



WHERE SCIENCE SERVES NATURE

# VALAGRO FOR FUTURE FARMING: WHAT'S NEXT

Giuseppe Natale  
CEO, Valagro

change.  
challenge.  
opportunity.

Strictly  
confidential



# FOOD: THE BIG ISSUE



LAB MADE FOOD



ENOUGH FOOD



VERTICAL FARMING



SUPERFOOD

ORGANIC FOOD



FOOD

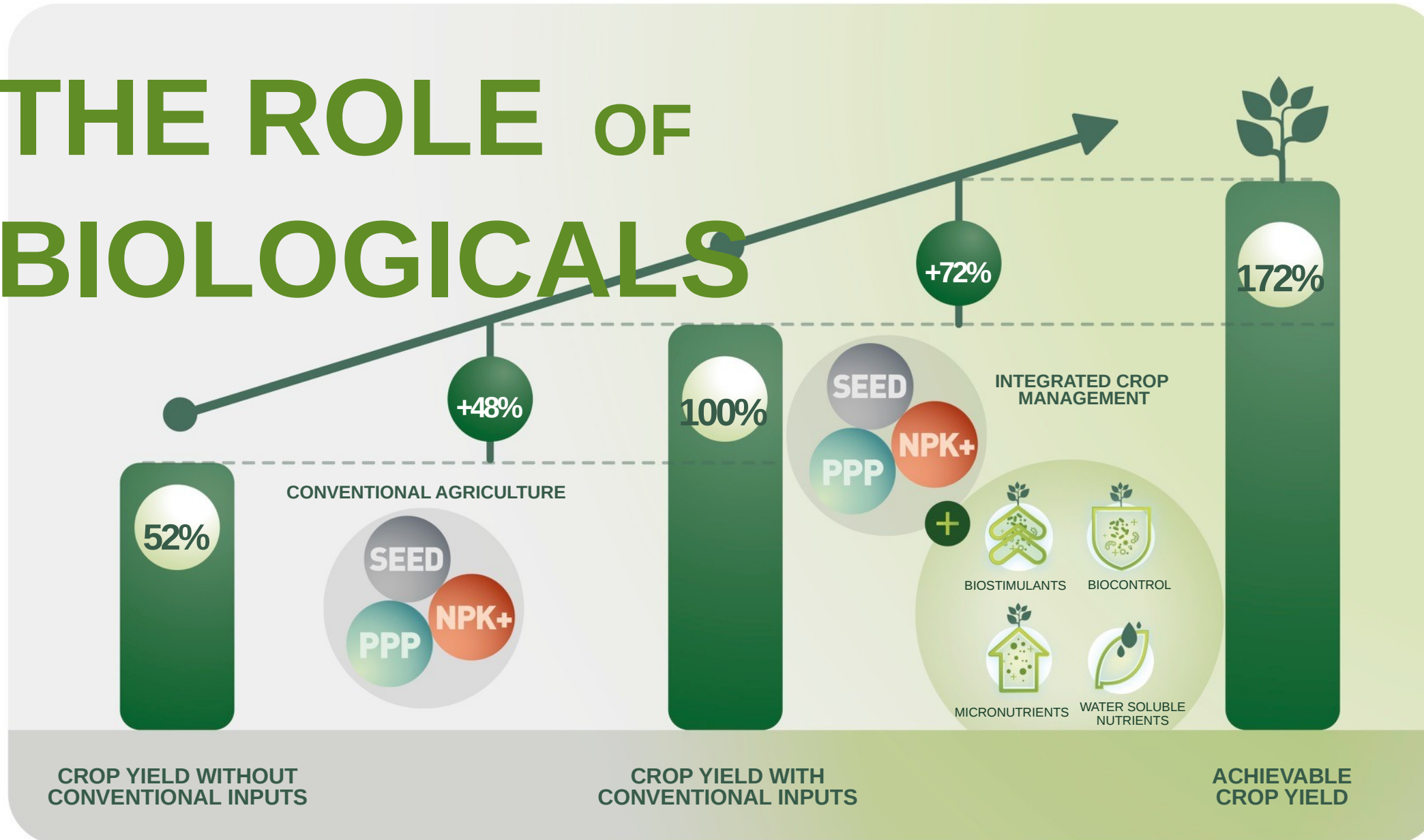
# FOOD: THE BIG ISSUE



Strictly  
confidential

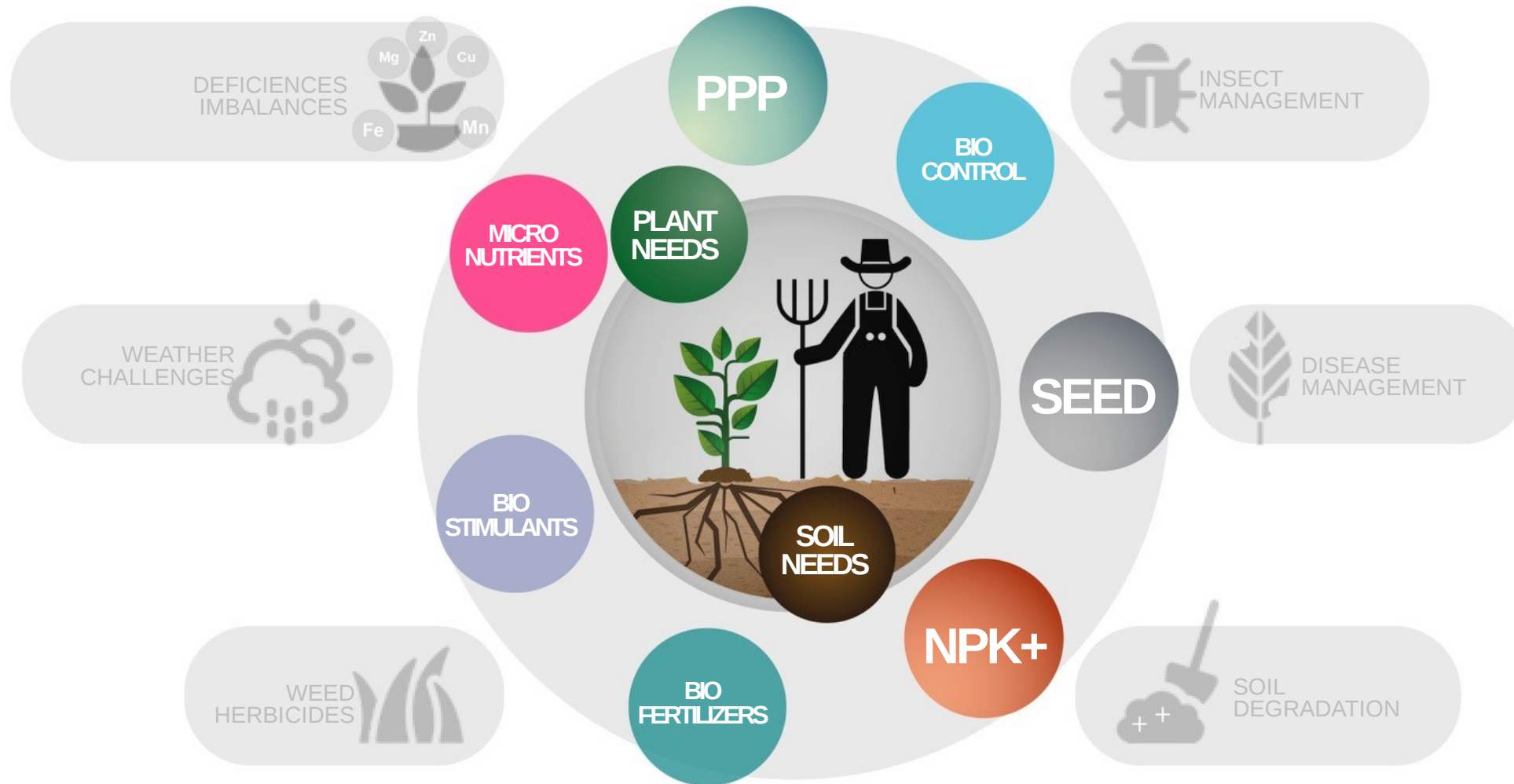
# CLEAR LIMITATIONS

## THE ROLE OF BIOLOGICALS



Strictly  
confidential

# TODAY SHIFT





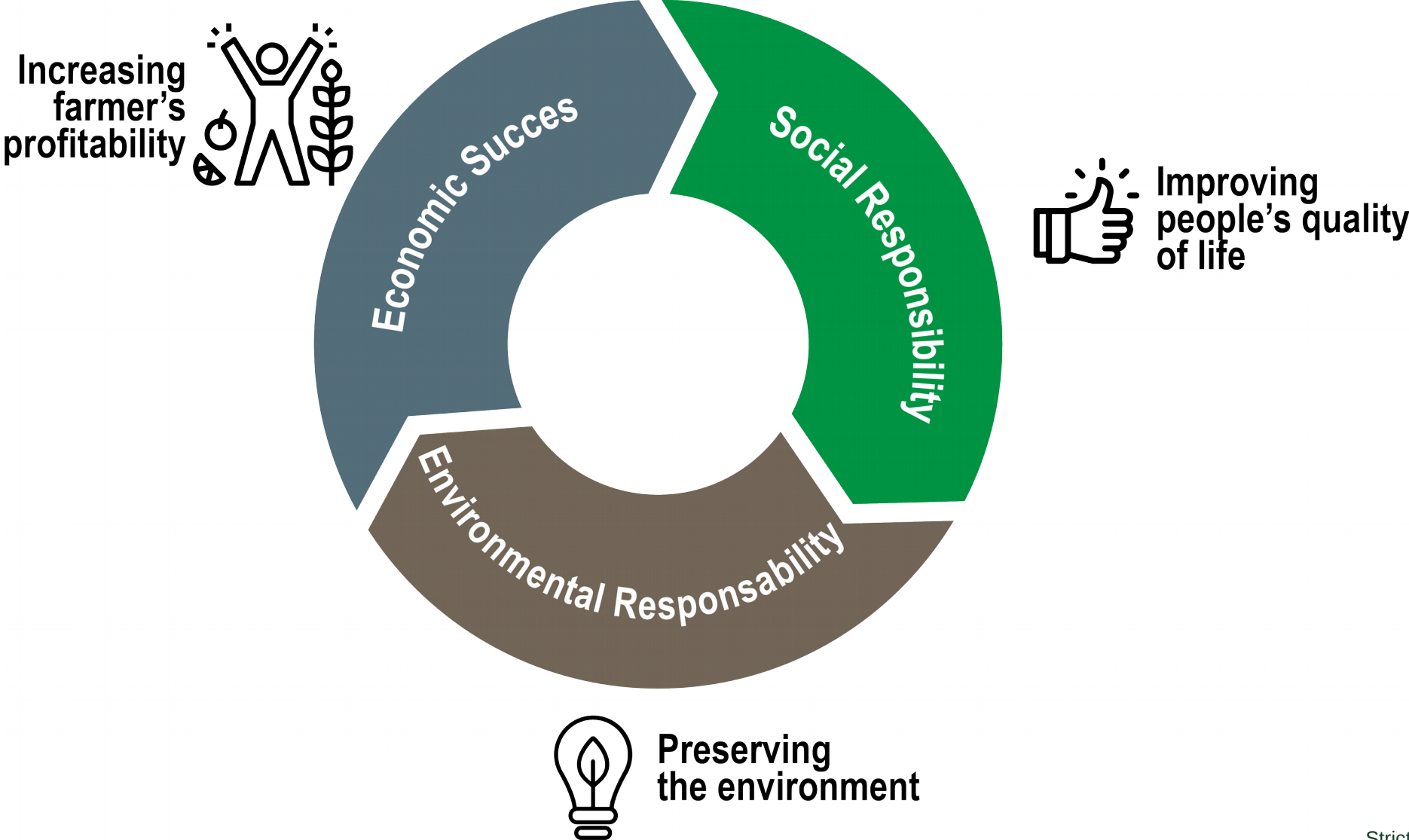
# TODAY SHIFT | VALUE CHAIN IMPACT



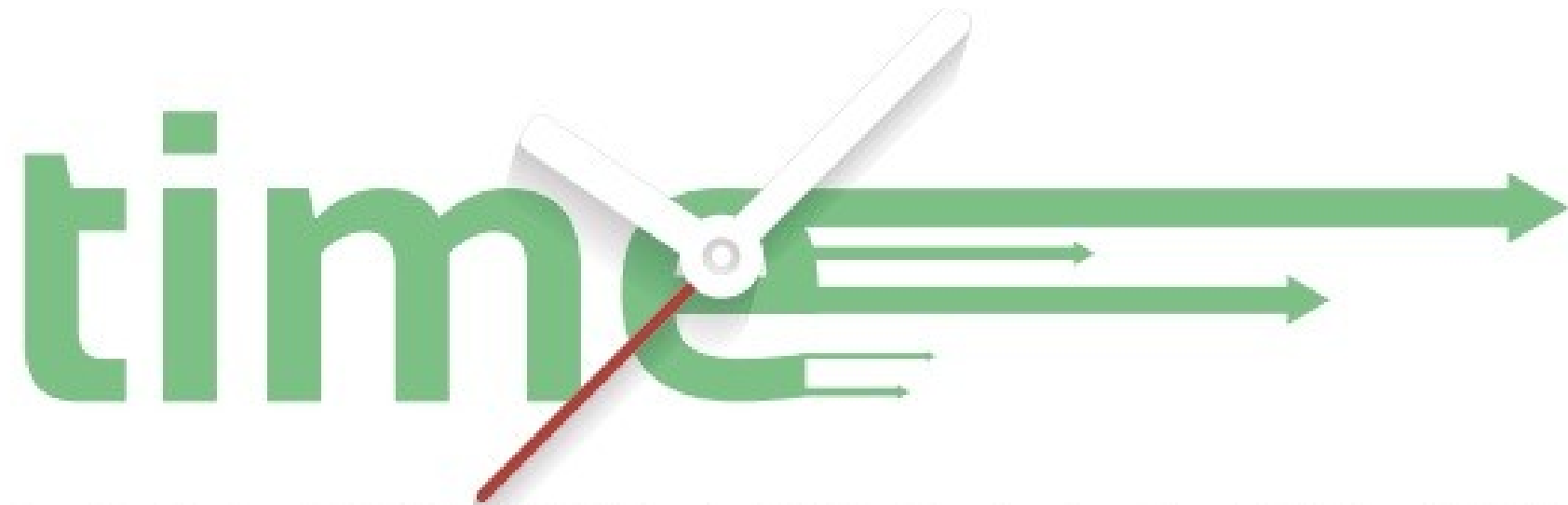


# NEED FOR A HOLISTIC VIEW ON SUSTAINABILITY

DIGITALIZATION WILL DRIVE  
SUSTAINABLE AGRICULTURE.



Strictly  
confidential



TO THINK DIFFERENTLY  
and move quickly

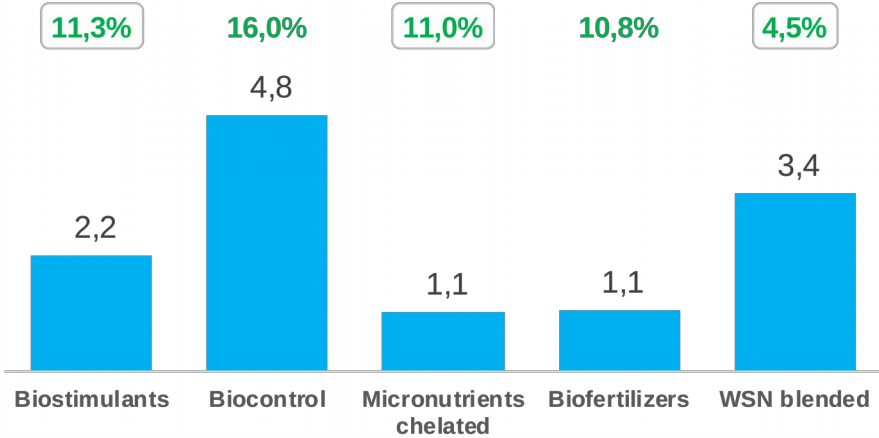
# TARGET MARKET | INDUSTRY DESCRIPTION AND OUTLOOK

## Industry and Outlook

**Biostimulants market includes** humic and fulvic acids, seaweed extracts, Proteins, amino-acids and microbials. **Biocontrol market** includes biochemicals, Microbials, Macro-organisms, Plant derived pesticides. **Micronutrients chelated** market estimation includes EDTA, DTPA, EDDHA, etc., and accounts about 20% of total micronutrients used in agriculture. **Biofertilizers** includes Nitrogen-fixing, Phosphate-solubilizing Potash mobilizing. **WSN blended market** includes the Water Soluble Fertilizers blended to provide Nitrogen, Phosphorous and Potash (NOT included straight fertilizers).

### 2019 Forecast value in Billions USD @ Manufacturer level

*In % the estimated Growth rate until 2021*



Source: Plant Biostimulants market size and trend from Global Biostimulants Market (2016-2021) by Market Data Forecast 2017. Biocontrol market size and trend from Global Biopesticides Market (2016-2021) by Market Data Forecast 2017. Chelated micronutrients market size and trend from Global Micronutrient Fertilizers Market (2017-2022) by Mordor intelligence 2017. Biofertilizers market trend and size by internal elaboration from Global Biofertilizers Market Report, 2021 by Global Market Insights 2018. WSN blended market size and trend by Global Water Soluble Fertilizers Market Industry(2016-2022) by Market Litmus 2018.

## Focus on Plant Biostimulants

### Biostimulants 2019 market split % by Crop

**57% of total PBS market value** are generated on Row Crops.

**68% of WW Harvested Area** are dedicated to Row Crops (FAO data 2016).



Source: Plant Biostimulants market split % by Crop and Country by internal elaboration from Global Biostimulants Market (2016-2021) by Market Data Forecast 2017. Internal elaboration of FAO data 2016.

Strictly  
confidential

# FUTURE WORLD AGRICULTURE



# TECHNOLOGY CHANGES LIVES

Strictly  
confidential

 **Valagro**<sup>®</sup>  
Where science serves nature



# TECHNOLOGY-DRIVEN PLATFORMS

## DRIVING MARKET DISRUPTION

**UBER**

| World's largest taxi company owns no taxis



| Largest accommodation provider owns no real estate



| Largest phone companies own no telco infra



| World's most valuable retailer has no inventory



| Most popular media owner creates no content

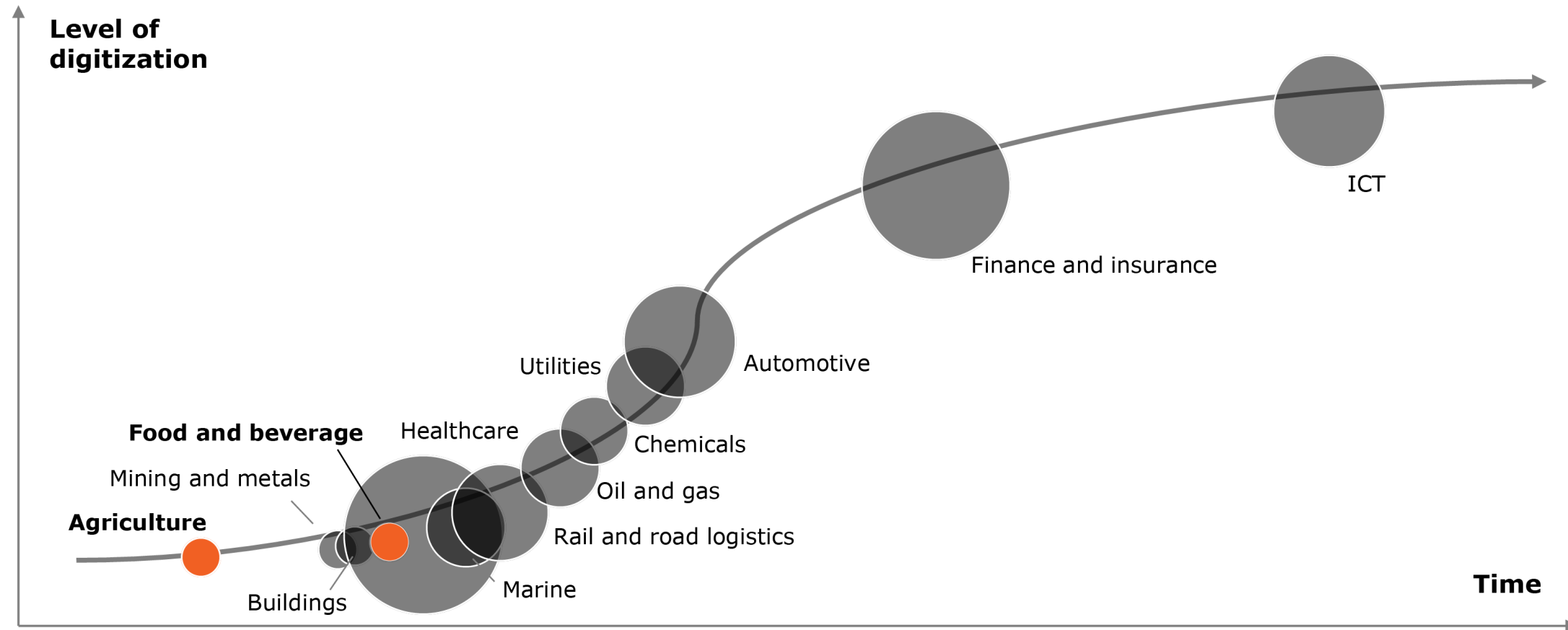


| Fastest growing banks have no actual money



| World's largest movie house owns no cinemas

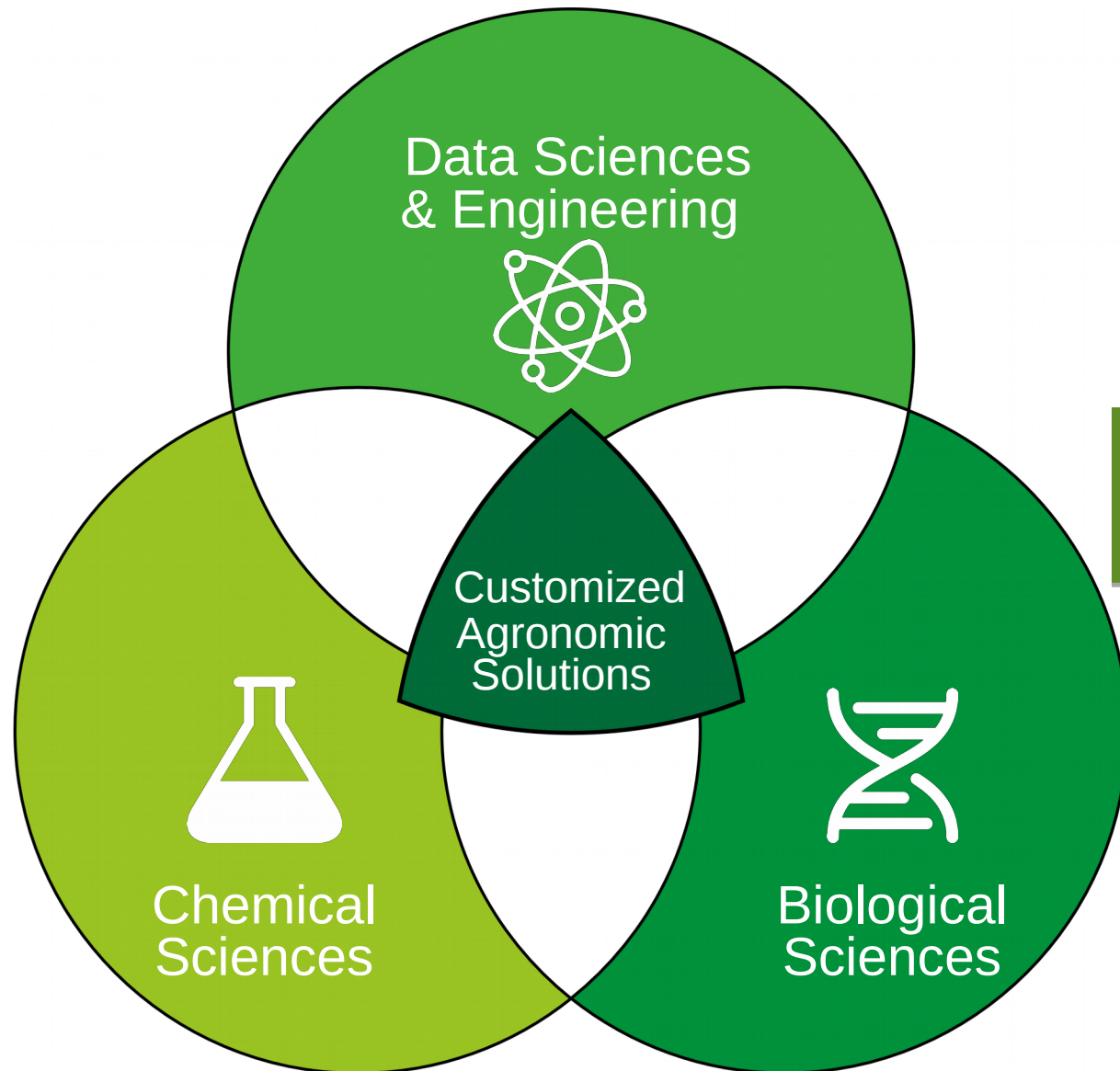
# OUR SECTOR IS A LATE MOVER



Source: ABB (Note: Bubble represents relative size of the industry for developed markets)

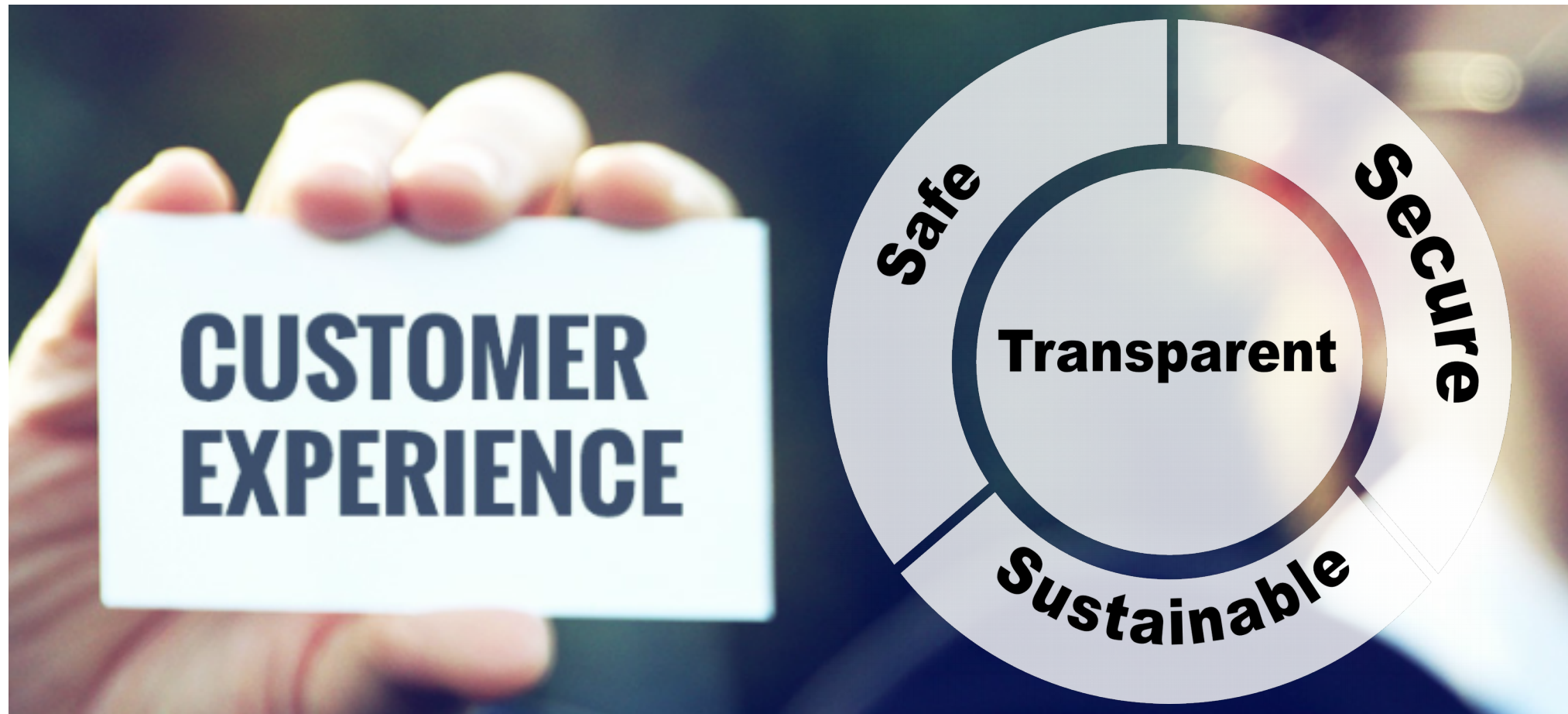
Strictly  
confidential

# INNOVATION IS KEY TO SOLVING BIG CHALLENGES



NEW BUSINESS MODELS  
POSSIBLE

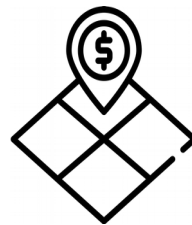
# NEXT GENERATION OF CUSTOMERS



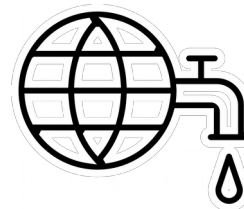


# FOCUS INDIA | WHAT'S NEXT?

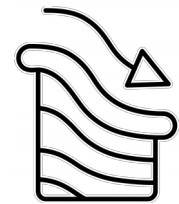
## SUSTAINABILITY



IMPROVE  
LAND USE  
EFFICIENCY



IMPROVE  
IRRIGATION  
WATER USE  
EFFICIENCY



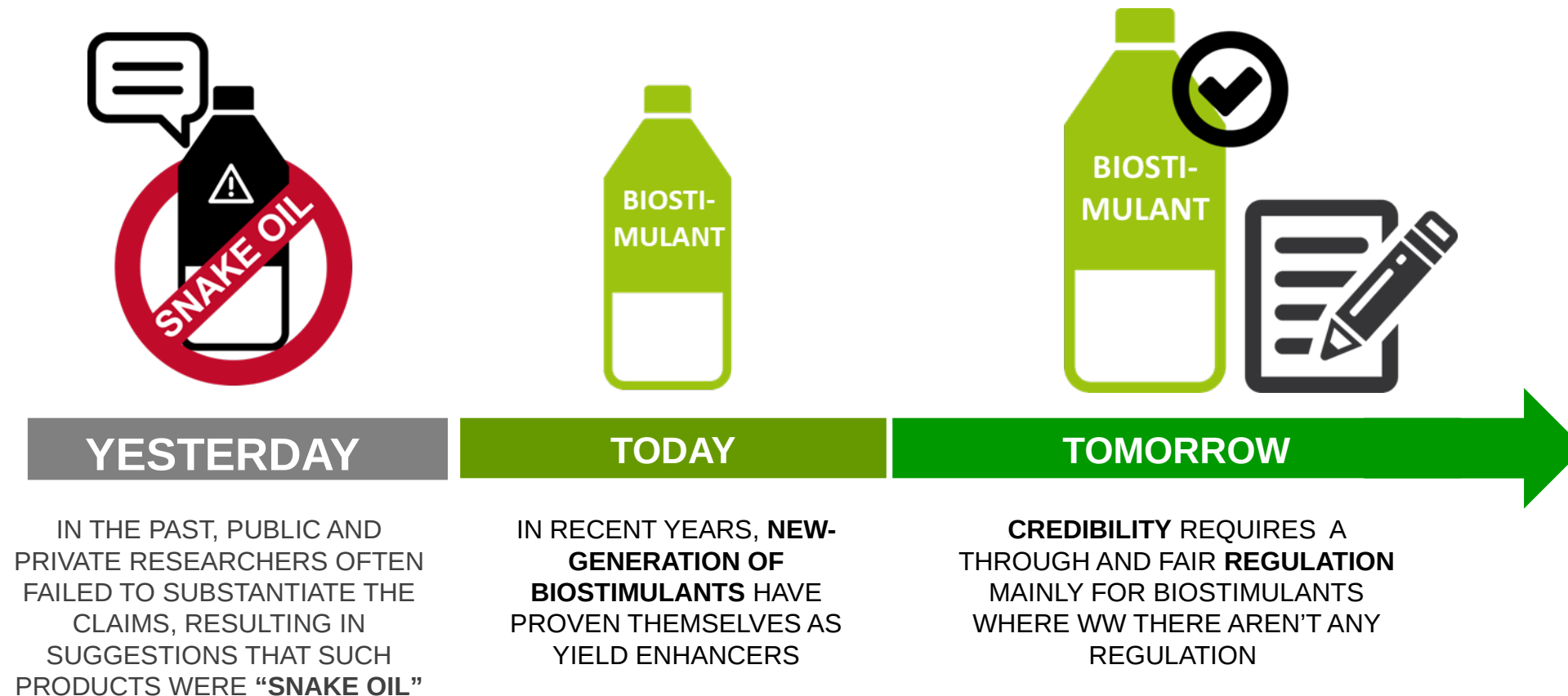
REDUCE  
SOIL  
EROSION

Strictly  
confidential

 **Valagro**<sup>®</sup>  
Where science serves nature

# FOCUS INDIA | WHAT'S NEXT?

## CREDIBILITY



# FOCUS INDIA | WHAT'S NEXT?

## INNOVATION



# GEAPOWER

GEAPOWER REDUCES THE COST  
OF TAKING A SOLUTION TO  
MARKET WHILE ENSURING  
CONSISTENT EFFICACY

1



### DEEP KNOWLEDGE OF ACTIVE INGREDIENTS AND RAW MATERIALS

- This enables Valagro to identify, characterize and preserve specific active ingredients that can achieve targeted physiological responses in plants



2



### PROPRIETARY EXTRACTION PROCESSES

- Customized extraction processes help maintain the correct ratio of each ingredient in complex natural mixtures



3



### ADVANCED SCREENING AND INVESTIGATION TECHNOLOGIES

- Genomics, phenomics and other “omic” sciences allow Valagro to decipher the genetic and molecular triggers for specific physiological responses in plant systems.
- Screening of hundreds of samples per experiment.



4



### PROVEN ABILITY TO PROVIDE COMMERCIALLY VIALE SOLUTIONS

- Extensive experience with field experiments
- Commercial function and research function are closely integrated
- Allows Valagro to fast-track product candidates with the best chance of attaining commercial viability



WIN THE  
GLOBAL  
CHALLENGE  
TOGETHER

