

Genetically modified (GM) crops have been consumed by people and animals for **25 years**, with **0** confirmed health or safety issues.

However, regulations around the world are not always the same, which causes delays in commercialization for everyone from developers and farmers right down to consumers.

Let's explore why it's time to review how we regulate.

## PROVEN TO BE SAFE

# OVER 4000

approved events in 70 countries (1992-2018).\*

# \$260 MILLION

**North American** consumers have eaten more than \$260 million (118 million kg) of GM papayas since they were introduced to the market in 2003.\*\*\*



# ZERO REJECTIONS

based on safety concerns.

# TRILLIONS OF MEALS

without a credible report of health or safety impacts to humans and animals.



## LOST OPPORTUNITIES

# \$4-14 BILLION

**China** loses an estimated \$4-14 billion USD annually to the overall economy each year it delays the commercialization of insect resistant maize.\*\*



# \$115 MILLION

A **5-year** regulatory delay of new nitrogen efficient rice could cost the Ghanaian economy as much as \$115 million USD.\*\*\*

## BUT REGULATION ISSUES CAUSE DELAYS



The time and costs associated with regulation and registration have increased by 50% over the past decade.



# 13 YEARS

the average time it takes to get approval for a GM crop is 13 years - longer than new pharmaceuticals (12 years) and aircraft (8.5 years).

## THE BENEFITS OF HARMONIZING GM CROP DATA REQUIREMENTS FOR:



### Regulators

Provide a framework for future GM crop adoption, while freeing resources to focus on areas like training.



### Consumers

Enjoy a safe, stable food supply, lower prices and access to biofortified foods that enhance nutrition and reduce food waste due to extended shelf life.



### Farmers

Boost income through yield increases and access to sustainable practices, which preserve natural resources and combat climate change.



### Developers

Allocate resources to research and development instead of duplicative regulatory dossiers.

\*ISAAA. (2018). Global status of commercialized biotech/GM crops in 2018: Biotech Crops Continue to Help Meet the Challenges of Increased Population and Climate Change. In ISAAA brief (Vol. 54). ISAAA: Ithaca, NY. \*\*Xie, W., Ali, T., Cui, Q., and Huang, J. (2017). Economic impacts of commercializing, insect-resistant GM maize in China. China Agric. Econ. Rev. 9 (3), 340-354. doi:10.1108/CAER-06-2017-0126 \*\*\*http://www.hawaiiipapaya.com/#superhero-powers \*\*\*\*Estimation from Dzaniku et. Al (2018). IFPRI/STEPRI