# Targeting sustainable farming: Here’s how much money low and middle-income countries are missing out on if they reject genetically-modified crops

GM crops produce higher farm incomes plus reduced land tillage practices and lower insecticide use, bringing substantial environmental benefits. While Australia, Canada, and the USA are significant adopters of GM crops, the EU has shunned the technology, and many low- and middle-income countries (LMICs) have followed the EU’s path, forgoing multiple benefits.

GM crops contribute to increased yields, with additional production of 330 million tons (MT) of soybeans and 595 MT of corn between 1996 and 2020. The yield increase has generated US$261 billion in additional farm income over this period and US$19 billion in 2020 alone.



The costs of not adopting new agricultural biotechnologies are more significant in LMICs, because farmers have fewer alternatives to combat crop pests and diseases, leaving production insufficient to satisfy food demands and alleviate poverty.

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For example, African farmers annually struggle against stalk borer infestations that reduce yields of white maize, a leading food crop. If legal, yields from Bt maize would increase significantly. South Africa is the only country on the continent to approve Bt white maize, and when small farmers adopted it, yields roughly doubled… Yields increased by 45–63% in India, and insecticide use was reduced by 55% in China, providing significant income gains. Additionally, fewer chemical sprays protected the environment and reduced occupational exposure, improving farmers’ health. Despite the clearly demonstrated benefits, planting Bt cotton is illegal in most of sub-Saharan Africa.

**This is an excerpt. Read the original post here (behind paywall)**