> It has been 25 years since biotech crops were first planted． Since then，GM crops and biotechnology have not just transformed agriculture and improved life for farmers and rural communities，but have helped improve the health of the planet，making us healthier too．

## Biotech is great for the environment and provides an important tool for tackling climate change．This is thanks to．．．

## Reduced CO2 and pesticide applications

Biotech crops require fewer passes by tractors，which has helped to
 prevent the release of
24．B1Lـ of CO 2 since they first came to market－equivalent to removing 16.7 million cars from the road


Over the past 25 years，biotech crops，such as those that are insect－resistant，have reduced pesticide applications by
619 MILLION KG
a global reduction of $8.1 \%$

20

Thanks to this reduction，the agriculture industry has cut its fuel use by an estimated
12，799 ㄴIITERS


Because biotech crops allow for no－till farming，more carbon remains in the soil．In 2018，日月円 the environmental gains were equivalent to removing


13．6 MIILLION
cars from the road

It has been 25 years since biotech crops were first planted. Since then, GM crops and biotechnology have not just transformed agriculture and improved life for farmers and rural communities, but have helped improve the health of the planet, making us healthier too.

## Leaps in biotech innovation have been instrumental in increasing yields and providing...

## Greater food security

An estimated
821 MILLION
people in the world suffered from hunger in 2018, and GMOs can play a crucial role in tackling the crisis


Thanks to improved pest and weed control, plant biotechnology has enabled farmers to grow an additional

## 405 MIILIION

tons of maize since their introduction


Plant biotechnology has also been responsible for the additional production of 180 million tons of soybeans, $\mathbf{3 5 7 . 7}$ million tons of corn, and $\mathbf{1 0 . 6}$ million tons of canola over the past
20 YEARS
as farmers have been able to grow more on the same amount of land


Without biotech, farmers would have needed
51 MILLION
more acres of land to produce the same amount of produce in 2018

It has been 25 years since biotech crops were first planted. Since then, GM crops and biotechnology have not just transformed agriculture and improved life for farmers and rural communities, but have helped improve the health of the planet, making us healthier too.

Plant biotechnology has helped to lift entire communities out of poverty, creating a ...

## Better quality of life

## 䪅 $\$ 135$ MILLION

The average cost of discovery, development and authorization of a new plant biotechnology trait is around $\$ 135$ million

## $\$ 5.15$

In 2018, farmers in developing countries received $\$ 5.15$ for each extra dollar invested in biotech crop seeds


Female farmers have realized an extra $\$ 96.2$ billion in income since the introduction of GM crops, which improves not only their quality of life, but that of their families and wider communities
$\qquad$

16.5 MILLION

This means that GM crops have helped alleviate poverty for over $\mathbf{1 6 . 5}$ million people in 21 developing countries over the last 20 years

It has been 25 years since biotech crops were first planted. Since then, GM crops and biotechnology have not just transformed agriculture and improved life for farmers and rural communities, but have helped improve the health of the planet, making us healthier too.

## Plant biotechnology has helped to lift entire communities out of poverty, creating a ...

## Growth in farm income

(3)
Thanks to enhanced productivity and efficiency gains, GMOs have helped increase farm incomes by $\$ 225$ billion over the past 25 years


GM insect resistant technology has added $\$ 59.5$ billion to the income of global maize farmers, while GM herbicide technology in soybeans has delivered $\$ 64.2$ billion of extra farm income


For each dollar invested in biotech crop seeds in 2018, farmers worldwide gained an average \$3.45

