# GAPS, CHALLENGES AND PROGRESS IN BOOSTING AGRICULTURAL PRODUCTIVITY AND ENDING HUNGER



Virtual Inter-Agency Expert Group Meeting on the Implementation of the Third United Nations Decade for the Eradication of Poverty 24 – 27 May 2021

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# Outline

Key trends in global poverty and hunger

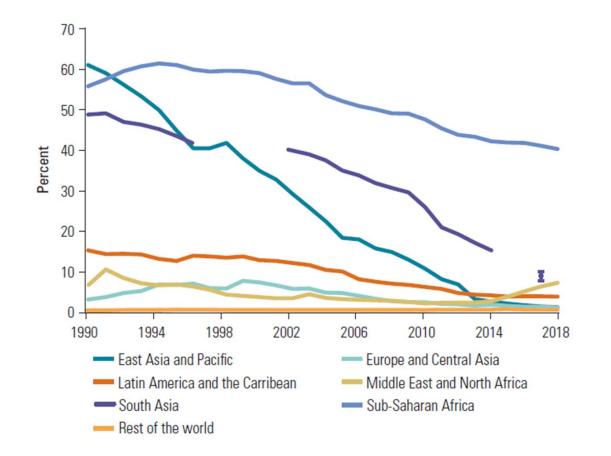
Agricultural productivity, poverty and hunger reduction

- How does agricultural productivity affect poverty reduction?
- What are the main trends in agricultural productivity across countries and regions?
- What is the role of agricultural productivity in the context of rural and structural transformation?
- Main challenges

# **Key Trends in Global Poverty**

- Reduction of extreme poverty has slowed:
  - >2017 estimate of people living in extreme poverty: > 689 million people
  - Reduction was > 1% p.a. on average from 1990 to 2015, reducing the overall
    - rate from 36.2% to 10.7% in 2015
  - After 2015, reduction decreased by only < 0.5% p.a. from 10.7% in 2015 to</li>
    9.3% in 2017
- COVID-19 estimated to have pushed an additional 119 124 million people into extreme poverty in 2020; may rise to 163 million by 2021 (World Bank, 2021).

# Trends in Poverty Rates at the US\$ 1.90 a Day Poverty Line by Region 1990 - 2018



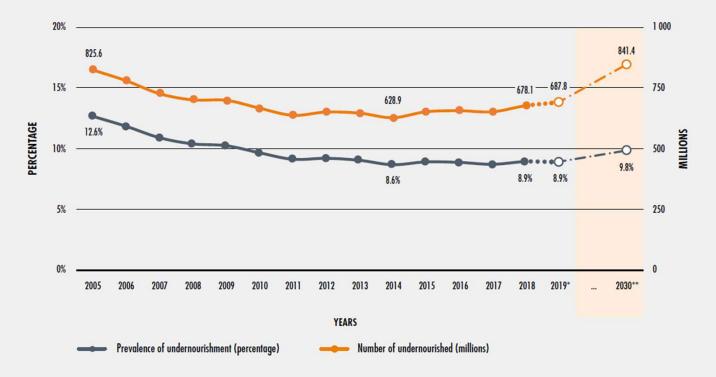
Source: Word Bank, 2020. Note: PovcalNet (online analysis tool), World Bank, Washington, DC, <u>http://iresearch.worldbank.org</u>. /PovcalNet/.

# Key Trends in Hunger (SOFI 2020)

- Nearly 690 million or 8.9% of world population were hungry in 2019, – up by 10 million in one year and by nearly 60 million in 5 years. The world is not on track to achieve Zero Hunger by 2030.
- If recent trends continue, the number of people affected by hunger would surpass 840 million by 2030, making Africa the region with the highest number of undernourished in 2030.
- Preliminary assessment suggests that COVID-19 may add 83 132 million to the total number of undernourished in 2020, depending on economic growth rate.

# Key Trends in Hunger (SOFI 2020)

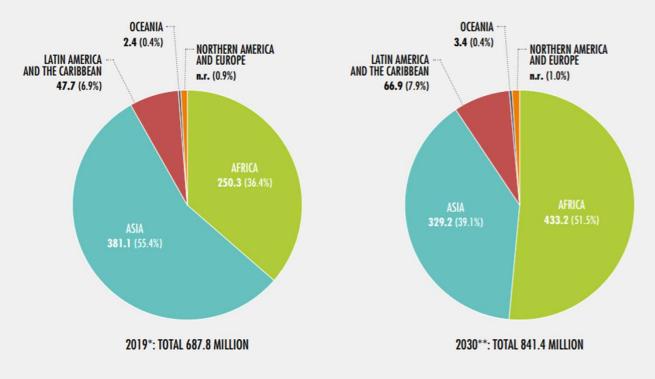
#### THE NUMBER OF UNDERNOURISHED PEOPLE IN THE WORLD CONTINUED TO INCREASE IN 2019. IF RECENT TRENDS ARE NOT REVERSED, THE SDG 2.1 ZERO HUNGER TARGET WILL NOT BE MET



NOTES: Projected values in the figure are illustrated by dotted lines and empty circles. The shaded area represents projections for the longer period from 2019 to the 2030 target year. The entire series was carefully revised to reflect new information made available since the publication of the last edition of the report; it replaces all series published previously. \* See Box 2 for a description of the projection method. \*\* Projections to 2030 do not consider the potential impact of the COVID-19 pandemic. SOURCE: FAO.

# Key Trends in Hunger (SOFI 2020)

IF RECENT TRENDS PERSIST, THE DISTRIBUTION OF HUNGER IN THE WORLD WILL CHANGE SUBSTANTIALLY, MAKING AFRICA THE REGION WITH THE HIGHEST NUMBER OF UNDERNOURISHED IN 2030

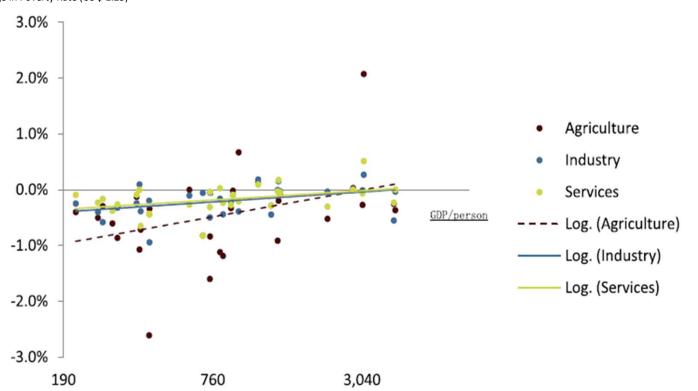


NOTES: Number of undernourished people in millions. \* Projected values. \*\* Projections to 2030 do not consider the potential impact of the COVID-19 pandemic. n.r. = not reported, as the prevalence is less than 2.5 percent. SOURCE: FAO.

## Why is agricultural productivity relevant for poverty and hunger reduction?

- 80% of extreme poor live in rural areas. An estimated 2.7 billion people globally depend on small-scale food production for their livelihoods.
- Raising agricultural productivity and fostering rural and structural transformation are key for poverty reduction and economic development.
- The cost of a healthy diet exceeds the international poverty line and is unaffordable for the poor. Globally, 3 billion cannot afford it.
- To increase the affordability of healthy diets, the cost of nutritious foods must be reduced.

# The Poverty-Reducing Effects of Agricultural Productivity Growth

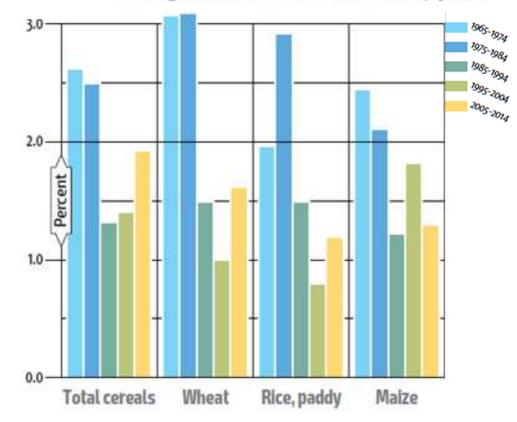


Change in Poverty Rate (US \$ 1.25)

Source: Ivanic and Martin, 2018

#### Land productivity: Yield growth has been slowing down

- Yield growth is hampered by the degradation of natural resources
- Competition for land and water resources is intensifying
- Climate change affects food-insecure regions the most



Average annual rate of increase in crop yields

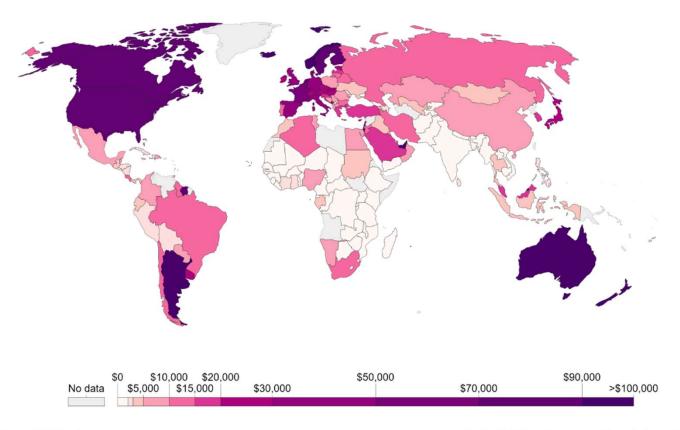
Source: FAO, 2017

#### Labour Productivity differs widely across countries

#### Agriculture value added per worker, 2017

Agriculture value added per worker is a measure of labor productivity. It corresponds to the ratio between value added in agriculture (constant 2010 US\$) and number of people employed in agriculture.

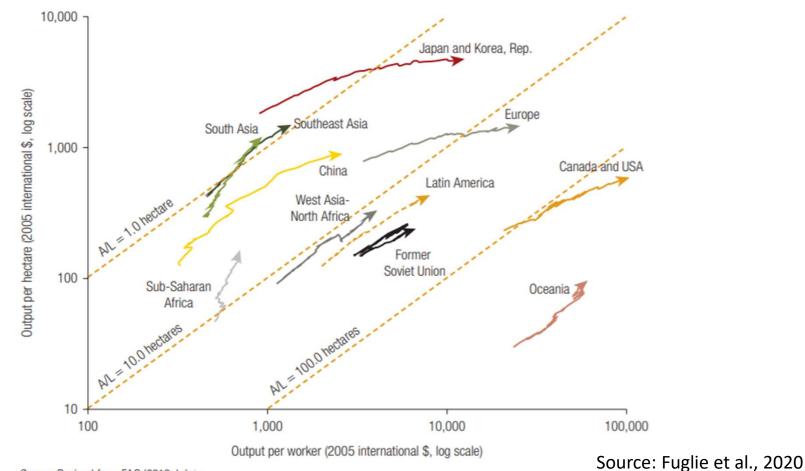




Source: World Bank

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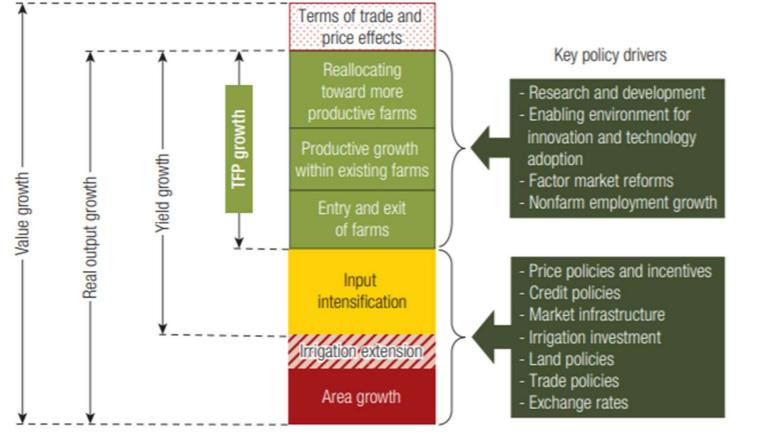
## Agricultural Land and Labor Productivity 1961–2015



Source: Derived from FAO (2018a) data.

Note: The diagonal lines represent constant land-labor (A/L) ratios.

#### **Decomposing Agricultural Economic Growth**

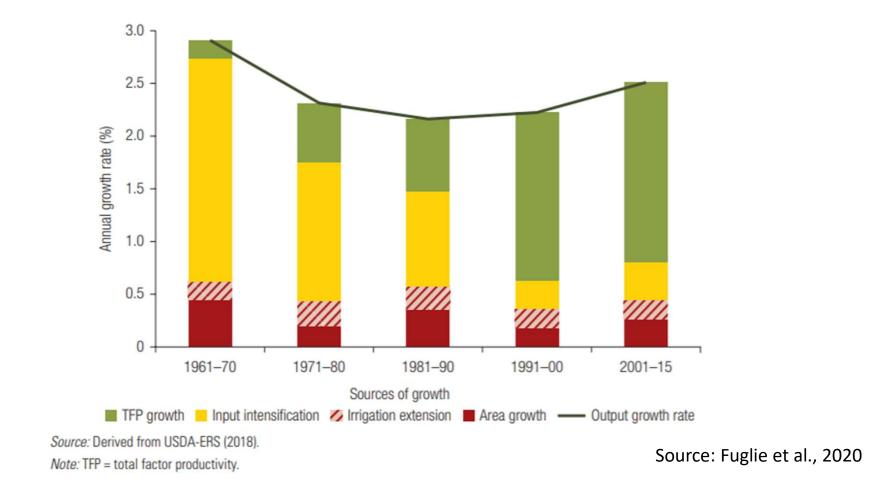


Source: World Bank.

Source: Fuglie et al., 2020

Note: TFP = total factor productivity.

#### **TFP Important Source of Global Agricultural Growth**

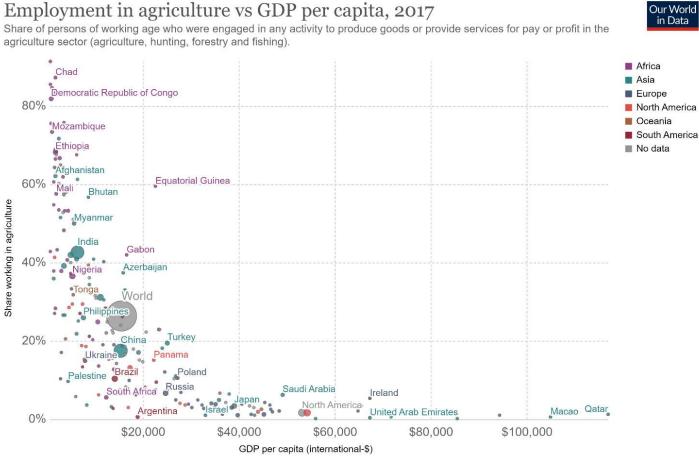


# The agriculture modernization sequence

| Stages of transformation    | Processes                                       |
|-----------------------------|---|
| Asset building              | Access to land and human capital for the        |
|                             | landless and SHF                                |
| Green Revolution            | Adoption/diffusion of new seeds and fertilizers |
|                             | for staple crops                                |
| Agricultural Transformation | Access to water for irrigation                  |
|                             | Ag diversification toward high value crops      |
|                             | Development of value chains and contracting     |
| Rural Transformation        | Mechanization and land concentration            |
|                             | Development of land and labor markets           |
|                             | Growth of the rural non-farm economy            |
| Structural Transformation   | Rural-urban migration                           |
|                             | Urban-based industrialization and services      |

Source: De Janvry and Sadoulet. 2019.

#### Employment in agriculture vs GPD per capita, 2017



Our World in Data

Source: World Bank

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#### Main Challenges 1

- Progress in poverty and hunger reduction has been slowing. The socio-economic impact of COVID-19 threatens to lead to major setbacks. How can the Third Decade make use of the UN Food Systems Summit to transform agri-food systems and accelerate progress towards the SDGs?
- Agricultural productivity growth has been shown to be more povertyreducing than growth in other sectors, in particular in low-income countries. What factors, targeted policies and investments can help to maximize this contribution?

## Main Challenges 2

- What lessons can be drawn from the significant disparities in land, labour and total factor productivity trends across regions and countries?
- Approaches that may have led to productivity gains in the past may not be replicable in the same way in the future. Strategies to reduce poverty by strengthening agricultural productivity must factor in the effects of climate change & environmental degradation.
- How to embed agricultural innovation and productivity growth for poverty and hunger reduction in a broader framework of contextspecific agricultural, rural & structural transformation?

#### Main Challenges 3

- Leveraging rural-urban linkages for inclusive rural transformation and effective poverty reduction requires territorial approaches, with accompanying measures, such as social protection and livelihood interventions to promote economic inclusion of the rural poor.
- Reliable and transparent statistics, information systems and approaches for impact evaluation are needed for poverty-focused agricultural, rural and structural transformation, and for support to the extreme poor.