

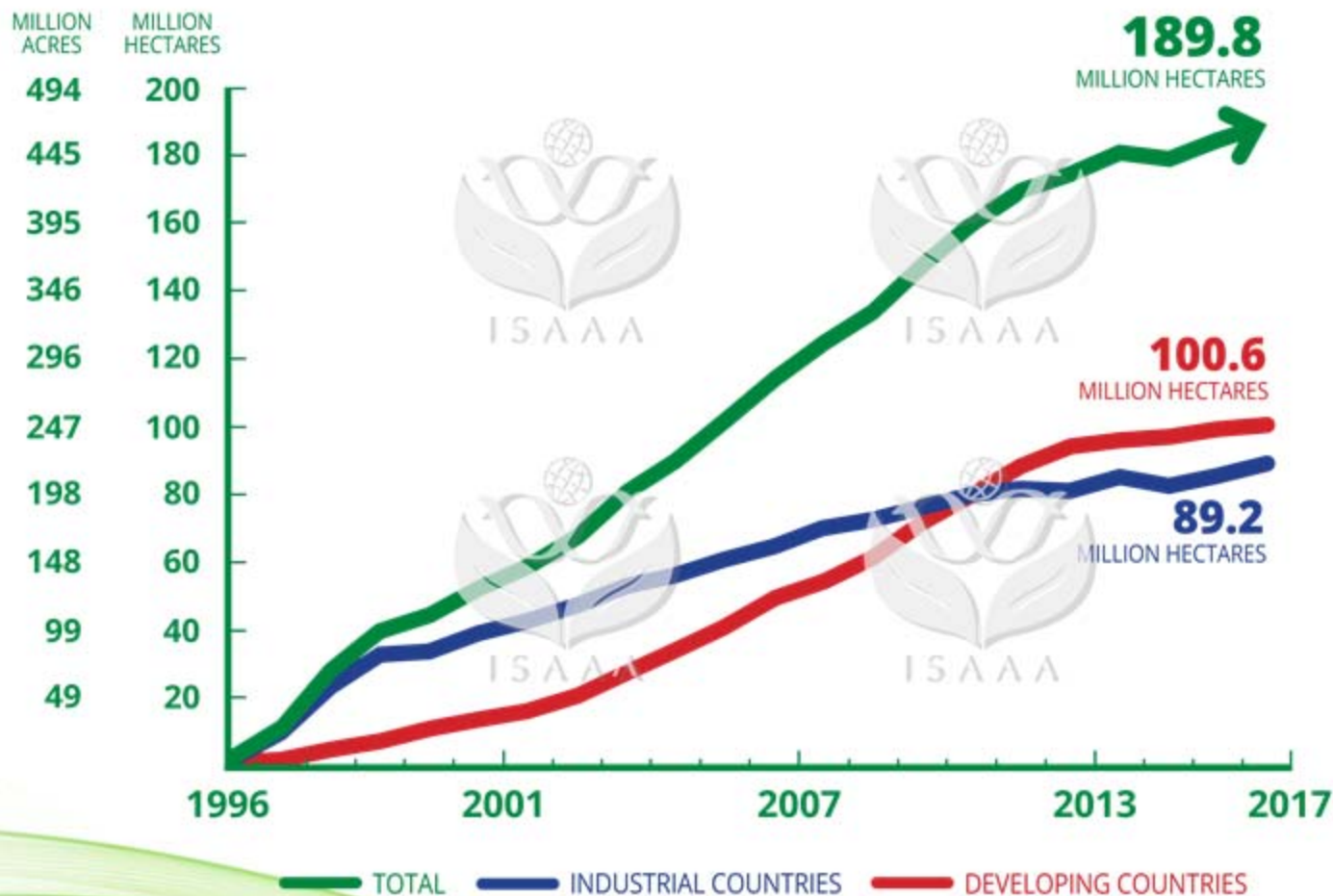


# Global Status of Commercialized Biotech/GM Crops in 2017:

*Biotech Crop Adoption Surges as Economic Benefits Accumulate in 22 Years*

International Service for the Acquisition  
of Agri-biotech Applications (ISAAA)

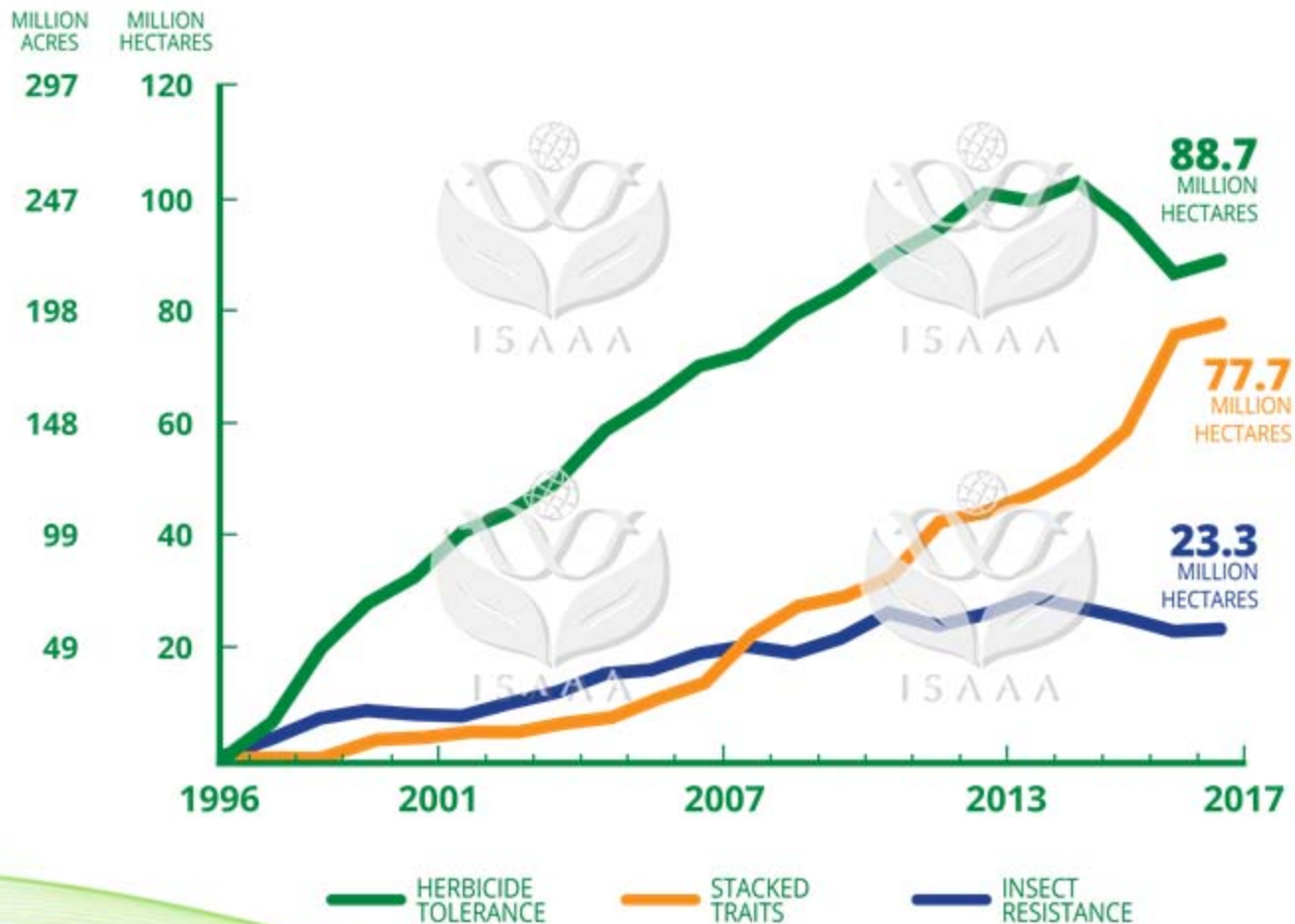
# Global Area of Biotech Crops, 1996 to 2017: Industrial and Developing Countries (Million Hectares, Million Acres)



ISAAA, 2017

# Global Area of Biotech Crops, 1996 to 2017: By Trait

(Million Hectares, Million Acres)

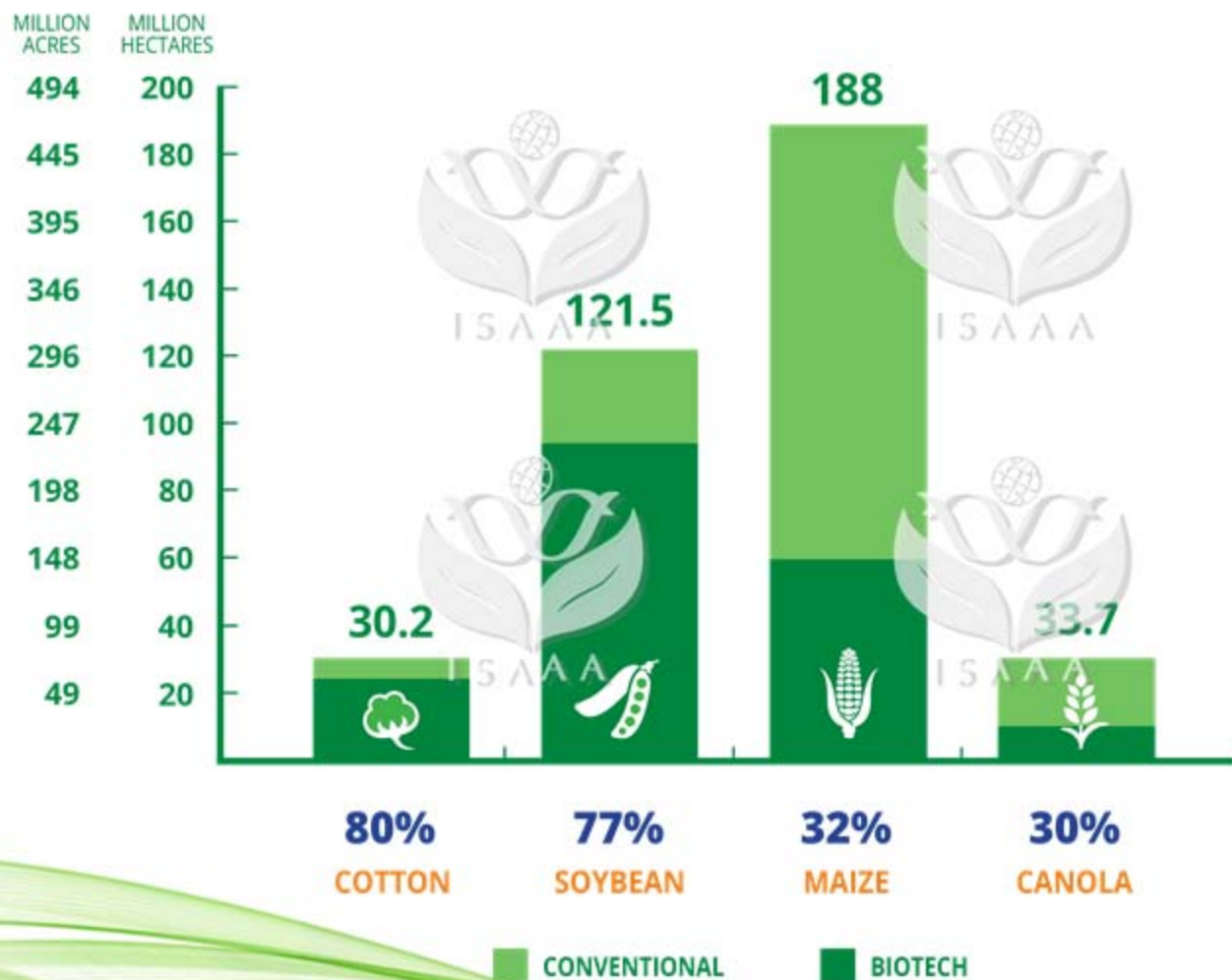


ISAAA, 2017

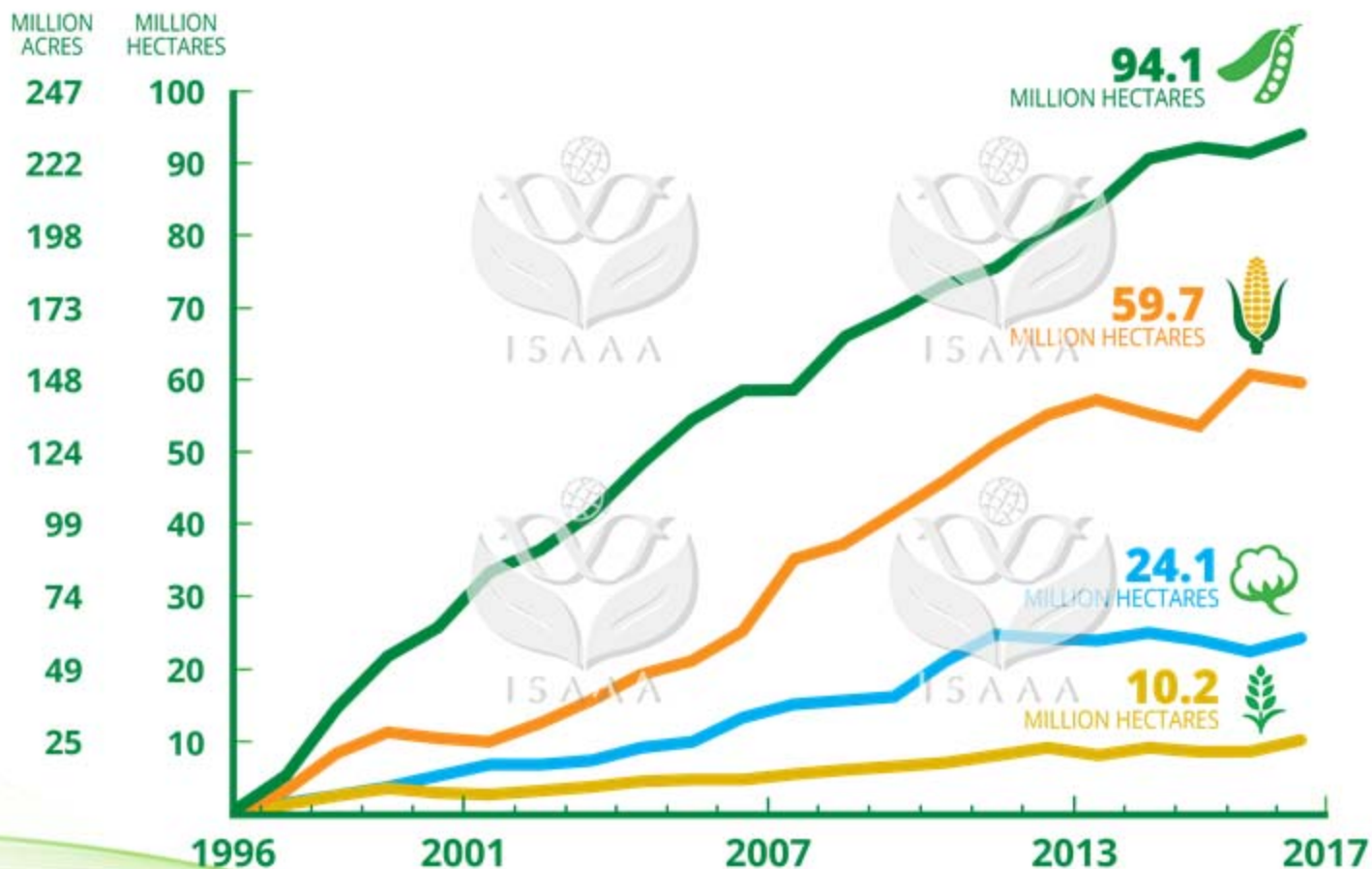




# Global Adoption Rates (%) for Principal Biotech Crops (Million Hectares, Million Acres), 2017

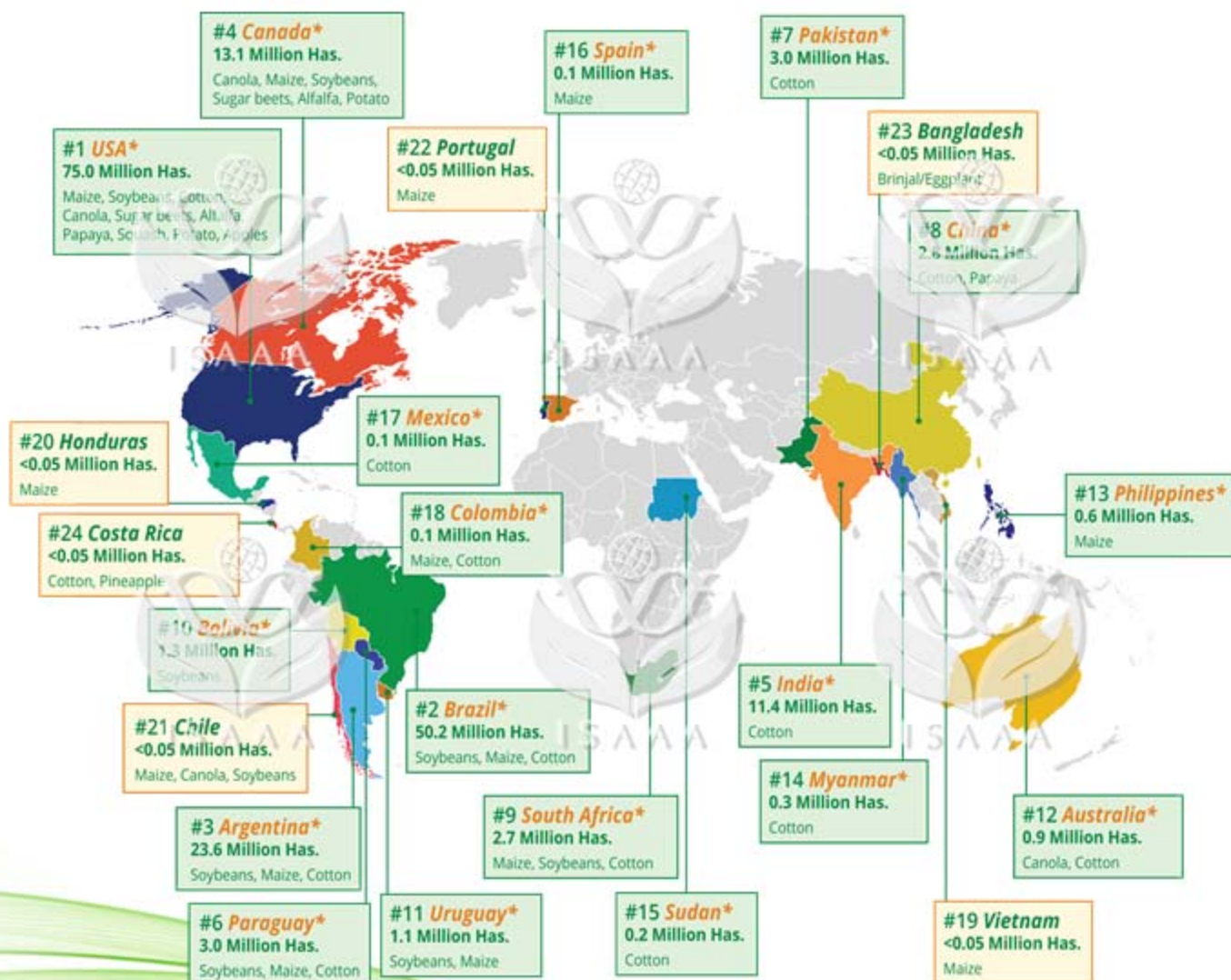


# Global Area of Biotech Crops, 1996 to 2017: By Crop (Million Hectares, Million Acres)



ISAAA, 2017

# Biotech Crop Countries and Mega-Countries\*, 2017

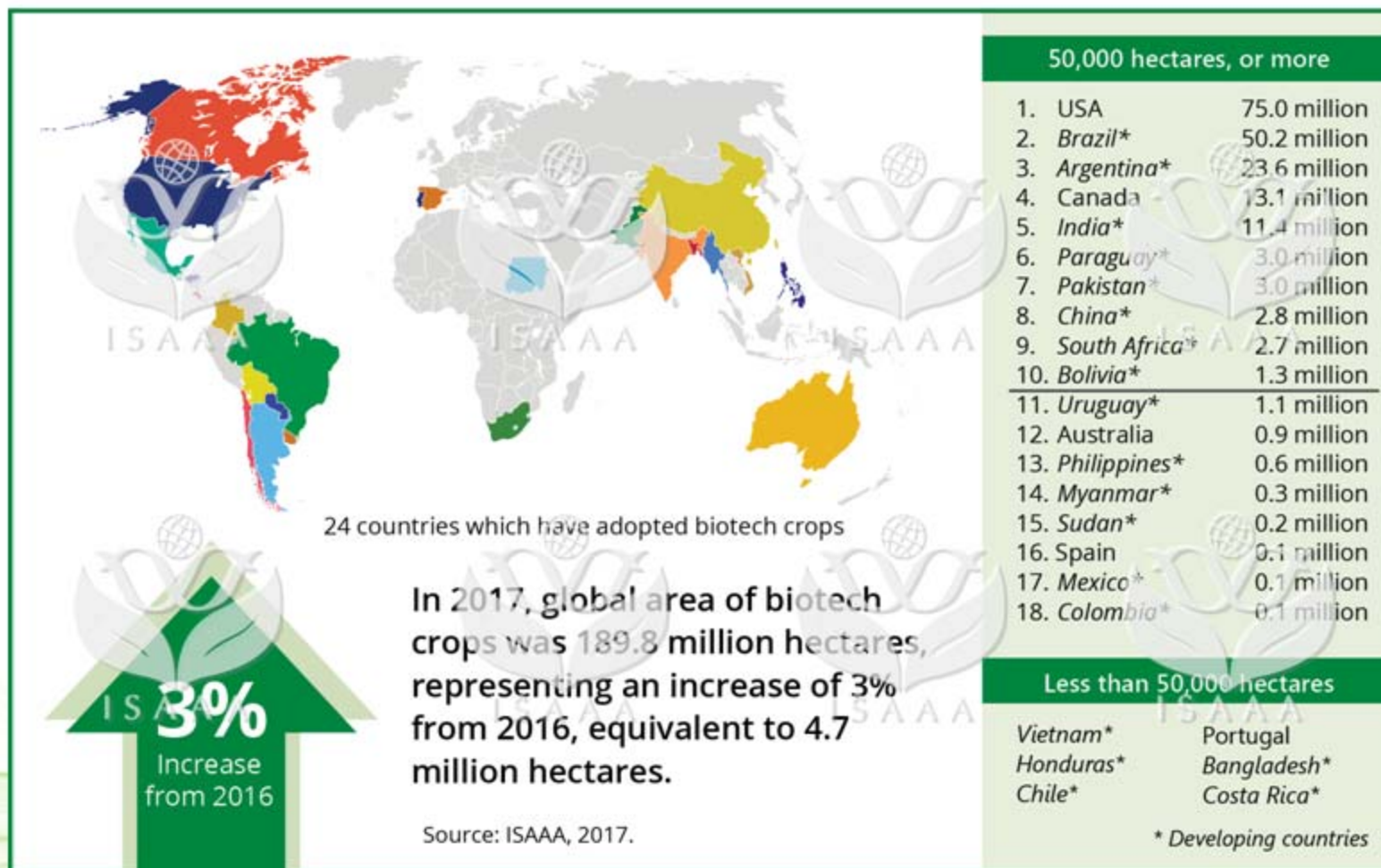


\*18 biotech mega-countries growing 50,000 hectares, or more, of biotech crops.

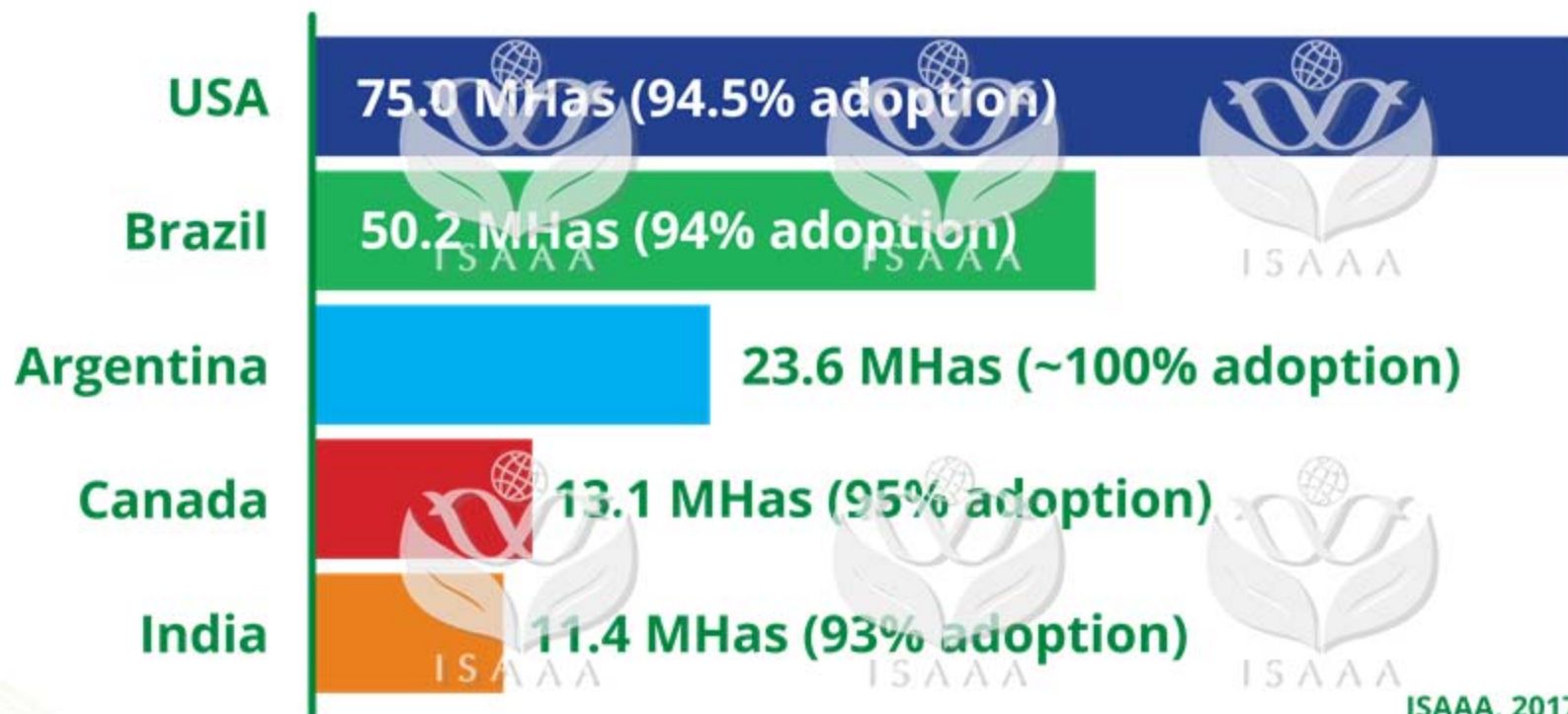
ISAAA, 2017



# Global Area of Biotech Crops, 2017: By Country (Million Hectares)



## Top 5 Countries that Planted Biotech Crops in 2017 (Area and Adoption Rate)





# STATUS OF APPROVED EVENTS FOR BIOTECH CROPS USED IN FOOD, FEED, PROCESSING, AND CULTIVATION



**67** COUNTRIES ISSUED



**4,133** REGULATORY APPROVALS FOR 26 GM CROPS SINCE 1992

**1,995** FOOD USE

**1,338** FEED USE

**800** CULTIVATION

**JAPAN** HAS MOST NUMBER OF APPROVALS  
**646** APPROVALS

**MAIZE** HAS LARGEST NUMBER OF APPROVED EVENTS  
**232** APPROVED EVENTS IN **30** COUNTRIES

HERBICIDE TOLERANT MAIZE EVENT  
**NK603** HAS MOST APPROVALS  
**55** APPROVALS IN **26** COUNTRIES

Source: ISAAA, 2017

# CONTRIBUTION OF BIOTECH CROPS TO FOOD SECURITY, SUSTAINABILITY, AND CLIMATE CHANGE



## INCREASING CROP PRODUCTIVITY US\$186.1 BILLION

FARM INCOME GAINS IN 1996-2016  
GENERATED GLOBALLY BY  
BIOTECH CROPS



## CONSERVING BIODIVERSITY

IN 1996-2016, PRODUCTIVITY GAINED  
THROUGH BIOTECHNOLOGY SAVED  
**183 MILLION HECTARES**  
OF LAND FROM PLOWING AND CULTIVATION



## PROVIDING A BETTER ENVIRONMENT LESS PESTICIDE APPLICATIONS

DECREASED ENVIRONMENTAL IMPACT  
FROM HERBICIDE & INSECTICIDE USE  
BY **18.4% IN 1996-2016**



## REDUCING CO2 EMISSIONS

SAVED 27.1 BILLION KGS CO2  
EQUIVALENT TO REMOVING  
**16.7 MILLION CARS**  
OFF THE ROAD FOR **1 YEAR**



## HELPING ALLEVIATE POVERTY & HUNGER

BIOTECH CROPS UPLIFTED THE LIVES OF  
**16-17 MILLION SMALL FARMERS**  
AND THEIR FAMILIES TOTALING  
**>65 MILLION PEOPLE**

Source: Brookes and Barfoot, 2018