
A Nuanced Approach to Food Self-Sufficiency: When Does it Make Sense?

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1. A Highly Polarized Debate

Critics attacked food self-sufficiency in 2008 food crisis:

- Cast as autarky (closed borders)
- Deemed 'inefficient'
- Conflates ends with means



A need for definitional clarity

- FAO defines Self-Sufficiency Ratio (SSR):

Production / production + imports – exports

- Self-sufficiency can also be measured as % of domestic production that meets daily caloric needs within a country:

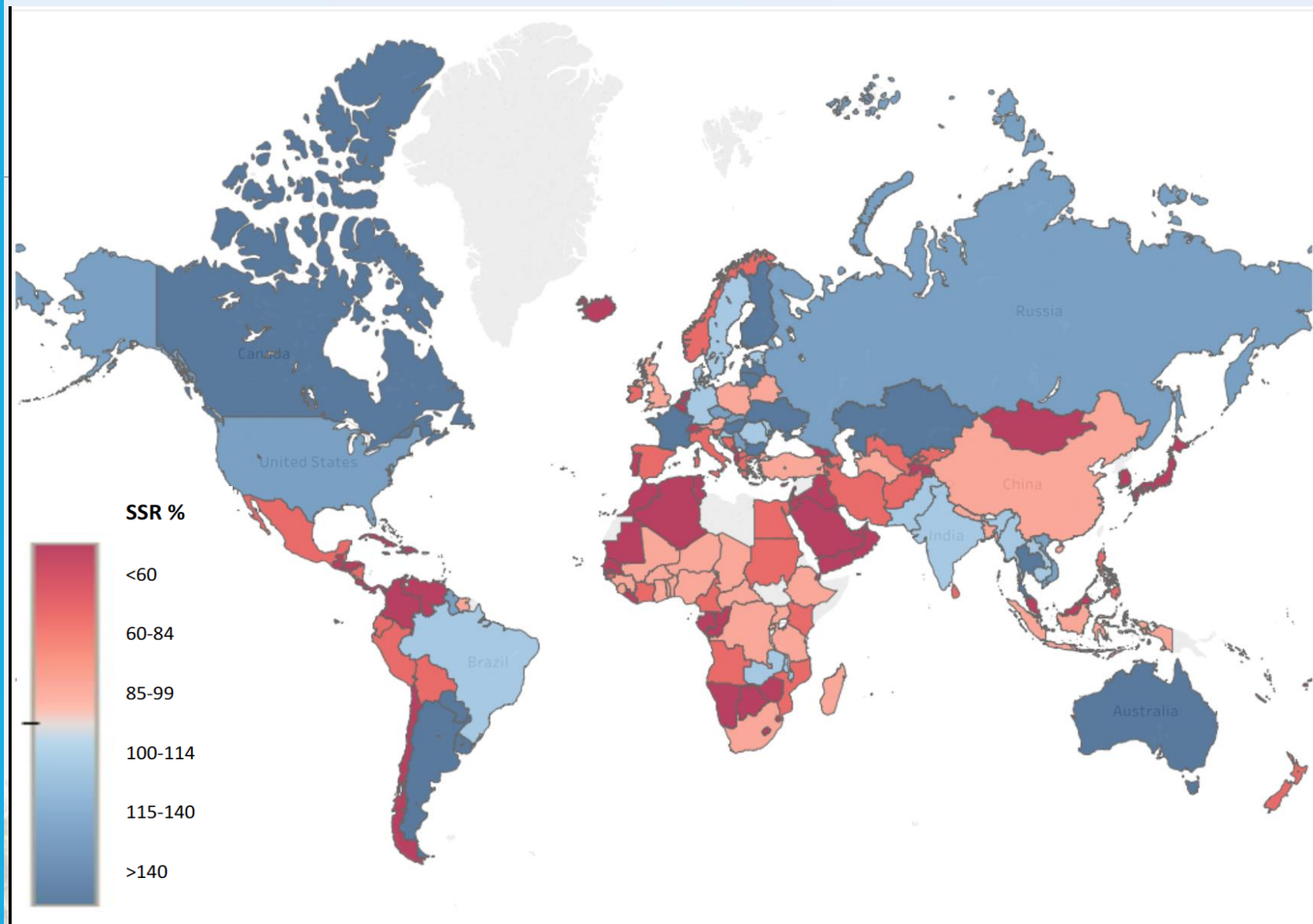
Usually 2500 kcal/person/day is considered self-sufficient

- These definitions of self-sufficiency do not preclude trade



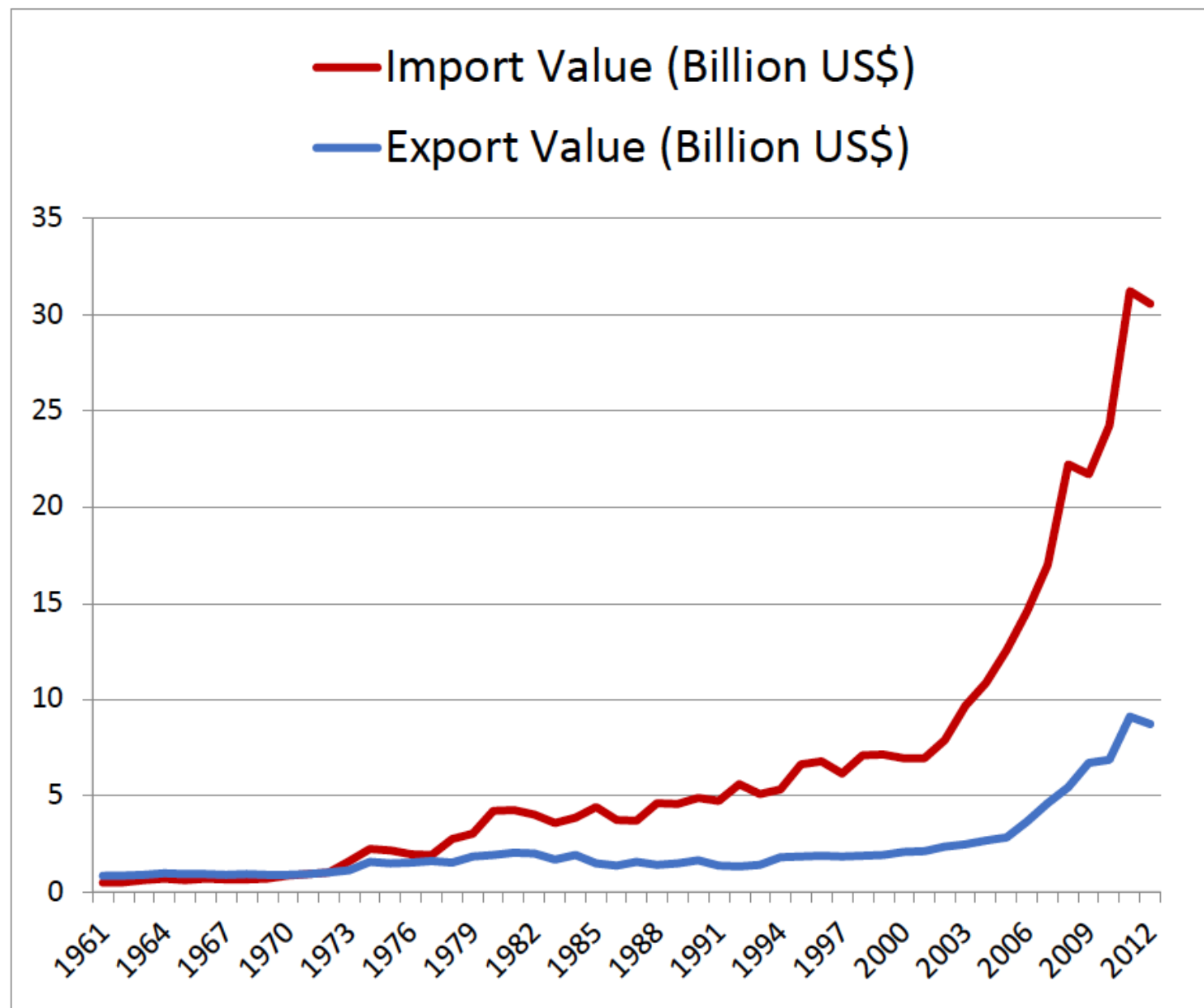
Self-Sufficiency Ratios for Cereals and Starchy Roots, by Country, 2007-2011

*Source: Clapp 2017.
Calculated from FAO Food Balance Sheets, based on averages for the 2007-2011 period for cereals and starchy roots.*

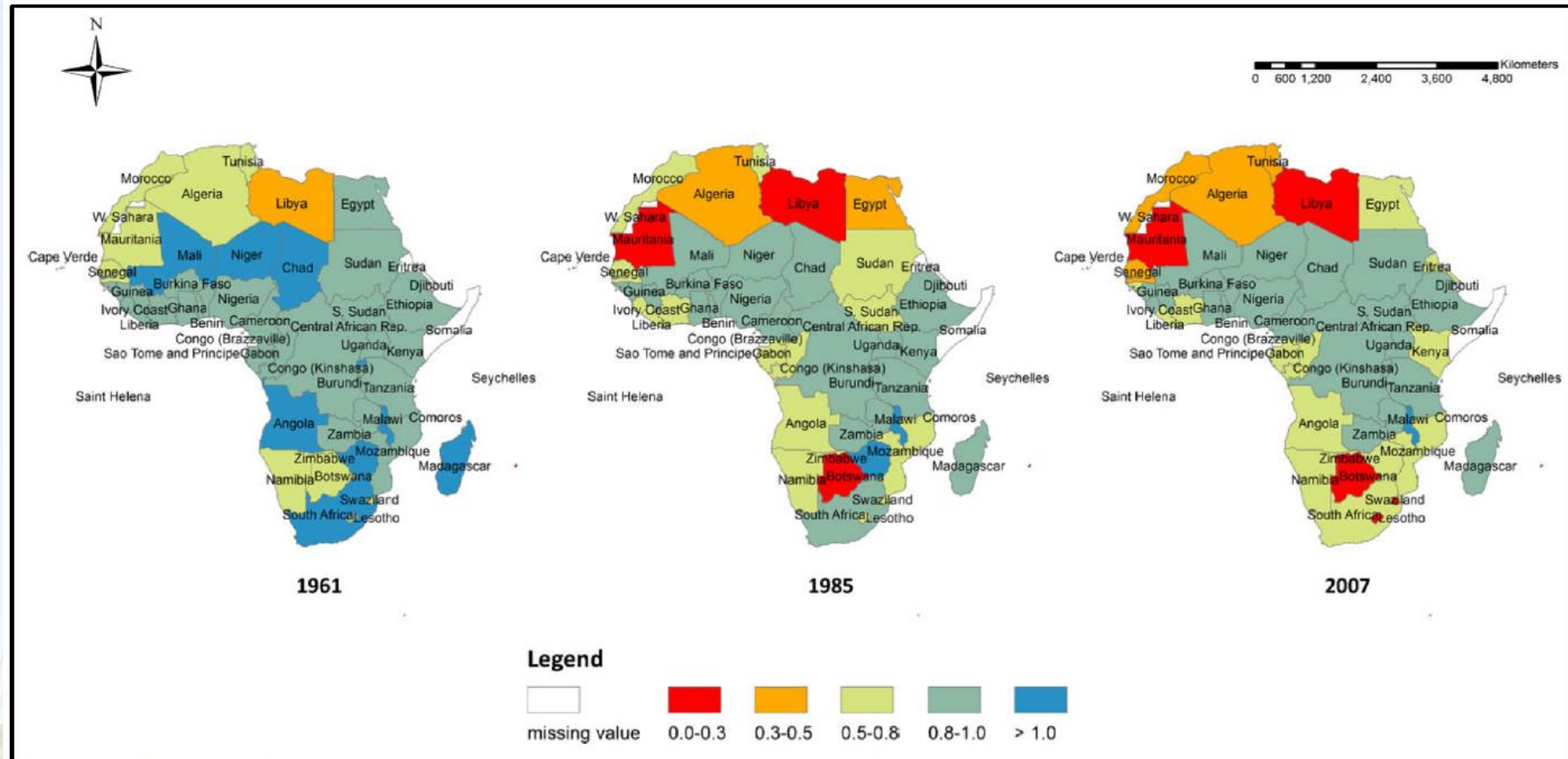


Value of Food Imports and Exports of the Least Developed Countries, 1961-2012

Source: FAO Data
(Current Values)



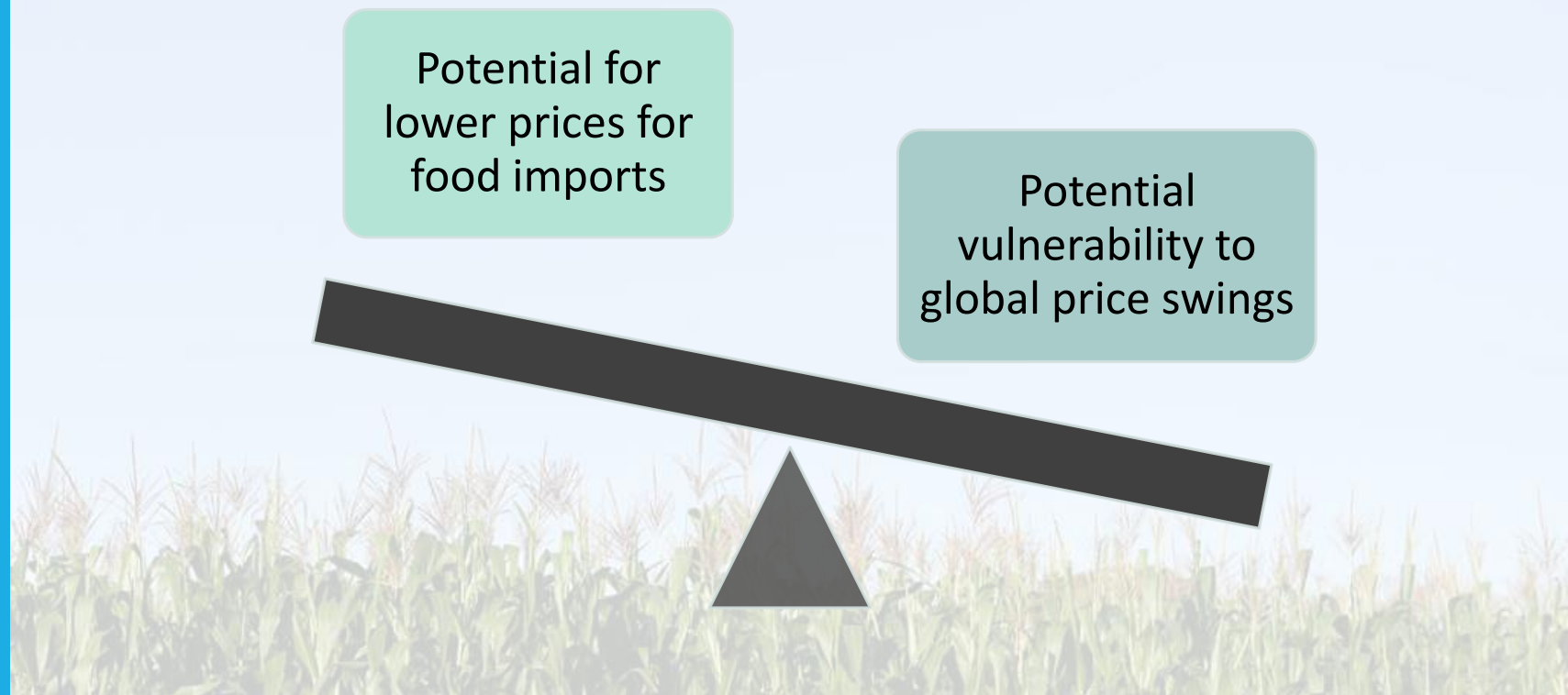
Changes in African Countries' SSRs over time



Source: Reproduced from Luan et al. 2014, based on FAO data

2. When Improving Self-Sufficiency Can Make Sense

A) Economically: benefits vs. costs



Examples of economic vulnerabilities from excessive reliance on imports



- Countries with high levels of poverty & food insecurity (esp. agri-based economies)



- Countries that rely on primary commodity exports



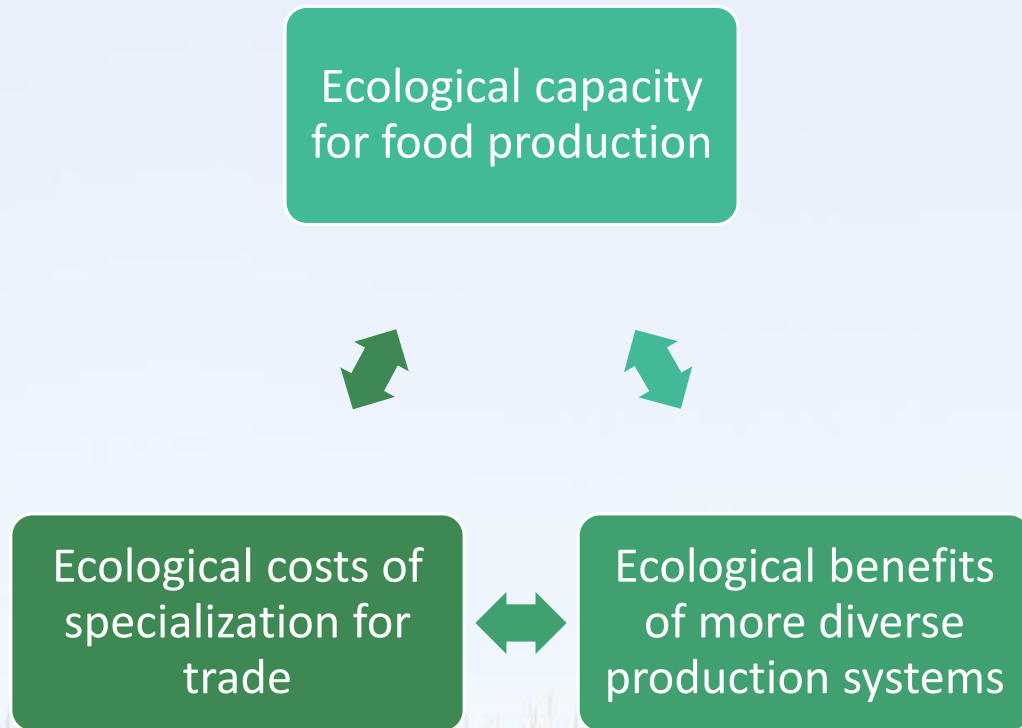
- Countries with large populations



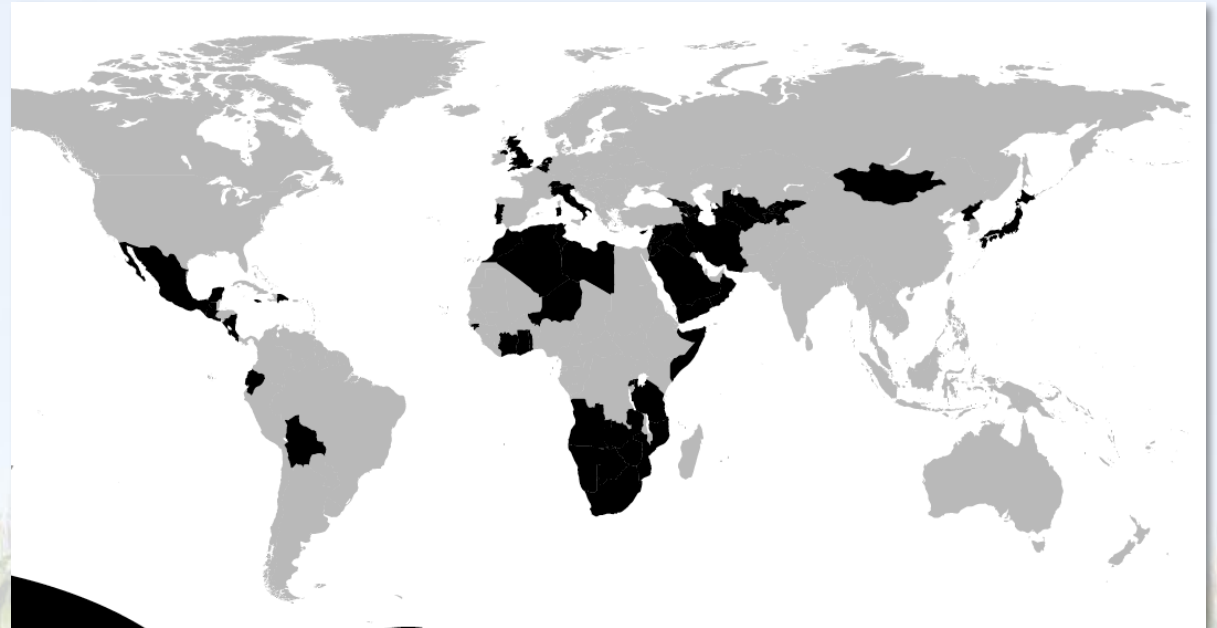
- Countries that rely on staples imports controlled by only a handful of suppliers

Paul Samuelson: "My belief is that every good cause is worth some inefficiency"

B) Ecologically: Multiple factors at play



66 countries currently exceed ecological boundaries and are unable to meet all of their food needs domestically (Fader et al. 2013)



Source: Reproduced from MacDonald 2013

Specialization vs. diverse farming systems



Forest clearing for palm oil production in Indonesia



Maize and bean intercropping in Rwanda

C) Politically: national security and political autonomy



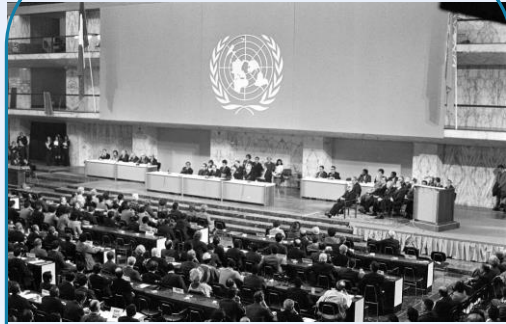
“Can you imagine a country that was unable to grow enough food to feed the people? It would be a nation that would be subject to international pressure. It would be a nation at risk.

And so when we're talking about American agriculture, we're really talking about a national security issue.”

- G.W. Bush, Speech to Future Farmers of America, July 27, 2001

3. Changing norms on food self-sufficiency

Post-WW2 – food self-sufficiency seen as normal policy (food & agriculture exempted from the GATT)



1994 GATT Uruguay Round Agreement on Agriculture liberalizes agricultural trade



1974 World Food Conference - calls for maximization of food self-sufficiency to address food crisis



2009 World Summit on Food Security – no mention of food self-sufficiency as a response to food crisis

Is food self-sufficiency making a come-back?





A more nuanced understanding of food self-sufficiency can help inform policies that are compatible with sustainability and food security in this new global context

Thank you!

For additional details:

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Viewpoint

Food self-sufficiency: Making sense of it, and when it makes sense

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