Global hotspots:

how the evolving nutrition and agricultural landscape is changing the story of development for 2030

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Disclaimer

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- I currently work as a Nutrition Coordinator for Action Against Hunger - Lebanon
- I received partial funding from the Hunger and Environmental Nutrition Practice Group of the Academy of Nutrition and Dietetics.
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Objectives

- Identify and prioritize hunger, malnutrition, and nutrition security hotspots where food and nutrition policy and agricultural development meet to inspire social action on realizing the Sustainable Development Goals.
- Describe trends, drivers, and challenges of the global agricultural landscape in the emerging development context.
- Discuss the impact of evidence-informed worldview on changing population behavior towards food, nutrition and agricultural policy choices and actions within everyday practice.

Quiz # 1

How many people are there in the world?

a. 8 Billion
b. 7 Billion
c. 6 Billion

Quiz # 2

What is the number of hungry people in the world?

a. 1 billion
b. 800 million
c. 700 million

Quiz # 3

What percentage of the world population is hungry?

a. 6.25 % (about 1/16th of the World Population)
b. 11 % (about 1/9th of the World Population)
c. 25 % (about 1/4th of the World Population)

In the last 20 years the proportion of the World population living in extreme poverty has…

In the last 20 years, the proportion of the world population living in extreme poverty has:

- ☐ Almost doubled
- ☐ Remained more or less the same
- ☐ Almost halved

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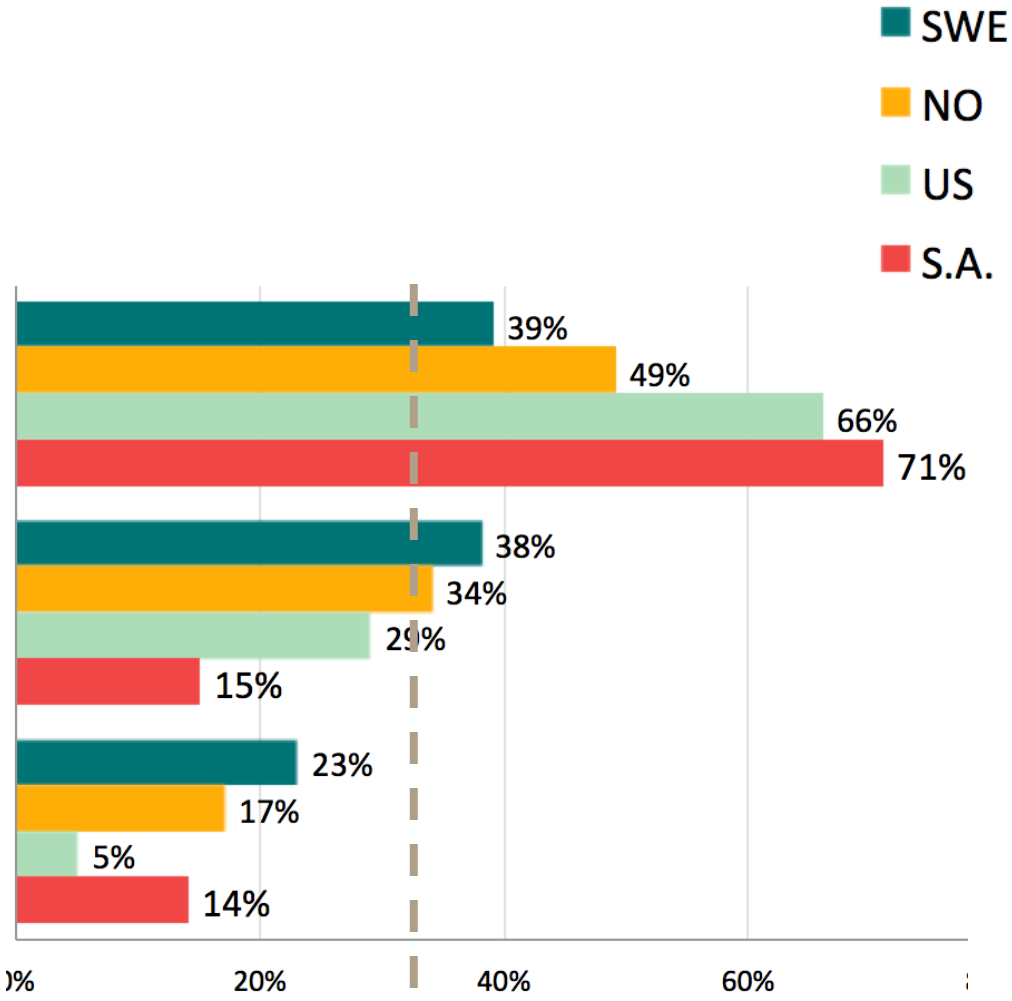


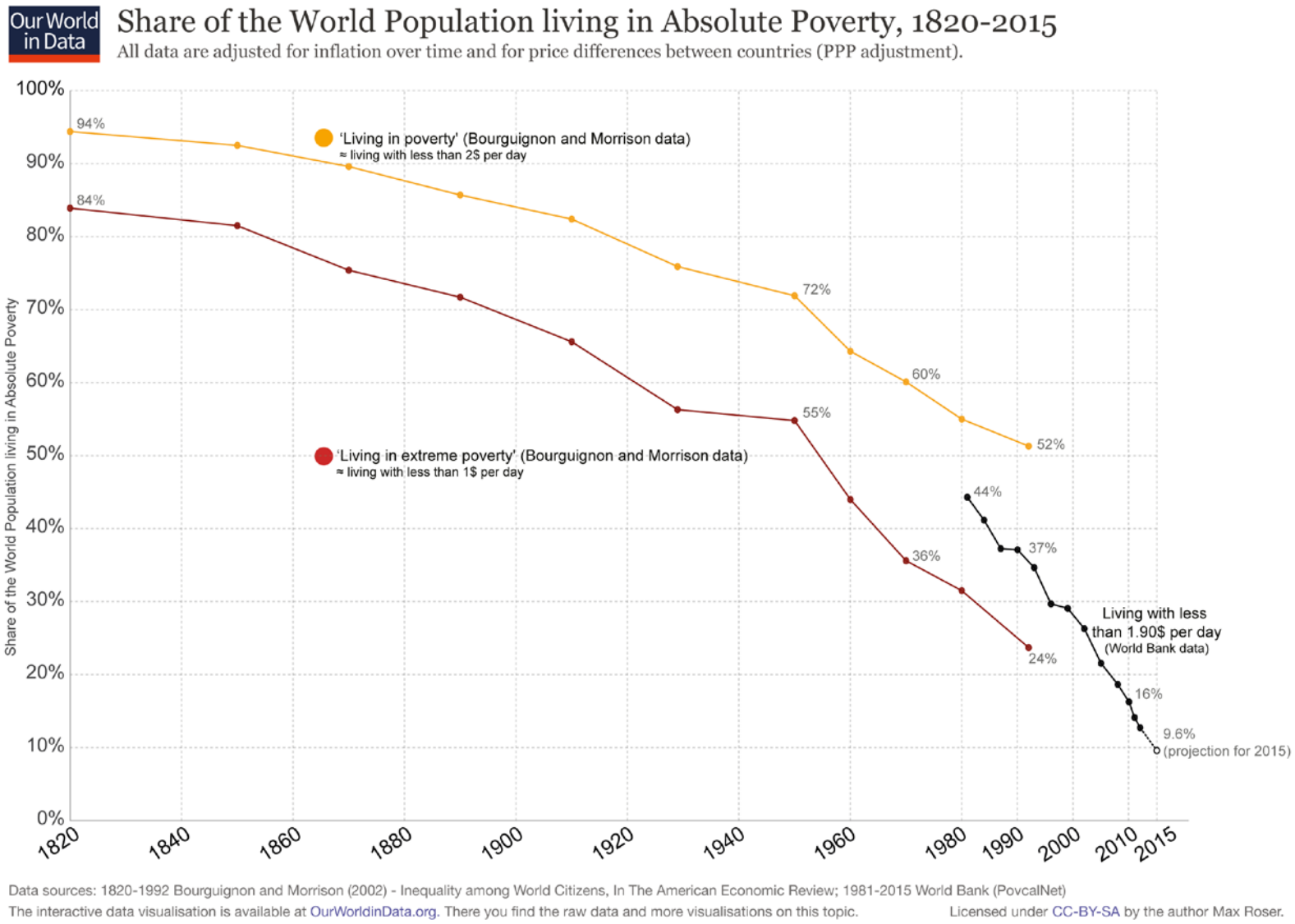
Over the last 200 years, poverty rate fell continuously coupled with **7-fold** increase in world population

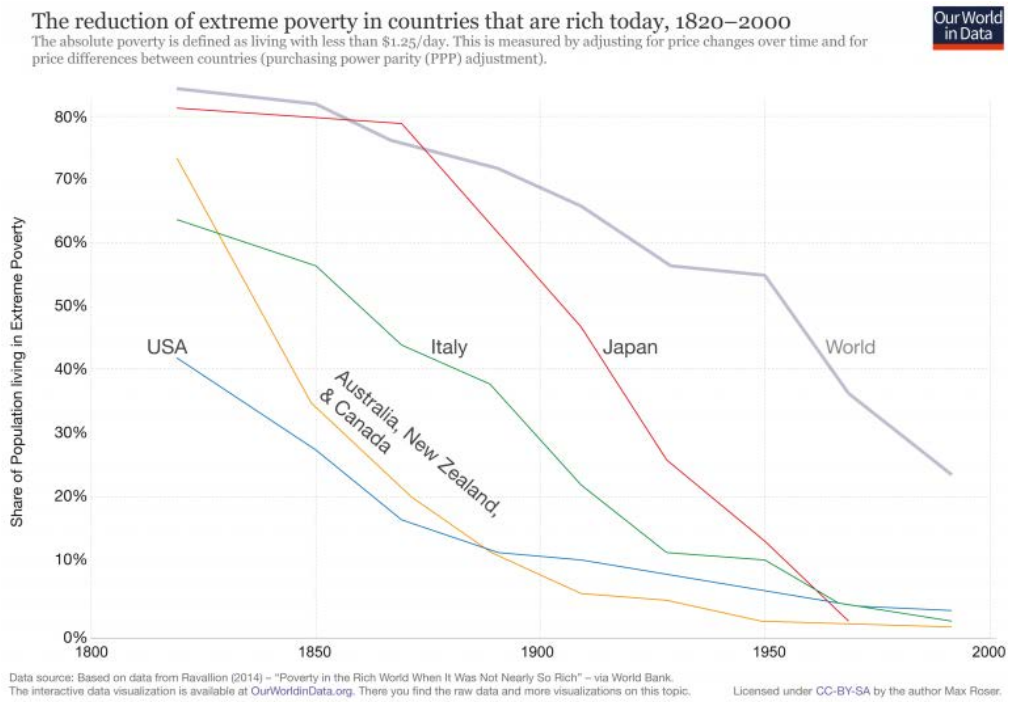
Every day 250,000 people graduate from extreme poverty

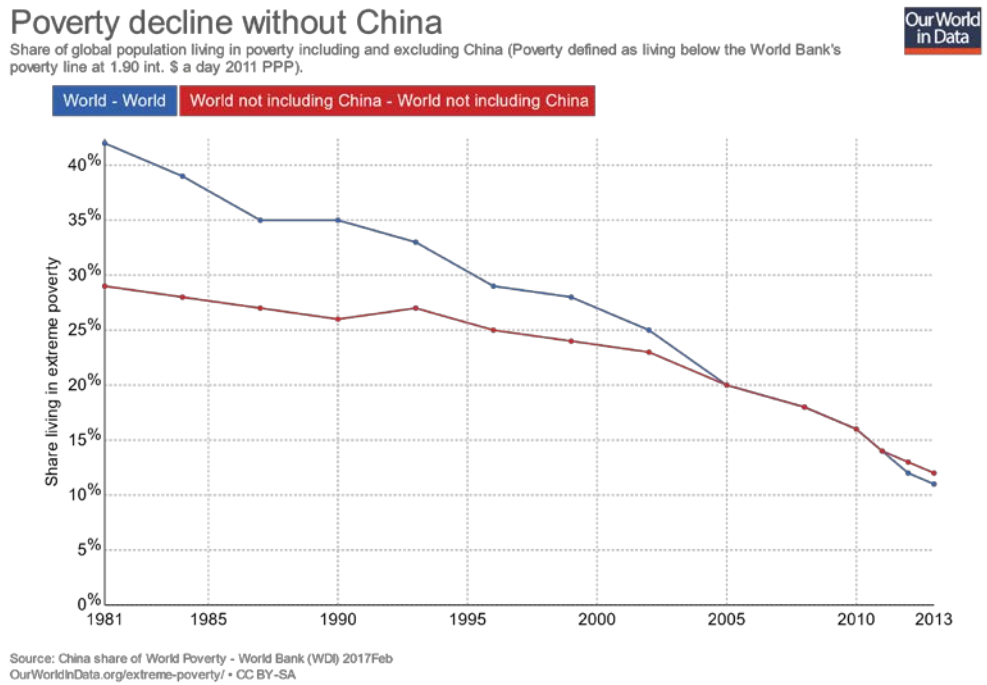
+ 300,000 get electricity for the first time

+ 250,000 get access to clean water

(worldbank.org)

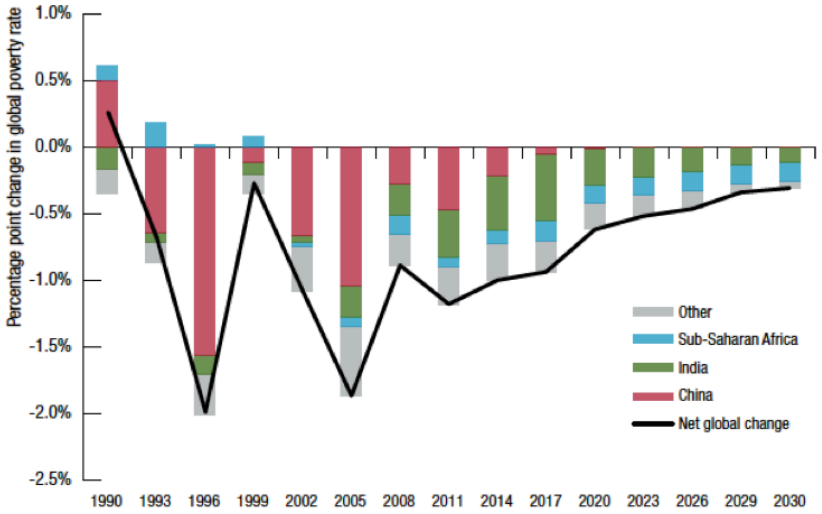






The decline of global poverty

FIGURE 7: AVERAGE ANNUAL PERCENTAGE POINT REDUCTION IN GLOBAL POVERTY BETWEEN 1990 AND 2030 (OFFICIAL ESTIMATES AND BASELINE SCENARIO)

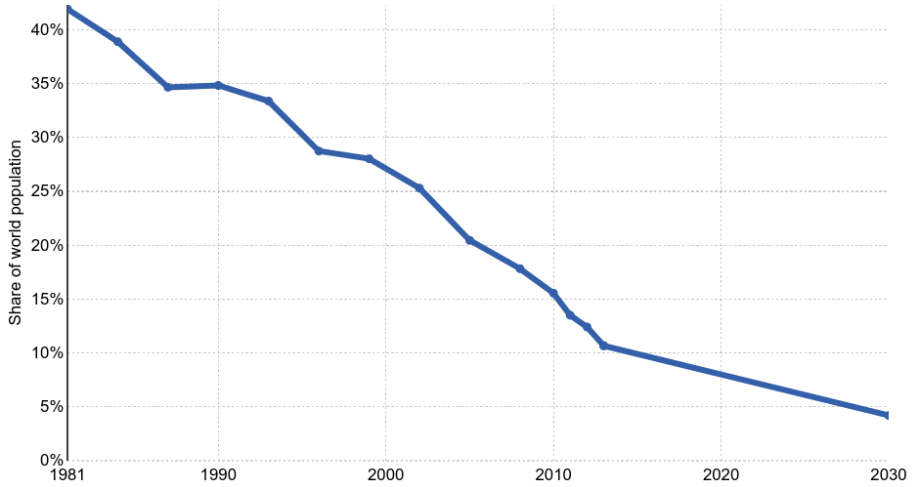


Source: Authors' calculations

Share of the world population living in extreme poverty

Share of population living in below the International Poverty Line (1.90 International Dollars). Figures account for cross-country differences in prices levels, as well as for inflation. Projection for 2030 is based on the assumption that the average growth rates of consumption in all countries will be the same as the observed average growth rates from the previous 10 years.

Our World in Data

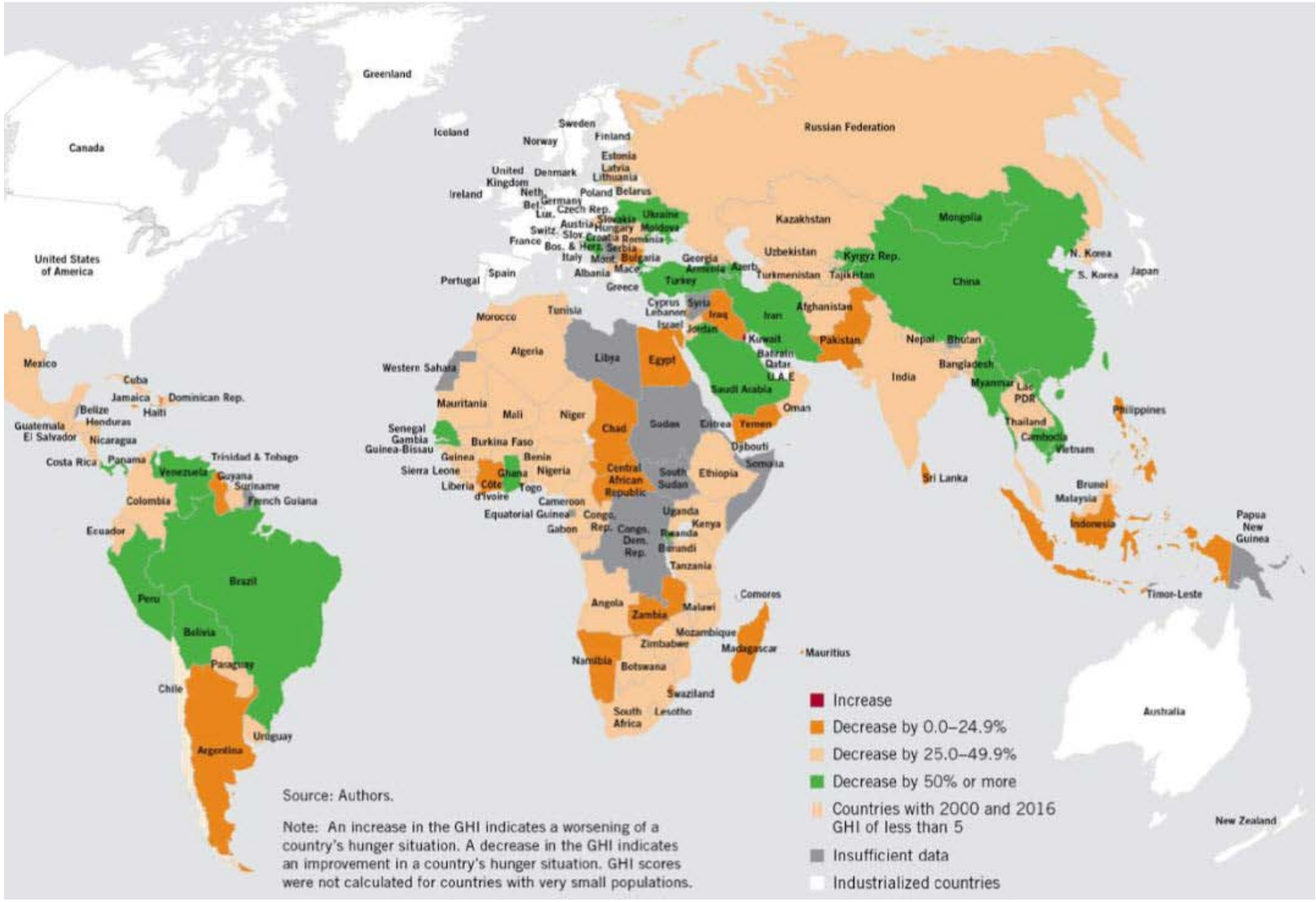


Source: Poverty headcount 1981-2030 - PovcalNet World Bank
Note: The projected figure for 2030 also assumes that the dispersion in the distribution of consumption in each country remains unchanged from the most recent available data.
OurWorldInData.org/extreme-poverty/ • CC BY-SA

2030: year of zero-hunger

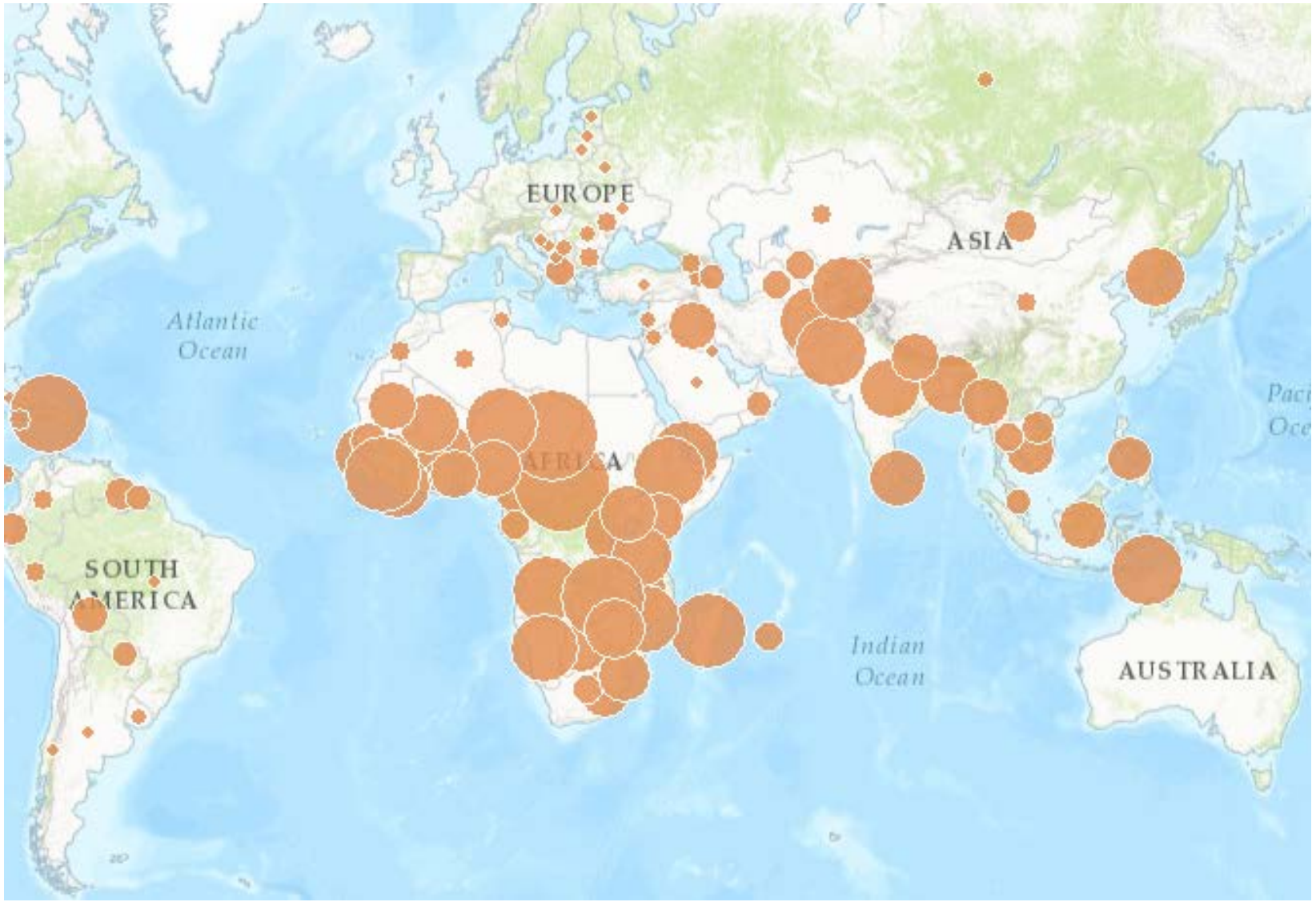
Mapping progress towards eradicating world hunger

Global Hunger Index, 2016



Mapping progress towards eradicating world hunger

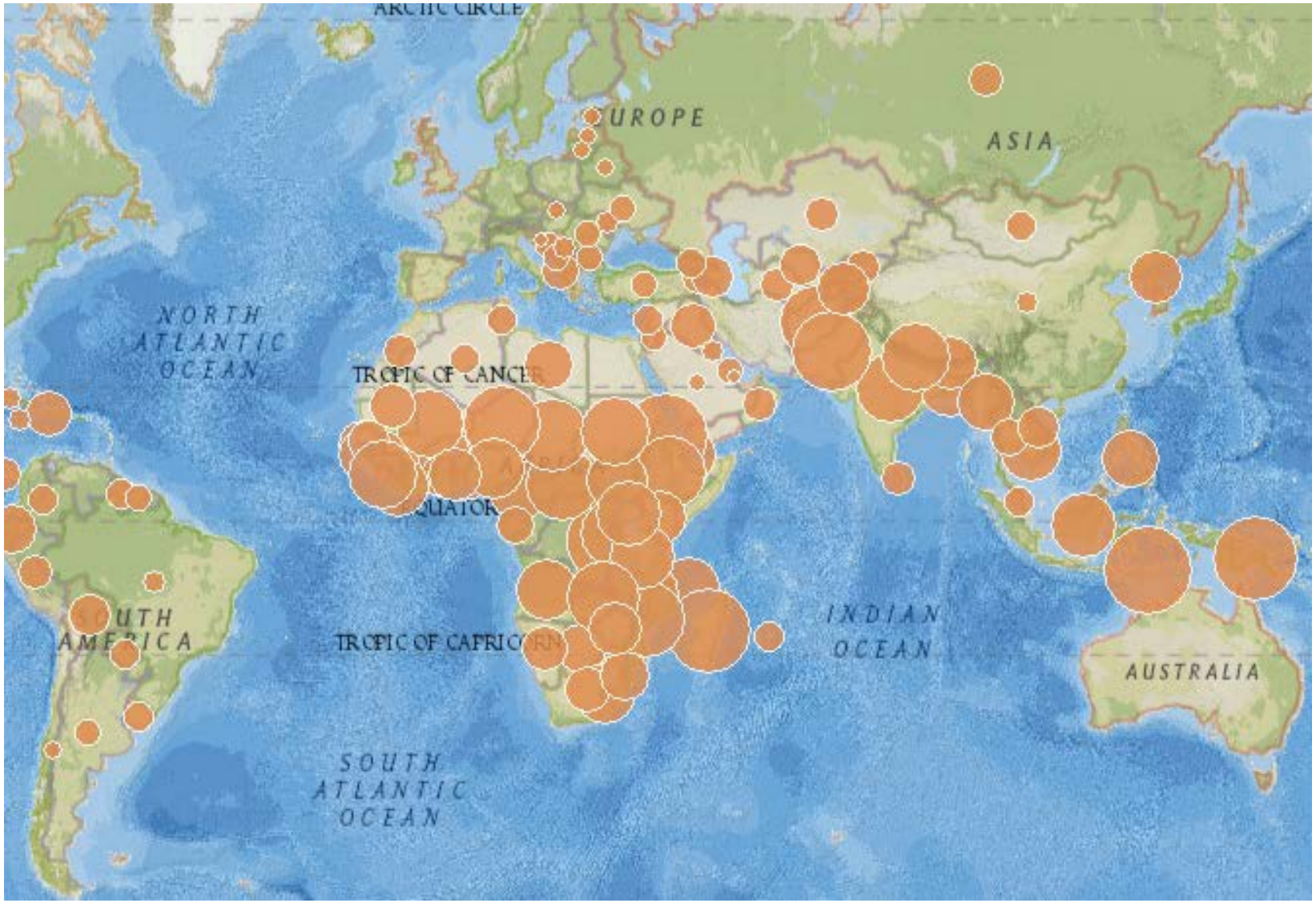
Per map, the higher the score, the larger the circle size. The African region has the greatest number and size of circles indicating highest hunger scores.



Under-5 Mortality Rate

The African region has the highest number of labels and possesses the greatest under-5 mortality rates

The stunting rate of children under 5 years of age (%)



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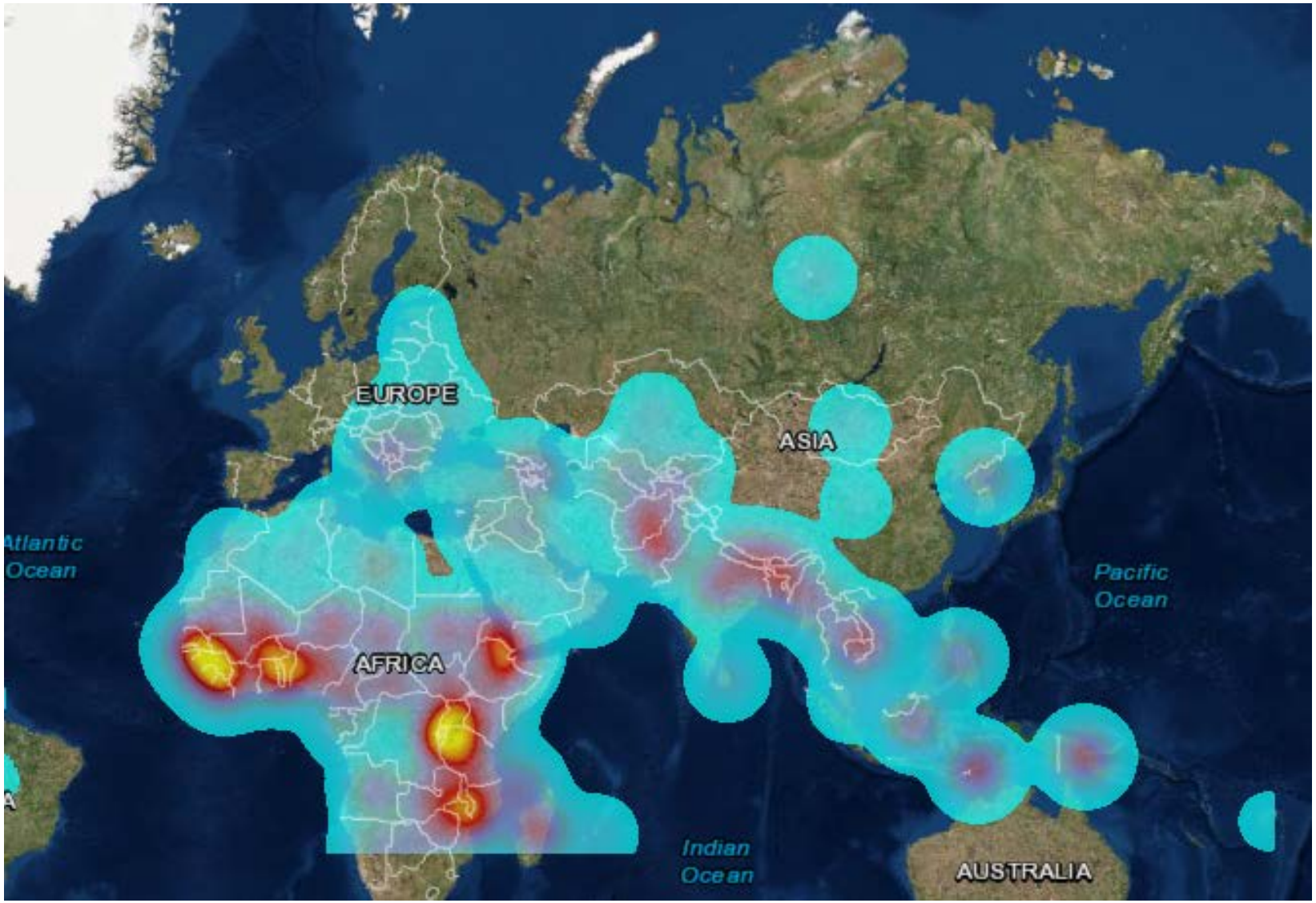
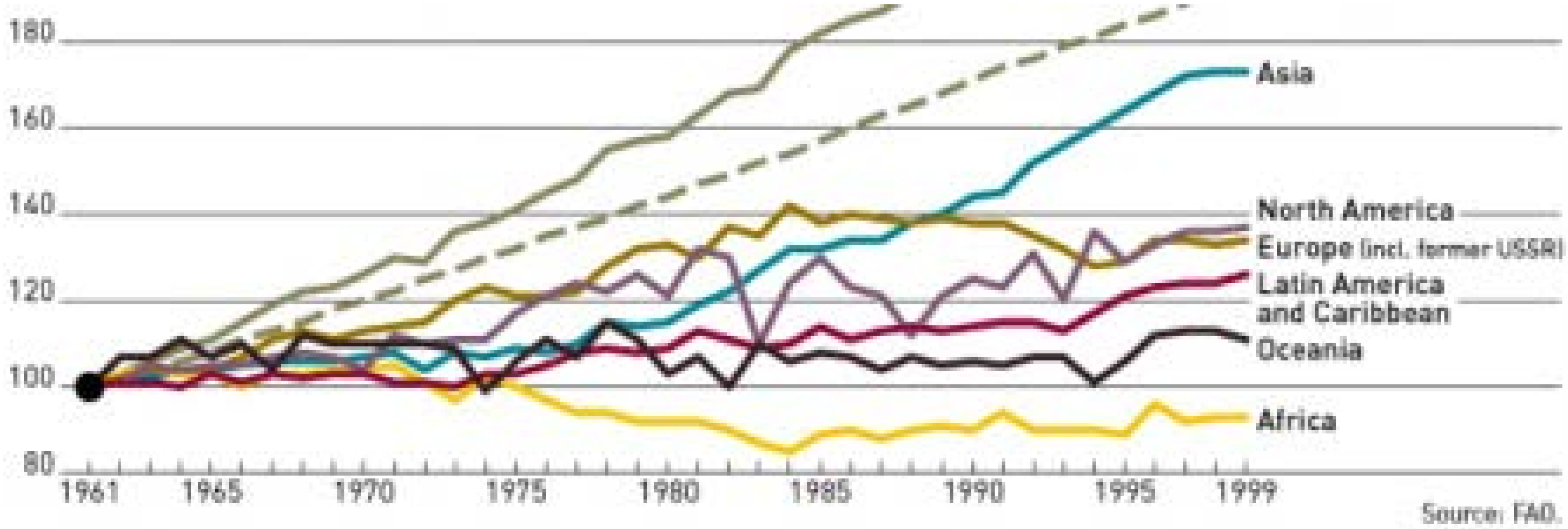


Key drivers of hunger

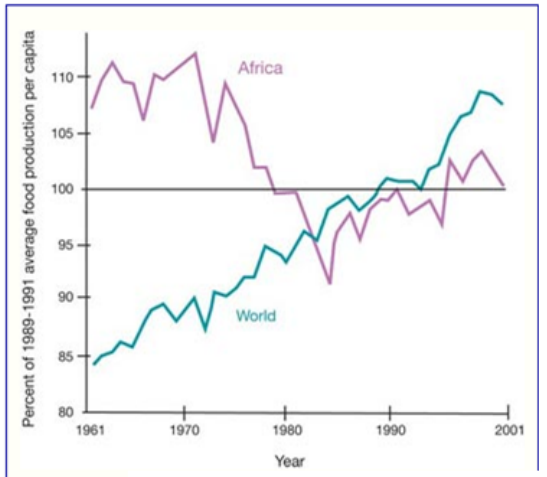
- Poverty
- Conflict
- World population
- Food and agriculture policy
- Climate change



Trends in World agricultural production

Trends in Per Capita Food Production

A combination of sea-level rise, rapid population growth in coastal zones worldwide and more intense storm surges associated with more severe winter and tropical storms will increase the numbers of people at risk from coastal flooding. Regions likely to be especially affected by coastal flooding include small islands and Asian megadeltas, such as the Ganges-Brahmaputra and the Zhujiang (Adger et al., 2007). The low-elevation coastal zone (LECZ; <10 m above mean sea level) contains about 10% of the world's population while only accounting for 2.2% of total land area (McGranahan et al., 2006). Asia has by far the greatest population in the LECZ, and 19 of the 215 countries studied by McGranahan et al. (2006) have more than 50% of their population in the LECZ (see also McGranahan et al., 2007). The greatest impacts proportional to population size will likely be on low-lying small island states in the



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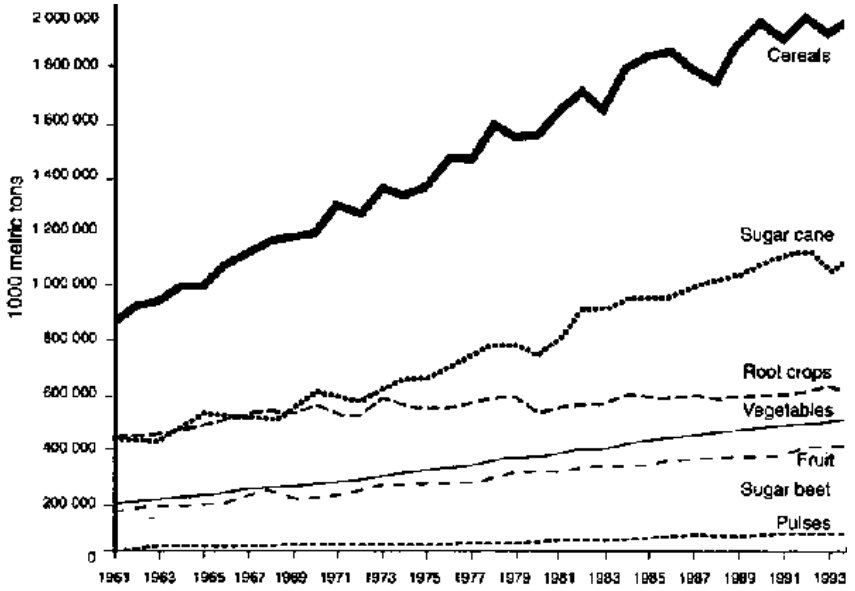
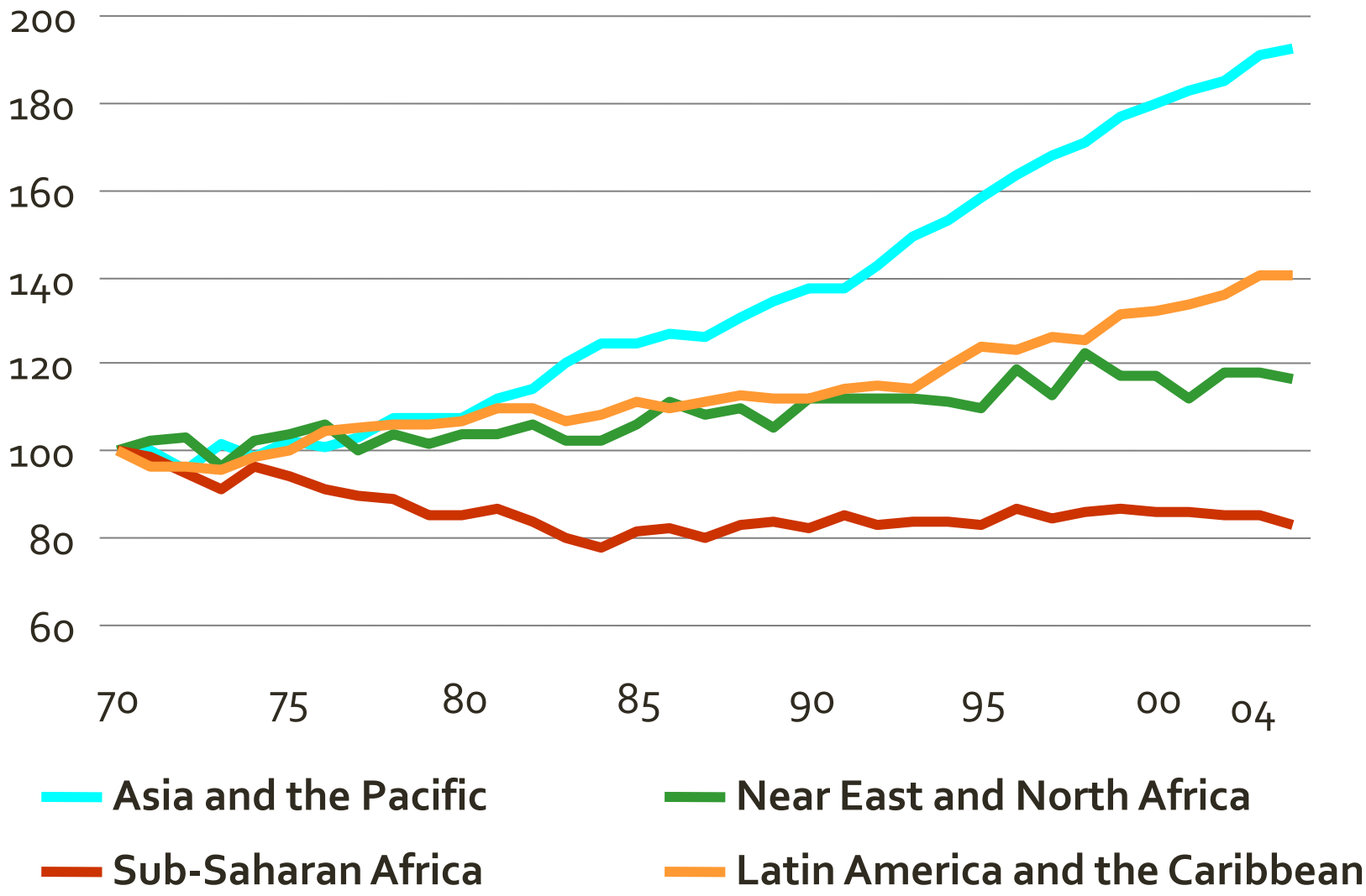
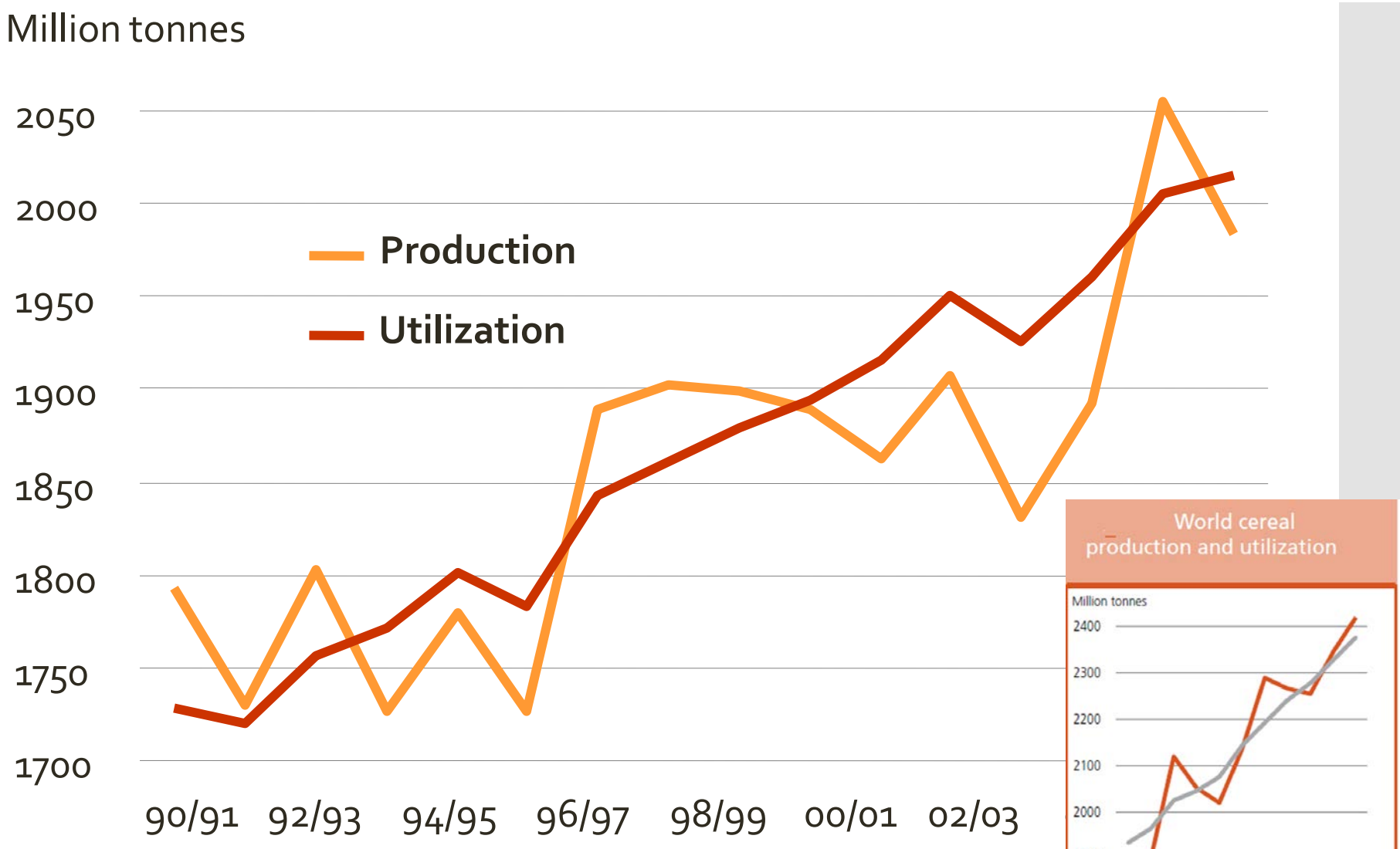


Trends in per capita food production

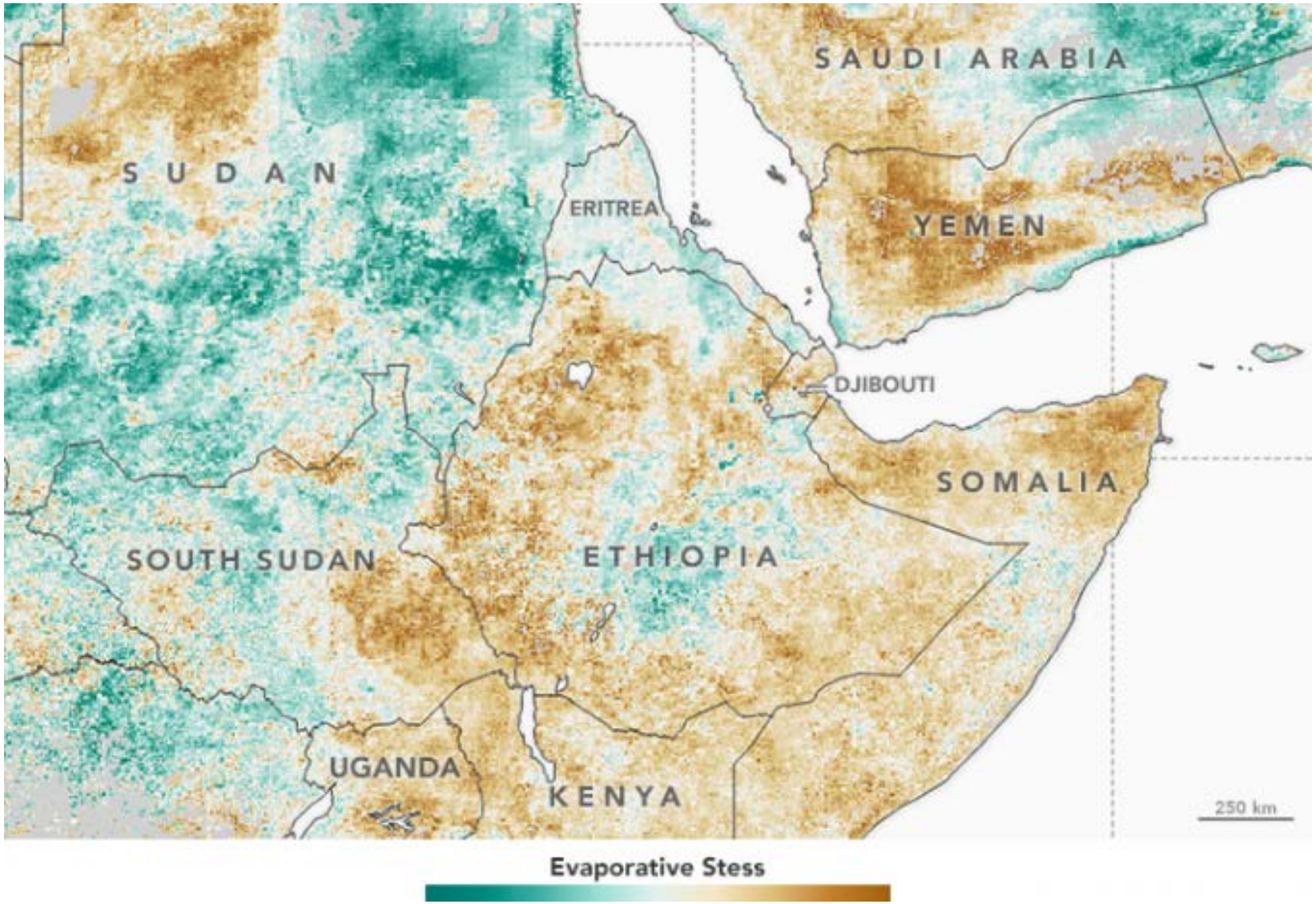
The developing country regions have not all made equal progress



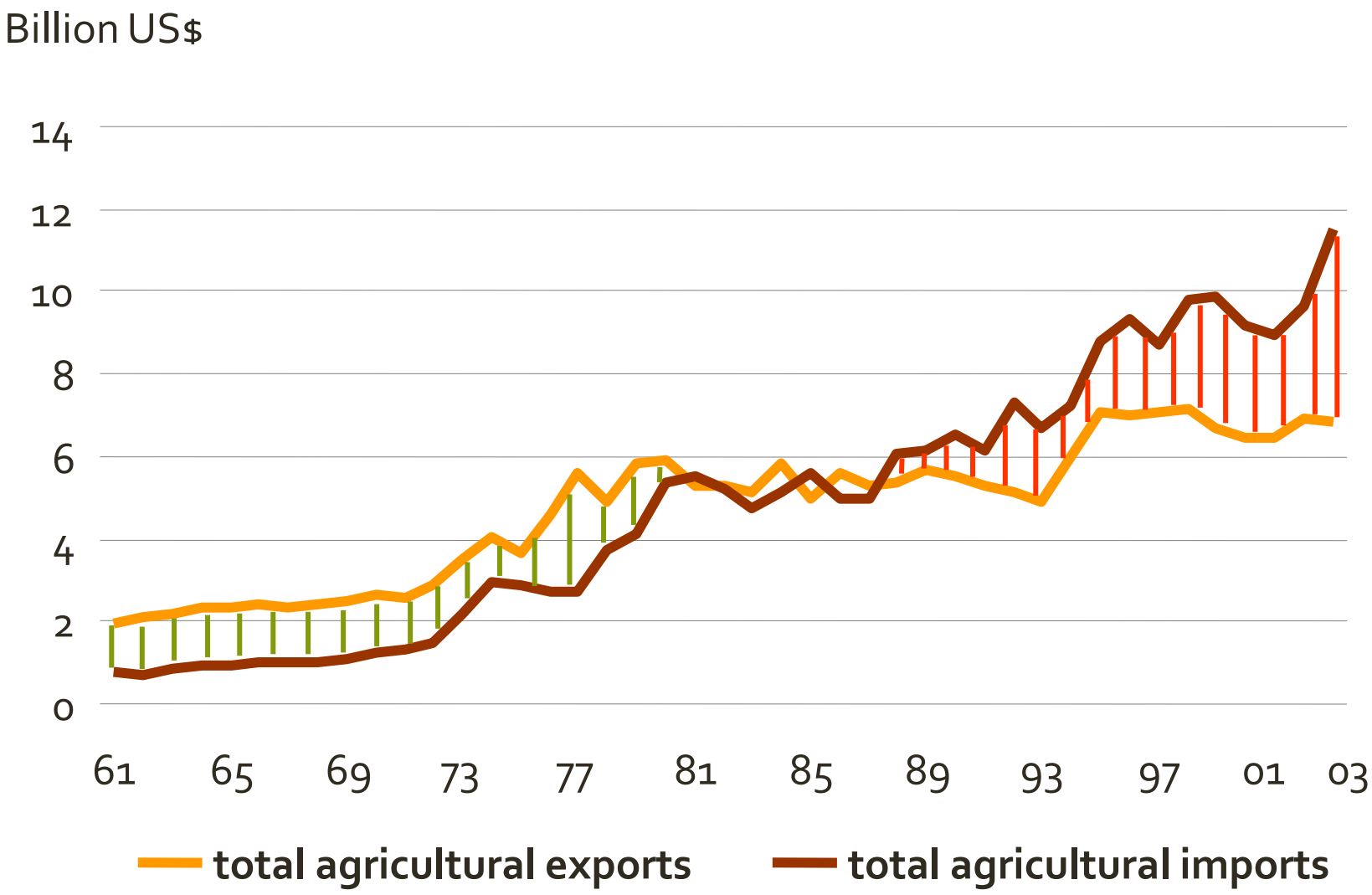
World cereal production has picked up



Food shortages in the Greater Horn of Africa, including South Sudan, Somalia, and Yemen

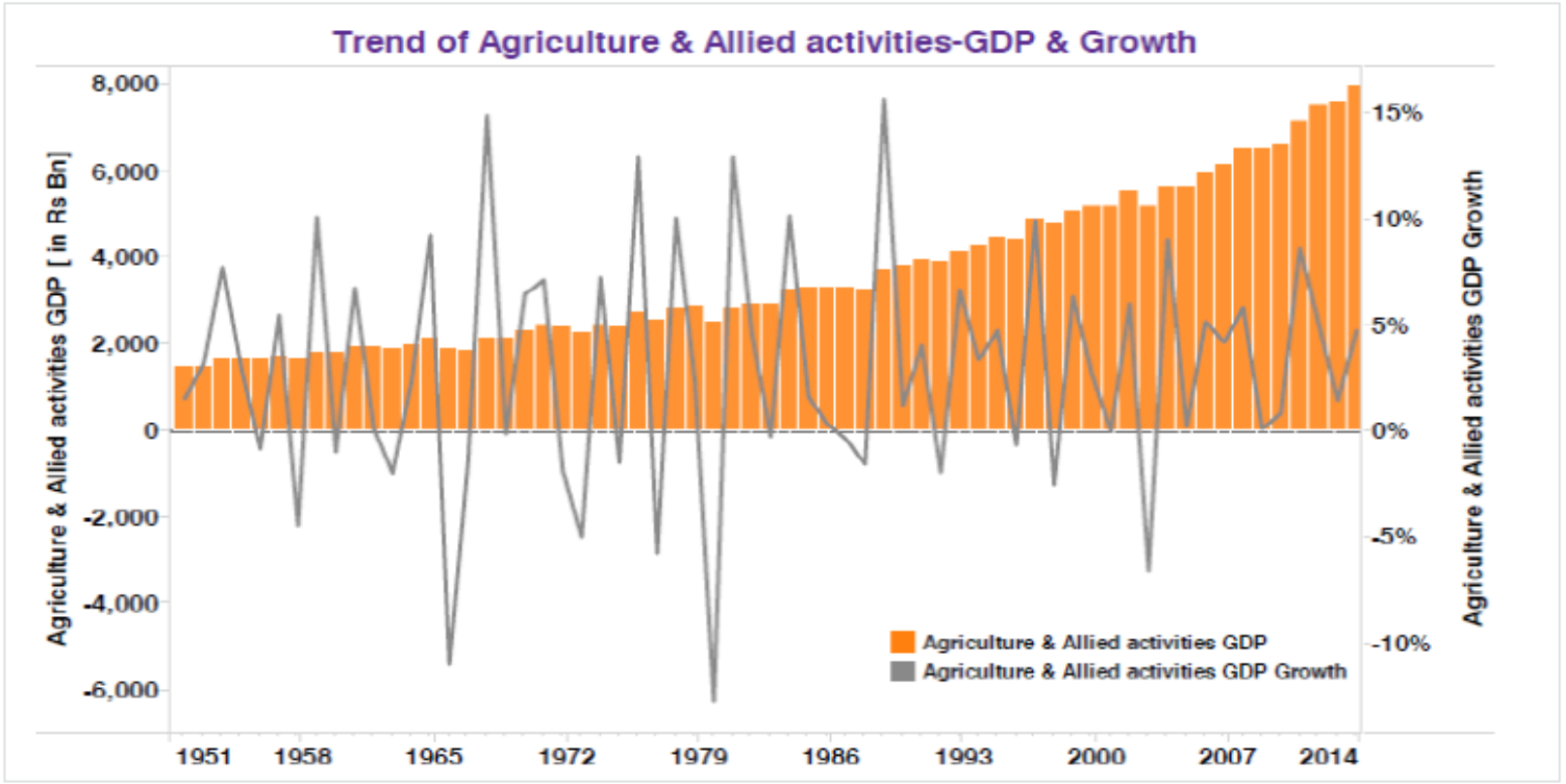


The agricultural trade deficit of Least Developed Countries is widening



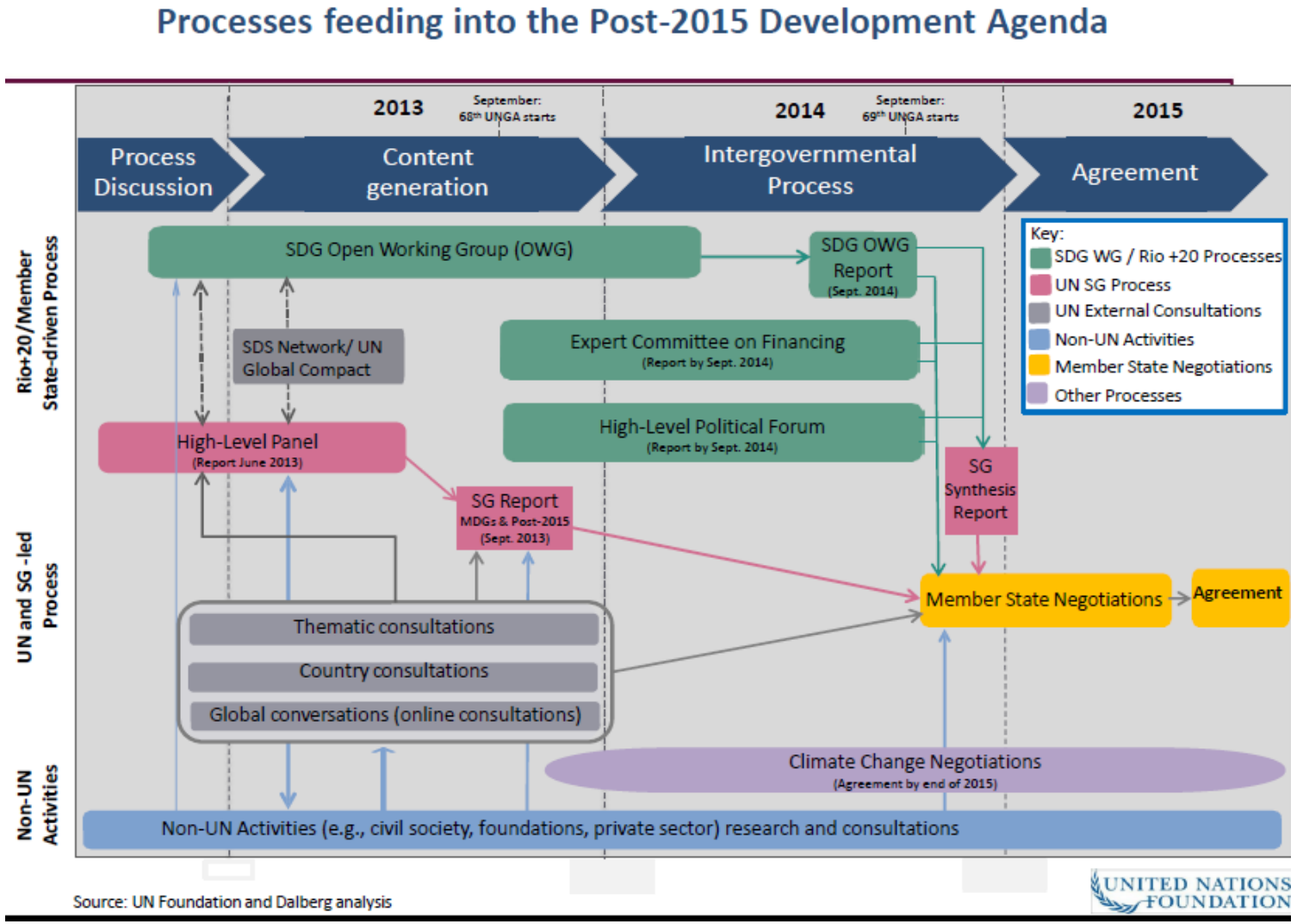
Link between agricultural and rural development and food security

Countries with worsening levels of undernourishment have seen a declining agricultural GDP



Source: RBI, CSO, GDP data is at constant prices 2004-05 base

Processes are needed to address complexity and multi-sectoral approaches



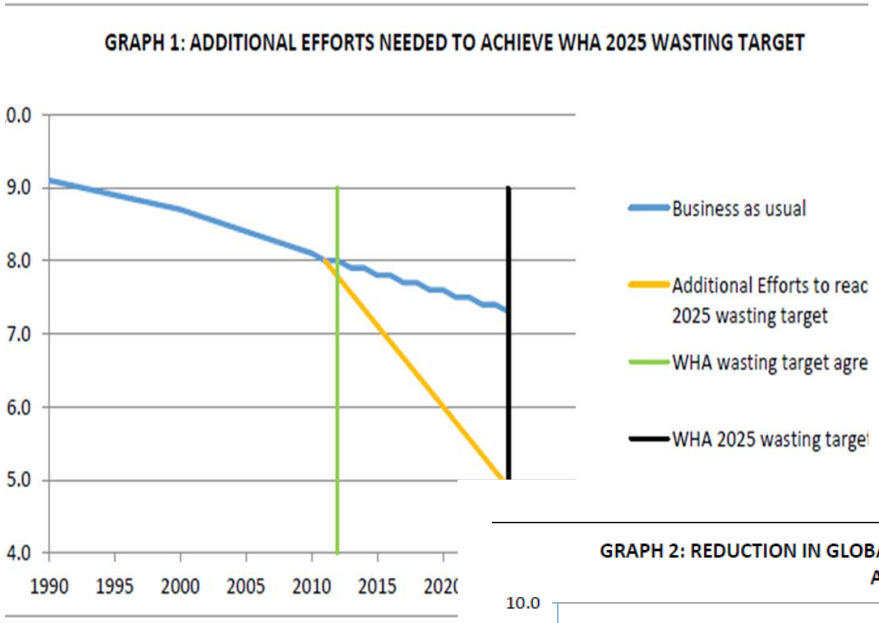
AS PART OF THE NEGOTIATIONS ON THE POST-2015 DEVELOPMENT AGENDA, WE CALL ON GOVERNMENTS TO:

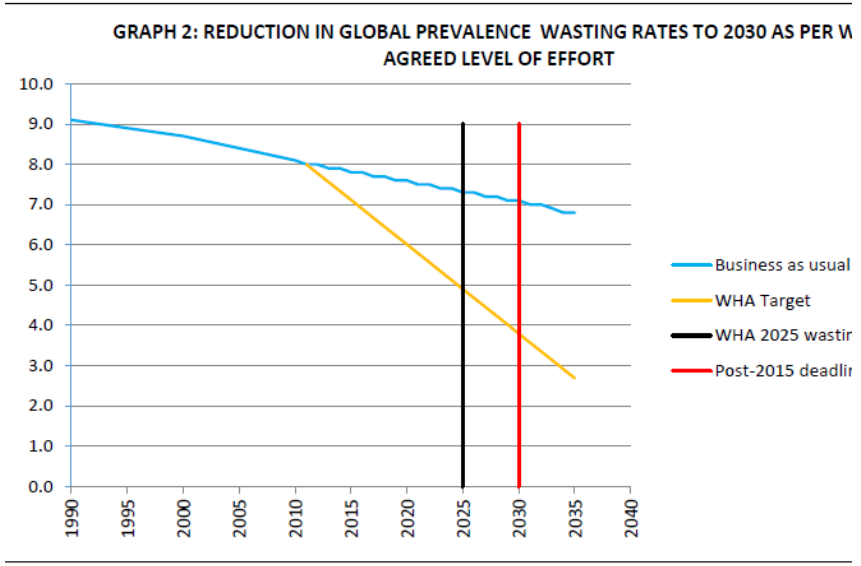
- INCLUDE NUTRITION AT GOAL LEVEL IN THE AGREEMENT WITH SPECIFIC 2030 TARGETS ON WASTING AND STUNTING IN UNDER-FIVES.
- AGREE ON A NEW WASTING TARGET THAT BUILDS ON THE 2025 WHA TARGET AND AIMS TO REDUCE BY AT LEAST HALF THE NUMBER OF CHILDREN UNDER-5 GLOBALLY WHO ARE ACUTELY MALNOURISHED.
  (This equates to a reduction in the global prevalence of wasting to below 4%.)
- INCLUDE A SPECIFIC INDICATOR ON COVERAGE FOR THE TREATMENT OF SEVERE ACUTE MALNUTRITION UNDER A POST-2015 HEALTH TARGET ON ENDING PREVENTABLE CHILD DEATHS.
- ADOPT TARGETS AND INDICATORS IN OTHER KEY SECTORS THAT WILL HELP IN THE FIGHT AGAINST UNDERNUTRITION.
  (E.g. health; food security; agriculture; water and sanitation; and gender equality.)

Goal 2.
End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

By 2030 **end all forms of malnutrition**, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.

Business as usual will not work

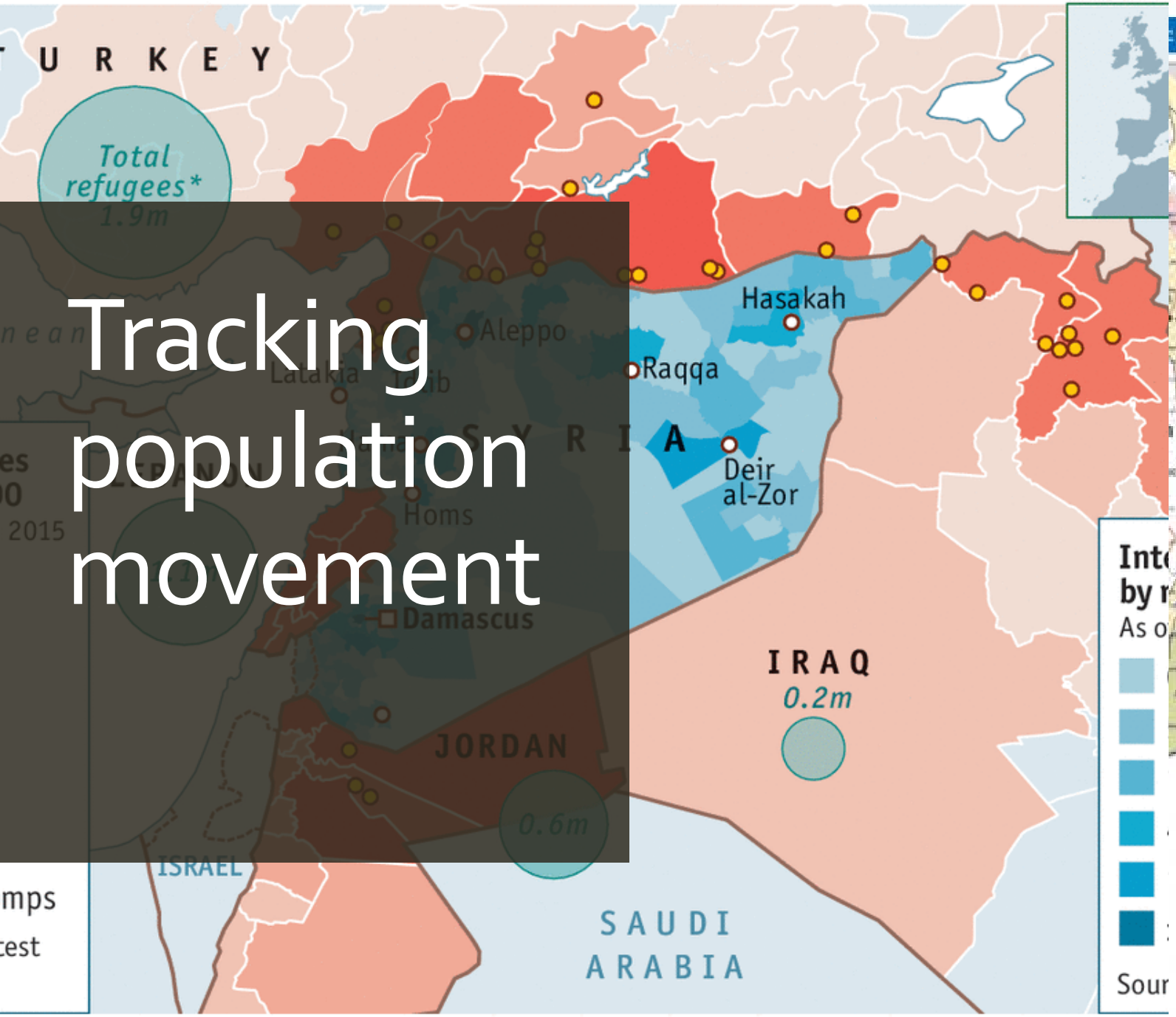


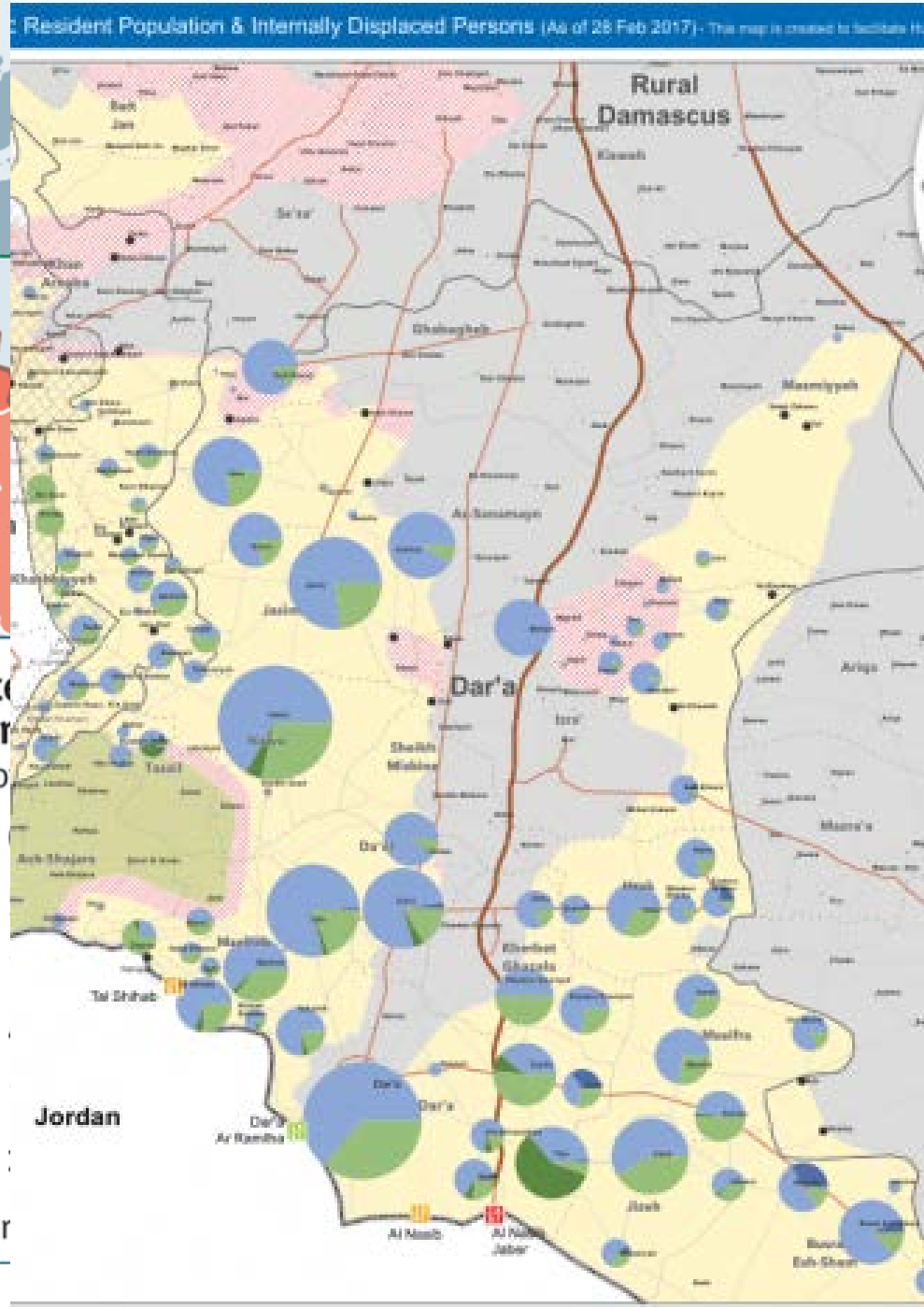


Refugees queue for food parcels in Yarmouk, Syria. Photograph: Reuters

Context Matters

Tracking population movement





Contextual relevance and impact

Typhoon Haiyan – Philippines 2013

Conflict IDP and food security crisis South Sudan 2013-present

Ebola epidemic Sierra Leone, Liberia, Guinea 2013-2015

Syrian Refugees in Amman, Jordan, 2011-present

Sahel Food insecurity 2011-present

Key topics covered

- Mapping hunger, malnutrition, nutrition security hotspots using geographic information systems
- Linking agricultural development to improving food and nutrition security
- Trends, drivers, and challenges of agricultural development, including: global population, income, food consumption patterns, food supply chain, prices of agricultural commodities, food shortages and food emergencies
- Implications of agricultural development on meeting the Zero Hunger Challenge with emphasis on contribution to cross-cutting issues and multi-sectoral action
- Application of evidence-informed facts in the context of population behavior change

"Amid horror, there are sparks of joy and moments of life and sharing that we do our best every day to make them happen,"

Key Take Home Messages

- The world is evolving and professionals/educators' perceptions need to evolve with it.
- There is dire need to know the facts of the past in the context of shaping the story of the future for realizing the Sustainable Development Goals.
- Knowledge alone is not enough. There are new skills, features and behaviors to possess for driving population engagement through data and emerging media.