

# The Power of “AND”

## 2023 Global MRL Harmonization Workshop

California Specialty Crops Council

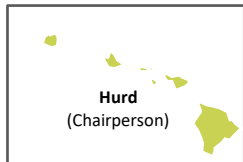
May 23, 2023

Ted McKinney - NASDA








# Who is NASDA?





*(as of April 2023)*

 NEASDA  
 SASDA  
 MASDA  
 WASDA  
 Denotes Elected

# What is the NASDA mission?

Enhance American and global food and agricultural communities through policy, partnerships and public engagement



# What we do?

- Represent State Departments of Agriculture in D.C.
- Our members co-regulate with Federal Government
  - Animals, feed, seed, fertilizer, pesticides, weights/measures, etc.)
- International Trade & Foreign Affairs
  - USMCA, Emerging Markets, Europe, Global Trade Organizations (APEC, OECD, United Nations)
- Issues & Policy Management
- National Agricultural Statistics Service (NASS)



# The Power of AND....

Book by R. Edward Freeman, Kirsten E. Martin, and Bidhan L. Parmar

*The Power of AND offers a new narrative about the nature of business, revealing the focus on responsibility **and** ethics that unites today's most influential ideas and companies.*

*And now, to borrow from this narrative .....*



# Power pairs - examples of “AND” .....

- Batman and Robin
- Mickey and Minnie
- Peanut Butter and Jelly
- Ham and cheese
- Fruits and Vegetables
- Watson and Crick
- Marie and Pierre Curie



# The Power of **AND**....

*The Power of Climate Smart Agriculture*

**AND**

*Increased Farm/Food Productivity*

**AND**

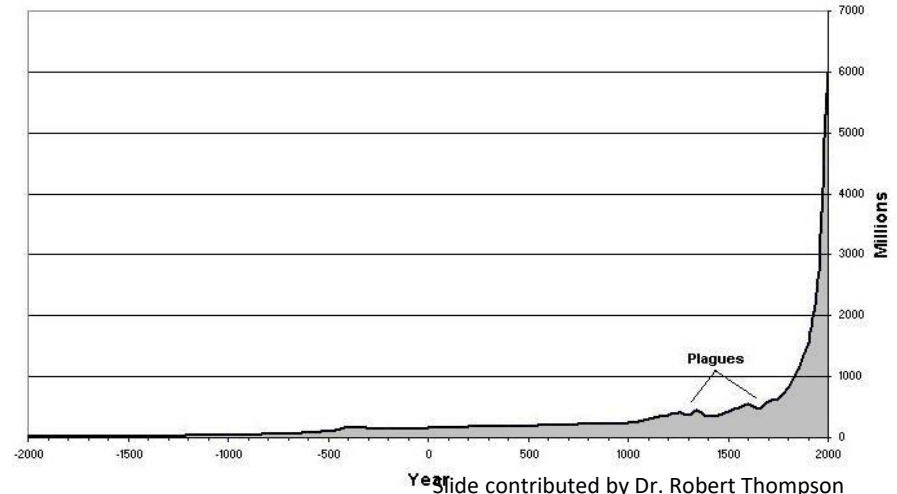
*Keeping a Robust Agricultural Toolbox*



# Evolution of World Population

- It took from the beginning of time to 1804 to get to the first billion people on earth.
- BUT, the population passed:
  - **2 billion in 1927**
    - (123 years later)
  - **3 billion in 1960**
    - (33 years later)
  - **4 billion in 1974**
    - (14 years later)
  - **5 billion in 1987**
    - (13 years later)
  - **6 billion in 1999**
    - (12 years later)
  - **7 billion in 2011**
    - (12 years later)
  - **8 billion in 2023**
    - (12 years later)

In 1798, Malthus wrote that food production could not keep up with population growth and that starvation would limit the size of the world's population.

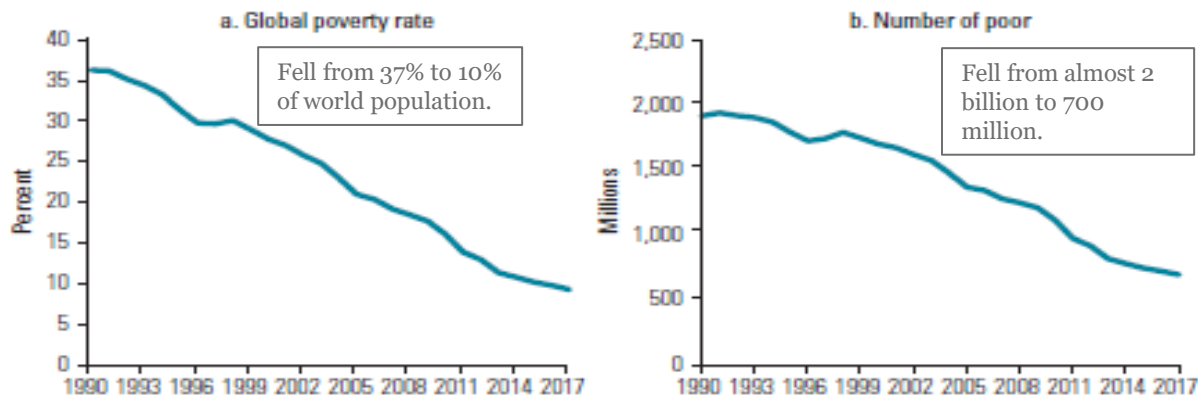


# Malthus Got It Wrong

- With the development of ocean shipping, vast new areas of land were brought into agricultural production in North and South America and Oceania.
- Engineering research developed machines that enabled every farmer to cultivate far larger areas of land and manage larger herds of livestock and poultry flocks.
- Research on genetics and on control of insects, diseases and weeds resulted in big increases in production per unit of land and per farm animal.
- Instead of limiting population as Malthus predicted, global food output has grown faster than consumption, the cost of food has trended downwards, and the world's population is now over 7.8 billion.

# Incredible Progress in Reducing Poverty Accelerated Global Food Demand Growth Over Three Decades

**FIGURE 0.1 Global Poverty Rate and Number of Poor at the US\$1.90-a-Day Poverty Line, 1990–2017**



Source: PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.  
Note: The global coverage rule is applied (see annex 1A in chapter 1 in this report).

But things are changing...





AN INITIATIVE OF



COLLEGE OF  
AGRICULTURE AND  
LIFE SCIENCES  
VIRGINIA TECH.

WITH >>>



AND >>>



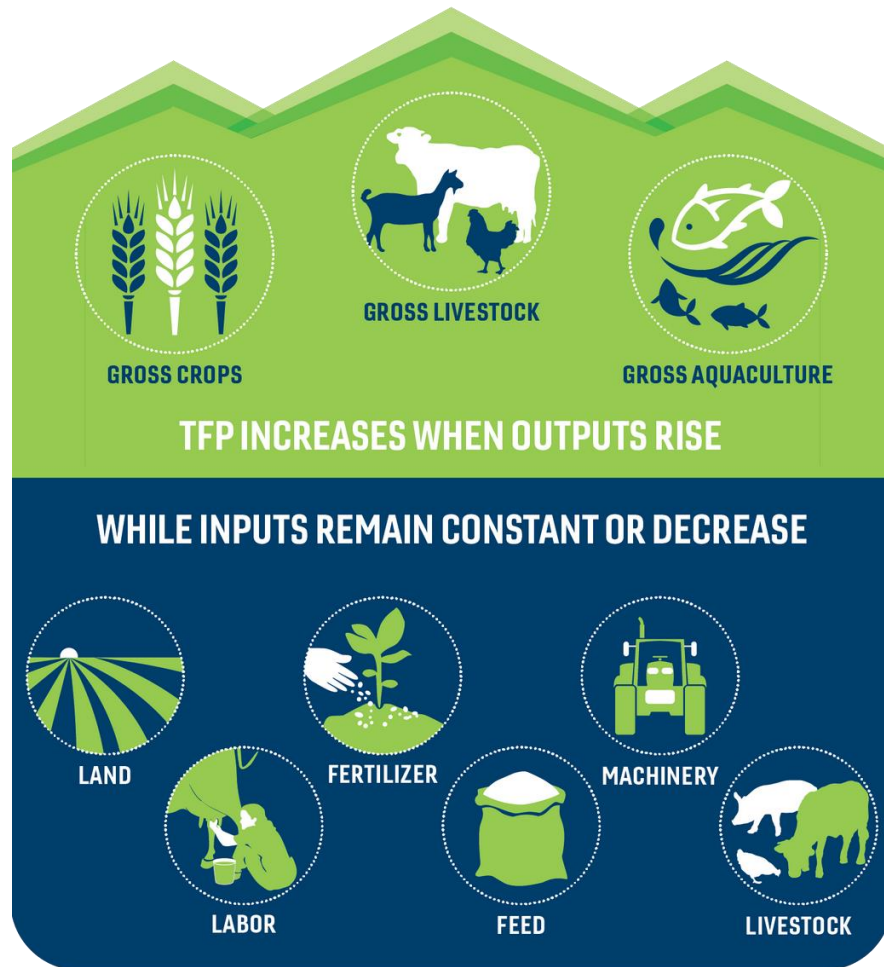
**SPG COALITION**  
Sustainable Productivity  
Growth Coalition

For Food Security and Resource Conservation

# TROUBLESOME TRENDS AND SYSTEM SHOCKS

2022 GAP Report<sup>®</sup>  
Executive Summary

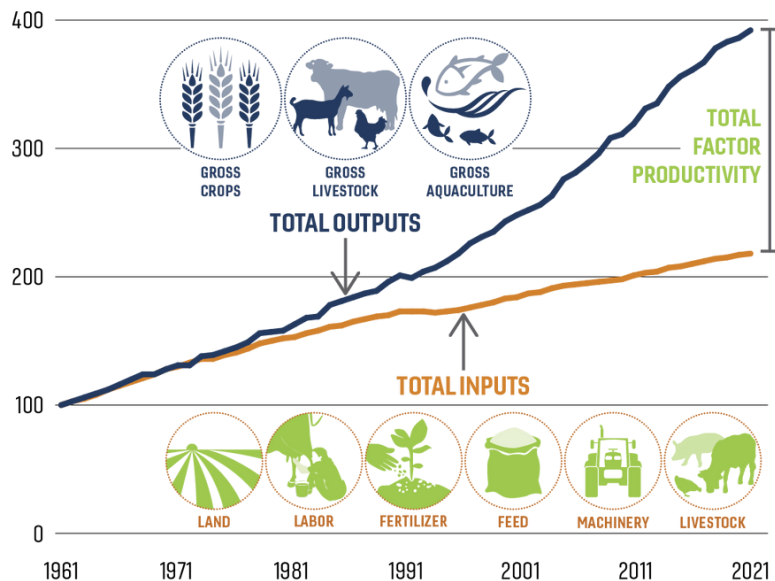
**TOTAL FACTOR  
PRODUCTIVITY MEASURES  
THE CHANGES IN HOW  
EFFICIENTLY AGRICULTURAL  
INPUTS ARE TRANSFORMED  
INTO OUTPUTS**



# A Global View of TFP Trends

Global Agricultural Outputs, Inputs, and Total Factor Productivity (TFP), 1961–2020

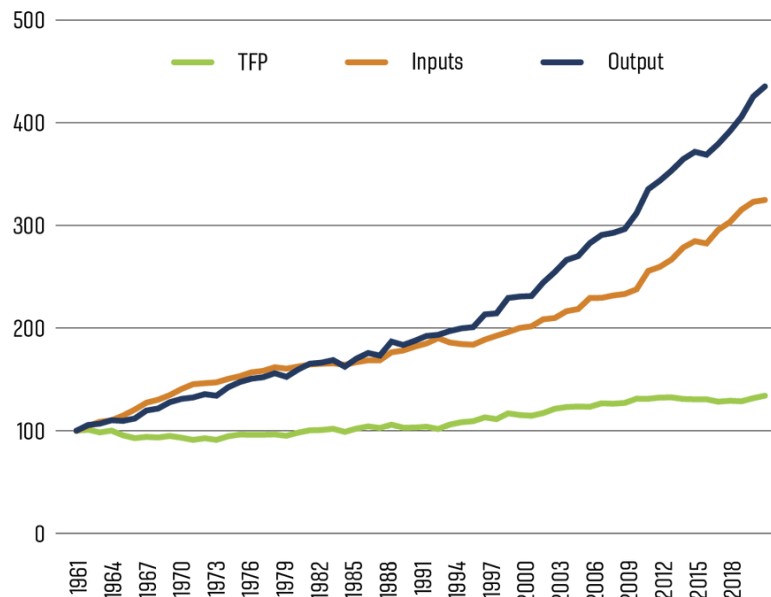
Index, 1961=100



Source: USDA Economic Research Service (2022).

Low-Income Country Agricultural Output, Input, and Total Factor Productivity, 1961–2020

Index, 1961=100

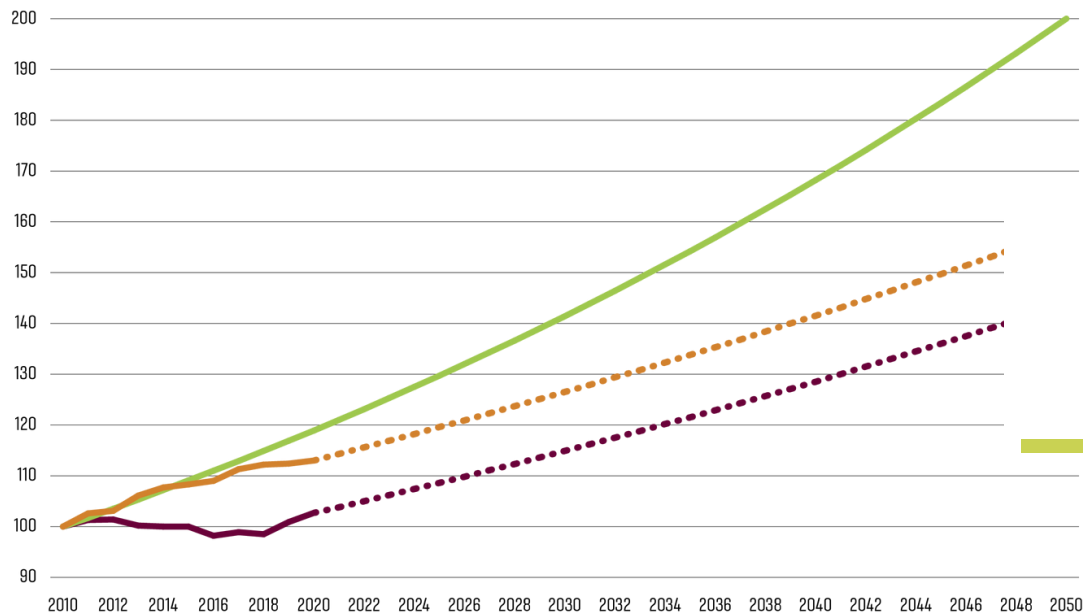


Source: USDA Economic Research Service (2022).

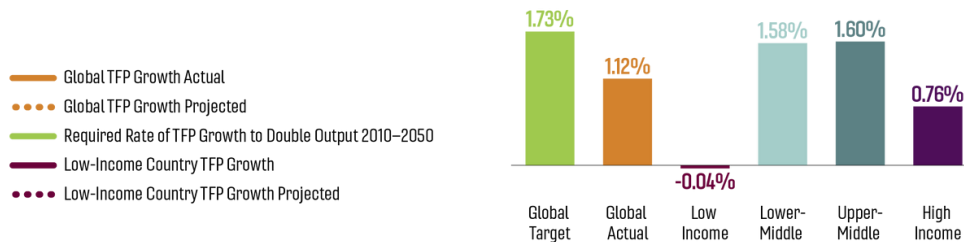


## 2022 GLOBAL AGRICULTURAL PRODUCTIVITY INDEX

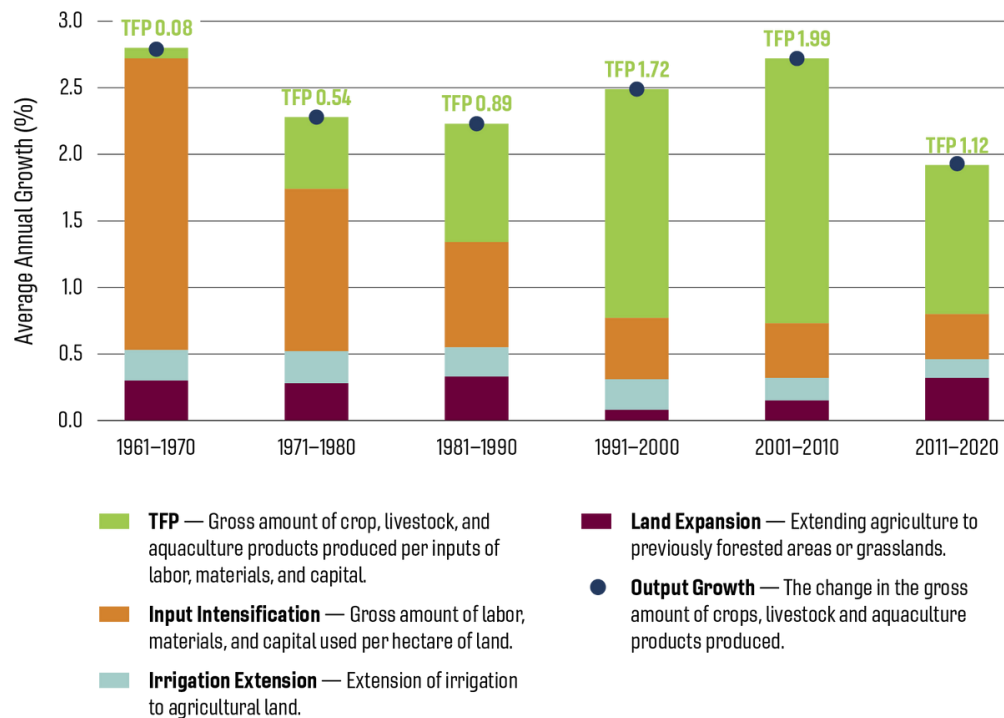
TFP growth rates are based on a 10-year rolling average over a ten-year period.



## Global TFP Growth Targets



## Global Sources of Agricultural Output Growth, 1961–2020



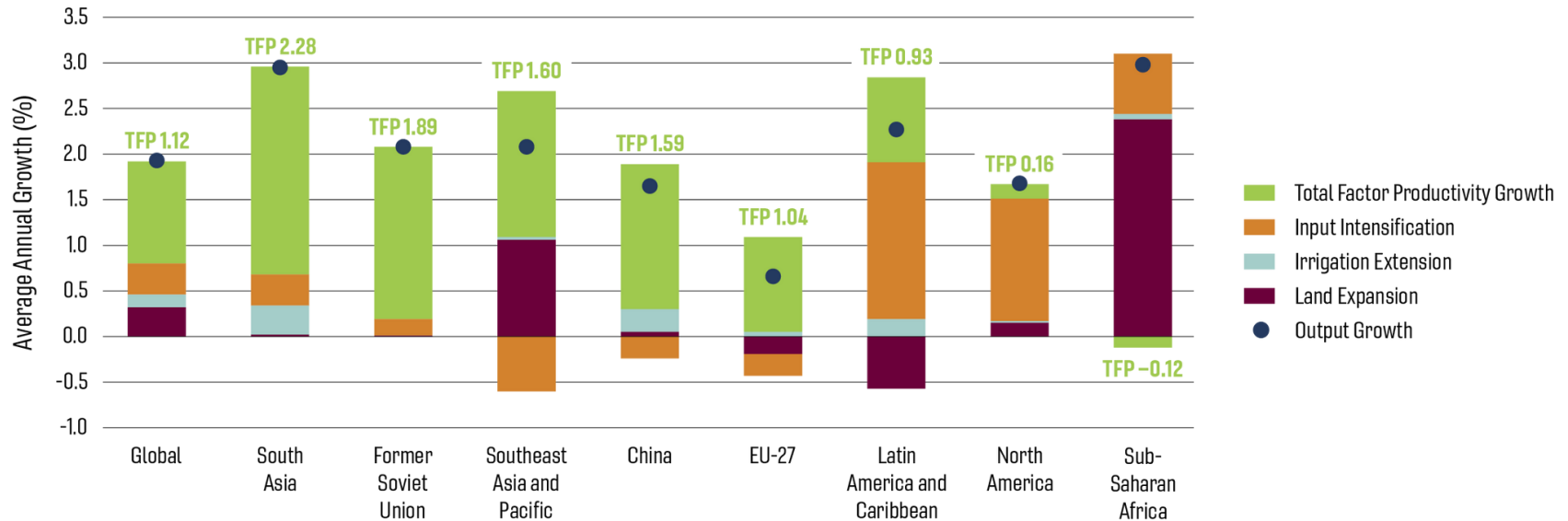
# Global Sources of TFP Growth

Source: USDA Economic Research Service (2022).



# Regional Trends

Sources of Agricultural Output Growth by Region, 2011–2020



Source: USDA ERS, 2021

# Key Messages

**01**

Global agricultural productivity growth is in steep decline.



**02**

Productivity growth is not scale dependent.



**03**

Extreme climate events disrupt productivity gains.



# Key Messages

04

Regional differences in productivity growth reveal areas of concern, alarm, and hope.



05

Productivity growth supports resilience during system shocks.



06

Current efforts to accelerate productivity growth are inadequate to the scope of the challenge.



# Envision 2030 – UN Sustainable Development Goals

GOAL 1: No Poverty

GOAL 2: Zero Hunger

GOAL 3: Good Health and Well-being

GOAL 4: Quality Education

GOAL 5: Gender Equality

GOAL 6: Clean Water and Sanitation

GOAL 7: Affordable and Clean Energy

GOAL 8: Decent Work & Economic Growth

GOAL 9: Industry, Innovation and Infrastructure

GOAL 10: Reduced Inequality

GOAL 11: Sustainable Cities and Communities

GOAL 12: Responsible Consumption and Production

GOAL 13: Climate Action

GOAL 14: Life Below Water

GOAL 15: Life on Land

GOAL 16: Peace and Justice Strong Institutions

GOAL 17: Partnerships to achieve the Goal



# Concerns .... and threats

1. Are we forgetting the 10 billion by 2050? ... **Yes, we are.**
2. Pace of new technology adoption ... and rejection
3. Losing tools from our toolboxes! **MRL bans is #1 on list.**
4. 30 x 30 plans globally?
5. Conservation Reserve Type Programs .... on less sensitive terrain and soils??
6. Misguided government policies – EU Precautionary Principle/Hazard Scheme
7. Will the WTO process work?
8. Subtle and non-so-subtle trade threats over technology adoption
9. Most important ... we are forgetting that climate remediation (climate smart agriculture) **and** greater productivity are possible  
... and essential



# Opportunities and actions .....

1. The growing attention to climate smart agriculture can be a good thing ... when married to increased productivity. Ag is part of the solution.
2. Technology development continues at a rapid pace in most parts of the world ... **And most of it is scale neutral**
3. The UN Food Systems Summit sharpened much of industry's focus on opportunities & realities to address climate change
4. The vast majority of the world both trusts the current regulatory system.
5. The world, led by industry AND Governments, must address the EU ... now.



# A few favorite quotes ...

Norman Borlaug:

"Take it to the farmer!" -- You cannot build a peaceful world on empty stomachs."

Dwight D. Eisenhower

"You know, farming looks mighty easy when your plow is a pencil, and you're a thousand miles from the corn field." *Bradley University, Peoria, Illinois, 9/25/56*

Marie Curie

"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less. One never notices what has been done, only what remains to be done."

Ted McKinney

"We **CAN** celebrate climate smart agriculture AND grow food and agriculture productivity AND to do it we must keep all current tools in our toolbox and add new ones."



# Thank You California Specialty Crops Council

Ted McKinney

NASDA

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