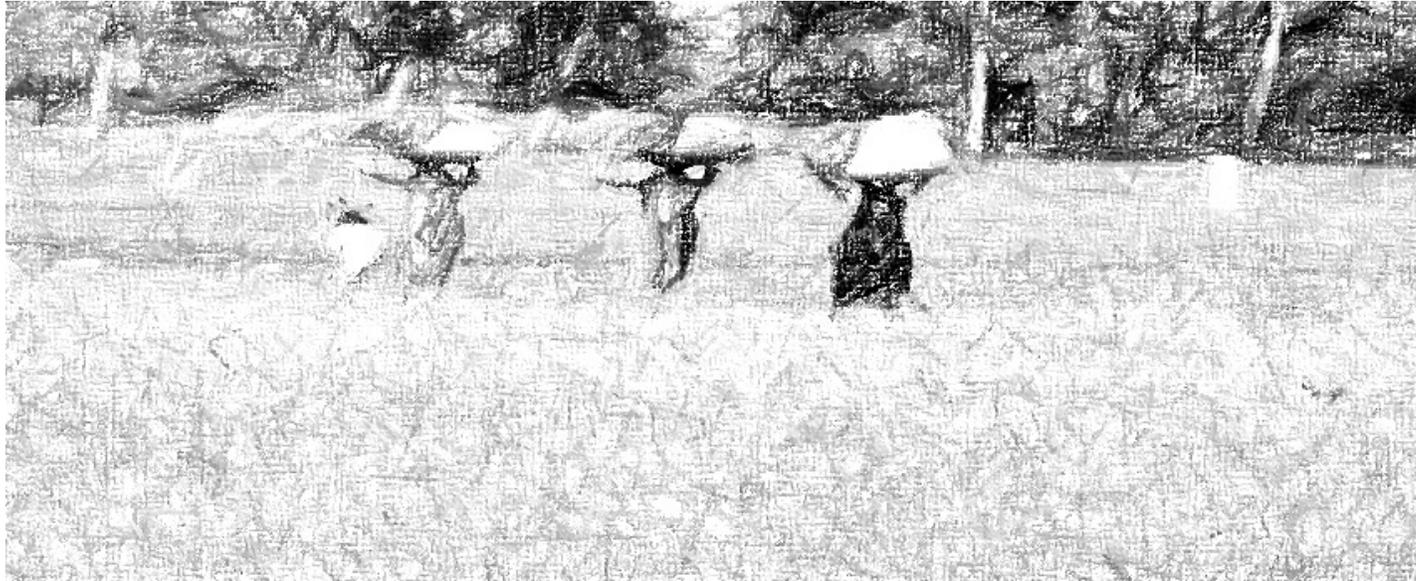


# Implications & Relevance of Sustainable Diets Internationally: It's All About the Context

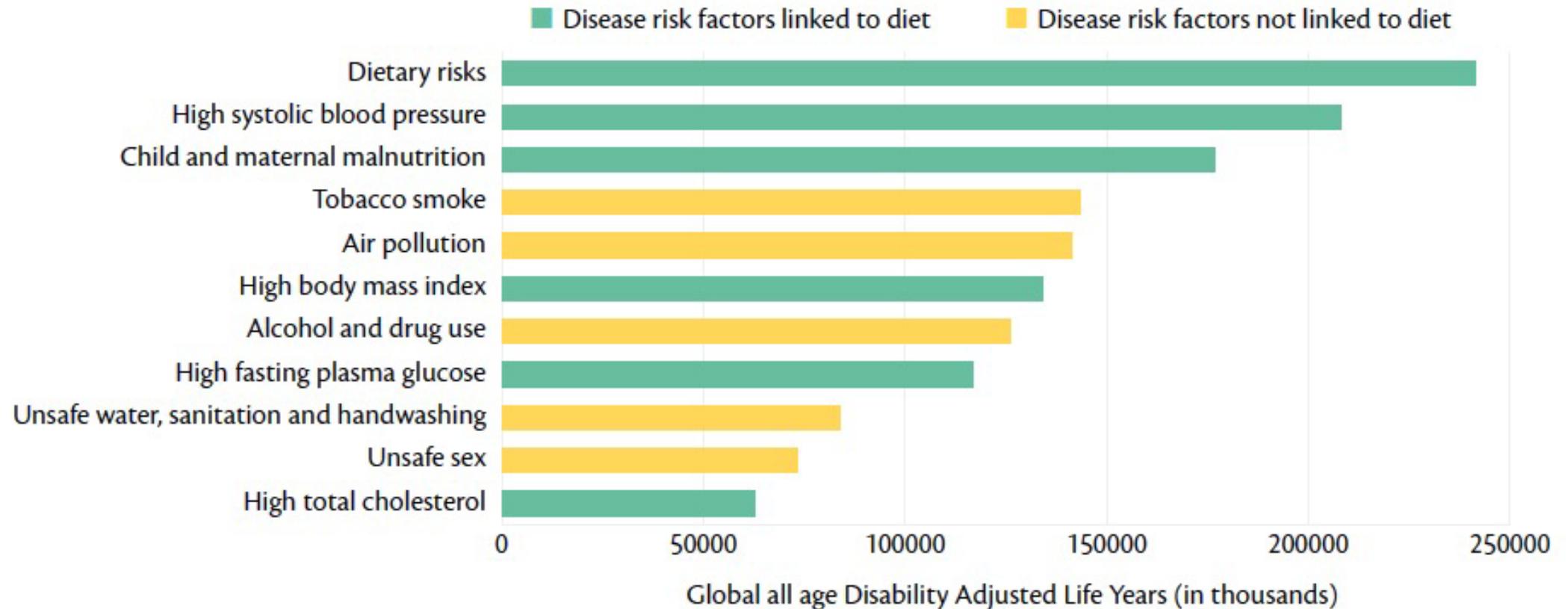


Jessica Fanzo

Johns Hopkins University

Food and Agriculture Organization of the United Nations

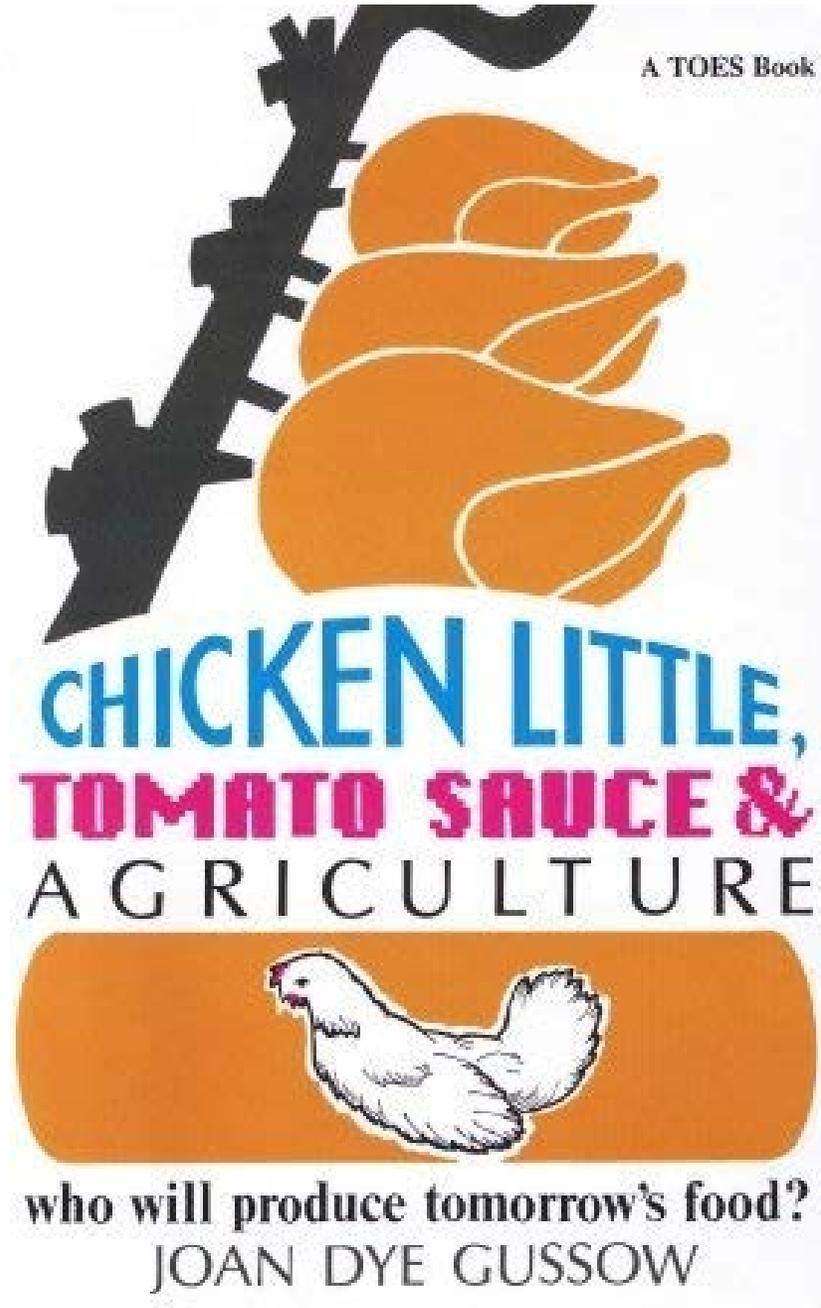
# Diets have been in the headlines



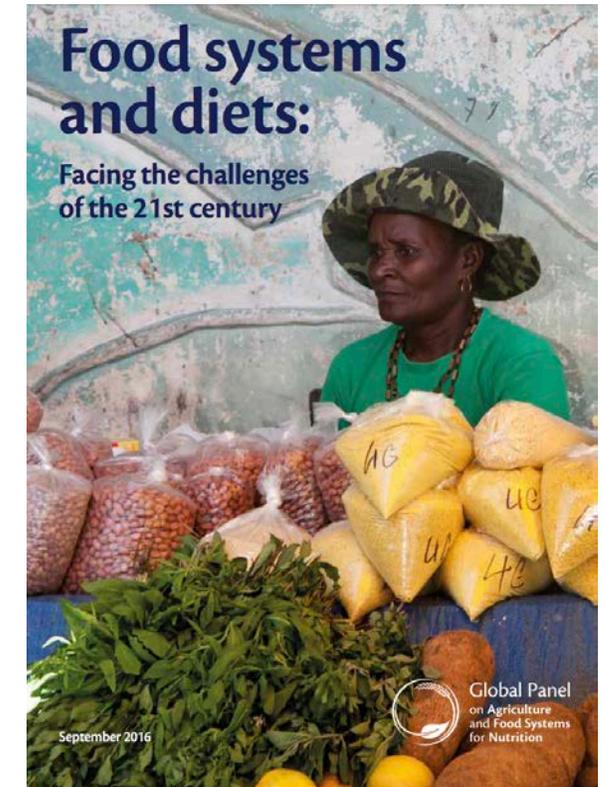
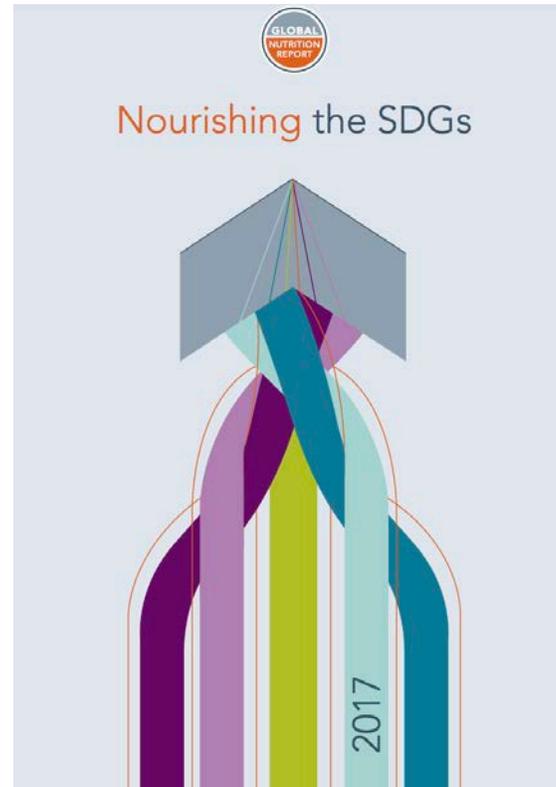
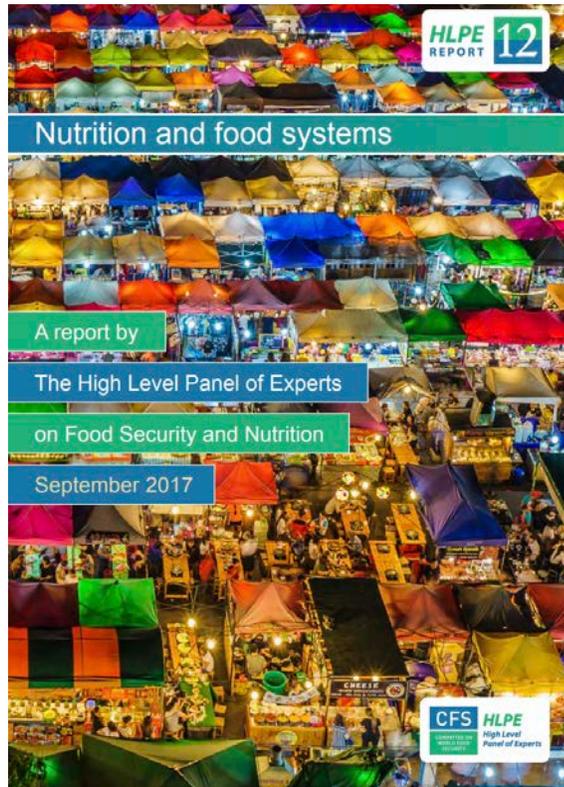
Source: Global Burden of Disease Study 2013 Collaborators (2015), Figure 5

Note: The graph shows global disability-adjusted life years (DALYs) attributed to level 2 risk factors in 2013 for both sexes combined.

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Many global reports discuss diets & sustainability issues

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# Contextualizing Global Definitions

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Those diets with low environmental impacts, which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources.

-- *FAO and Bioversity 2011*

## SUSTAINABLE DIETS AND BIODIVERSITY

DIRECTIONS AND SOLUTIONS  
FOR POLICY, RESEARCH AND ACTION



# Turning this definition into a feasible reality is a challenge for many LMIC countries

- **Policymakers** are dealing with massive inequities, and have to prioritize and evaluate trade-offs
- **Consumers** have to determine what is practical, convenient, affordable and at the same time, what fulfills their own demands and desires
- **Private sector** has to answer to that demand and ensure there is a market

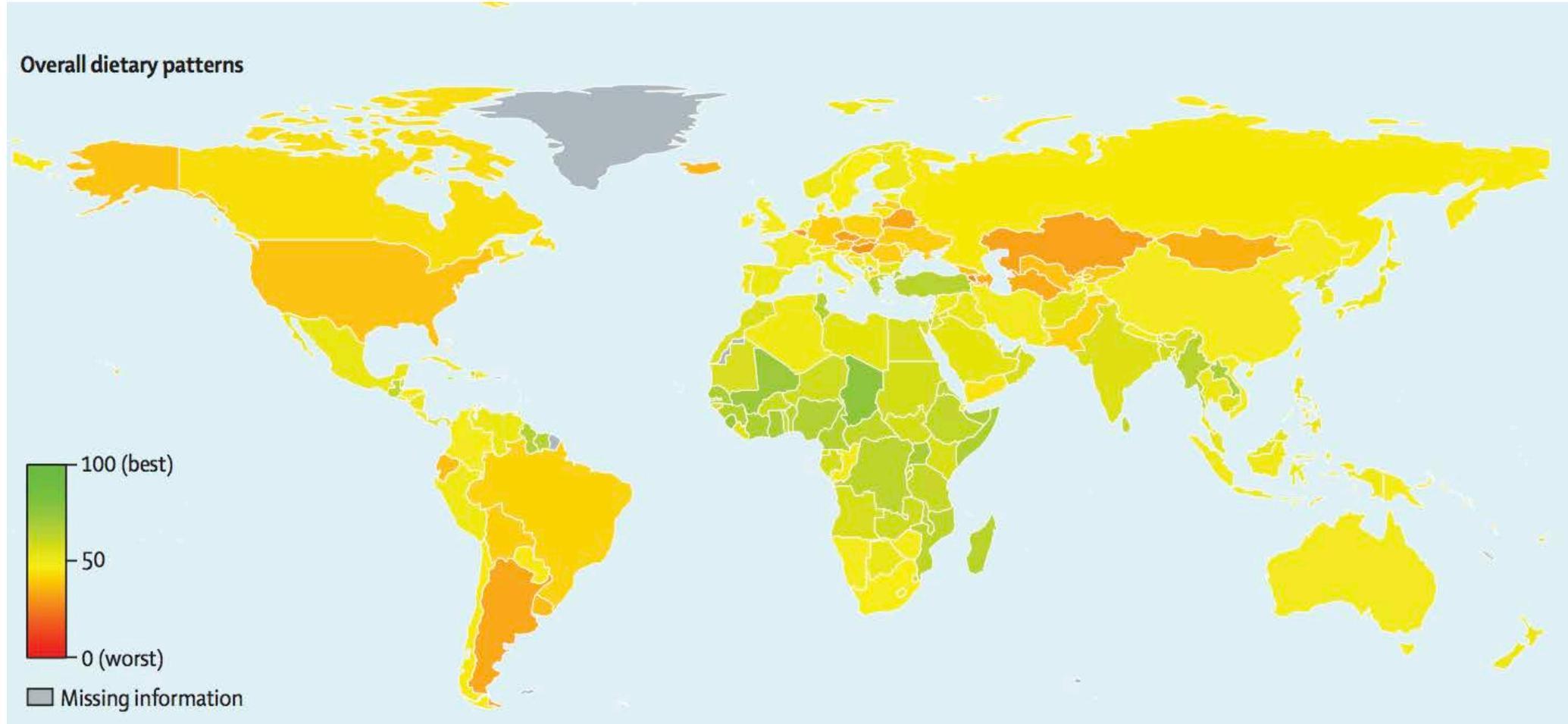


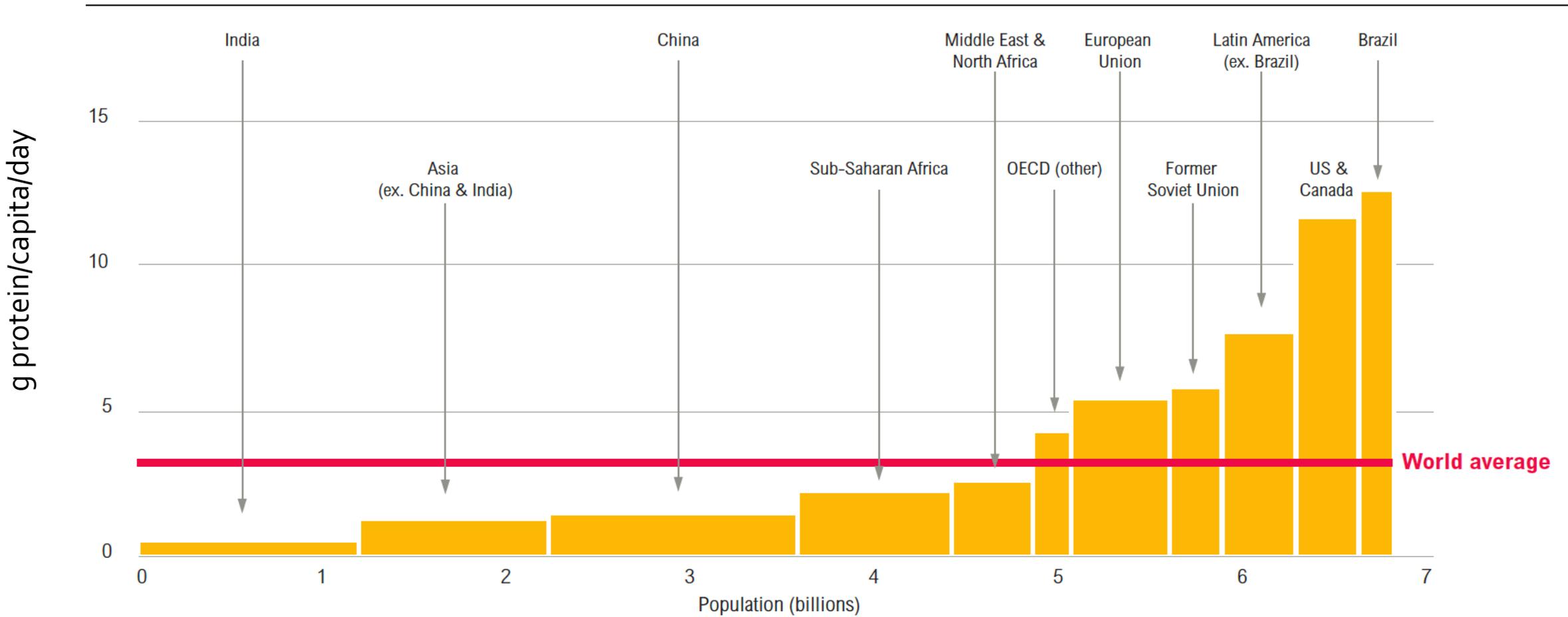
# 1. Many diets consumed in LMIC setting are sustainable, at the moment...

- “Eat Food. Not too much. Mostly Plants.” Michael Pollan
- In the high- and middle-income countries and among urban populations in all income countries, meat consumption is rising (exceptions).
- Whereas, in many low-income countries, populations cannot access or afford animal source foods and these are of critical importance to growth, development and wellbeing. Insects are common, plant-based diets are common.
- Those most vulnerable and in low income countries will suffer the most from high-income country decisions regarding the environment, natural resource depletion and climate change.

# sub-Saharan Africa has a healthier diet?

Global dietary patterns among men and women in 187 countries in 2010

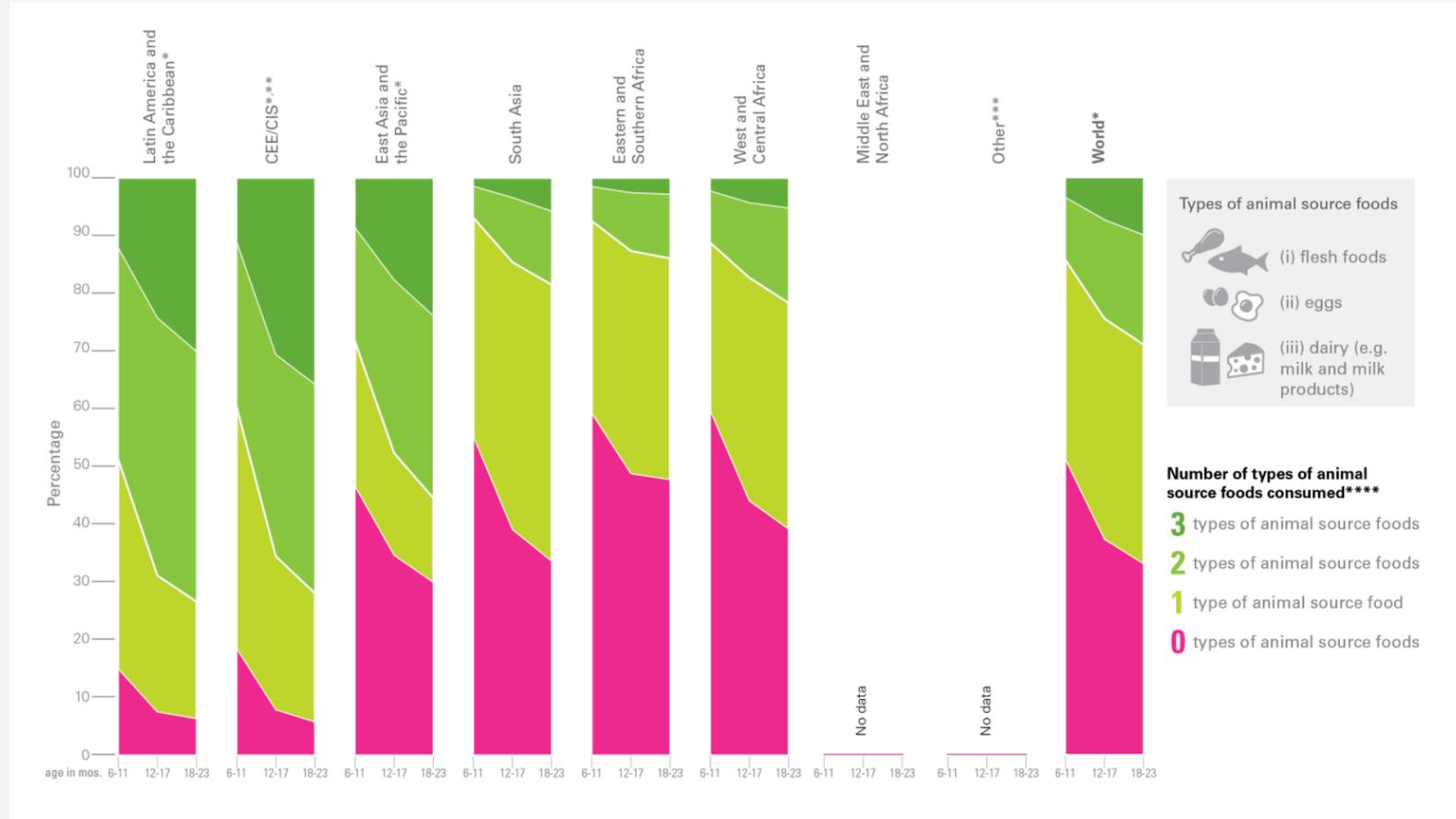




Source: Ranganathan, J. et al. 2016. "Shifting Diets for a Sustainable Food Future." Working Paper, Installment 11 of Creating a Sustainable Food Future. Washington, DC: World Resources Institute. Accessible at <http://www.worldresourcesreport.org>

Globally, the vast majority of children are eating only one type of animal source food in the previous day – or none

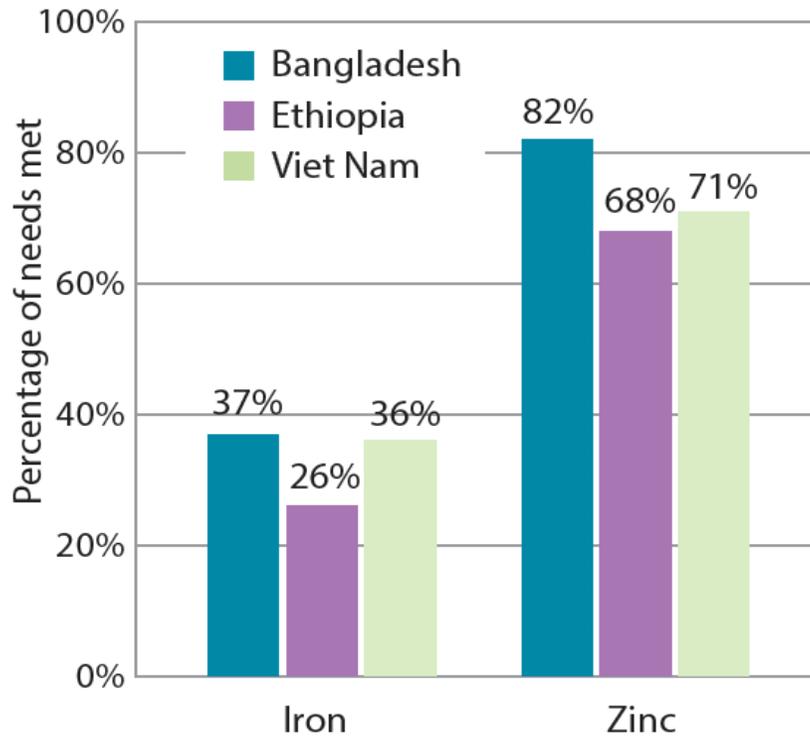
Percentage of children 6-23 months of age in each animal source food group category, by age and by region, 2015



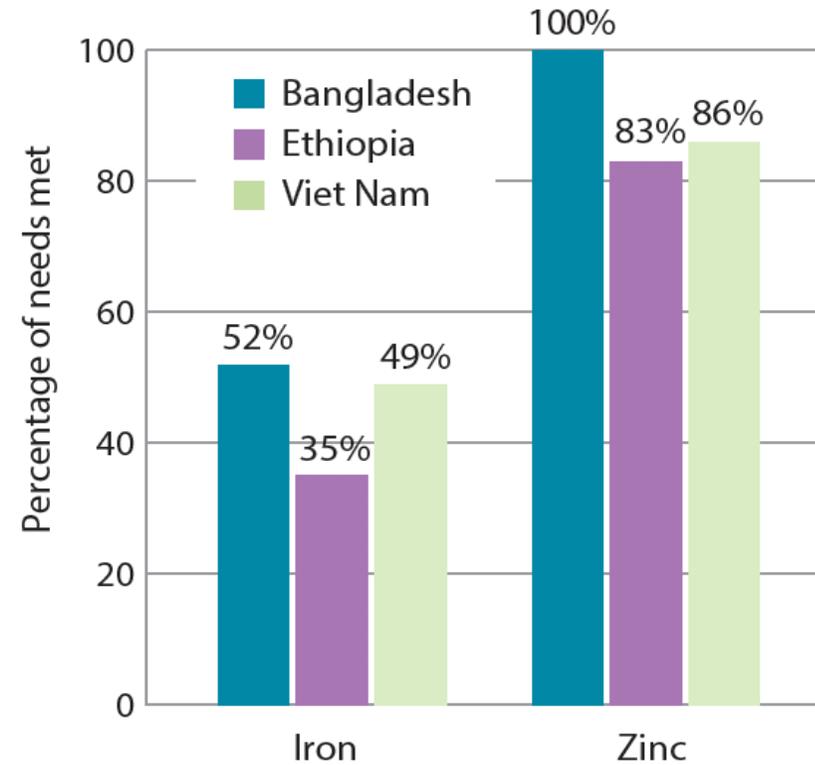
**Note:** Analysis is based on a subset of 55 countries with data on types of animal source foods consumed between 2010-2014 covering 67 per cent of the global population excluding China and Russian Federation. Regional estimates are presented only where adequate population coverage (~ 50 per cent) is met. \*To meet adequate population coverage, Latin America and the Caribbean does not include Brazil, CEE/CIS does not include Russian Federation and East Asia and the Pacific does not include China. \*\*Even after exclusion of Russian Federation from the analysis, CEE/CIS only met 45 per cent population coverage. \*\*\*Other refers to mainly high-income countries not included within UNICEF programme regions. \*\*\*\* The animal source foods were grouped into the three following types (i) flesh foods; (ii) eggs; and (iii) dairy (e.g. milk and milk products).

**Source:** UNICEF global databases, 2016, based on MICS, DHS and other nationally representative sources.

**Figure 3a: 6-8-month-old infants**

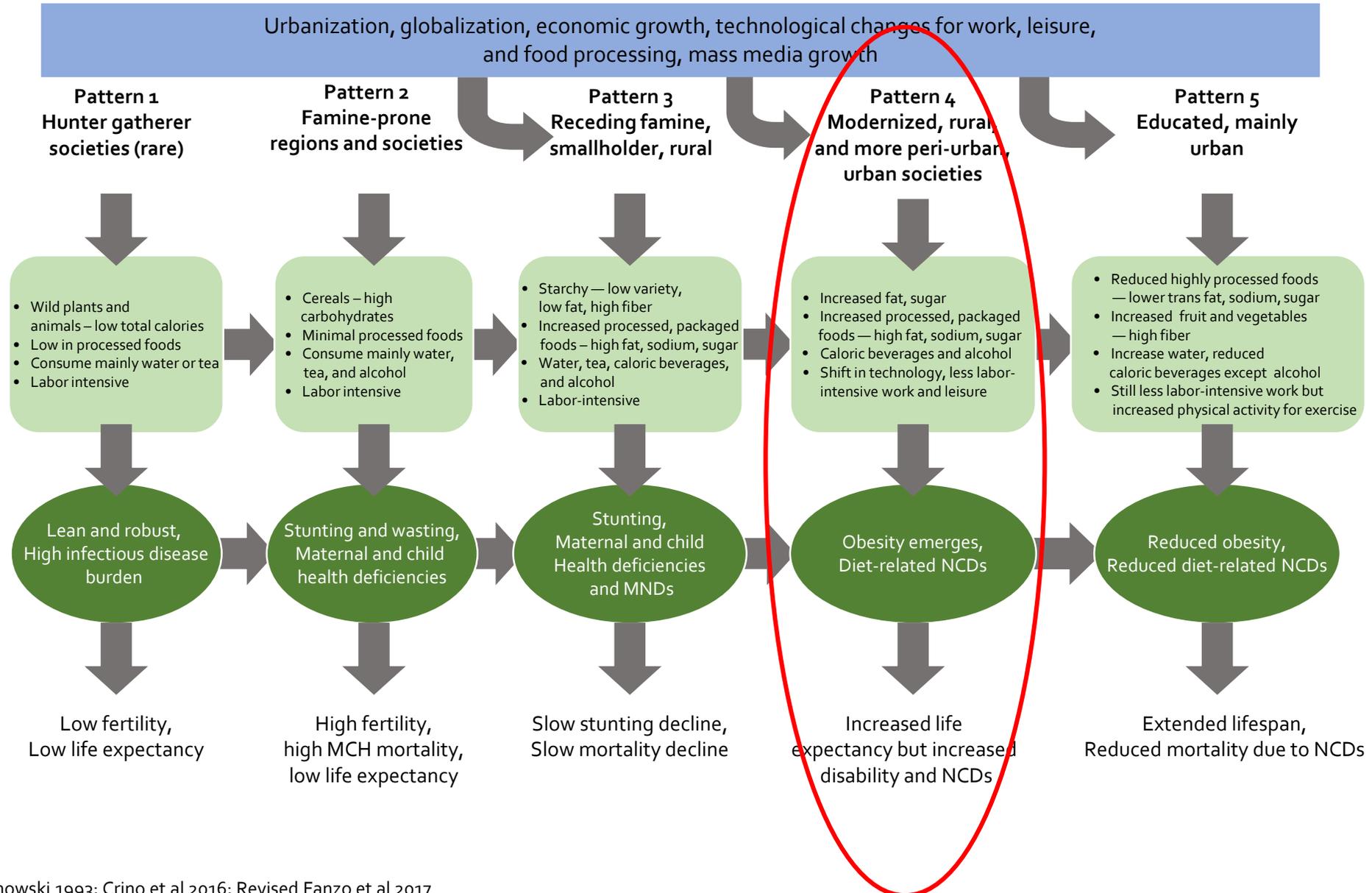


**Figure 3b: 9-11-month-old infants**



The “5 food group, unfortified” complementary food diets consisted of 30 percent of energy from the country’s typical staple food (rice for Bangladesh and Viet Nam, corn bread for Ethiopia) and 25 percent of energy from legumes, 20 percent of energy from chicken egg, 20 percent of energy from fish for Bangladesh and Viet Nam and chicken for Ethiopia, and 5 percent of energy from green leafy vegetables.<sup>11</sup>

# 2. But rapid transitions & shifting diets are underway





## *Obesity Was Rising as Ghana Embraced Fast Food. Then Came KFC.*

The growing popularity of fried chicken and pizza in parts of Africa underscores how fast food is changing habits and expanding waistlines.

By DIONNE SEARCEY and MATT RICHTEL OCT. 2, 2017

**TIMES INSIDER**

# The Global Siren Call of Fast Food

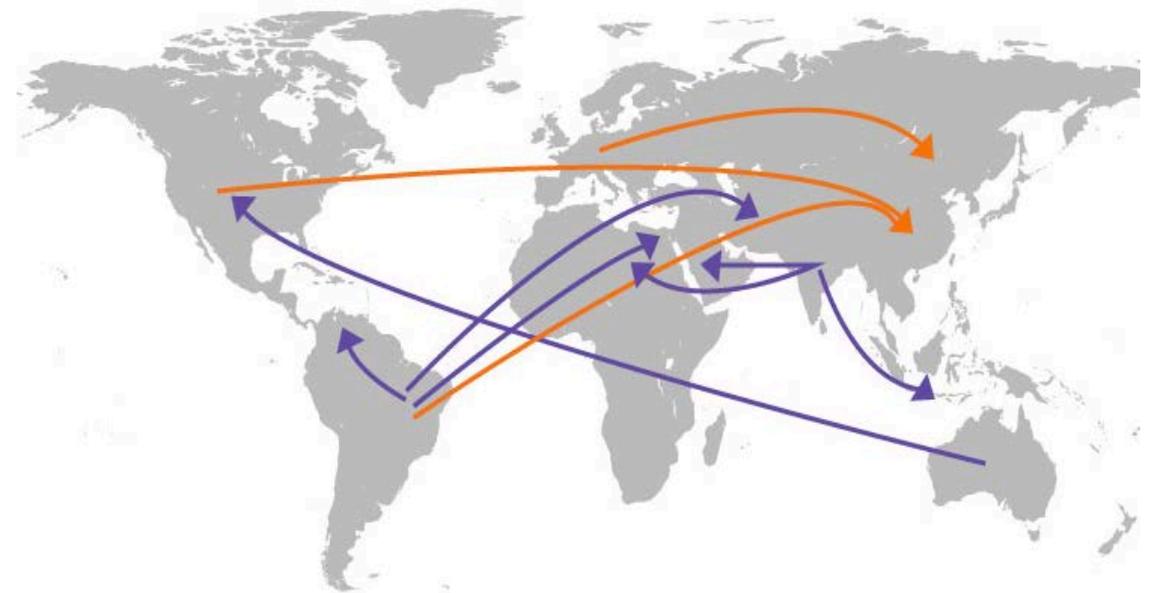
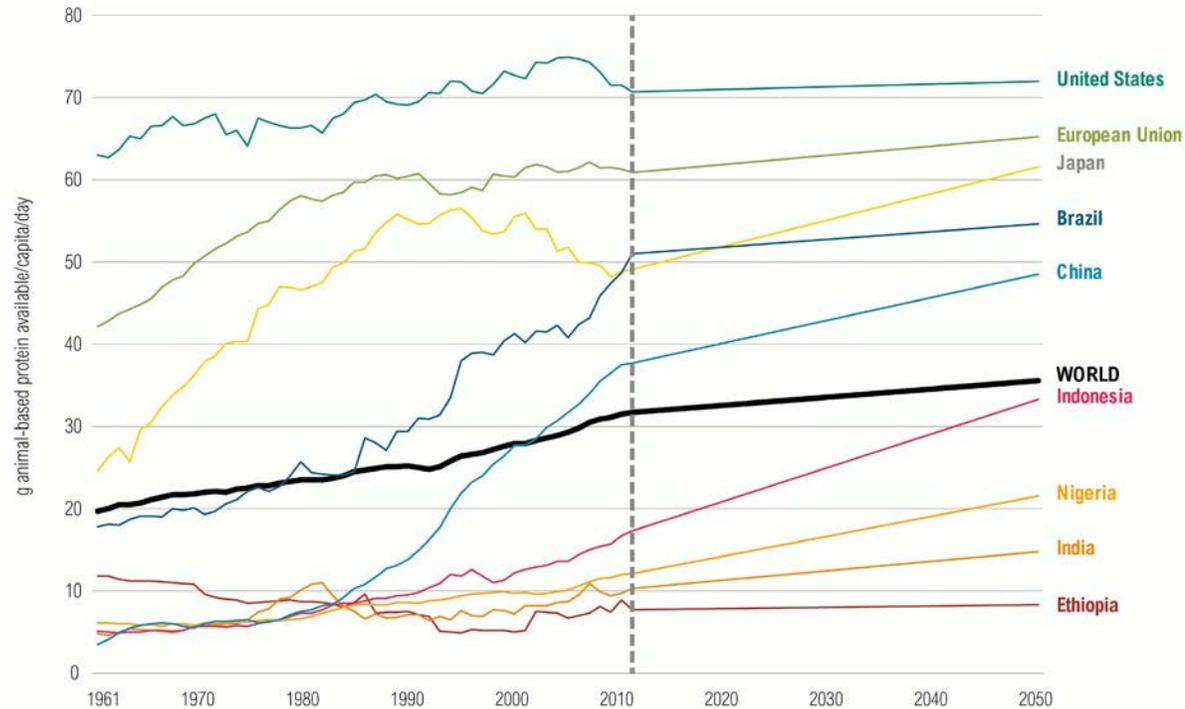
By DIONNE SEARCEY OCT. 2, 2017



## How Big Business Got Brazil Hooked on Junk Food

As growth slows in wealthy countries, Western-food companies are aggressively expanding in developing nations, contributing to obesity and health problems.

# And there is a growing demand for meat



Indian buffalo beef to North Africa, the Middle East and Southeast Asia

Brazilian beef to Iran, Egypt and Venezuela

Australian beef to the United States

Western European pork to Russia

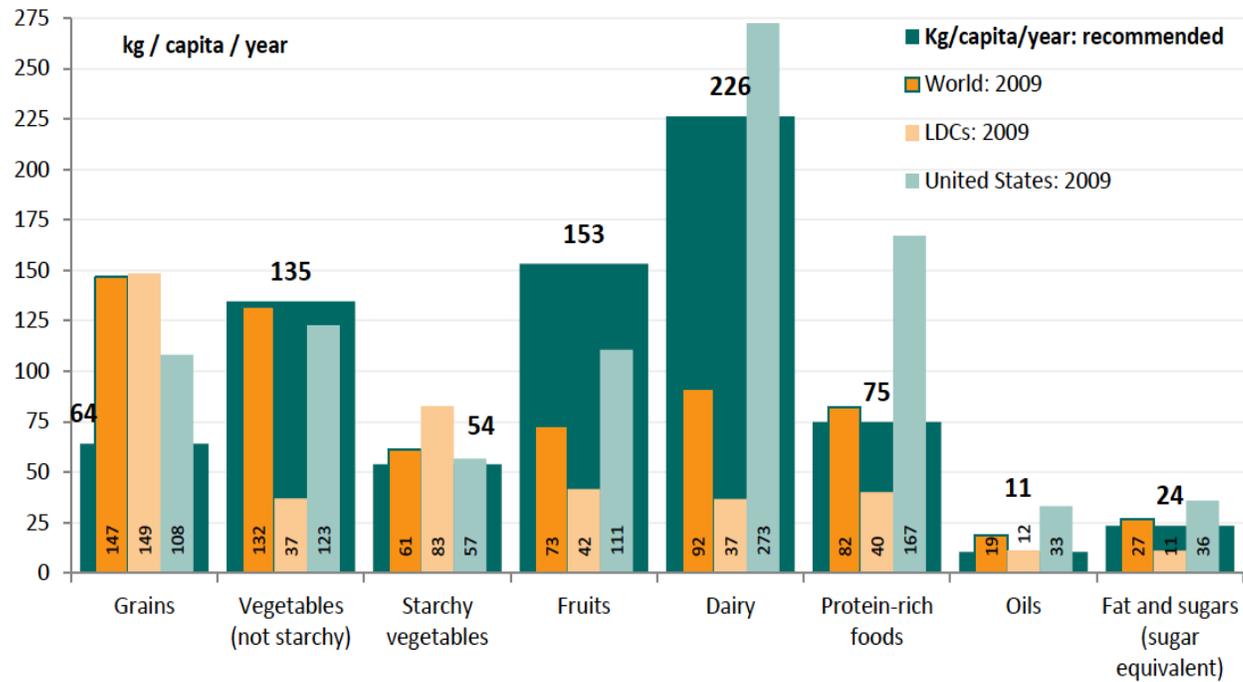
Brazilian pork to China

United States pork to China

Information from USDA Foreign Agricultural Service April 2012 "Livestock and Poultry: World Markets and Trade"

# 3. Disjointed Policies

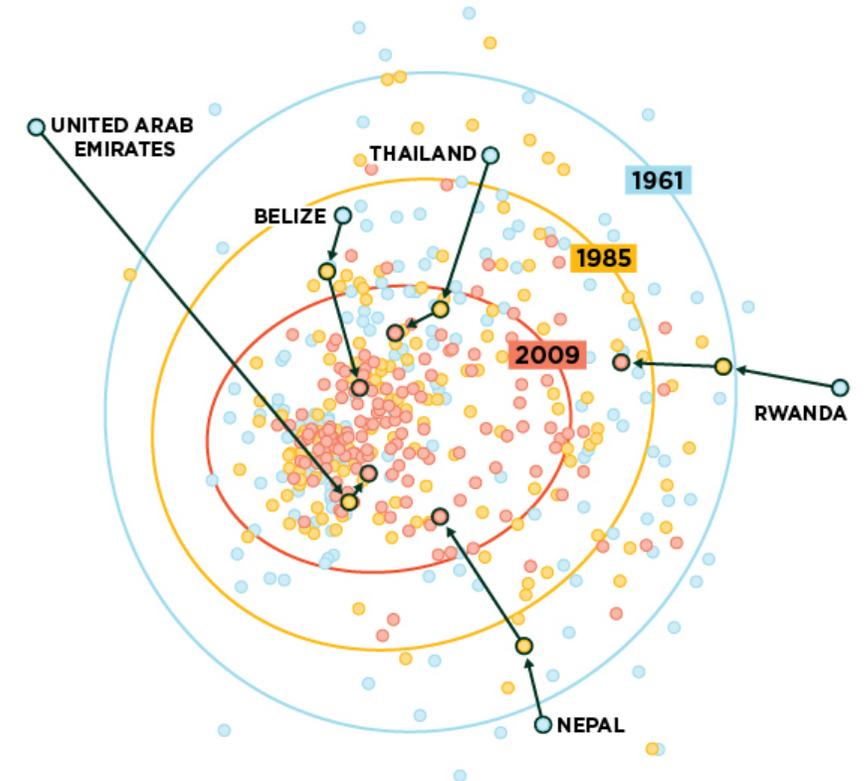
Are dietary guidelines thinking about sustainability?



Is our food supply able to provide the necessary diversity?

Each country's food supply composition in contribution to calories in:

● 1961 ● 1985 ● 2009



# 4. Policymakers constantly deal with trade-offs



Promotion of palm oil as replacement for trans fats  
Increased deforestation and loss of biodiversity



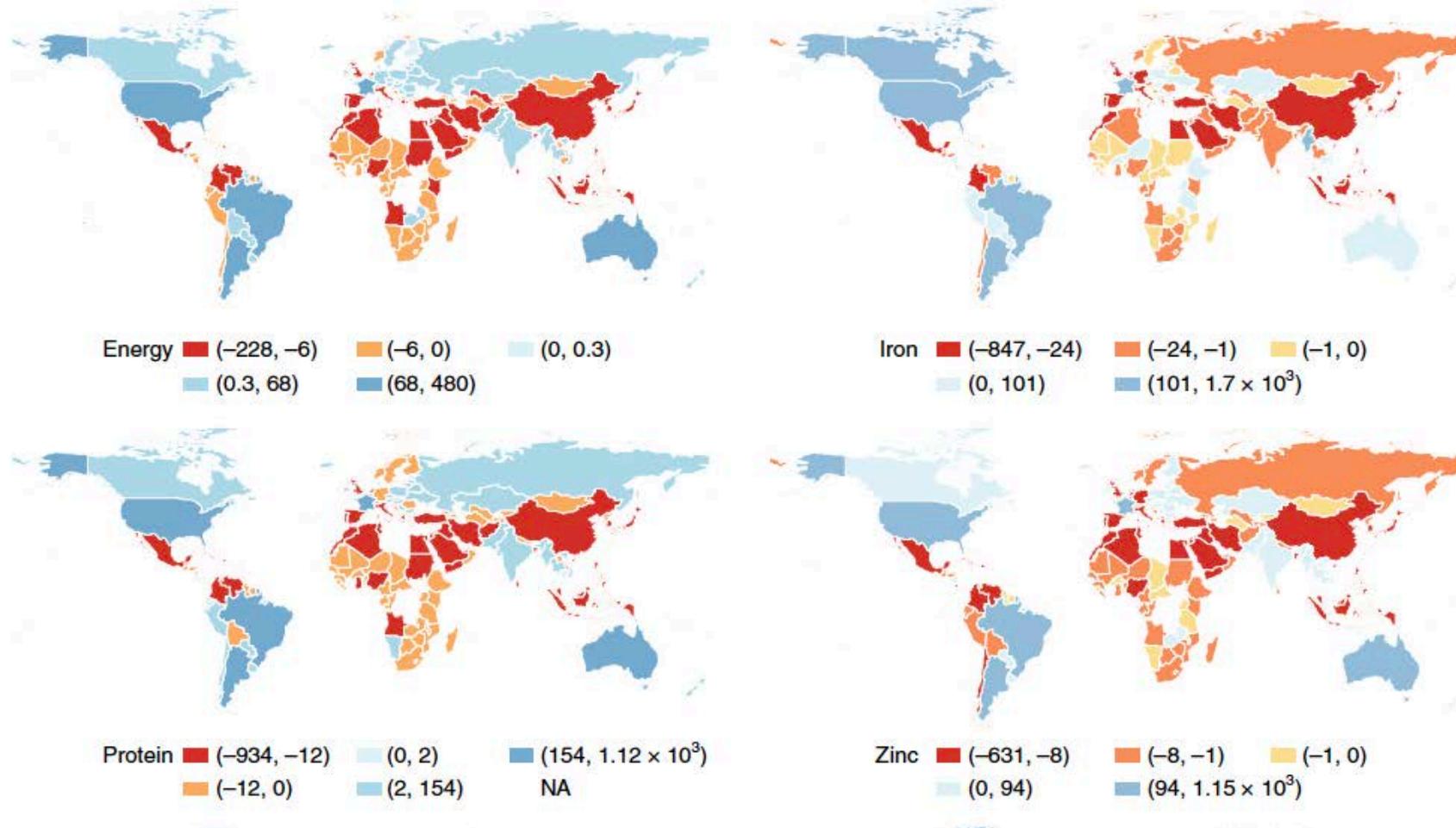
Promotion of grass fed beef, potential omega 3 benefits  
Increased methane gas production



Promotion of Mediterranean diet & olive oil for heart health  
Increased use of significant amounts of water

# Trade Policies Matter

Change in number of people who could be nourished without trade.

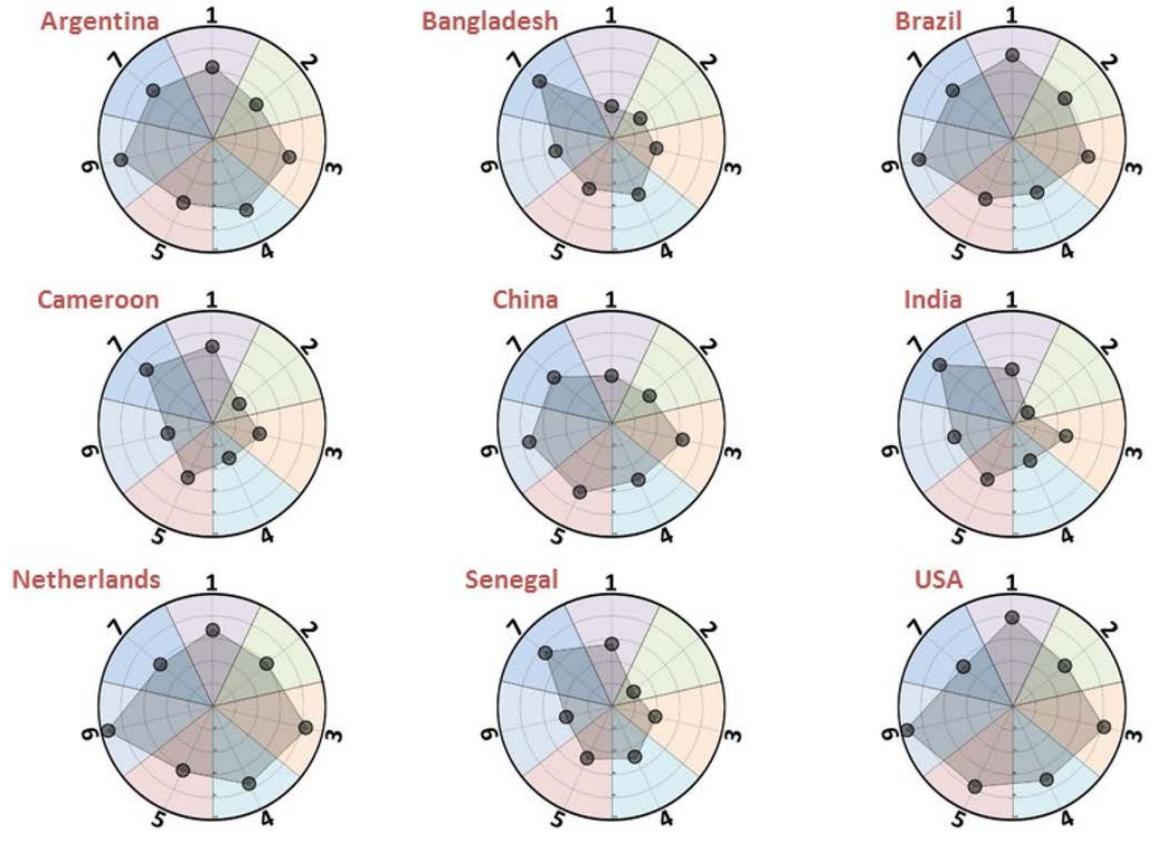
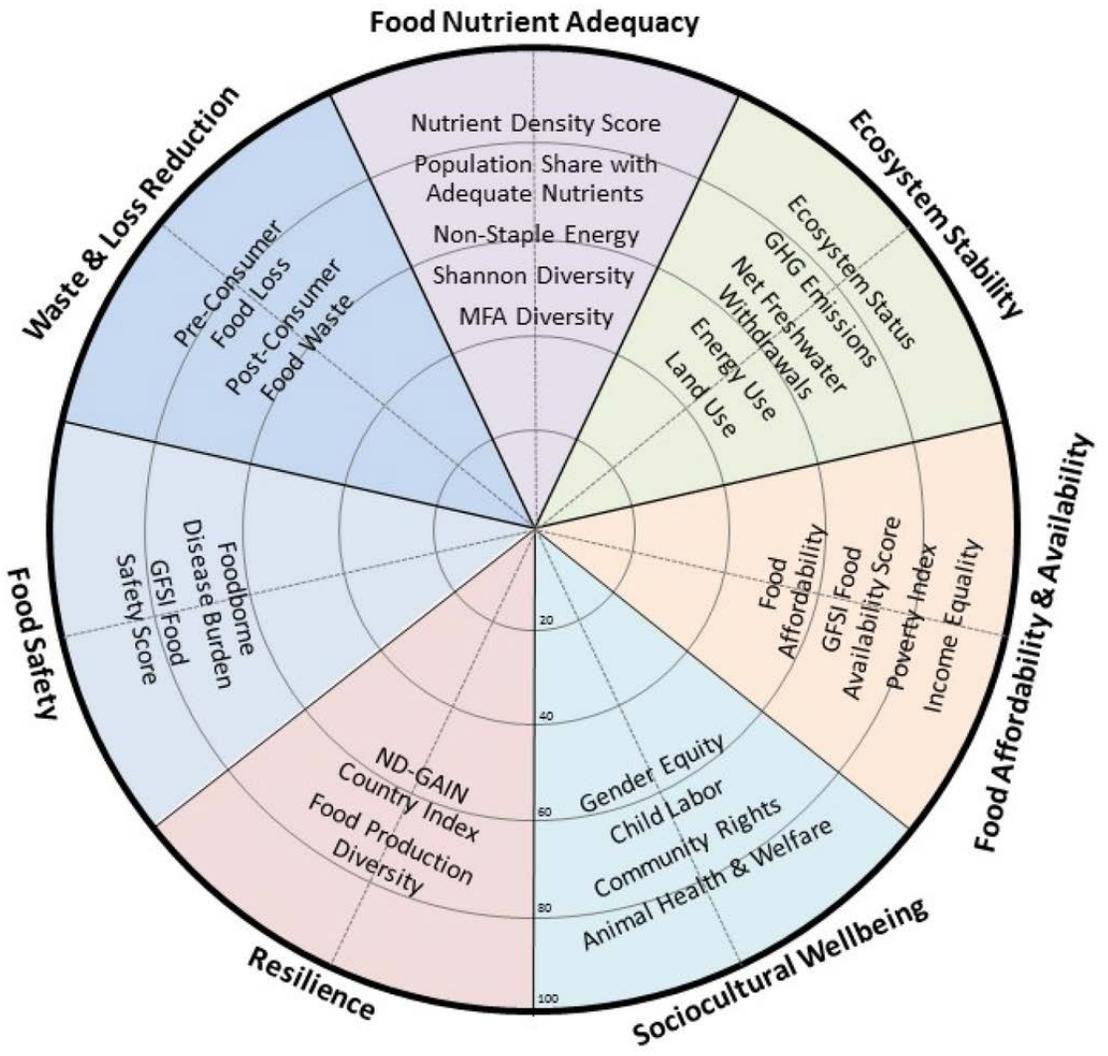


# What are the evidence gaps?

Although the need to advance commitments towards sustainable diets as a central aspect of sustainable development is clear, gaps nevertheless persist in our understanding of what constitutes a sustainable diet for different populations and contexts, and how to measure this.

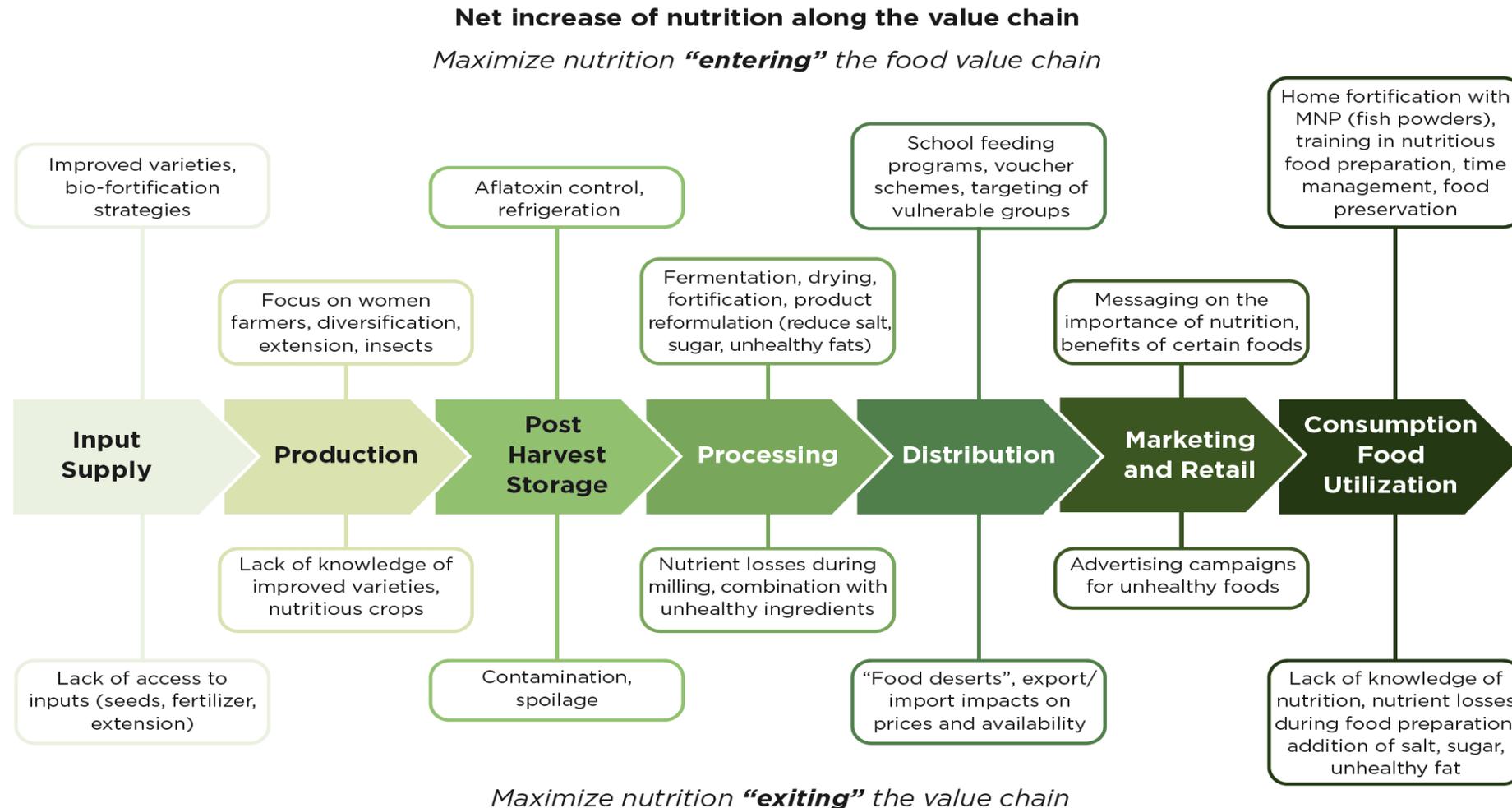
- Better characterize key determinants for a sustainable diet and how these determinants can be measured in a spatio-temporal way, perhaps using a suite of indicators and a consolidated index.
- Guidance on what a sustainable diet would mean economically, for all food value chain actors in the LMIC context.
- Policy analysis on how to better integrate sustainability issues into policies relevant for diets and nutrition.

# Creating dashboards: Does this help policymakers?

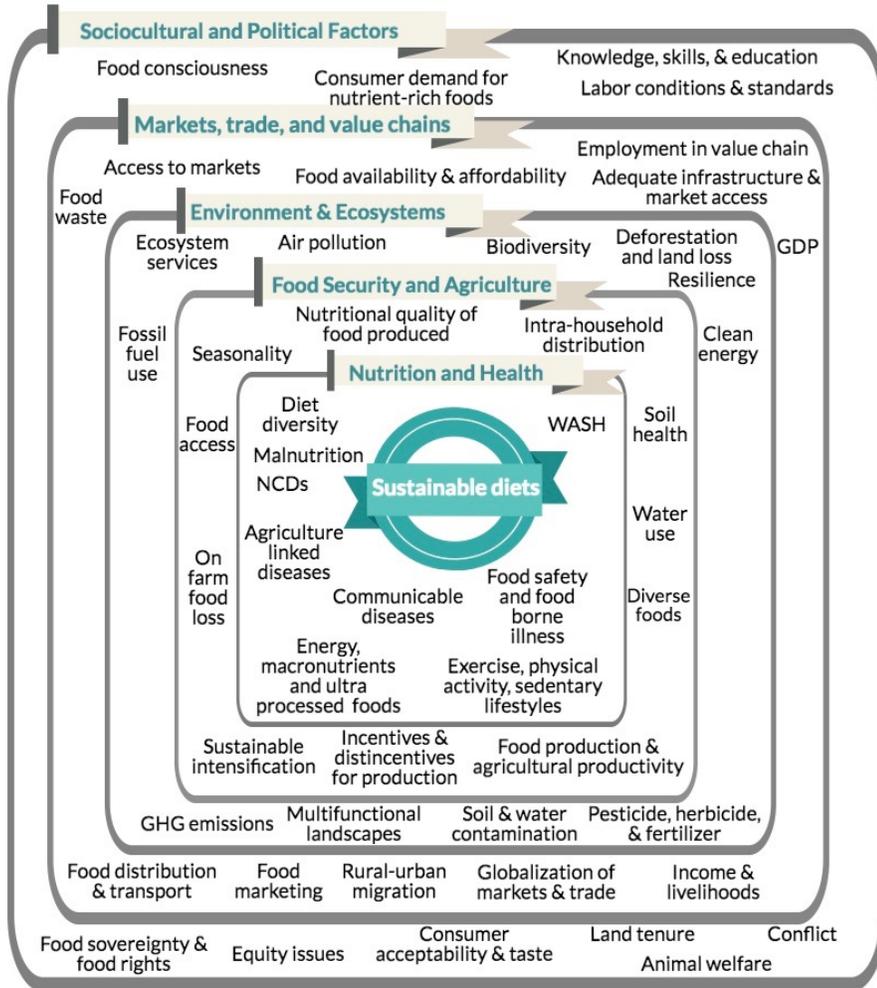


Source: Gustafson, D., Gutman, A., Leet, W., Drewnowski, A., Fanzo, J. and Ingram, J., 2016. Seven food system metrics of sustainable nutrition security. *Sustainability*, 8(3), p.196.

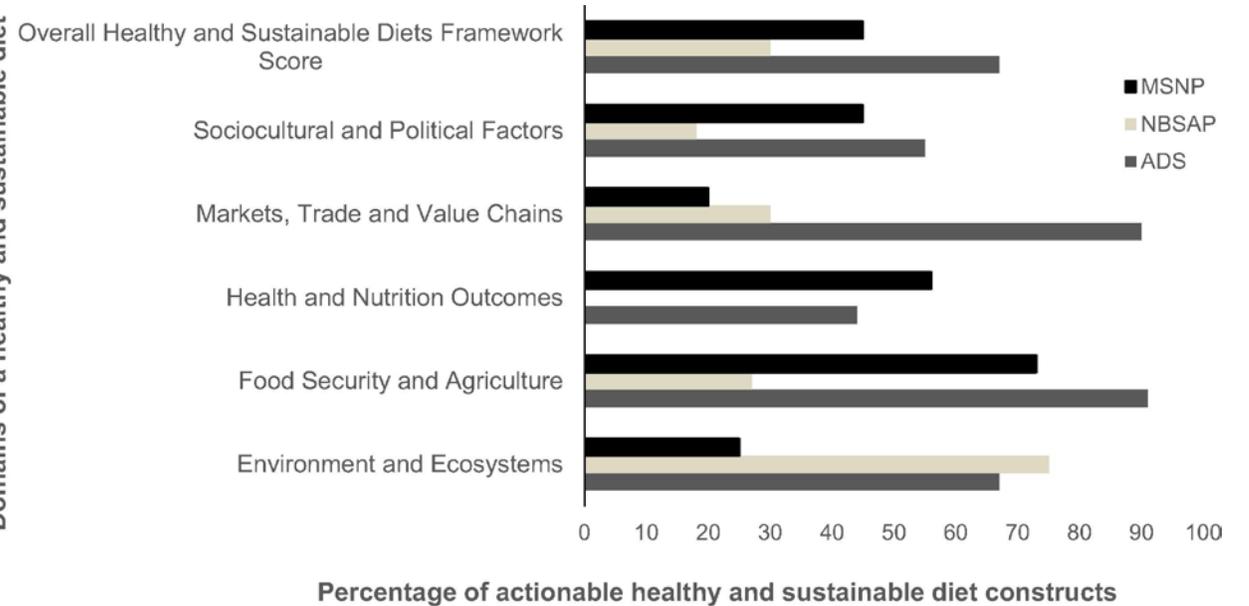
# Local context, local foods, local environments and local landscapes



# Policy analysis: Nepal case study



Domains of a healthy and sustainable diet



Percentage of actionable healthy and sustainable diet constructs

MSNP = Multi-Sectoral Nutrition Plan  
 NBSAP = National Biodiversity Strategy and Action Plan  
 ADS = Agriculture Development Strategy

# What do we need to do to influence policy?

Targeted  
evaluation

Program  
assessment  
Review evidence  
of effectiveness of

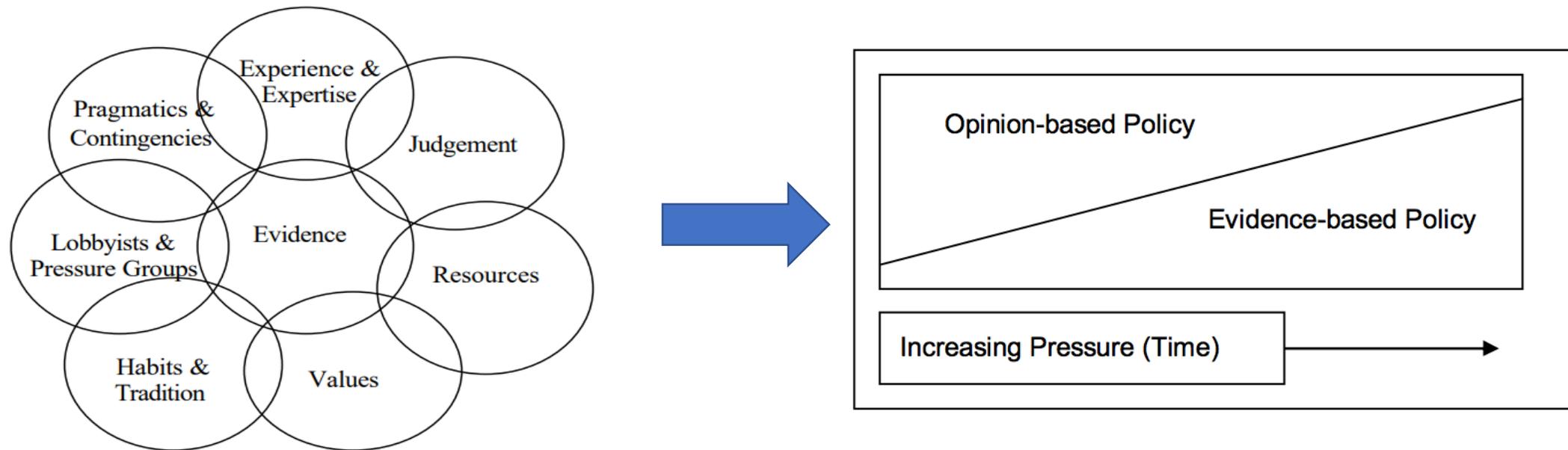
**“There is no “policy cycle” in which to inject scientific evidence at the point of decision. Rather, the policy process is messy and often unpredictable. It is a complex system in which the same injection of evidence can have no effect, or a major effect.”**

Determine whether  
programs are  
achieving desired  
results

Implementation  
oversight  
Ensure programs are  
effectively delivered

# What is the Problem Then?

**“The good news is that evidence can matter. The bad news is that it often does not.” – Julius Court, ODI**



# Coming to Grips with EBP Realities

**“When presenting evidence to policymakers, experts need to engage with the policy process that exists, not the one we wish existed.”**

- Efforts fail when experts do not understand how the policy process works.
- Need to reject two romantic notions:
  - that policymakers will ever think like scientists
  - that there is a clearly identifiable point of decision at which scientists/experts can contribute evidence to make a demonstrable impact
- “Bounded rationality” - policymakers can only gather limited information before they make decisions quickly. They will have made a choice before you have a chance to say “more research is needed”!
- To do so, they use two short cuts:
  - rational ways to gather *quickly* the best evidence on solutions to meet their goals
  - irrational ways - including drawing on emotions and gut feeling - to identify problems *even more quickly*

# SUSTAINABLE DEVELOPMENT GOALS



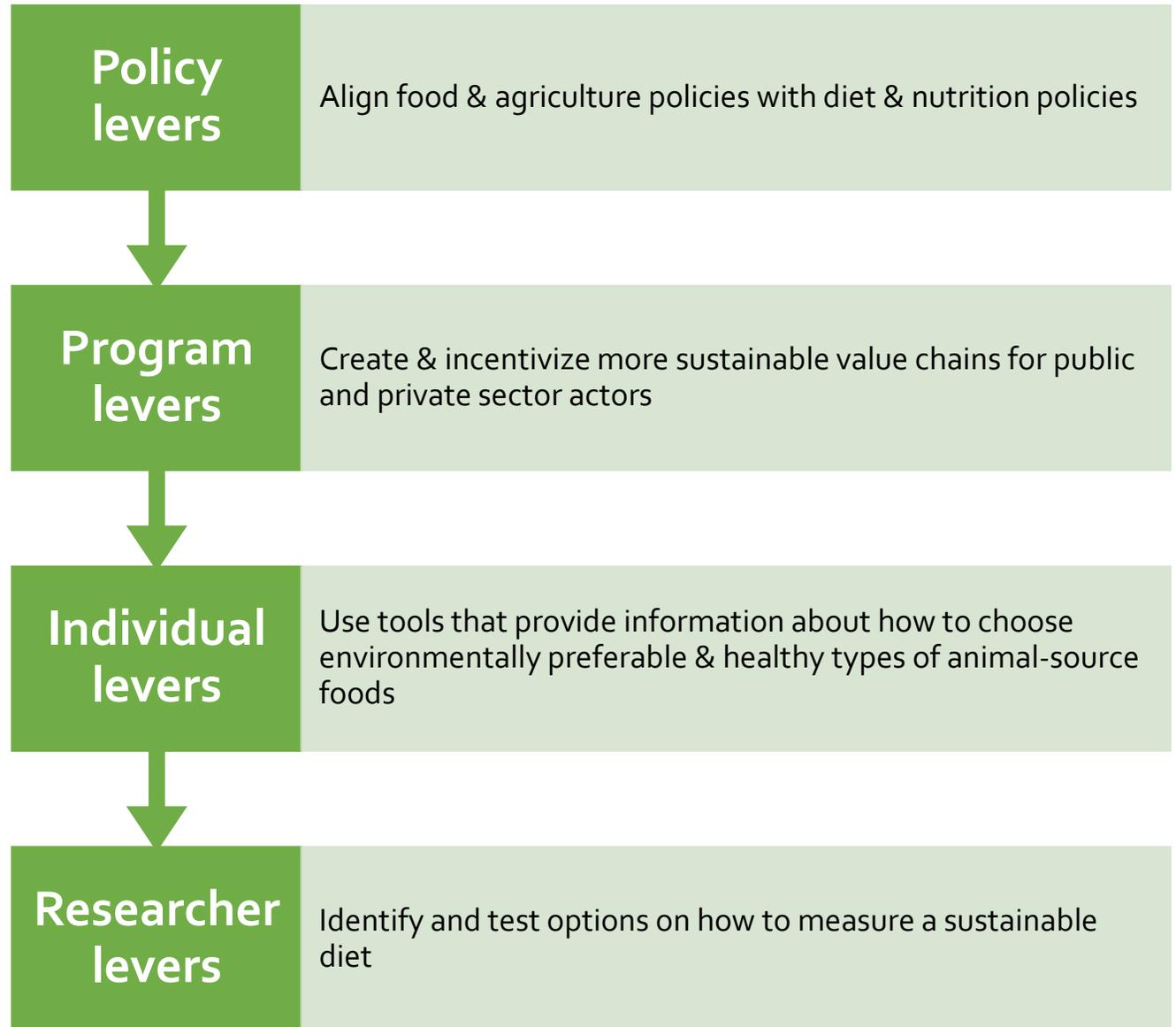
# Losing Earth: The Decade We Almost Stopped Climate Change

By Nathaniel Rich

Photographs and Videos by George Steinmetz

AUG. 1, 2018

# Starters for Sustainable Diets





**Thank you!**