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Kenya

AGRICULTURAL BIOTECHNOLOGY ANNUAL

Kenya Biotechnology Annual Report

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Report Highlights:
Kenyan Government officials continue to make strides in an effort that will likely culminate with Kenya becoming the first east African country to establish a comprehensive biotechnology policy, including regulations regarding the treatment of genetically modified organisms (GMOs).

Section I. Executive Summary:

Kenya's parliament passed a Bill, now known as the "Biosafety Act 2009," in December 2008 and President Kibaki signed the Bill into Law, when it became an "Act" in February 2009. A Government-created body known as the National Council of Science and Technology (NCST) spearheads the development of biotechnology regulations that will guide future research and trade in biotechnology generally, and GMOs specifically.

While Kenyan regulatory officials develop biotechnology rules and regulations, some GMO enthusiasts remain concerned that certain aspects of the new regulations could potentially lead to discrimination against GMOs. Reportedly, Kenyan regulators are considering, and may be poised, to write regulations that will require labeling of any commodity

that will have been produced with GMO seed and any product that contains GMO material. Reportedly the agencies that manage the labeling portfolio for all food and non food materials may not have considered that the GMO products are scientifically indistinguishable from their non-GMO cousins.

In spite of current GMO regulations that impede GMO imports, the Government of Kenya (GOK) permitted GMO corn imports from South Africa during the 2009 marketing year. Kenya imported about 700,000 tons of South African white corn during the just concluded marketing year, reportedly without testing for genetic material. The decision appears to have been very pragmatic, because Kenya needed the white corn to cover a severe production shortfall. To have rejected South African white corn, because of its GMO content, may have been politically unacceptable to the Kenyan population already complaining about shortages and high prices of white-corn flour, a staple in the Kenyan diet.

Section II. Biotechnology Trade and Production:

Kenyan officials require a declaration of the GMO status for all crops/food products imported for use in the Kenyan market. U.S. exporters shipped 250,000 tons of U.S. white corn to Kenya via the commercial market in recent months and also shipped processed yellow corn and soy products, as a part of food aid efforts conducted mostly by the World Food Program. U.S. white corn, until this year's crop, has been GMO free, but many U.S. white-corn producers have reportedly shifted production to GMO varieties this year. South Africa supplied the Kenyan market with about 700,000 tons of white corn and while it remains unclear how much was GMO, it is clear that South African farmers plant and harvest GMO white corn on more than half their corn acreage.

Once Kenyan regulators develop the necessary regulations regarding agriculture biotechnology and, more specifically, GMO trade and production, Kenya will be in position to produce GMO crops commercially. Kenyan researchers have been investigating GMO crops since 1998 and some of those crops are at the field-trial stage. They need the new regulations to move the successful trials to commercialization.

Section III. New Technologies:

Kenya does not currently use, nor participate in, scientific studies that employ animal genetic modification (AGM) or cloning. Reportedly, the Ministry of Livestock has not proposed AGM legislation or regulations and furthermore has not broached the topic with other Government regulators.

Section IV. Biotechnology Policy:

The NCST is the government agency responsible for the implementation of the Biosafety Act, as well as International biotechnology agreements such as the Cartagena protocol. The NCST established the National Biosafety Committee (NBC) to develop agricultural biotechnology policies and review applications to begin field trials and eventually commercialization. Participation on the NBC includes representatives from Government Ministries, as well as scientists from civil society and the national universities.

GOK ministry roles on the NBC include: The Kenya Plant Health Inspectorate Service, Ministry of Agriculture, oversees, introduction, testing and use of biotechnology plants and seeds; the Ministry of Health regulates food safety questions; the Ministry of Environment and Natural Resources oversees environmental questions and conducts environmental impact assessments; and, the Pest Control Products Board regulates pesticides.

Kenyan researchers are currently testing GMO crops (list here below) under regulations established by the NCST in the late 1990s. Now, as a result of passage of the Biosaftey Act, Kenya Agricultural Research Institute (KARI) scientists anticipate that the new Biosafety-Act regulations will facilitate commercialization of the successful GMO trials.

Crop	Year Trials Began	Current Status	Collaborators
Virus-resistant sweet potato	1998	Confined Field Trial (CFT)	KARI, Monsanto, USAID, ARC-VOPI (South Africa), Danforth Center (USA)
Insect-resistant maize	2001 leaves 2003 seeds	CFT	KARI, CIMMYT, Syngenta Foundation, Rockefeller Foundation
Insect-resistant Cotton	2003	CFT	KARI, Monsanto
Virus-resistant cassava	2003	CFT	KARI, Danforth Center (USA), USAID/ABSP 11
Fortified sorghum	2005 & 2009	CFT	Bill & Melinda Gates, Africa Harvest, Pioneer, KARI, AATF

Source: KARI

Section V. Marketing:

In studies done in 2003, 2006 and 2007 by the International Maize and Wheat Improvement Centre (CIMMYT), KARI and Kansas State University, Kenyan consumers were found to accept agricultural biotechnology and GMO foods at rates well below 50 percent (please see table below). Processors and retailers showed a higher level of acceptance, especially with regard to GMOs.

Biotechnology Awareness in Kenya

Type	Area or Industry	Number	Awareness	
			Biotechnology	GM* crops
Urban consumers	Nairobi	612	46	38
Rural consumers	Western Kenya	121	16	13
	Eastern Kenya	400	63	31
Gatekeepers	Milling companies	32	67	87
	Supermarkets	40	83	79

Source: CIMMYT *GM – Genetically Modified

For a detailed report please read: http://www.cimmyt.org/english/wps/transg/DebunkingMyths_GM.pdf or http://www.syngentafoundation.org/__temp/P4_05_Kimenju_etal_2004_Consumer_attitudes_towards_GM_food_v.pdf

In an attempt to improve the knowledge and acceptance of biotechnology and GMO crops and foods, the GOK, with support from USAID and other donors, established a National Biotechnology Awareness Creation Strategy (BioAware-Kenya).

Section VI. Capacity Building and Outreach:

The following list represents U.S. Government funded biotechnology capacity building and outreach activity:

1. Fellowship programs in agriculture biotechnology, intellectual Property rights, technology transfer, and policy development;

2. Farmer-to-farmer capacity building workshops;

3. Biotechnology speaker programs;

4. Biotechnology public awareness and outreach; and,

5. Support to African biotechnology stakeholder organizations.

Additional capacity building will strengthen Kenyan biotechnology and GMO researchers, GOK regulatory officials and private sector resellers. Continued awareness building will help consumers understand the benefits of GMO and biotechnology crops and foods.