Required Report: Required - Public Distribution **Date:** February 12,2020

Report Number: MZ2019-0006

Report Name: Agricultural Biotechnology Annual

Country: Mozambique

Post: Maputo

Report Category: Biotechnology and Other New Production Technologies

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Report Highlights:

Mozambique planted its first genetically modified (GM) corn trial at Chókwè Agricultural Station in 2017, as part of the Water Efficient Maize for Africa (WEMA) program aimed to test drought and pest resistance after the approval of the Biosafety Regulation on management of "Genetically Modified Organisms" (Decree no. 6/2007 of April 25), updated in late 2014. After two planting seasons, preliminary results were shared and have shown promise in containing pests.

EXECUTIVE SUMMARY

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CHAPTER1: PLANT BIOTECHNOLOGY

PART A: PRODUCTION AND TRADE

a) PRODUCT DEVELOPMENT

Mozambique's agricultural sector is characterized mainly by farming; about 80 percent of its estimated 29 million people are active in farming. Of the 80% in agriculture, only 10 percent are involved in commercial farming and the remaining are subsistence farmers. Over 80 percent of the total cultivated area is used for production of staple food crops for self-consumption, including cassava, corn, rice, sorghum and pulses.

GM corn plants were planted in the Confined Field Trial (CFT) run by the Mozambican Agricultural Research Institute (Instituto de Investigação Agrária de Moçambique, IIAM) as part of the Water Efficient Maize for Africa (WEMA) program, which is a public/private partnership designed to develop drought and pest tolerant corn varieties with the use of biotechnology and conventional breeding. The project is in line with the Mozambican government's agricultural strategy's to augment agricultural production and productivity with the use of modern technologies.

In two planting seasons, trials tested the tolerance of GM corn to pests during the first stage. It is expected that in the second stage drought tolerance will also be tested, since in the previous planting was irrigated.

In addition, Mozambique is considering using innovative biotechnologies in product development, such as plant disease diagnoses on animals (Newcastle disease) and plants (cassava, tomatoes viruses), and bio fortified crops, like orange sweet potatoes. Animal genetic improvement, biodiversity studies on forestry, and poultry studies are other innovative biotechnologies that Mozambique is considering.

In February 2017, Mozambique started its GMO trial in Chókwè district, Gaza province. This trial was aimed to evaluate the efficiency of the Bt gene in controlling spotted stem borer/stalk borer (C. partellus and B. fusca) in Mozambican corn in Mozambique, by measuring the level of damage caused by insects.

Preliminary results were shared and concluded that:

- Bt gene is efficient at protecting corn against spotted stem borer/stalk borer (C. partellus and B. fusca) on corn in Mozambique, which was the primary subject for this trial; and
- The trial also proved that Bt gene can also protect corn from Fall armyworm.

b) COMMERCIAL PRODUCTION

No commercial production of GE crops is currently taking place in Mozambique. Nevertheless, the country has appropriate legislation in place. The revised Biosafety Legislation also clarifies the process of import, export and transit of GE products which includes specific requirements for testing samples, grain import for human consumption, and quarantine measures.

c) EXPORTS

Mozambique is not exporting any GE crops. However, exports are regulated by the Biosafety Legislation regulation. The regulation establishes regulations for production sites, transport, identification and labelling.

d) IMPORTS

Mozambique allows for the importation of GE crops intended for direct use as food, feed or for processing but requires approval from the National Biosafety Authority. The applicant is required to submit a report on the risk assessment and management for human health and the environment, including monitoring measures. The applicant may also be required to submit samples for testing purposes.

e) FOOD AID

The import of GE products for food aid is generally authorized in emergency situations, but only for commodities destined for human consumption and only if there are no alternative sources to respond to emergencies on a timely manner. Any GE food grains imported need to be processed prior to distribution to the final recipients of food aid to avoid utilization as seed. Mozambique is a U.S food aid recipient country. Under Food for Progress and McGovern Dole Food for Education programs, the country receives from the United States corn soy blend (CSB) for school feeding projects, soybean cooking oil, and wheat for monetization under Food for Progress.

f) TRADE BARRIERS

Post has not identified any additional biotechnology-related trade barriers that may negatively affect U.S. exports, nor potential to do so.

PART B: POLICY

a) REGULATORY FRAMEWORK

The government of Mozambique acknowledges the contribution that modern biotechnology can make to meet critical needs for food and nutritional security. At the same time, the government also recognizes that the development of modern biotechnology needs to go together with appropriate regulations in order to maximize the benefits while minimizing potential risks.

b) APPROVALS

No plants or crops have been approved or registered in Mozambique for cultivation, import or export, except for food aid in emergency. However, GE corn trials started in 2017 and preliminary results shared.

c) STACKED or PYRAMIDED EVENT APPROVALS

The Mozambique's Biosafety Legislation does not indicate how it will handle stack event approvals.

d) FIELD TESTING

With the approved Decree, the Mozambique Biosafety Regulation allows the public and private sector to research GE crops. Research is subject to prior application, field and greenhouses inspection, confined research project submission and monitoring measures, and risk control. The first confined trial started in the 2016/17 cropping season and preliminary results were shared in 2018.

e) INNOVATIVE BIOTECHNOLOGIES

Not applicable.

f) COEXISTENCE

To date, there is no specific guideline for coexistence and Mozambique does not have a national organic standard in place.

g) LABELING and TRACEABILITY

Compulsory labeling of GE products or food containing GE ingredients is necessary based on the Mozambique Biosafety Legislation. However, Mozambique does not have full control measures of GE products entering the country due to lack of resources for testing/inspecting and widespread of its entry points.

h) MONITORING AND TESTING

There is no system in place for testing and monitoring of GE products.

i) LOW LEVEL PRESENCE (LLP) POLICY

There is currently no low-level presence policy in Mozambique.

j) ADDITIONAL REGULATORY REQUIREMENTS

According to Mozambique Biosafety Legislation, there are no additional product and/ or seed registration required, beyond GE crop approval, prior to use. Re-registration is not required.

k) INTELLECTUAL PROPERTY RIGHTS (IPR)

The last two chapters of the Mozambique Biosafety Regulation discuss confidentiality, intellectual property, public participation and access to information. It protects research information and intellectual property while foreseeing public participation and information access.

l) CARTAGENA PROTOCOL RATIFICATION

Mozambique ratified the Cartagena Protocol on Biosafety in 2001(Resolution no. 11/2001, of December 20th) and created the inter-institutional National Biosafety Working Group (GIIBS - Grupo Inter-Institucional Sobre Bio-Segurança) to coordinate the process of developing a National Biosafety Framework for Mozambique. The Ministry of Science and Technology was designated to serve as the National Biosafety Authority.

m) INTERNATIONAL TREATIES and FORUMS

Mozambique is a signatory of *inter alia*:

- The Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization (WTO-SPS)
- Codex Alimentarius Commission (Codex)
- International Plant Protection Convention (IPCC) of the Food and Agricultural Organization (FAO)

n) RELATED ISSUES

There are no other issues related to plant biotechnology that are not captured under the current headings.

PART C: MARKETING

a) PUBLIC/PRIVATE OPINIONS

The government of Mozambique is committed to adopting new agricultural technologies to reduce hunger and poverty by increasing agricultural production. The government understands that this is only possible if the country adopts new agricultural technologies, including biotechnology. This is, however, contrasted by the public opinions which show a total lack of knowledge about GE and Biotechnology in general. Widespread awareness through outreach programs and capacity building among civil society and subsistence farmers is required.

b) MARKET ACCEPTANCE/STUDIES

At this moment, post is not aware of any marketing studies on GE products conducted in Mozambique. Commercial farmers are seeking Bt cotton and drought tolerant corn seeds, should they become available.

CHAPTER 2: ANIMAL BIOTECHNOLOGY

PART D: PRODUCTION AND TRADE

a) PRODUCT DEVELOPMENT

There are no GE or genome edited animals (and/or clone) under development in Mozambique.

b) COMMERCIAL PRODUCTION

Mozambique does not commercially use or produce any livestock clones, offspring clones, GE animals, or products derived from animal biotechnologies. However, the country does use artificial insemination.

c) EXPORTS

Mozambique does not export GE animals, livestock clones, or products from these animals.

d) IMPORTS

Mozambique does not import GE animals, livestock clones, or products from these animals. There is no regulation in place for GE animals, livestock clones, or products from these animals.

e) TRADE BARRIERS

Post has not identified any additional biotechnology-related trade barriers that may negatively affect U.S. exports, or have the potential to do so.

PART E: POLICY

a) REGULATORY FRAMEWORK

N/A

b) APPROVALS

N/A

c) INNOVATIVE BIOTECHNOLOGIES

N/A

d) LABELING and TRACEABILITY

N/A

e) INTELLECTUAL PROPERTY RIGHTS (IPR)

N/A

f) INTERNATIONAL TREATIES and FORUMS

N/A

g) RELATED ISSUES

N/A

PART F: MARKETING

a) PUBLIC/PRIVATE OPINIONS
N/A

b) MARKET ACCEPTANCE/STUDIES

There are no market acceptance studies on Animal Biotechnology in Mozambique.

Attachments:

No Attachments