

# The adoption of GMOs and legal implications

## A brief discussion on future foods

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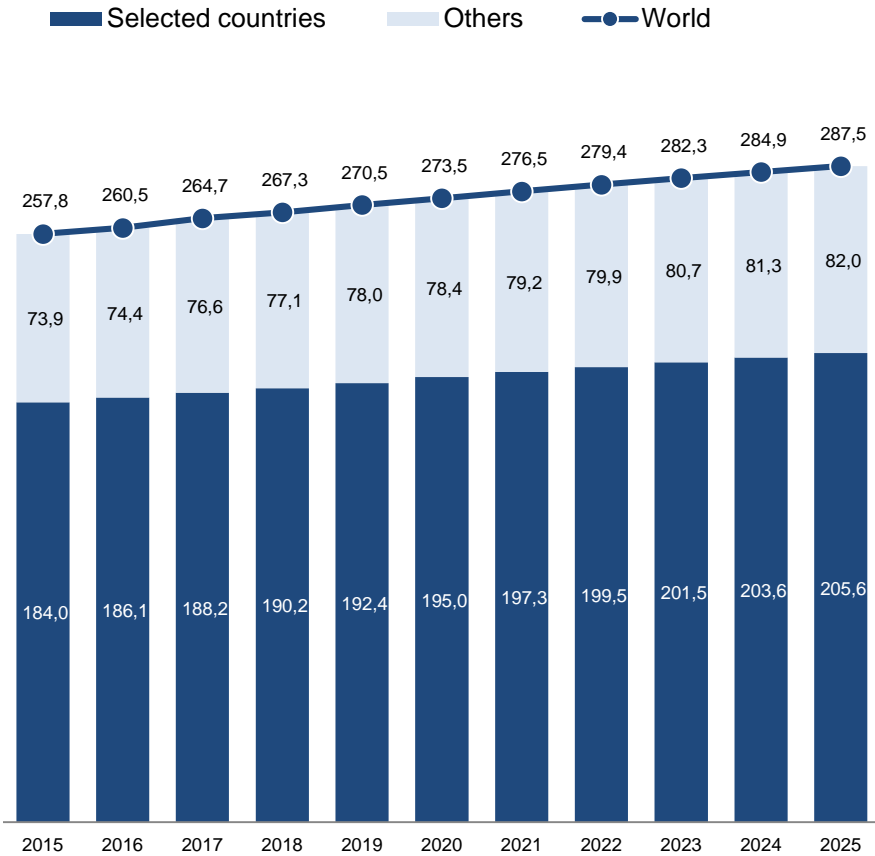
# Who will produce food?



Δ 2015/2025

World animal protein production forecast (million tons)

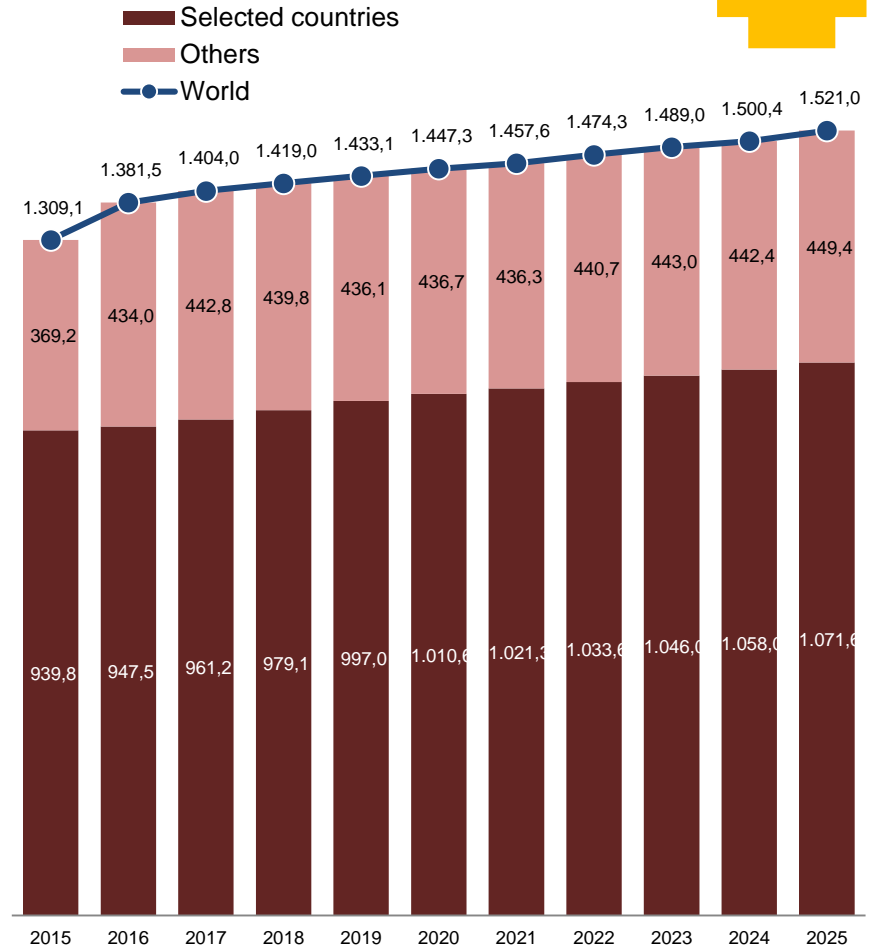
**12%**



Δ 2015/2025

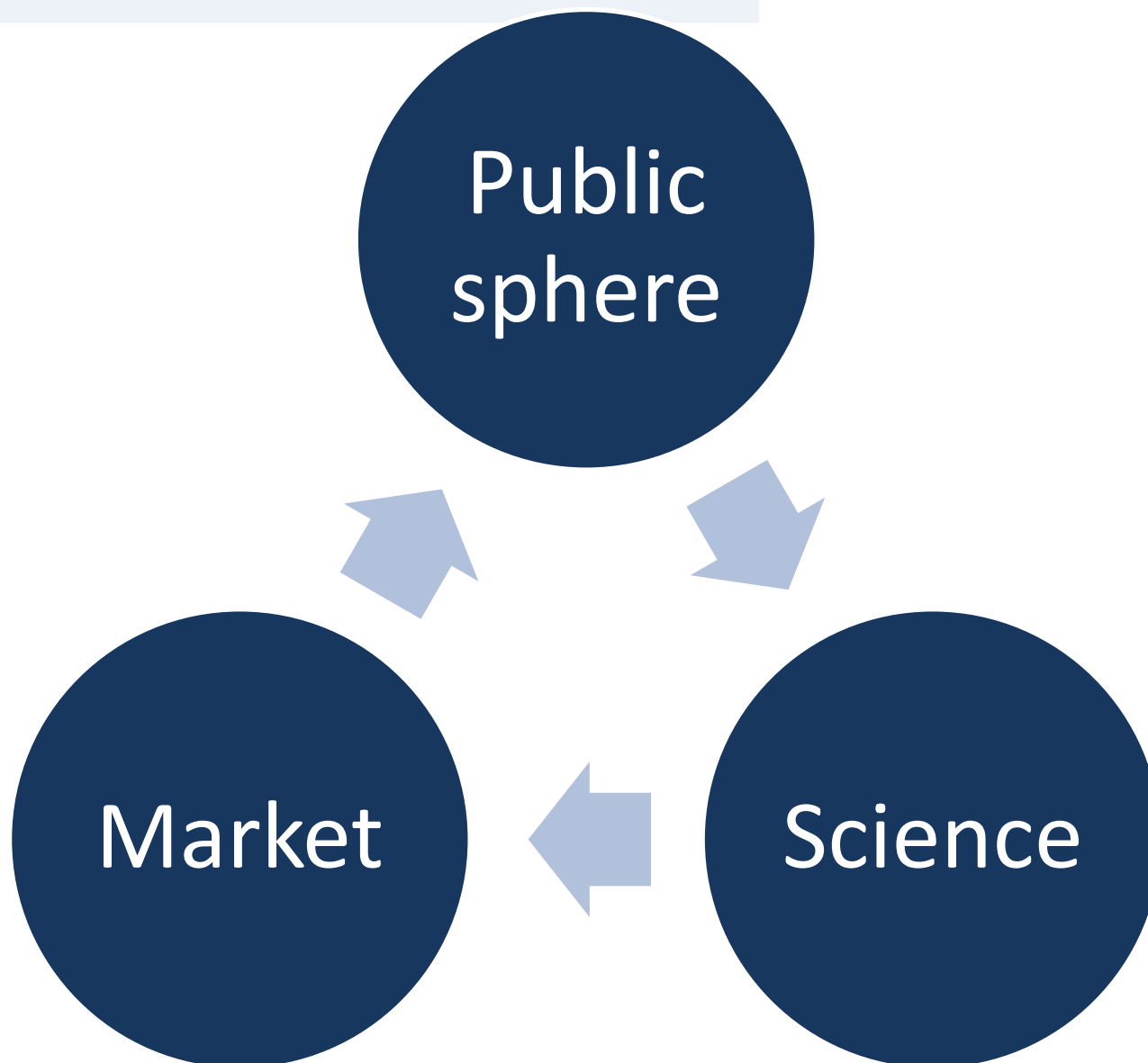
World grain production forecast (million tons)

**16%**



Source: Céleres®, 2016.

# How to implement a new technology?

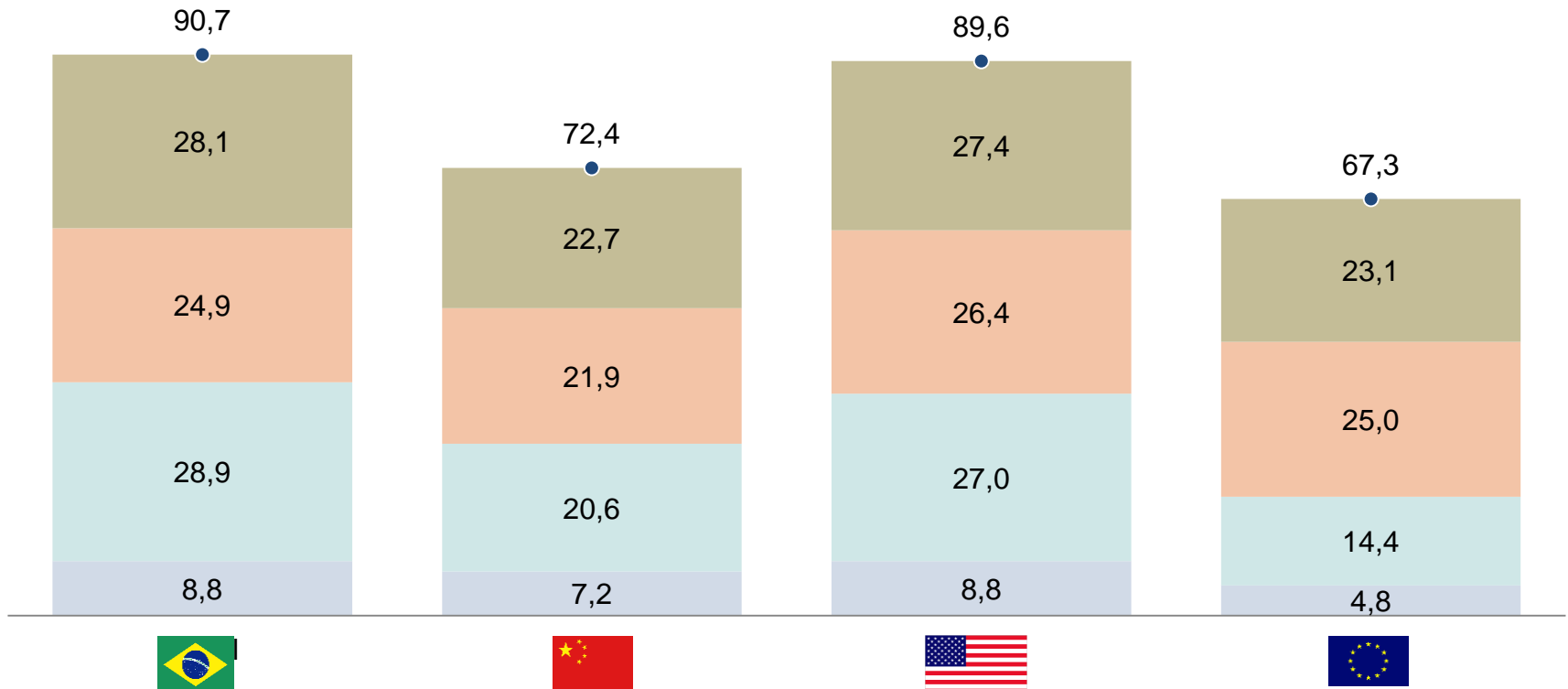


# Regulatory framework classification of selected countries



Grades per country and average per group (base: 100)

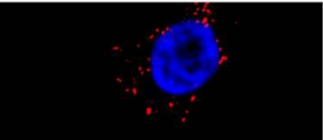
■ Historical ■ Institutional ■ Regulatory ■ Technical



# What to expect from biotechnology?

## Scientists use CRISPR to discover Zika and dengue weaknesses

June 24, 2016 Cydim Focsenden



GMO

## President Obama Signed This GMO Labeling Bill

Michal Addady  
Jul 31, 2016

Soon all food products

On Friday President Obama signed a new standard for food labeling. ABC News reports

## Data For Farmers

The data revolution is helping all of us make better decisions, and farmers are no exception. In the same way that fitness trackers encourage us to exercise more, watch what we eat and get enough sleep, new mobile applications from Monsanto are helping farmers use more precise amounts of fertilizer, water and other resources.



## Merger mania is the name of the game for crop inputs

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**Lon Swanson, Wells Fargo Sector Manager, Crop Inputs and Fees**  
**Chris Eggerman, Wells Fargo Sector Analyst, Crop Inputs and Fees**

Mergers in the Food and Agribusiness industry have been taking place for decades as farmers, suppliers, and processors have worked to improve efficiencies in effort to increase their bottom lines.

I remember when my Dad "merged" his farm with my Uncle Evert's farm operation so they could share their harvesting equipment. The purchase

## China land reform opens door to corporate farming

Move to bring capital into large-scale agriculture keeps bar on individual ownership



## The G20 and a New Era Global Governance

As G20 Summit approaches, the world is shifting focus to Hangzhou where the meeting will be held, and pins high hopes on this global event.



## China lays groundwork to be major producer of GMO crops

Steven Cerier | September 22, 2016 | Genetic Literacy Project

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China has a fifth of the world's population, but only about 7 percent of its arable land. Farming plus safe and healthy foods are national obsessions. So it came as no surprise that government-owned ChemChina is poised to snap up Swiss-based Syngenta, one of the world's largest seed and pesticide companies. It's a bet on the



## The Case for Health Care Stocks (Especially Biotech)

Email Print f t

By Ben Levisohn

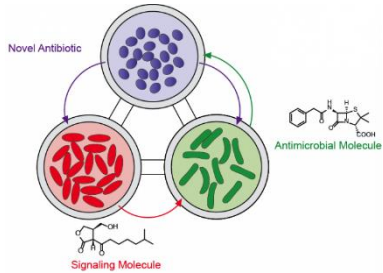
**Morgan Stanley's Adam Parker** and team make the case for owning healthcare stocks, particularly biotech:

We upgraded health care to Overweight earlier this year, the first time we have been overweight since the end of 2014. The US health care sector looks markedly different than health care in other parts of the world, with a biotechnology market capitalization that is 4.5 times the size of biotech in all the other regions combined. We had been cautious on health care last year during the volatility but warmed up a few months ago noting that



Getty Images

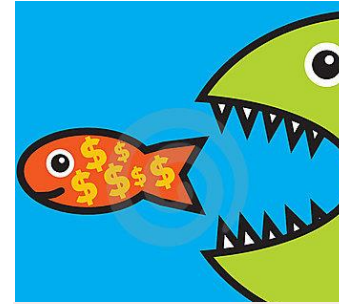
# Future is on the way (and looks promising)



**Microbes and biotechnology**



**CRISPR**



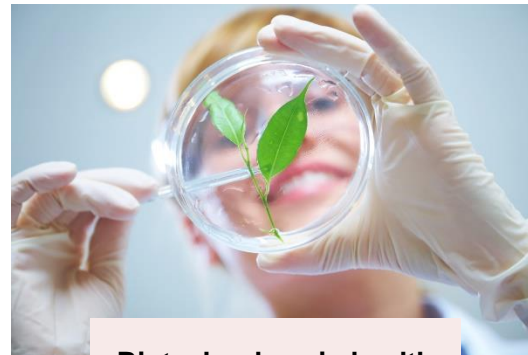
**Market concentration**



**Chinese transgenic seeds**



**Data science**



**Biotechnology in health**



**Simplification of the approval process**

# Thank you

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