

# Can GMOs HELP PROTECT THE ENVIRONMENT?



**THEY  
ALREADY  
DO.**

Contrary to myths about GMOs hurting the environment, GMOs allow farmers to **preserve the land** while **doing more with less resources**.

## The Environmental **CHALLENGE:**

**30%** POPULATION INCREASE BY 2050<sup>1</sup> =  
**HIGHER DEMAND FOR**



**FOOD**  
and **FIBER**



**FUEL**

**2** POTENTIAL PATHS

**1**

Convert more land, like forests and prairies, into agricultural production

**2**

Use agricultural technologies like GMOs to increase crop yields on existing farmland

## **GMOS** are **ONE SOLUTION**

In 2015, GMOs allowed farmers to use

**48.2 MILLION**  
less acres of land

to produce the same amount of food, fuel and fiber crops<sup>2</sup>



Without access to GMOs, farmers would have needed to plant an additional:



**18.2 MILLION**  
acres of corn



**20.7 MILLION**  
acres of soybeans



**7.4 MILLION**  
acres of cotton



**1.7 MILLION**  
acres of canola

to keep up with global production levels in 2015<sup>4</sup>

<sup>1</sup> World population projected to reach 9.7 billion by 2050 (2015). Retrieved from: <http://www.un.org/en/development/desa/news/population/2015-report.html>.

<sup>2</sup> Brookes, G. and Barfoot, P. (2017). GM crops: global socio-economic and environmental impacts 1996 - 2015. Retrieved from <http://www.pgeconomics.co.uk/>.

<sup>3</sup> Brookes, G. and Barfoot, P. (2016). GM crops: global socio-economic and environmental impacts 1996-2014. Retrieved from [http://www.pgeconomics.co.uk/pdf/Grow\\_More\\_on\\_Less.pdf](http://www.pgeconomics.co.uk/pdf/Grow_More_on_Less.pdf).