BEYOND PROMISES: Facts about Biotech/GM Crops in 2018
The increase in global biotech crop adoption in the past 23 years manifest the satisfaction of more than 17 million farmers.
2018 was the 23rd year of commercialization of biotech/GM crops. The experience of the last 23 years of commercialization confirmed the promise of biotech crops to deliver substantial agronomic, environmental, economic, health, and social benefits to small and large scale farmers worldwide.

Biotech crops are the fastest adopted crop technology in recent history, reflecting farmer satisfaction of their benefits and high adoption rates.

This booklet presents the important highlights about biotech/GM crops in 2018, from ISAAA Brief 54 Global Status of Commercialized Biotech/GM Crops in 2018 available at http://www.isaaa.org/.
The number of countries planting biotech crops more than quadrupled from 6 in 1996 to 26 in 2018.
Biotech/GM crop area in 2018 attains new record-high adoption at 191.7 million hectares worldwide.

On the 23rd year of commercialization of biotech/GM crops in 2018, 26 countries grew 191.7 million hectares biotech crops, an increase of 1% equivalent to 1.9 million hectares from 189.8 million hectares in 2017.
Biotech/GM crop area increased ~113-fold from 1996, the fastest adopted crop technology in the world

The cumulative global area of biotech/GM crops reached 2.5 billion hectares in 23 years (1996-2018) of commercialization cultivation.

The successful adoption rate of biotech/GM crops shows the significant benefits it delivers to small and large farm-holders and to consumers as well.
The average biotech/GM crop adoption rate of the top five countries increased in 2018 to reach close to saturation for major crops.
Brazil continues to be the top developing country in 2018, planting biotech soybeans, maize, and cotton.
In 2018, 70 countries adopted biotech crops — 26 countries planted and 44 additional countries imported.

Biotech/GM crops in 2018 were grown by 26 countries — 21 developing and 5 industrial countries. Developing countries grew 54% of the total global biotech crop area.

An additional 44 countries (18 + 26 EU countries) formally imported biotech/GM crops for food, feed, and processing. Thus, a total of 70 countries adopted biotech/GM crops in 2018.
Two new developing countries, Indonesia and eSwatini planted biotech crops for the first time in 2018.

Indonesia, a returning biotech country, has planted a new biotech drought tolerant sugarcane with yields 20-30% higher than parental varieties during drought.

The Kingdom of eSwatini (formerly Swaziland) planted Bt cotton for the first time in 2018. This brought the number of African countries planting biotech crops to three again.
Twenty-one developing countries grew 54% of the global biotech area in 2018.
Biotech/GM soybeans reached 50% of the global biotech crop area in 2018.
The major biotech/GM crops grown in 2018 are soybeans, maize, cotton, and canola.

In 2018, four biotech/GM crops comprised the most number of hectares: soybeans (95.9 million hectares), maize (58.9 million hectares), cotton (24.9 million hectares), and canola (10.1 million hectares).

Other biotech crops grown in 2018 include alfalfa, sugar beets, papaya, squash, eggplant, potato, apples, pineapple, and sugarcane.
Herbicide tolerance remained the dominant trait, occupied 45% of the global biotech/GM crop area.

Herbicide tolerance in soybeans, canola, maize, alfalfa, and cotton remained the dominant trait.

Biotech/GM crops with stacked traits increased from 77.7 million hectares in 2017 to 80.5 million hectares in 2018, a ~3% increase equivalent to 2.8 million hectares.
Stacked traits are favored by farmers for all three major biotech crops: maize, soybeans, and cotton.
Biotech/GM maize has the largest number of approved events in 2018: 137 in 35 countries.
From 1992 to 2018, 4,349 regulatory approvals were issued for 27 biotech/GM crops.

From 1992 to 2018, 4,349 approvals were issued by regulatory authorities for 387 biotech events from 27 biotech crops. Such approvals were issued to biotech crops for food use (2,063), feed use (1,461), and for environmental release or cultivation (825).
Biotech/GM crops provide more diverse offerings to consumers in 2018.

Biotech/GM crops have expanded beyond soybeans, maize, cotton, and canola to give more choices to consumers and food producers.

These biotech crops include alfalfa, sugar beets, papaya, squash, eggplant, potatoes, and apples, all of which are already in the market.
Biotech Innate® potatoes with non-bruising, non-browning, reduced acrylamide, and late blight resistance traits and non-browning Arctic apples were planted in the USA and Canada in 2018.
More than 6 million farmers in India planted 11.6 million hectares of Bt cotton in 2018.
Up to 17 million farmers from 26 countries planted biotech/GM crops in 2018.

More than 95% of 17 million farmers that grew biotech crops in 2018 are risk-averse, small, resource-poor farmers in developing countries.

In the last 23 years, millions of farmers in ~26 countries worldwide have made independent decisions to plant biotech crops.
Biotech/GM crops contribute to global food security, sustainability, and climate change.

From 1996 to 2016, economic gains of US$186.1 billion at the farm level were generated globally by biotech crops, due to reduced production costs and substantial yield gains.

Biotech crops have reduced the amount of pesticides used by 670 million kilograms. In 2016 alone, fewer insecticide sprays reduced CO₂ emissions by 27.1 billion kilograms, equivalent to taking 16.7 million cars off the road for a year.
Biotech/GM crops helped alleviate poverty by helping up to 17 million small farmers and their families, totaling more than 65 million people.