



Food and Agriculture
Organization of the
United Nations



Sustainable agrifood systems: what role can technology transfer and technology assessment play?

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Workshop on Lessons Learned from the UNCTAD Pilot Project on Technology Assessment in Africa

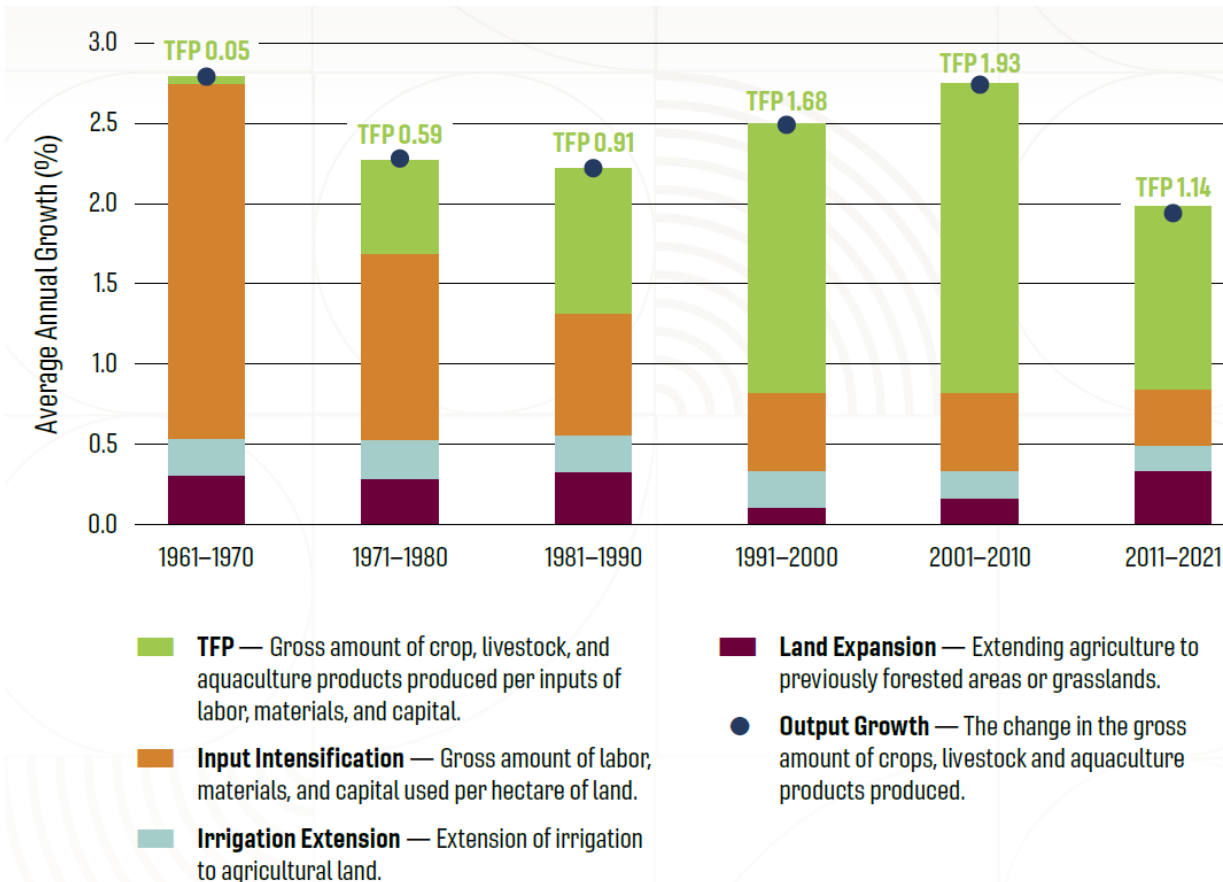
Wednesday, 23 October 2023

**Enhancing
productivity**

**Enhancing
sustainability
and resource
efficiency**

**Enhancing
climate
resilience**

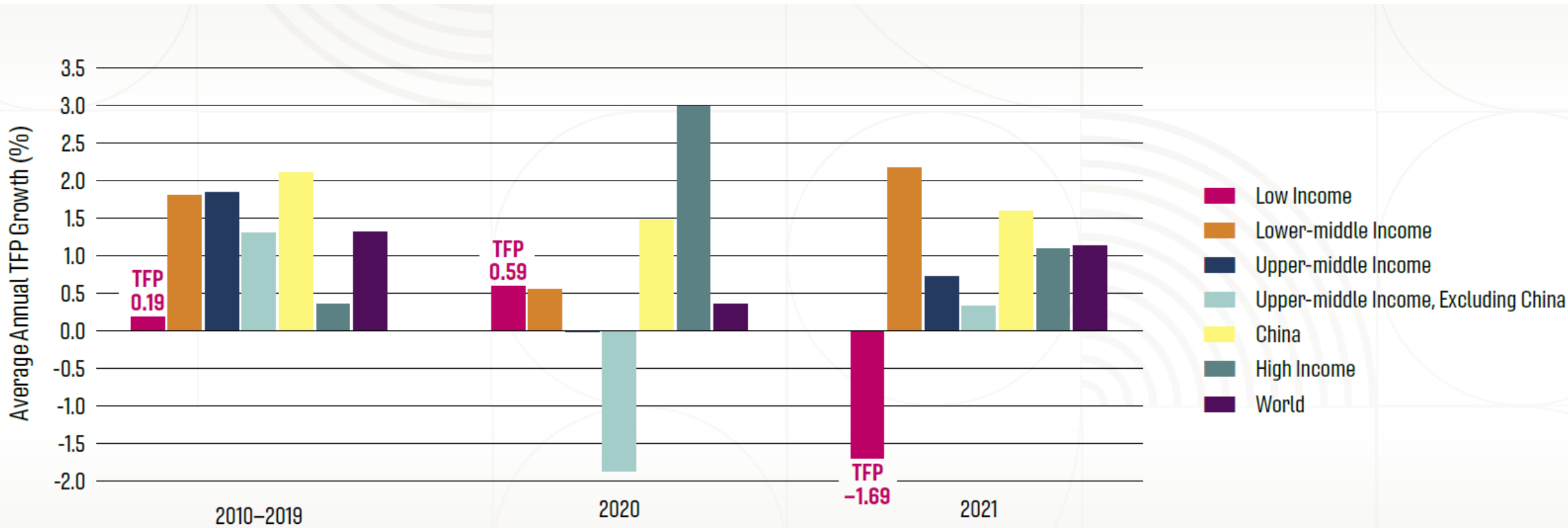
Historical global source of agricultural output growth



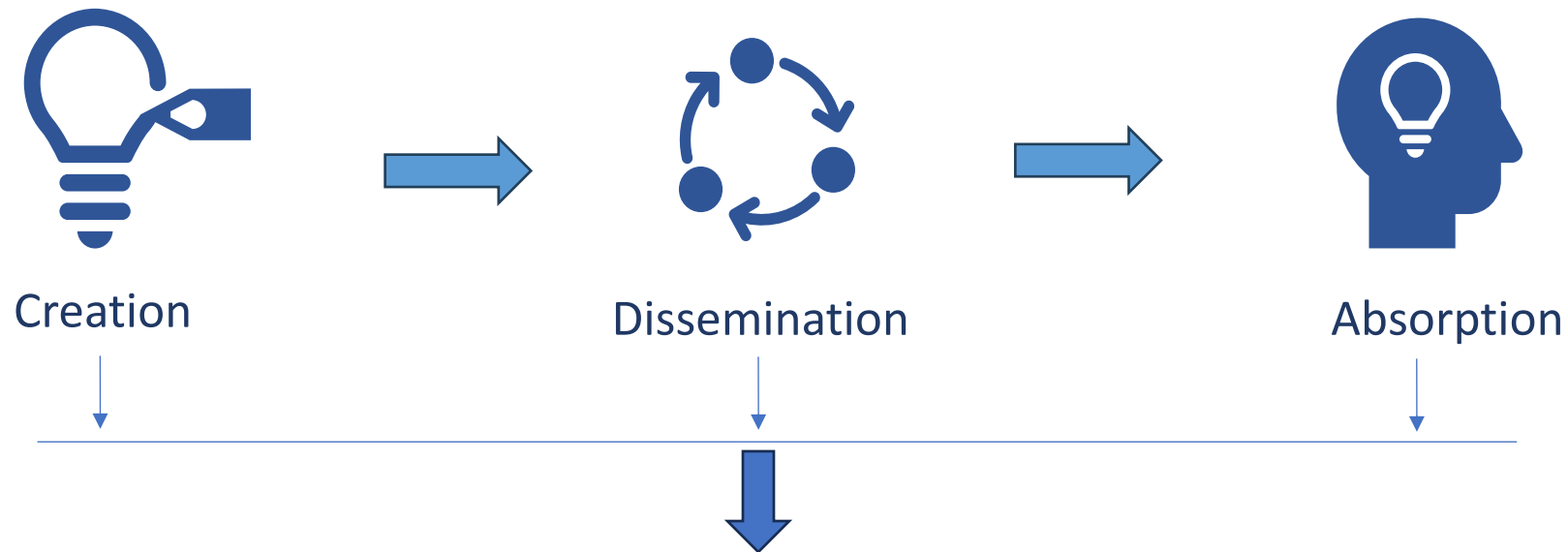
- Input intensification was the primary driver of increased agricultural output in the 1960s and 1970s.
- Starting in the 1980s, TFP growth became the main contributor to agricultural output growth and has remained so until today.
- In the 1990s, global TFP growth averaged 1.68 percent annually, rising to an average of 1.93 percent annually in the first decade of the 21st century.
- However, from 2011 to 2021, the average annual global TFP growth declined to 1.14 percent.

Source: USDA Economic Research Service (2023).

Low Ag. Productivity growth in LICs



Source: USDA Economic Research Service (2023).



- ☐ **Adoptable** → Suitable, Feasible, Tailored, Shared
- ☐ **Effective** → Productivity, Food Security, Adaptation, Scalability
- ☐ **Sustainable** → Environmentally, Financially, Socially

A case study: S.E.E.D. Hub Platform (Sri Lanka)



Climate and Crop Management

Weather forecasts including temperature, precipitation, and wind speed and direction

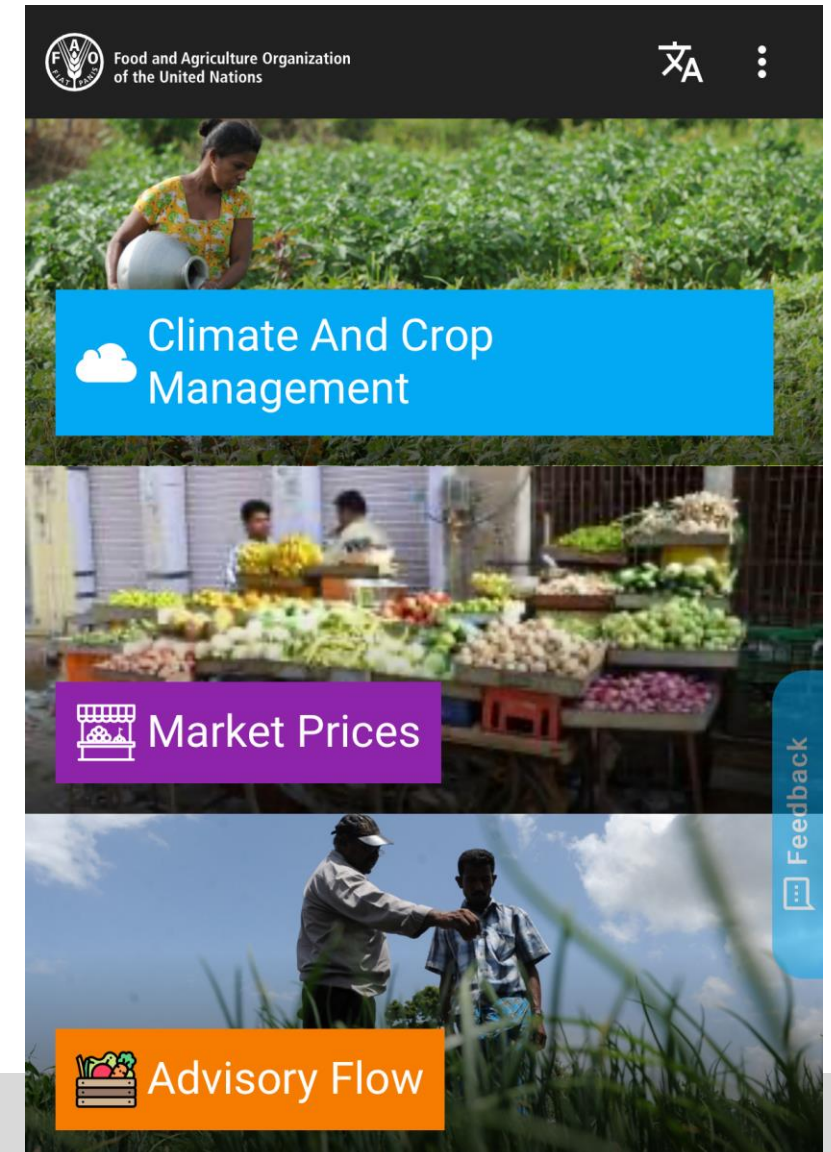
Information on the crop calendar of range of commodities and advices at different stages of crop development

Market Prices

Retail, wholesale, and farmgate prices on a range of agricultural commodities at daily and weekly levels

Advisory Flow

Advices on climate, agro-met and agro-market updates



- 1. More Technology Sharing:** Sharing technology is essential for both mitigation and adaptation reasons, as well as to improve productive efficiency by filling the gaps across countries and reducing food loss and waste within countries (more efficient value chains).
- 2. Innovative Finance Solutions:** Traditional finance solutions, such as monetary transfers (e.g., ODA), may not meet the scale of needs. Innovative solutions, including technological transfers, are required.
- 3. Enabling environment:** It is not just about making technologies available but also creating conducive environments for their adoption.
- 4. Local Solutions:** Adapt technologies to local conditions with the help of local stakeholders, ensuring that they are culturally and environmentally suitable.



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Thank you

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