

CONTRIBUTION OF BIOTECH CROPS TO SUSTAINABILITY

INCREASES CROP PRODUCTIVITY

contributes to **food, feed, & fiber** security



more **affordable food**

reduced production costs ↓



LESS ploughing pesticide sprays labor

US\$150 BILLION

farm income gains in 1996-2014
GENERATED GLOBALLY BY
BIOTECH CROPS

HELPS CONSERVE BIODIVERSITY

land-saving technology



↑ higher productivity

on world's **1.5 BILLION** hectares of arable land



prevents **deforestation** protects biodiversity



REDUCES AGRICULTURE'S ECO-FOOTPRINT

lowers **CO2** emissions



in 1996-2014, pesticide spraying reduced by **583.5 million kg**

decreased environmental impact from herbicide & insecticide use by **18.5%**

use of **herbicide tolerant biotech crops** conserves **soil moisture**

savings on **fossil fuels**



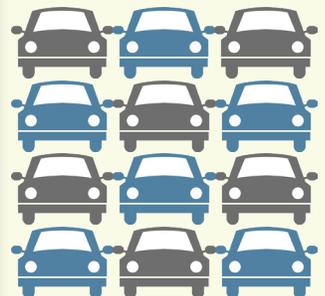
HELPS MITIGATE CLIMATE CHANGE

fewer **herbicide & insecticide** applications



reduced **FUEL USE**

reduced **CO2 emissions** equivalent to removing **12 MILLION CARS** from the road for **1 YEAR**



CONTRIBUTES TO THE ALLEVIATION OF POVERTY AND HUNGER

better **livelihoods** from **higher yields**

~**18 million farmers** in **28 countries** planted **biotech crops** in 2015



90%

small, resource-poor farmers from developing countries

biotech crops help farmers **earn reasonable incomes**

biotech cotton has made significant contribution to the incomes of

~**16.5 MILLION** farmers and their families in **CHINA, INDIA, PAKISTAN, MYANMAR, BURKINA FASO, & SOUTH AFRICA**



SOURCES:

Brookes, Graham and Peter Barfoot. 2016.

James, Clive. 2015. 20th Anniversary (1996 to 2015) of the Global Commercialization of Biotech Crops and Biotech Crop Highlights in 2015. ISAAA Brief No. 51. ISAAA: Ithaca, New York.

For more information, visit ISAAA website:

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