



The Impact of Biotechnology on Developing Countries

Publication

[Report](#)

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In this study, Ecologic Institute researchers Timo Kaphengst and Lucy Smith summarize the advantages and disadvantages of the increasing share of genetically modified organisms (GMOs) in developing countries. The accrued benefits and/or disadvantages vary widely across the reviewed countries and depend on the governance structures of each country. On the one hand, GM crops can increase export revenues; on the other hand, developing countries' resulting dependency on Western biotechnology companies could grow and threaten local farmers, especially smaller ones. Moreover, GMOs are leading to a reduction in biodiversity. In light of this, the authors recommend that GM crops no longer be promoted in developing countries. The study is available for download.

The [briefing](#) [pdf, 800 kB, English] is part of the Framework Contract Development Policy for the European Parliament. It summarises the advantages as well as the disadvantages of the growing share of GM crops in developing countries.

The briefing explores the following questions: is biotechnology able to fulfil its vision of fighting worldwide hunger? How do GMOs affect the earning potential of farmers in existing agricultural structures? And last but not least: what influence does biotechnology have on biodiversity?

The cultivation of genetically modified organisms (GMOs) has increased in the last years in developing countries. In 2011, more than half of all agricultural land allocated to growing GM crops -a total of 160 million hectares- was found in developing countries.

More and more GM monoculture crops (like soy or maize) are being harvested for export and not primarily for domestic consumption, like staple/sustenance crops (e.g. sorghum or cassava). This trend may lead to a dependency on Western biotechnology companies and endanger the existence of smaller farmers. Without an accompanying social security system, poor harvests may have dramatic consequences on local farmers. At a more fundamental level, only a resilient and sustainable agriculture that is based on a wide variety of crops can assure a country's food security. The current support for GMOs thus endangers traditional crops as well as biodiversity as a whole.

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