20 years of biotech crops generated \$186.1 billion in economic, ecological and health gains, studies show

The International Service for the Acquisition of Agri-biotech Applications (ISAAA) and PG Economics Ltd. released new studies highlighting the continued social, environmental and economic benefits of the global adoption of biotechnology in agriculture.

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Biotech crops offer enormous benefits to the environment, health of humans and animals and contributions to the improvement of socioeconomic conditions of farmers and the public," ISAAA chair of the board Paul S. Teng said. "The recent production of next-generation biotech crops – including apples and potatoes that are not likely to spoil or become damaged...combined with the commercialization approval for an insect-resistant sugarcane – provides more diverse offerings to consumers and food producers."

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The ISAAA report shows that the global biotech crop area increased in 2017 by 3%, or 4.7 million hectares. This increase is due primarily to greater profitability stemming from higher commodity prices, increased market demand both domestically and internationally and the presence of available seed technologies...In fact, developing countries now account for 53% of the global biotech area planted.

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From 1996 to 2016, biotech crops provided \$186.1 billion in economic gains to some 17 million farmers, many of whom are female, smallholder farmers solely responsible for the livelihood of their families and communities, PG Economics reported.

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The PG Economics study also noted that great strides have already been made to reduce the footprint of agriculture and in mitigating and adapting to climate change. The latest study highlighted how biotech use in agriculture continues to contribute to reducing greenhouse gas emissions.

Editor's note: both studies are available online.

Graham Brookes & Peter Barfoot (2018) Farm income and production impacts of using GM crop technology 1996–2016, GM Crops & Food, DOI: <u>10.1080/21645698.2018.1464866</u>

Graham Brookes & Peter Barfoot (2018) Environmental impacts of genetically modified (GM) Crop use 1996–2016: Impacts on pesticide use and carbon emissions, GM Crops & Food, DOI: 10.1080/21645698.2018.1476792

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