New report hails Ghana's 'unique' biosafety regime as nation prepares for its first GMO crop

A new report has hailed Ghana's "unique" biosafety regime as the West African nation prepares to commercialize insect-resistant Bt cowpea, its first genetically modified (GM) crop.

The report notes that Ghana has put in place a government policy on biosafety, a regulatory regime, a system to handle requests for authorizations and administrative functions and other systems for "follow up," public awareness and participation.

"The (biosafety) framework is unique to Ghana but it is modeled after the United Nations Environment Programme/Global Environment Facility blueprint," observed the annual agricultural biotechnology report published by the United States Department of Agriculture's (USDA) Foreign Agriculture Service and the Global Agricultural Information Network (GAIN).

Given this robust regulatory regime, <u>Ghana is now ready for commercialization</u> of GMOs, the USDA/GAIN report concluded.

"There is the possibility of commercializing Bt cowpea in the very near future... The commercial release of Bt cowpea was to be a joint action with neighboring Burkina Faso and Nigeria in December 2018, but the dossiers for Ghana and Burkina Faso were still being internally reviewed. [Nigeria <u>commercialized Bt</u> <u>cowpea</u> in late 2019.] Review of the dossier is now complete and application for commercial release is ready to be submitted to the NBA for approval," the USDA/GAIN report said. "The possibility of a commercial release of Bt cowpea in the very near future remains high."

The USDA/GAIN report noted that Ghana's government recognizes the potential of biotechnology as a key innovation in the quest for national food and nutrition security. Ghana has taken a pro-biotechnology position and acknowledges biotechnology and nanotechnology as a means of achieving much-needed development under the science, technology and innovation policy.

Promising future

The report observed that food producers are eager to adopt genetically modified crops as a means of achieving improved productivity. "For instance, after observing the results of the Bt and GM cotton trials, farmers were highly impressed that cotton could be produced with only two insecticide applications per production cycle (instead of eight) and demanded that the seeds be made available to them immediately," the report noted.



John Dziwornu, vice chairman of the Ghana Farmers and Fishermen Association, confirmed that farmers are eager to grow GM crops. "For us, you want to get the value for your investment. And guaranteed returns for us as farmers. And GM will provide that," he observed.

Dziwornu is convinced that Ghana has adequate systems and structures in place for the introduction of GM crops. "These are the same structures that have provided us with local improved seeds over the years. Research is a continuum and we trust it," he told the Alliance for Science in an interview.

Effectiveness and autonomy

The USDA/GAIN report also found that Ghana's main biosafety body, the National Biosafety Authority, is showing a sense of autonomy and building its capacity to effectively manage the sector.

"The National Biosafety Authority (NBA) has finally relocated to its new office, giving it the sense of autonomy that it craved as an institution of authority," the report noted. "Membership of an Appeals Tribunal that will address concerns by the public before issues are taken to the High Court has been approved by the NBA's Board."

Ghana's parliament passed the National Biosafety Act in 2011 to guide the management of genetically modified organisms (GMOs) in the country. The law established the NBA to manage the introduction, transportation, import, export, and handling of GMOs in Ghana.

As part of that process, the NBA has seated a 13-member board of directors and a memorandum of understanding overseeing the regulation of GMOs has been signed by six of the seven major state agencies.

Apart from the NBA, the Food and Drugs Authority (FDA), Environmental Protection Agency and Customs Services, as well as Plant Protection and Regulatory Services Directorate, have all signed the MOU to cooperate and adequately share information to allow for smooth oversight.

Last June, parliament also <u>passed a legal instrument</u> that lays out how provisions in the biosafety law will be implemented. This provides guidelines to the Institutional Biosafety Committees and others, while identifying procedures to be followed from the research phase to commercial release of new GM products.

Currently, there are no restrictions on the importation of GM crops or products containing genetically modified materials. "Ghana currently imports food and feed products from elsewhere in Africa, Asia, Australia, Europe, South America and the United States that may contain biotechnology elements," the report observed.

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"Based on the scope of the Biosafety Act and the recently issued Biosafety Regulations 2019, agricultural products that are not considered as living modified organisms (LMOs), such as soybean meal, soybean oil and processed foods, are freely imported from Argentina, Brazil, the European Union and the United States, which may contain biotechnology elements," the report added.

Gaps in the system

According to the USDA/GAINS report, the Biosafety Act makes provision for establishing a monitoring body to control GM imports and exports. Labeling will be required for products with a GM materials content exceeding a national limitthat has yet to be set. But that monitoring system hasn't been implemented.

"Equipment has been acquired to establish a GMO detection lab on the premises of the Ghana Standards Authority. Space has been secured for this purpose. This is envisaged to help ensure that importation of bioengineered products, especially living modified organisms (LMOs) is in harmony with the NBA's guidelines," the report noted.

"However, a monitoring program of genetically modified products is yet to be developed... There is currently no timeline on the implementation of this monitoring, but announcements providing further details are anticipated in 2020," the report added.

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