventual commercialization. Mozambique is expected to initiate confined field trials (CFTs) for drought-tolerant maize under the Water Efficient Maize for Africa (WEMA), as well as insect resistant cowpea.

As of 2013, Mozambique was one of the 5 countries working towards reviewing its biosafety regulations to ensure they are functional, science-based and cost/time effective. The other 4 countries were Burkina Faso, Ethiopia, Tanzania and Togo.



FACT 8

African Countries Contributed to the Environmental Benefits Accruing from Adopting Biotech Crops Globally

By adopting biotech crops, African countries contributed to the overall global environment benefits accrued through reduced use of fossil-based fuels with fewer insecticide and broad based herbicide sprays. In 2013 alone, planting biotech crops resulted in estimated savings of 2.1 billion kg of CO₂, equivalent to reducing the number of cars on the road by 930,000.



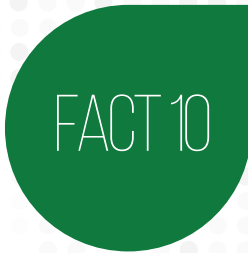
FACT 9



Economic Benefits by African Countries Continue to Rise

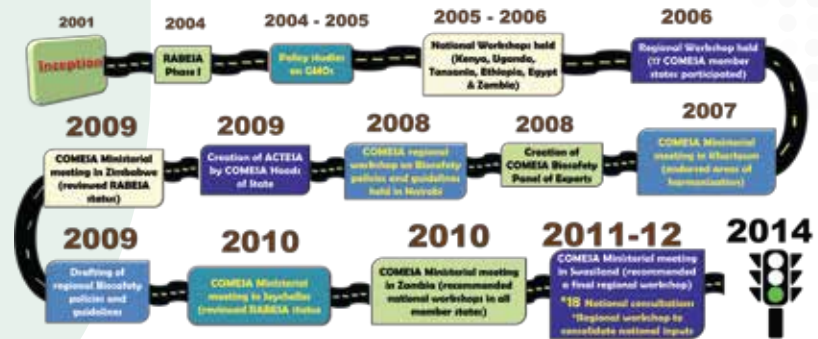
The continent is increasingly realizing economic, social and environmental benefits as a result of adoption of GM crops. Between 2008 and 2013 for instance, Burkina Faso recorded economic gains of about US\$137 million, and US\$37 million for 2013 alone. South Africa realized US\$1.6 billion in accumulated benefits from 1998 to 2013. The economic gains in 2013 alone was US\$ 313 million, up from US \$218 million in 2012.

Regional Biotechnology and Biosafety Policy Initiatives Progressed in the Continent



In February 2014, the COMESA Council of Ministers approved the regional policy on biotechnology and biosafety. The policy provides COMESA member states with a mechanism for scientific regional risk assessment of GMOs intended for commercial planting, trade and access to emergency food aid with GM content in the COMESA region. This follows more than a decade of continued work towards the development of the Regional Approach to Biotechnology and Biosafety Policy in Eastern and Southern Africa (RABESA).

Meanwhile, three regional organizations in West Africa namely: the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), the West African Economic and Monetary Union (WAEMU) and the Economic Community of West African States (ECOWAS), made significant progress towards the adoption of a regional biosafety law. After two years of deliberations, the organizations finally arrived at a consensus to harmonize positions in July, 2014.





“Together with majority of the members in the group, we choose Bt cotton because it requires less spraying, is easier for us women to take care of and saves some time for us to do other household chores – freedom is the word”

- Mrs. Zouma Salimata, Woman farmer, Pegwende farming group (GPC), Burkina Faso.



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