Frustration grows over Ghana's delay in approving GM cowpea

As crop losses in Ghana lead to skyrocketing prices for cowpea — a protein-rich staple food — farmers, seed producers and scientists are expressing frustration over the government's delayed approval of a genetically modified variety (GM) that can resist insect pests.

The price of cowpea (beans) in the Ashanti Region has doubled since the beginning of the year, according to local news reports. A cup of beans at the Kumasi Central Market that previously sold for 2.50 cedis (US$.40) has shot up to 5 cedis. "The price of the beans keeps going up. That is why we have increased the prices and our customers complain about the new price," Afia Mansah, a market trader told Joy News.

The government's delay in approving GM cowpea for commercial release has created a situation where the crops are continually being damaged by pests, resulting in skyrocketing prices, Alhassan Amadu, president of the Northern Region branch of the Seed Producers Association of Ghana, said in a statement.

"We wish to state that the main reason for very low crop yield by cowpea farmers is the attacks by insect pests at all growth stages… we are not able to harvest up to a tonne of cowpea per hectare, hence, making the price of cowpea grains very expensive on the market," Amadu said.

Nigeria has already approved the GM cowpea, which can resist the destructive pod borer insect pest. Nigerian farmers growing the improved variety are reporting an average 80 percent reduction in pesticide use and higher yields.

"We have heard Nigeria has given it to their farmers and they are enjoying it. Why is the Ghanaian farmer being treated differently?" asked Mohammed Hafiz Alhassan, a cowpea grower in Ghana's northern region. "And so, we are thinking if we don't let our voices be heard, we will continue to suffer, and also pollute the environment. It's not even healthy because you need to be spraying every four days at the peak of the insects. And so, whoever is in authority and can help get the seeds into the hands of the farmer should do this as early as possible so we can all benefit from this new generational technology."

Although Ghanaian scientists have developed a local variety of GM cowpea, the absence of a governing board for the National Biosafety Authority (NBA), the state regulator of GM foods, has stalled the approval processes.

"It is sad to note that although Ghana and Nigeria commenced work on this GM cowpea at about the same time, the leaders of Nigeria and state institutions supported their scientists to quickly release these varieties to their farmers, but the case is different in Ghana," noted Amadu, who is also a cowpea farmer.

Farmers want “access to technology-driven (GM cowpea) seed varieties that would help boostproductivity, reduce costs of production and increase crop yield,” Amadu added.

Farmers, scientists and seed dealers are asking the government to implement the appropriate structures that will allow the stalled approval processes to resume, with the goal of making the seeds available to farmers and ultimately halting the continuous price hikes.

Scientists at the state-run Savannah Agricultural Research Institute (SARI) of the CSIR last January submitted documents to the authority requesting environmental release of the variety following 12 years of research. But the authority has asked the scientists to hold on and re-apply after it gets a new governing board.

“The seed is ready in the hands of the scientists. So, what we need is give it out to the farmers. But to do that, we first need environmental release so we can do some kind of multi-locational trials with the scientists and the farmers together,” explained Dr. Richard Ampadu-Ameyaw, a researcher at the Science and Technology Policy Institute of the Council for Scientific and Industrial Research (CSIR) and country coordinator of the Open Forum on Agricultural Biotechnology (OFAB).

Dr. Richard Ampadu-Ameyaw, Ghana's coordinator for the Open Forum on Agricultural Biotechnology in Africa. Credit: Ankur Paliwal

"But when the scientists applied for the release, unfortunately, it was done at a time that the board had been dissolved. So, we will have to wait for the board to be re-constituted so we can go ahead. As we speak now, the board is still not in place. So, we are waiting for the board to be formed so the application can be given to them," he added.

The mandate of all state boards expired Jan. 6, 2021, after the first term of President Nana Akufo-Addo ended. But almost a year on, the second-term president has yet to fill a number of vacancies, including the NBA's governing board.

"Initially, we thought as an authority, they should be able to accept applications minus the board," Ampadu-Ameyaw explained in an interview with the Alliance for Science. "But when seeking interpretation, we realized the board must be in place. Even though it came as a surprise to some of us, we don't want to go ahead of the law. For now, I can say that the clock has been stopped. We are waiting for the board to come in place. And when the application is finally submitted to the board, then we can start the clock."

The board may not be inaugurated before the end of the year, according to the Ministry of Environment, Science and Technology, which supervises the work of the NBA. The minister has reportedly recommended a list of potential board members and is awaiting the president's action.

But even if the NBA approves the application for environmental release, it will take some time for scientists to gather and analyze information from field trials at multiple locations across the country. That data would then be submitted to the Ministry of Food and Agriculture's National Varietal Release Committee for final approval before the seed becomes generally available to Ghana's farmers. No one knows just how long the process would take.

"The frustrations we are going through is that we were told about this GM cowpea, which was supposed to help reduce the cost of production and the current spraying regime," Alhassan said. "And we gave it all the support it needed. And we were given assurance that sometime last two years ago or last year, it will be in the hands of farmers. And that's what we were all hoping for. But still, we don't have it."

Joseph Opoku Gakpo is a 2016 Cornell Alliance for Science Global Leadership Fellow and contributes to the Multimedia Group Limited in Ghana, working with Joy FM, Joy News TV, and MyJoyOnline. He has a master's degree in communications studies from the University of Ghana and is a member of the Ghana Journalists Association. Find Joseph on Twitter @josephopoku1990

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