



The Role of International Trade in Promoting Food Security

Thematic Seminar on Food Security, WTO Committee on Agriculture



Food and Agriculture Organization
of the United Nations

Geneva, 28 March 2023

1.

Food security in the world

2.

Trends in food and agricultural trade

3.

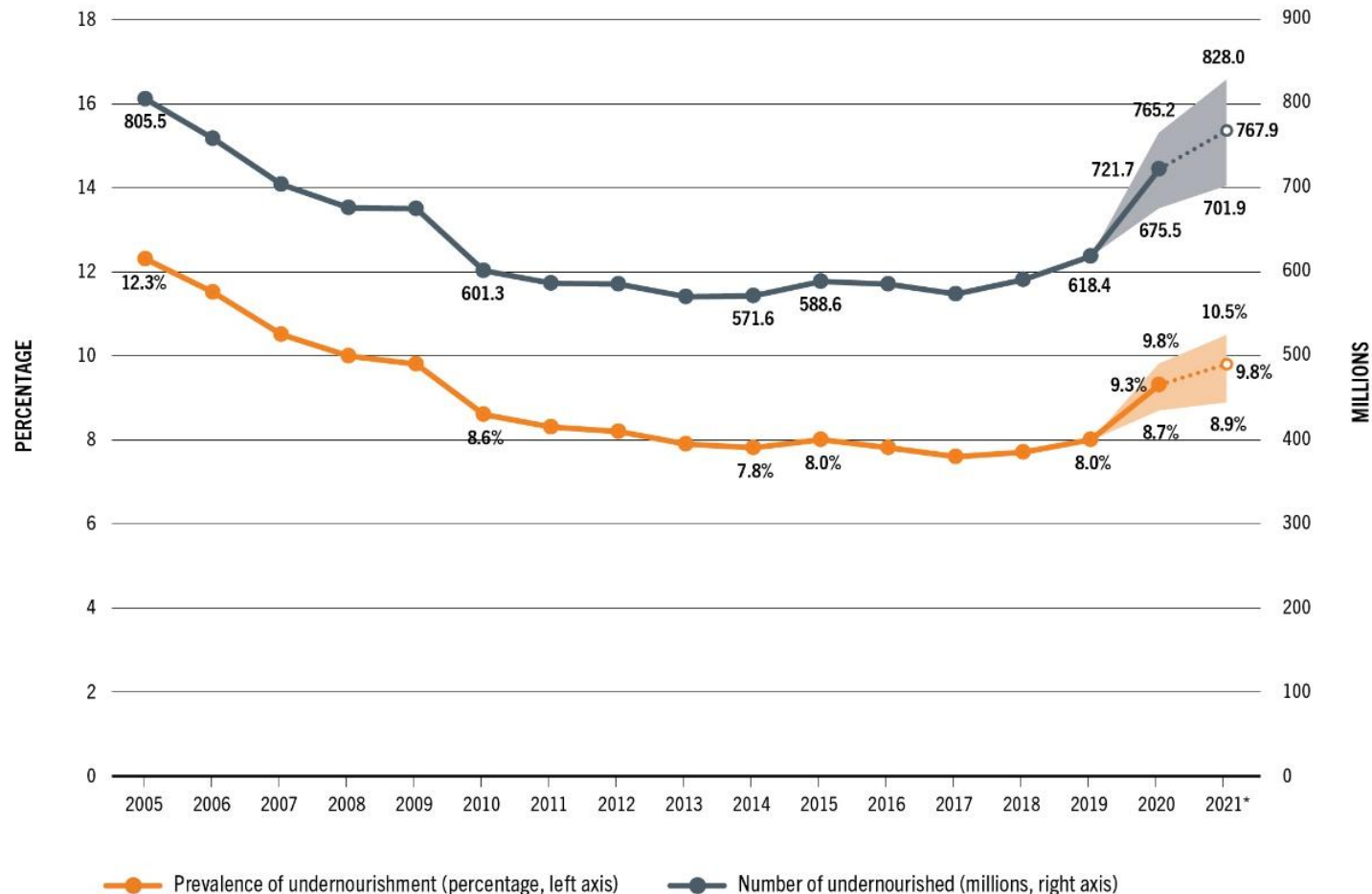
Linkages between trade, food security and nutrition

4.

Current challenges in the trade – food security nexus

Food security in the world

Prevalence of Undernourishment, 2021



- In 2021, between 702 and 828 million people faced hunger (corresponding to 8.9% and 10.5% of the world's population, respectively)
- A total of 150 million more people since 2019
- Drivers: conflict, climate extremes and economic shocks, combined with growing inequalities
 - conflict – 24 countries
 - weather extremes – 8 countries
 - economic shocks – 21 countries

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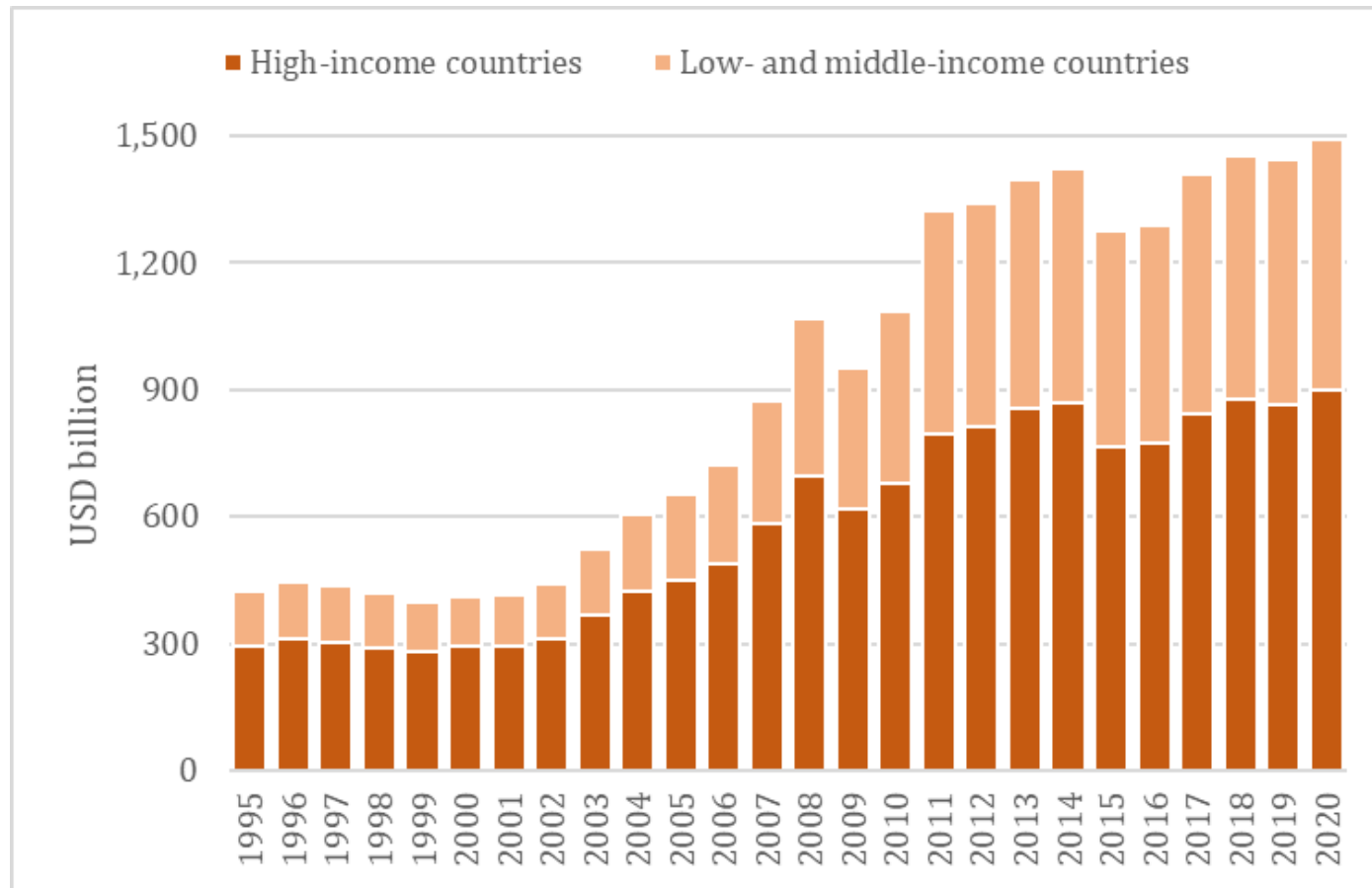
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Trends in food & agricultural trade

The evolution of the value of food and agricultural trade



- Since 1995, food and agricultural trade has more than tripled in nominal terms
- The share of global exports from low- and middle-income countries increased from 30 percent in 1995 to 40 percent in 2011
- Emerging economies have become important players and low-income countries are better integrated into global markets.

Trends in food & agricultural trade

Share of imports and domestic production in food consumption, 2019



- Low-income countries import about 14 percent of their food consumption
- High-income economies rely on the global food markets to meet about 60 percent of their food needs
- Large and richer countries can better leverage comparative advantage – low income countries face high trade costs

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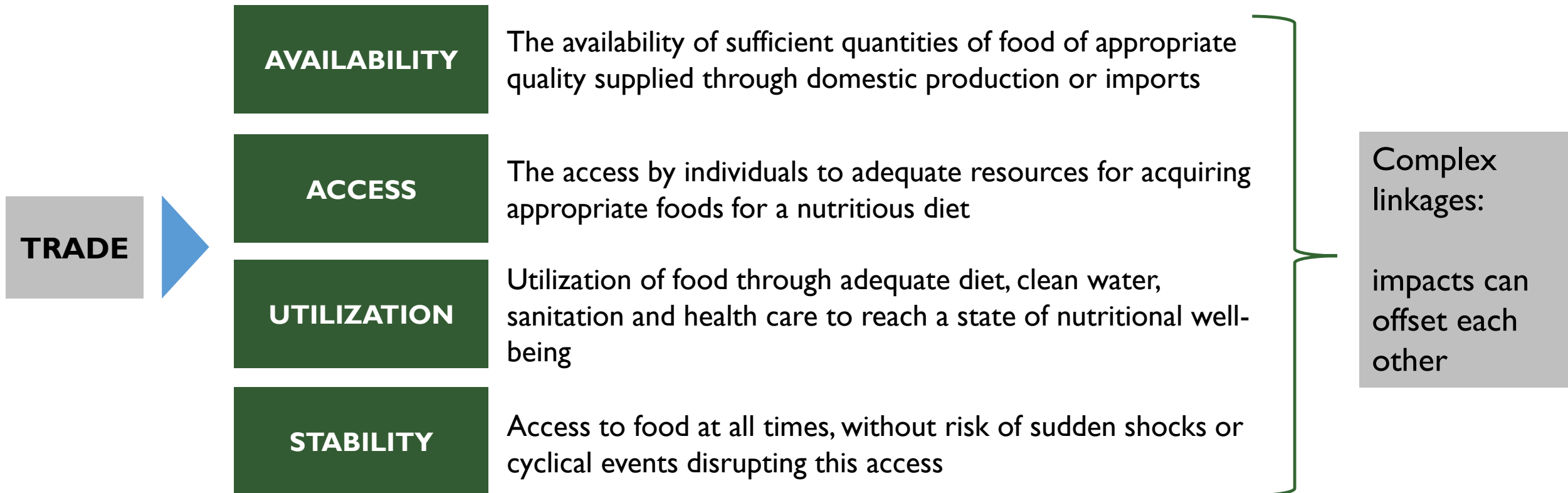
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Food security and its dimensions

Food security is defined when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (1996 World Food Summit)



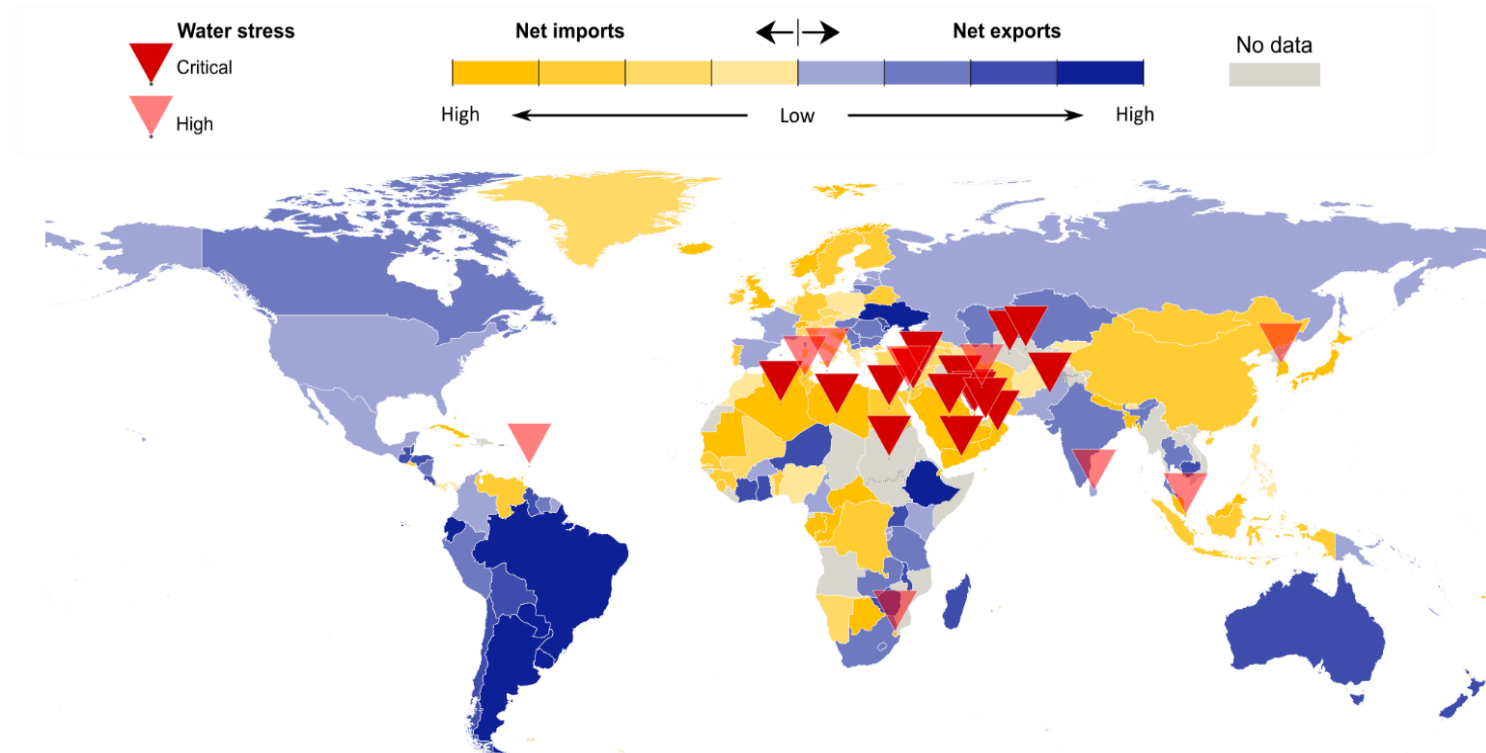
Trade, availability & access to food

- Agroclimatic conditions, land and water availability affect agricultural production and trade
- Trade moves food from surplus to deficit countries, increases the availability of food, reduces prices and can promote food security

Trade openness can have a positive impact on dietary energy supply adequacy per capita (sample 151 countries; Dithmer and Abdulai, 2017)

In the short-run, for net-importing developing countries, trade openness can affect farm income negatively, offsetting other gains and leading to increases in hunger (sample 52 countries; Mary, 2019)

The relationship between water scarcity and net trade positions, 2019

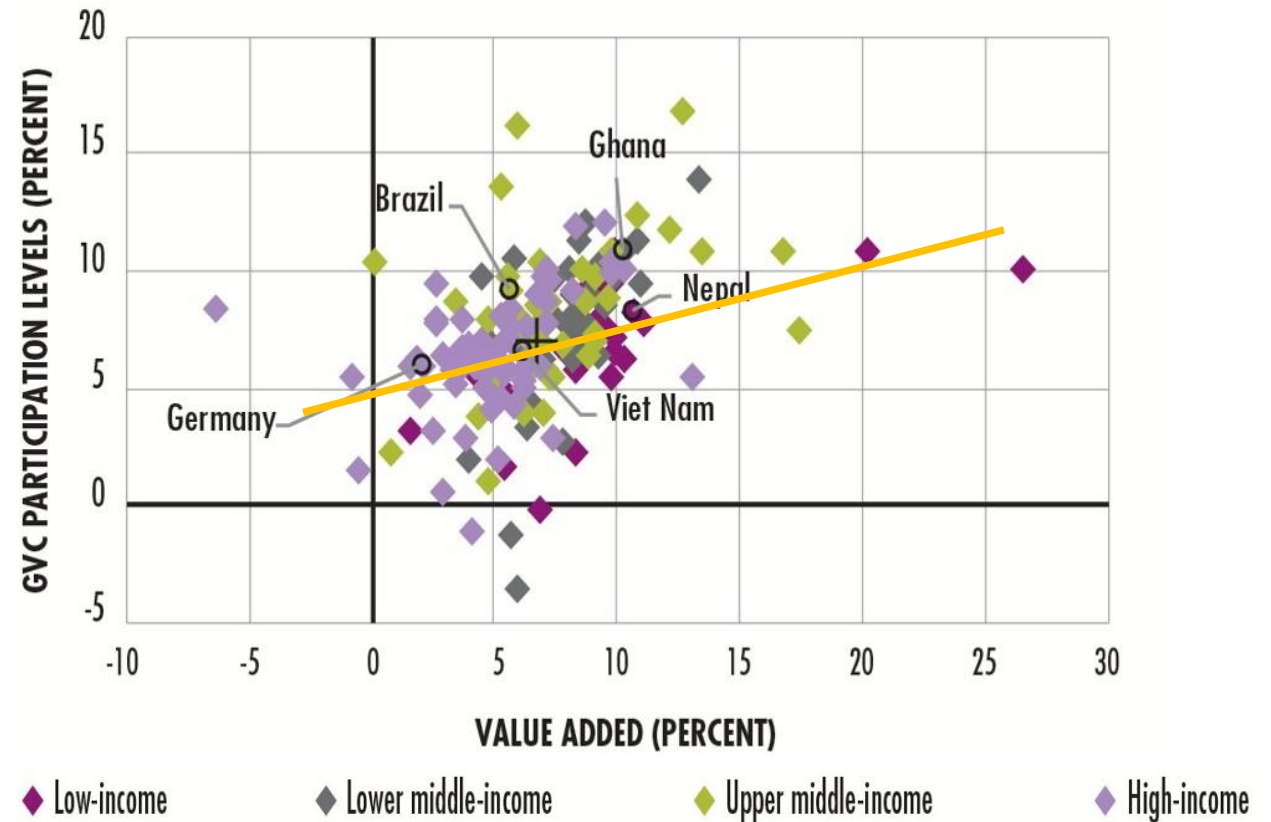


Trade, agricultural productivity & food security

- Trade promotes economic growth through efficient allocation of resources
- As trade affects food prices, the prices of production factors and wages, gains from trade can be asymmetrically distributed
- Smallholder farmers may be unable to compete globally

- In the long term, trade generates technological spillovers and can result in productivity growth
- A 10% increase in agricultural global value participation can on average lead to an increase in agricultural labour productivity of more than 1% (FAO, 2020)

Global value chain participation and agricultural productivity

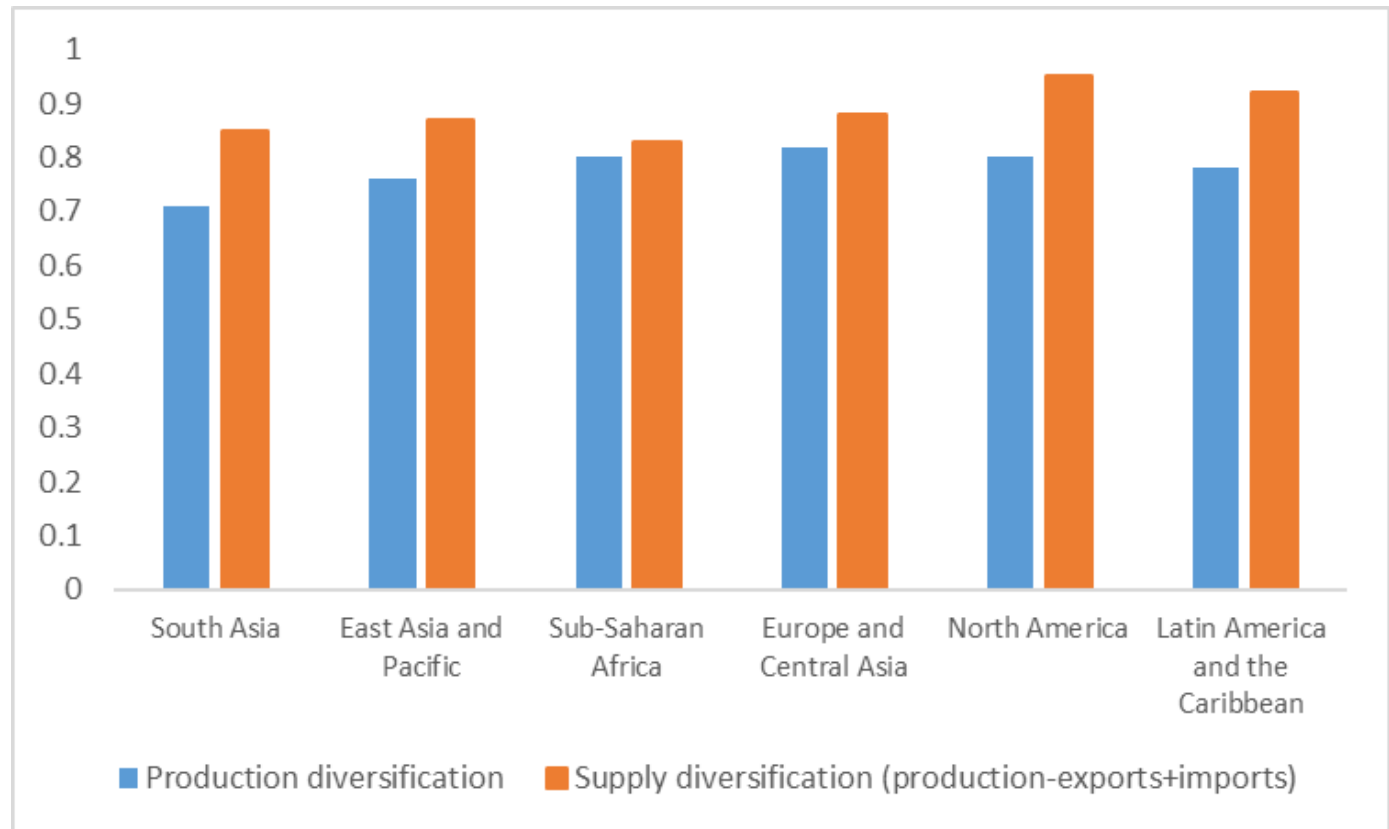


Trade and utilization: Foods diversity & nutrition

- Trade can increase the diversity of foods, as foods that cannot be produced domestically can be imported from other countries
- Diversity in foods and nutrients provides the basis for healthy diets

- **FOODS:** countries can attain higher diversity in foods through trade (Remans, *et al.*, 2014)
- **NUTRIENTS:** all countries increased their nutrient adequacy through trade - for low-income countries there are particular concerns around vitamin A and B12 (Geyik, *et al.*, 2021)

Diversification index (0=one food, 1=highest value of foods diversity)
Region averages

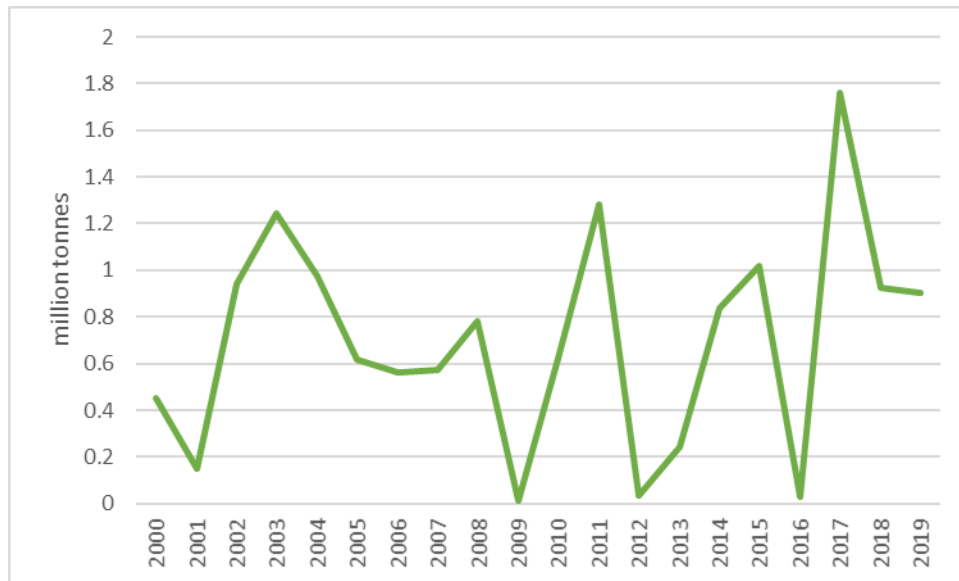


Trade and stability

Trade helps to offset the impact of production shortfalls and dampen domestic price volatility

BANGLADESH - RICE

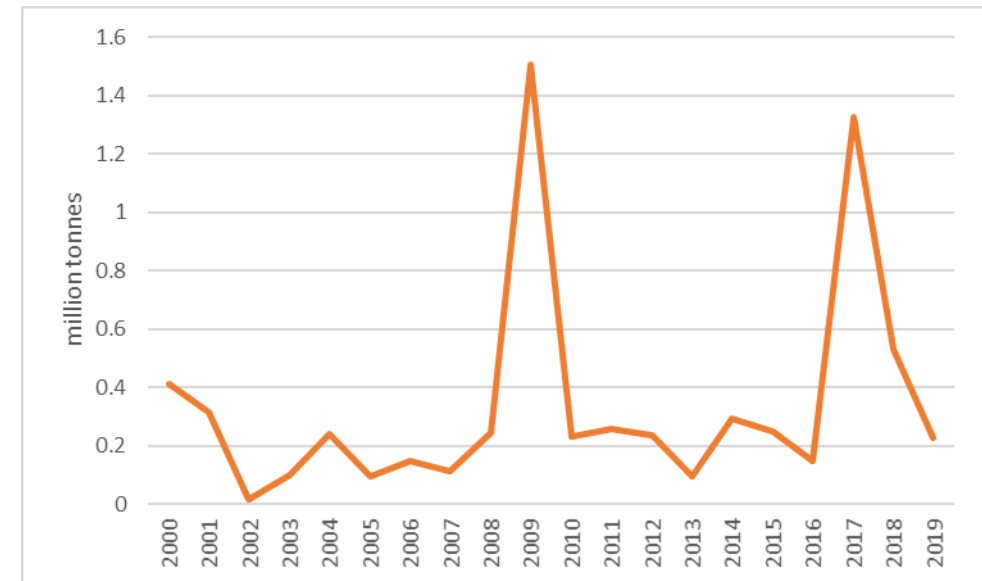
- severe floods in 2017 led to retail rice prices increase by over 30 percent
- imports increased to about 1.7 million tonnes to stabilize domestic prices
- custom duties reduced from 25% (June) to 2% (August)



FAOSTAT

KENYA - MAIZE

- reduced 2016 production due to poor rains and concerns over the 2017 long-rains harvest due to dryness and armyworm infestations resulted in record prices in April
- import licenses and removal of import duties on maize for the period of four months



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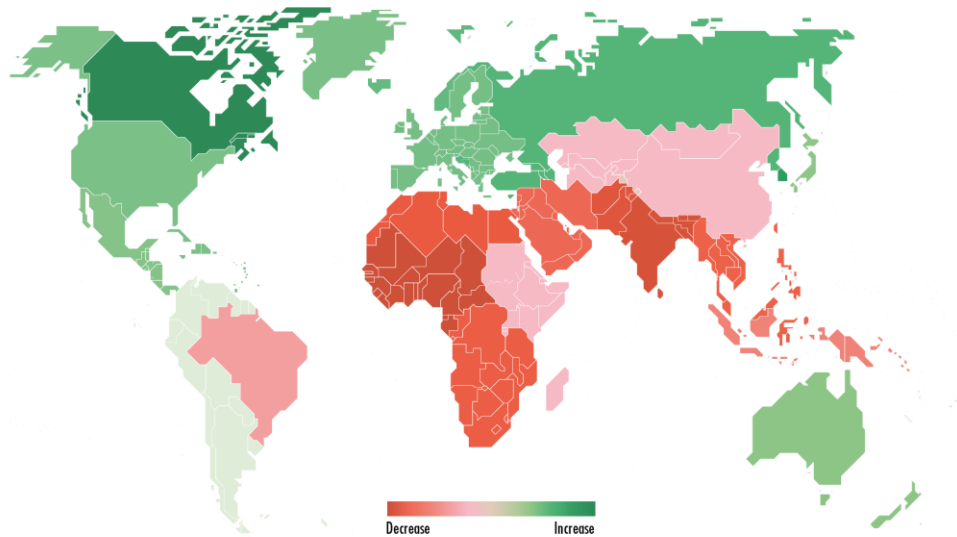
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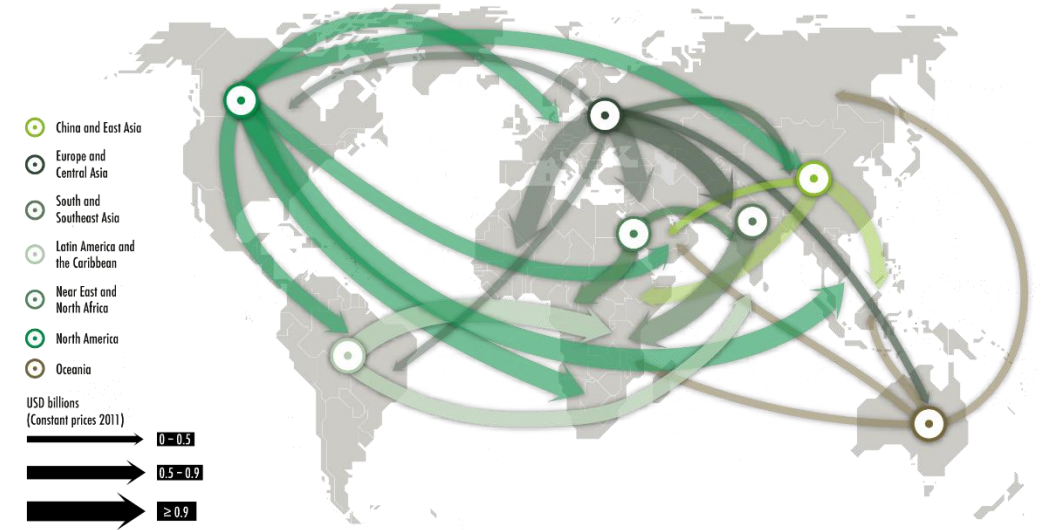
Climate change & food security: The adaptation role of food trade

Impact of climate change on agricultural production by 2050
(relative to baseline)



FAO. 2018. The State of Agricultural Commodity Markets 2018.

Increases in exports of agricultural products in 2050
(relative to baseline)

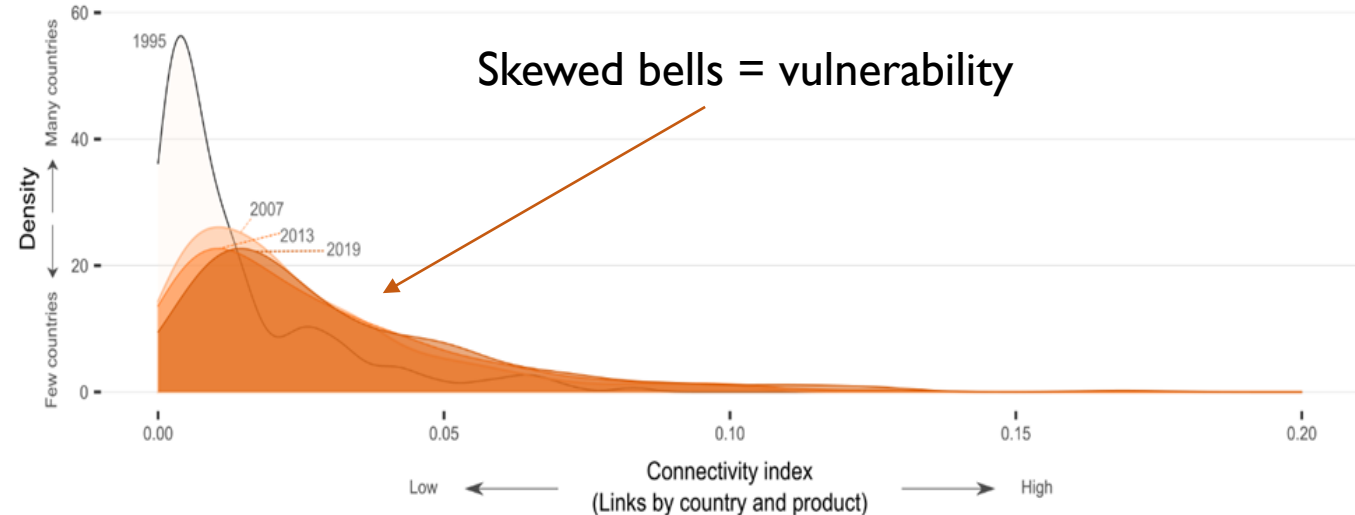
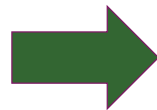
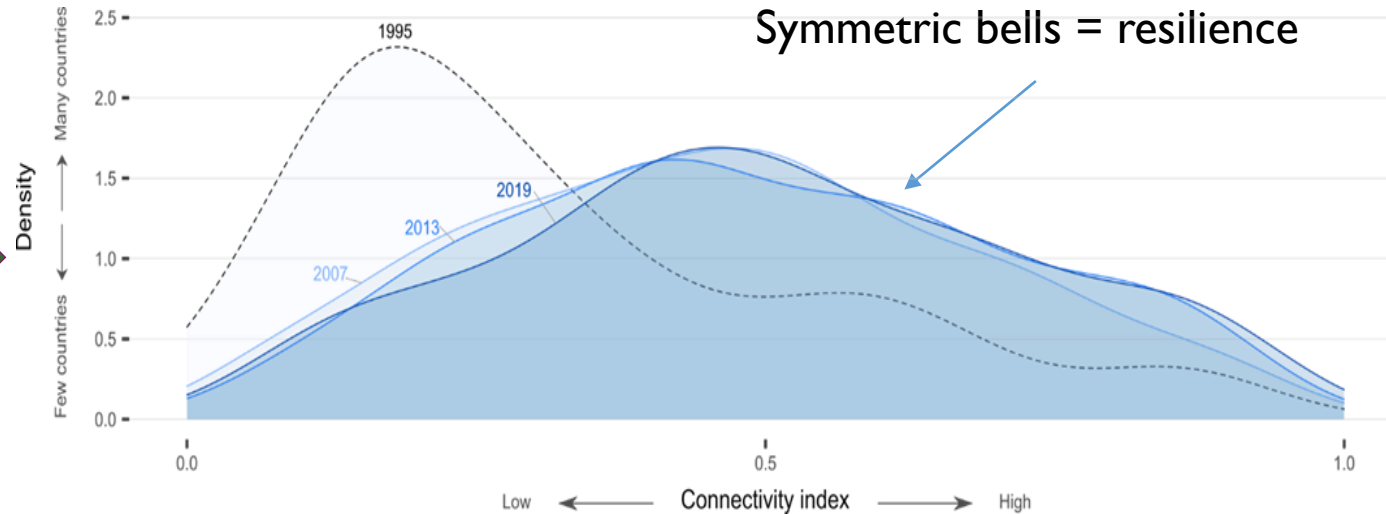
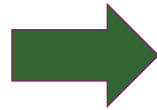



FAO: 2018. The State of Agricultural Commodity Markets 2018.

Well-functioning markets strengthen the adaptation role of trade in promoting food security, but for net-importing countries that are affected by global warming, food import bills can increase significantly

The globalization of food trade: Distribution of trade links and resilience

- For **aggregate food**, the global market has become **more resilient** to shocks.
- Since 1995, the distribution of trade links has become more balanced and symmetric
- For **individual foods**, markets can be **vulnerable** to shocks.
- Trade links at the product level are unevenly distributed – **export restrictions can harm food security**





Without trade, the availability and accessibility of foods and nutrients would be more unevenly distributed, any form of domestic production disruptions would cause serious concern for food security, and diets would be less diverse.

