



The role of agriculture trade in achieving sustainability objectives and food security

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The Role of International Trade in Promoting Food Security
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Food systems have always and will continue to be exposed to shocks



**Trade, Trade Policy,
and Trade Policy
responses could
mitigate or amplify
these risks**

All these risks will increase
due to climate change



Food security – availability, access, utilization, and stability of supply



Simple pathway without trade policy disruptions



Change in wheat exports, Jan-Jun 2022 vs Jan-Jun 2021

Million metric tons

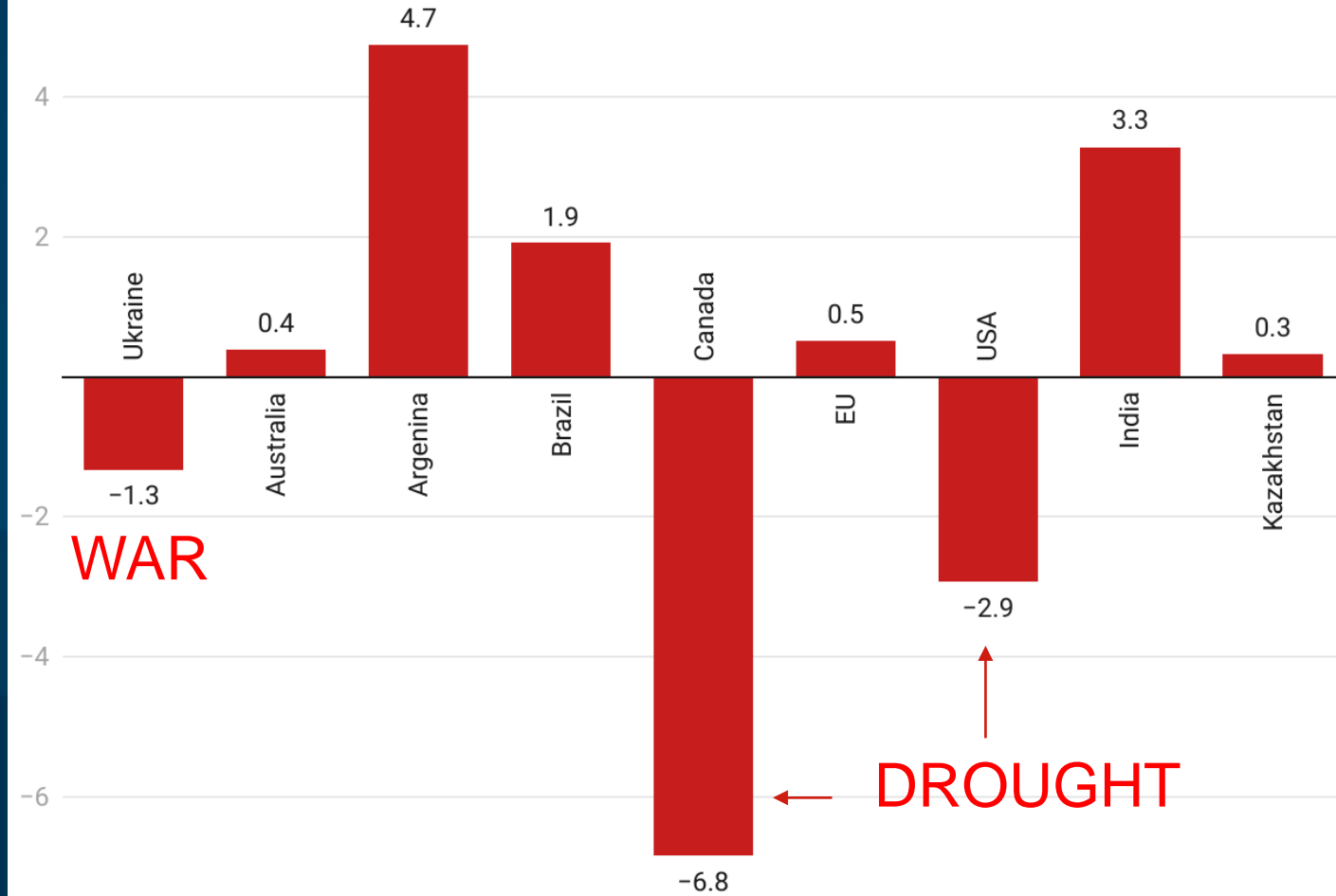


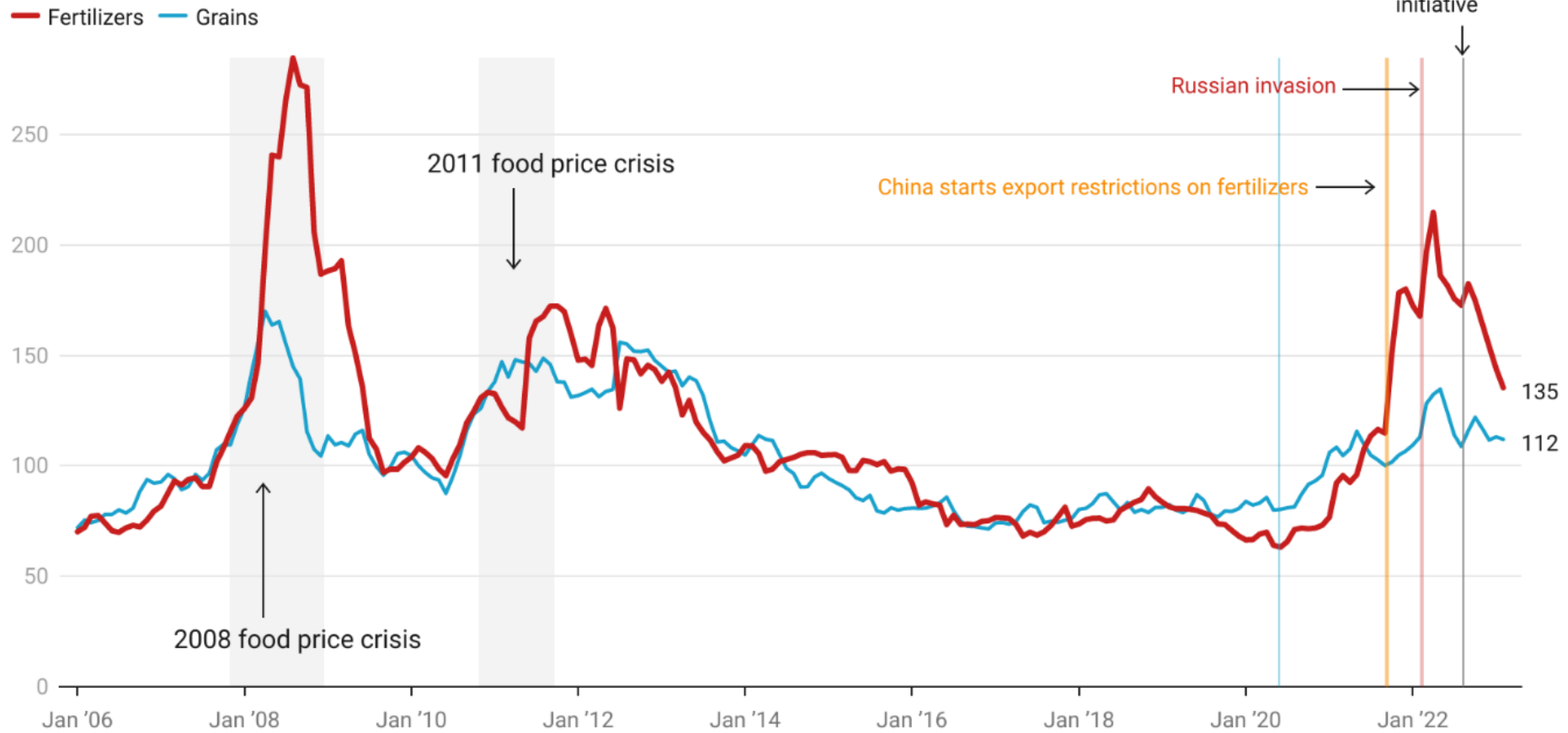
Chart: Joseph Glauber • Source: Author's calculation based on COMTRADE data

Global markets
help adjust to
shocks
e.g., 2022



Prices for grains and fertilizer

Index based on constant USD prices. Base 100 = Average 2010-2020



Source: World Bank, U.S. Bureau of Labor Statistics

Rising real prices for food and fertilizer. Source: <https://www.ifpri.org/blog/high-fertilizer-prices-contribute-rising-global-food-security-concerns>

Six Lessons Learnt from a Year of Multiple Crises



Lesson #1: Avoid export bans and restrictions on food and agricultural goods

Lesson #2: Flexibility in the sources for food, feed, and agricultural inputs

Lesson #3: Increase agricultural productivity

Lesson #4: Provide for financial risk and uncertainty

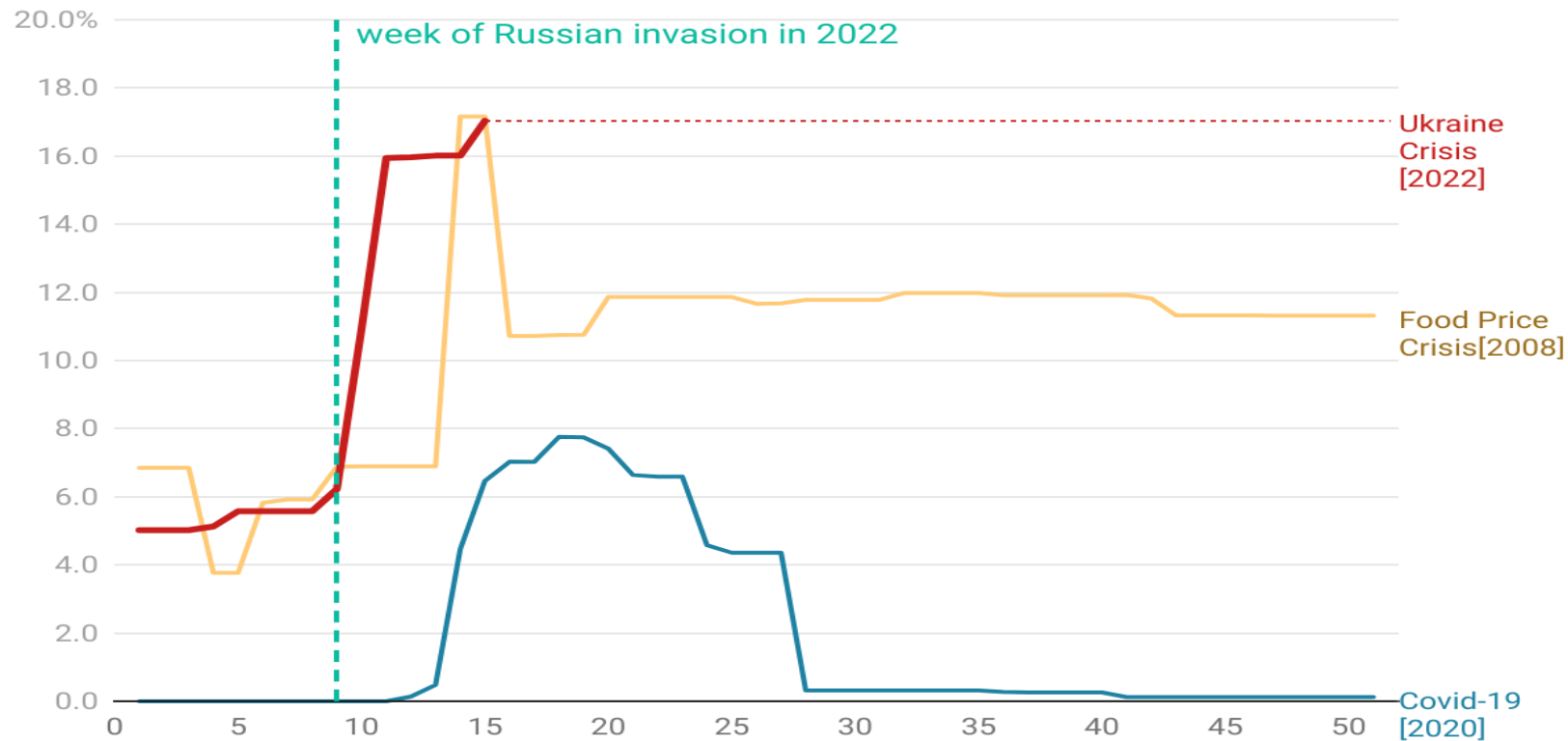
Lesson #5: Don't forget the broader, longer-term agenda

Lesson #6: Protect nature and climate, protect the food supply!



Lesson #1: Avoid export bans and restrictions on food and agricultural goods

Evolution of the share of global trade, in calories, impacted by export restrictions



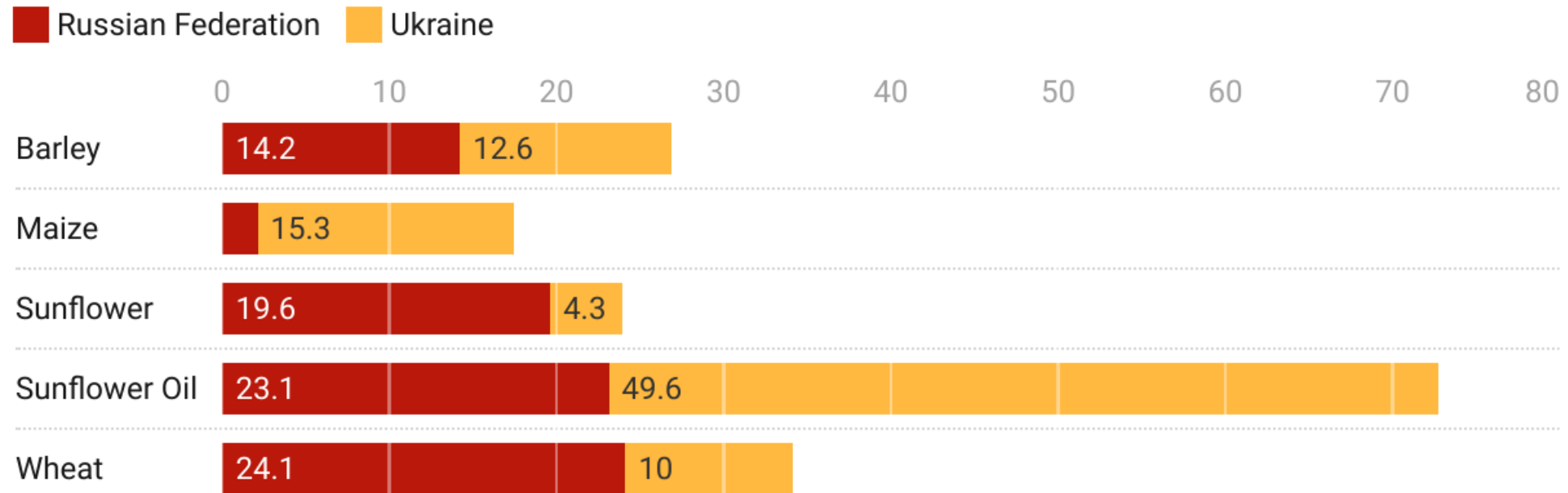
X-axis shows the week of the year. 1= first week of the year. Data extracted from the Export restriction tracker on April 12th 2022.

Chart: David Laborde • Source: Food and fertilizer export restriction tracker, IFPRI



Lesson #2: Flexibility in the sources for food, feed, and agricultural inputs

Share in global markets, volume



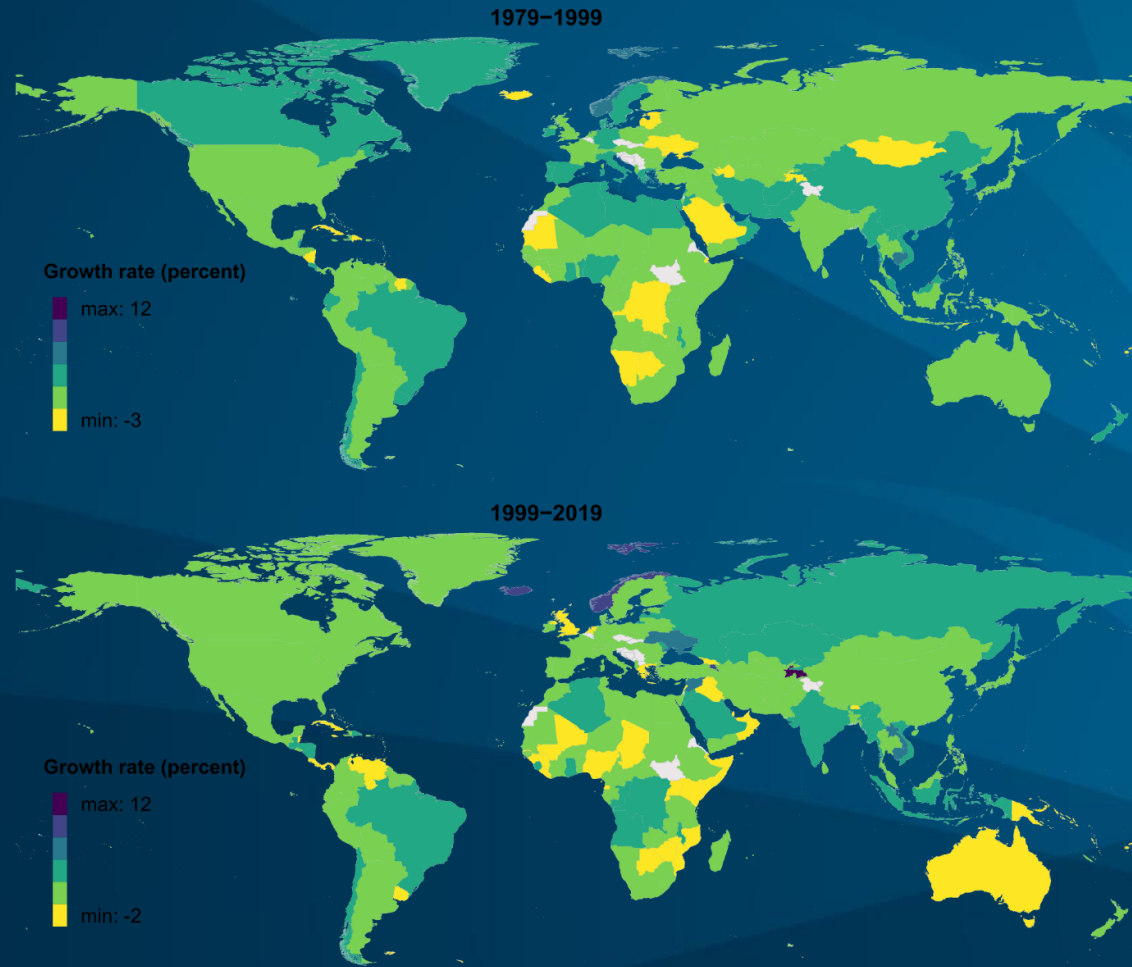
Intra-EU trade excluded from computations.

Chart: David Laborde • Source: COMTRADE • Created with Datawrapper



Lesson #3: Increase agricultural productivity

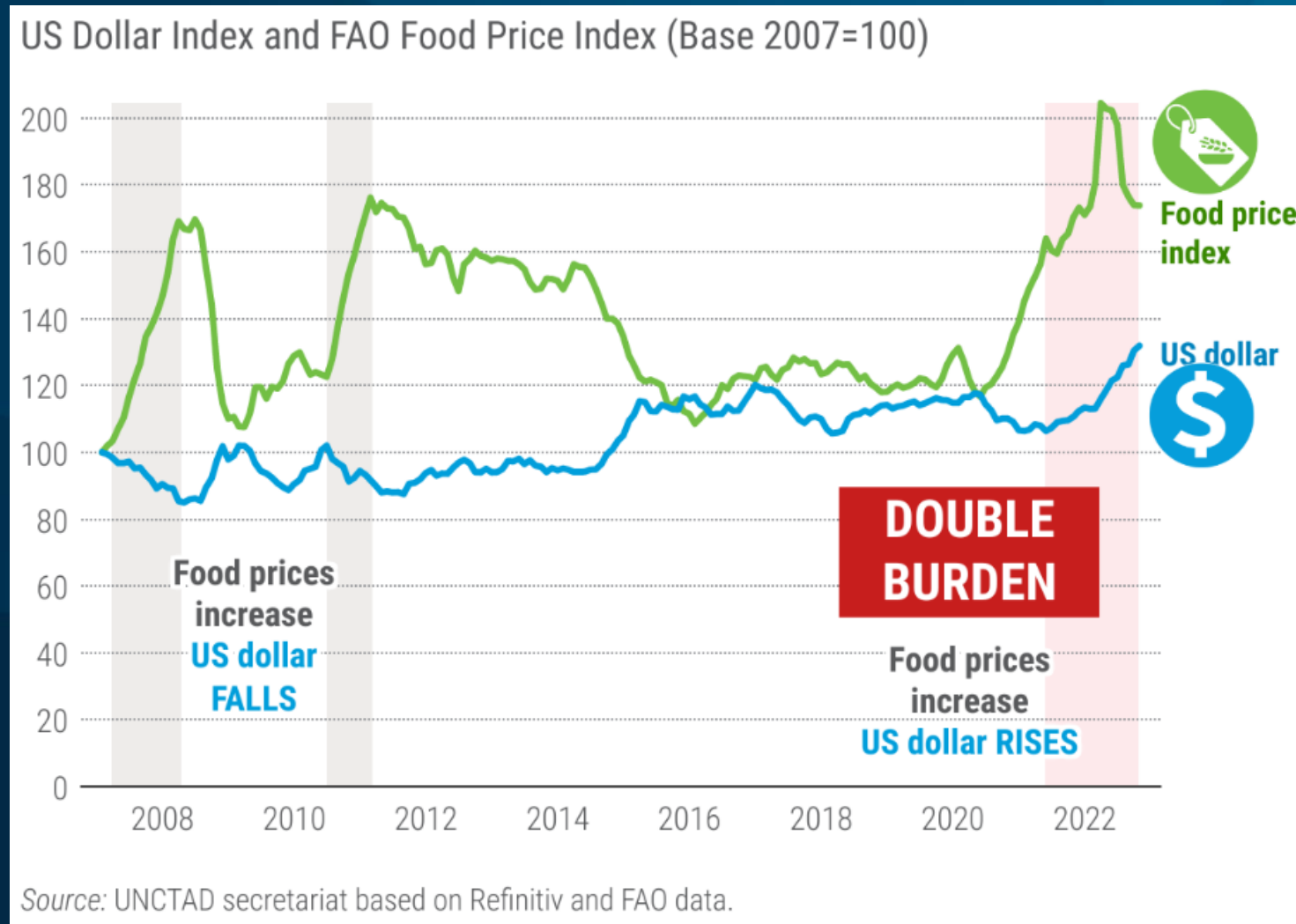
Average annual growth rates in agricultural total factor productivity, 1979-1999 and 1999-2019



Source: Authors' calculation based on Fuglie *et al.* (2010).



Lesson #4: Provide for financial risk and uncertainty





Lesson #5: Don't forget the broader, longer-term agenda



Short term
effects



With long-
term
repercussions



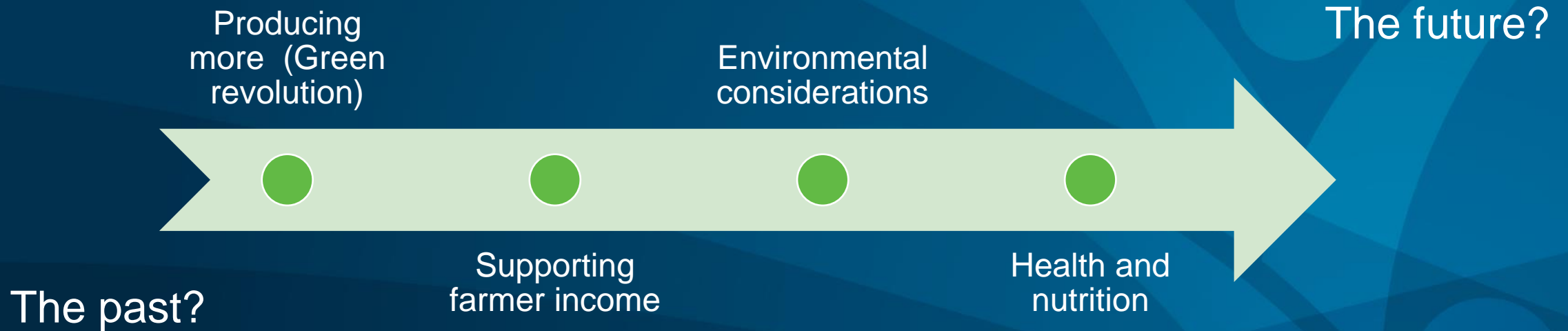
What should be the
world's strategy to
manage the situation and
prepare for the future?

A wide-angle photograph of a sunflower field. The sunflowers are in full bloom, with bright yellow petals and dark brown centers. They stretch across the entire foreground and middle ground to a flat horizon line. The sky above is a clear, deep blue with a few wispy white clouds scattered across it. The overall scene is bright and sunny.

**Lesson #6: Protect nature and climate, protect
the food supply**



A brief history of farm policy goals, and level of development



THANKS

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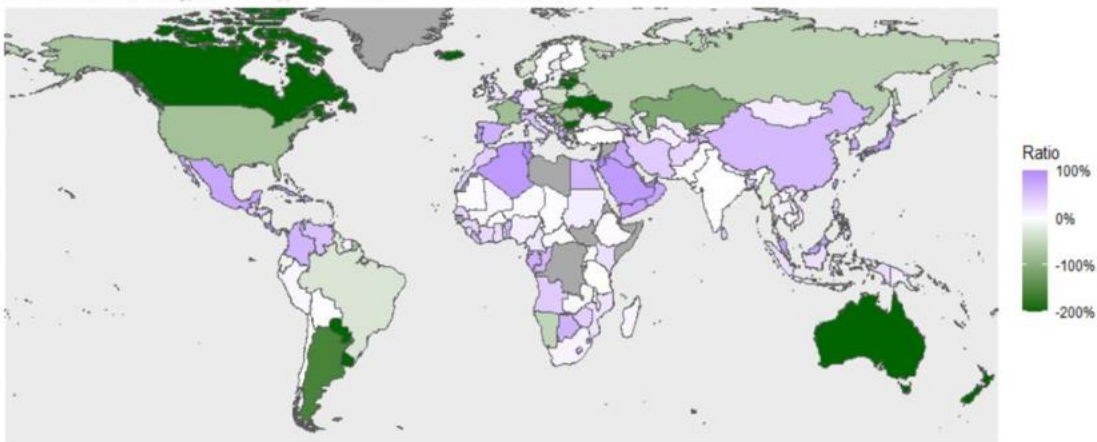
Photos by Lucas Green





National imbalances in food supply and demand between regions- the role of trade and a multilateral trade system

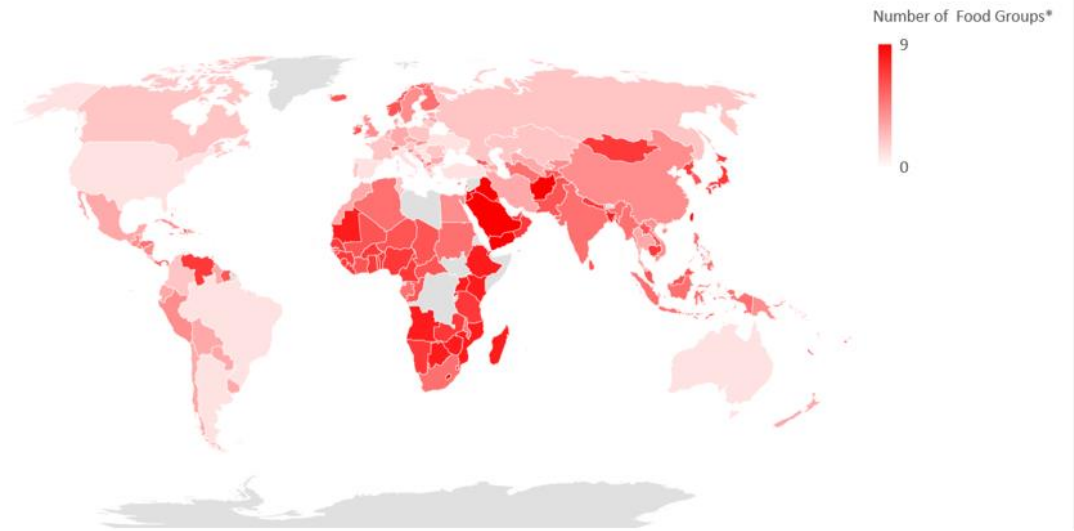
Ratio of net Imports and Food Consumption, Proteins



Source: Authors' computations based on FAOSTAT Food Balance Sheets

Note: For the sake of readability, the ratio is capped to -200% and +100% but several economies exceed these bounds.

Number of food group with insufficient domestic supply (adjusted by FLW)

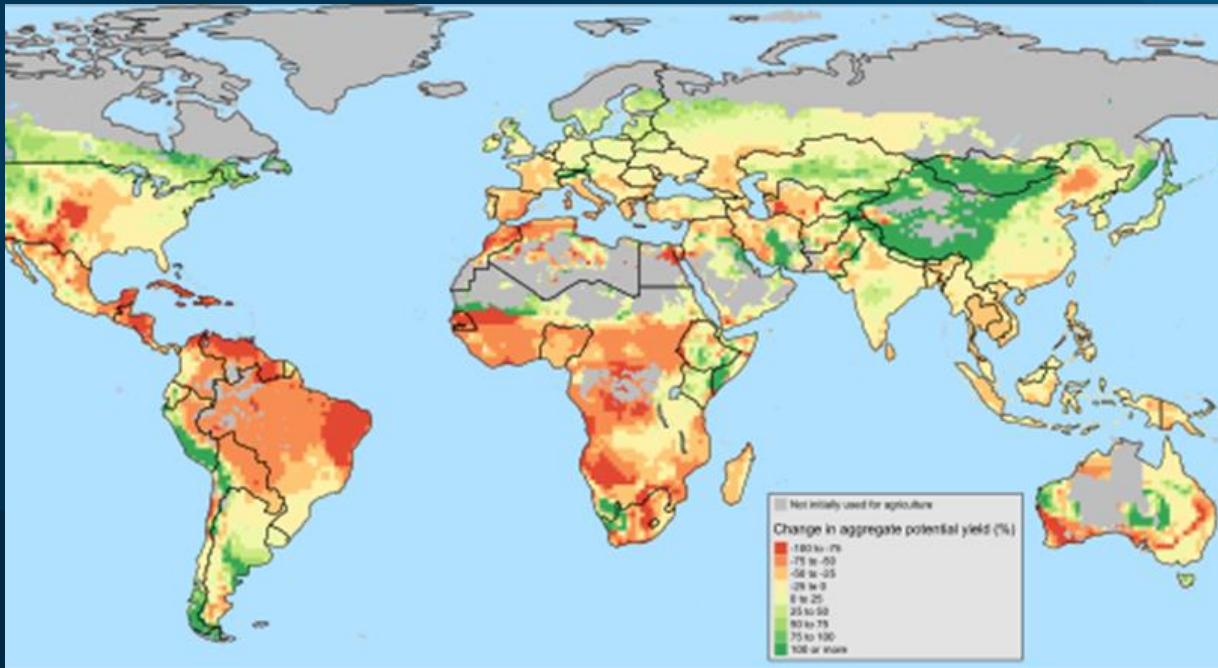


Source: Authors' computations based on FAOSTAT Food Balance Sheets, and UNEP (2021) food waste estimates.

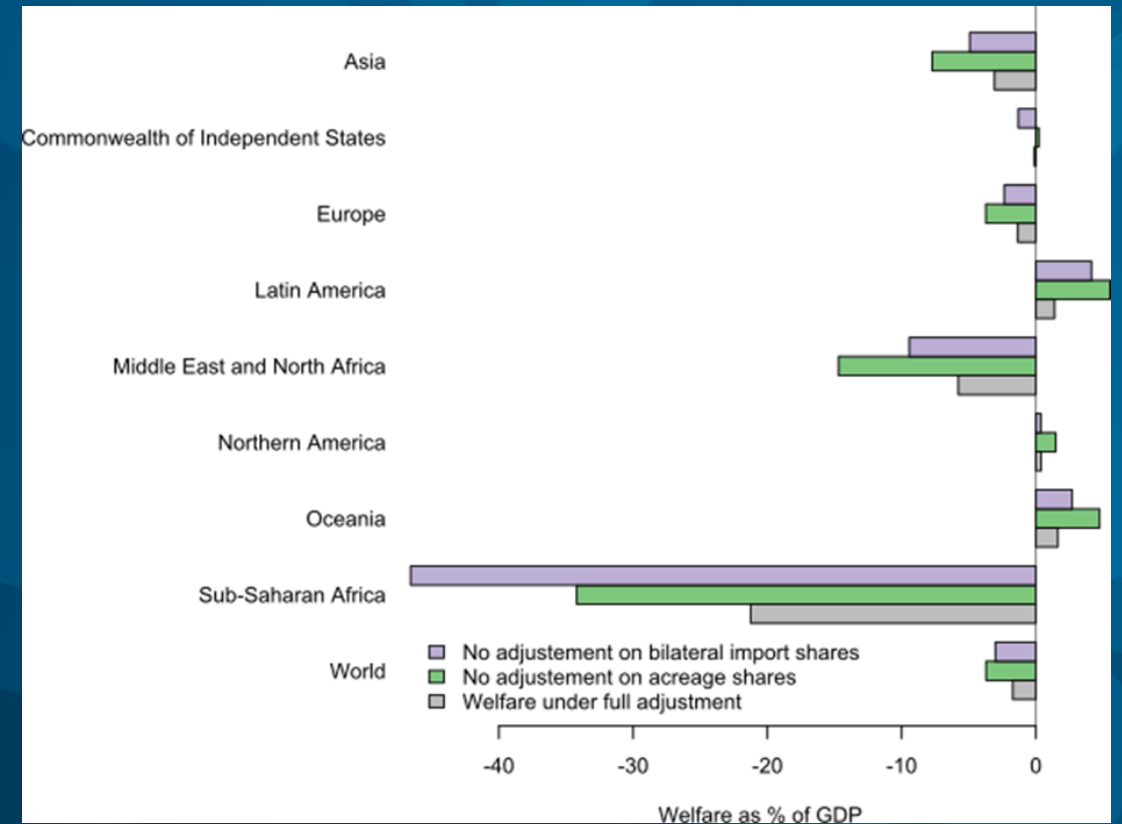
Laborde Debucquet, David; Piñeiro, Valeria; and Johan Swinnen. Forthcoming. Tomorrow's agri-food system: the linkages between trade, food security and nutrition for a sustainable diet. Routledge Handbook of Sustainable-Diets.



Trade remains critical to adaptation



Relative changes due to climate change in potential yields aggregated across crops



Welfare results under full adjustment and limited adjustment

Source: [Gouel and Laborde \(2018\)](#)