

Dr Martin Mwirigi, acting Institute Director of the Biotechnology Research Institute at KALRO said that the government has since the 1990s been utilising biotech to boost agricultural production. Photo Credit: Marion Wagaki.

GMO maize farming gets Kenya government nod, set for early 2023

By Marion Wagaki

THE National Biosafety Authority (NBA) has authorised the release of genetically modified organism (GMO) seeds to the farmers ahead of the long rains season in 2023 for cultivation.

The NBA is a State agency in Kenya mandated to ensure the safety of human and animal health and provide adequate protection of the environment from harmful effects that may result from GMOs.

The approval of the release of seeds through a letter dated October 19, 2022, to the Kenya Agriculture and Livestock Research Organization (KALRO), which has been undertaking biotechnology (BT) trials in Kenya could see farmers start growing GM maize after all the

necessary modalities are in place. The move follows the lifting of the ban on GMO maize, sparking mixed reactions from stakeholders.

President William Ruto said approval of GMO maize imports could be the solution to the costly staple food, which is also in short supply.

The President, on October 3, 2022, lifted the 10-year ban on the importation and cultivation of GMO maize, saying the move would help feed the drought-stricken counties where more than four million people are on the brink of starvation.

The President further said the move was part of the government's response to the biting drought in Kenya and a progressive step towards redefining

agriculture in Kenya by adopting crops that are resistant to pests and diseases.

The approval by the NBA will prompt the National Variety Release Committee (NVRC) to fast-track the modalities to gazette the BT maize seeds.

Speaking to journalists during a media engagement at the KALRO Kiboko Centre where the confined field trials of the GM maize have been taking place, Principal Biosafety Officer Erick Korir said with the recent lifting of the ban, the developers of the technology (KALRO) would now seek approval from the Kenya Plant Health Inspectorate Service (KEPHIS) for bulk seed production for the distribution to farmers.



James Karanja, a maize breeder at KALRO, taking journalists through the process of coming up with the GM trials and what it took to reach at the level where now the ban was lifted. Photo Credit: Marion Wagaki.

“As NBA we have a role to play and we are required by law and will continue to monitor the GM crop for the next 20 years to check on any advanced effects on its cultivation,” he said.

Mr Korir said the GMO food on sale would be clearly labelled.

“Labelling is for consumer choice. It is to inform the public and it is mandatory for the GM packaging just like any others that are normally labelled,” he said.

Mr Korir assured Kenyans of the safety of GM products and equated to conventional variety of the same crop.

James Karanja, a maize breeder at KALRO who has been working on the commercialisation of transgenic drought and pest-tolerant maize, said the technology would protect maize crops from insect pests such as the stem borer and the fall armyworm.

“This technology is here to help save the farmer shillings that they have been using to buy chemicals and guaranteeing them quality in terms of yield as well as their health”, he said.

According to Mr Karanja, GM maize can double maize productivity from eight-17 bags of 90-kilogramme bags per acre to 28-35 bags per acre, reducing imports.

Dr Martin Mwirigi, acting Institute Director of the Biotechnology Research Institute at KALRO dismissed the various myths about GM crops, saying more than 70 countries had approved GMOs.

“The use of technology has been there for over 25 years with no adverse effects shown and therefore we are coming out with confidence that the technology is safe and institutions such as NBA can assess

what the scientists have done and ensure what is going to the market is safe for consumers,” said Dr Mwirigi.

The KALRO Director-General, Dr Eliud Kireger, noted that about 500,000 acres of land would serve as demonstration plots next year from March pending the full commercialisation of BT maize by private companies.

Once the BT maize is gazetted, he said, KALRO would import 11 metric tonnes from South Africa under the TELA project for planting on the 500,000 acres in time for the 2023 long rainy season.

According to Dr Kireger, Kenya has a fully functional and robust policy, legal and institutional framework for governing the use of GMOs. KEPHIS recommended the release of three BT maize varieties – WE1259B, WE3205B and WE5206B – after a decade of successful research. The final release and placement of the varieties to the market are still pending Cabinet approval.