

Viewpoint: ‘One of the greatest human accomplishments’ — GM insect-resistant cowpea quintuples yields without pesticides

African farmers, especially smallholders, will need to achieve much higher yields than they do today. Fulfilling this will require concerted efforts across all aspects of the food system, but advanced crop innovations can make an important contribution, especially as growing conditions are becoming more extreme and erratic as a result of climate change.

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One example is Nigeria’s adoption of pod borer-resistant cowpea, which uses biotechnology to help the crop naturally fend off one of its most pervasive pests, the Maruca pod borer. Before the cultivation of this improved variety, farmers who relied only on the cowpea’s natural resistance [yielded on average](#) a third of a ton of harvest per hectare. If they used costly insecticides, they could yield more than five times as much – around 1.7 tons per hectare – but also risked safety and environmental damage in the process.

It took almost two decades of effort to develop and deliver this crop innovation to farmers in Nigeria, the largest cowpea producer in Africa.

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Such innovations can help the continent’s farmers meet the urgent need to feed its growing population – and thrive – in the face of climate change. Doing so would be one of the great human accomplishments of all time.

[**This is an excerpt. Read the original post here**](#)