



Global Panel
on Agriculture
and Food Systems
for Nutrition

Food systems and diets: Facing the challenges of the 21st century

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Sandy Thomas, Global Panel; Lawrence Haddad, GAIN



Who we are

The Global Panel is an independent group of experts with a commitment to tackling global challenges in food and nutrition security.



Panel Members



Akinwumi Adesina

President, African Development Bank



**John Beddington
Co-Chair**

Former United Kingdom Government Chief Scientific Advisor



Agnes Kalibata

President, Alliance for a Green Revolution in Africa (AGRA)



Rachel Kyte

Special Representative of the UN Secretary General for Sustainable Energy; and CEO of Sustainable Energy for All (SE4All)



Srinath Reddy

President, Public Health Foundation of India



Rhoda Peace Tumusiime

Commissioner for Rural Economy and Agriculture, African Union Commission



Tom Arnold

Director General, Institute of International and European Affairs (IIEA)



José Graziano da Silva

Director General, Food and Agriculture Organisation (FAO)



**John Kufuor
Co-Chair**

Former President of Ghana



Maurício Antônio Lopes

President, Brazilian Agricultural Research Corporation (Embrapa)



Emmy Simmons

Board Member, Partnership to Cut Hunger and Poverty in Africa/AGree

2017 Global Panel's Activities

2017	Event	Location
16 March	Foresight report presentation at the World Bank with Panel Member Emmy Simmons and Dr Lawrence Haddad	Washington DC, US
3 May	Event on Foresight and food environment brief launch with Panel Member Mauricio Lopes, Embrapa	Brasilia, Brazil
9-10 May	High-level event in Nigeria with launch of consumer behaviour brief + Federal Ministry of Agriculture and Rural Development launch of Nigeria's Agricultural Sector Food and Nutrition Strategy 2016-2025	Abuja, Nigeria
26-26 May	G7 meeting in Italy	Taormina, Italy
July	High-level in-country engagement event in Mozambique and launch of urbanisation brief	Mozambique
September	High-level in-country engagement event in Bangladesh, with Panel Member Srinath Reddy, Public Health Foundation of India	Dhaka, Bangladesh
October	Attendance of the World Food Prize event and tentative launch of fifth Global Panel brief	Des Moines, Iowa, US



The Foresight project aims

- To inform planning, policies and investments
- To strengthen ability of food systems to support high quality diets & hence nutrition



The added value of this Foresight Project

- Placing nutrition and diets in the wider policy space
- Looking into the future to inform today's decisions
- Drawing on the best science, evidence and advice
- Distilling complexity into priorities for action



The problem



Malnutrition is pervasive and increasing

- Malnutrition affects all **193** countries
- Malnutrition affects **1 in 3 people** → will rise to 1 in 2 people if current trends continue
- **800 million** are hungry, **2 billion** have micronutrient deficiency, **1.9 billion** are overweight or obese
- Overweight/obesity rates are rising in every country
- Undernutrition rates decreasing too slowly

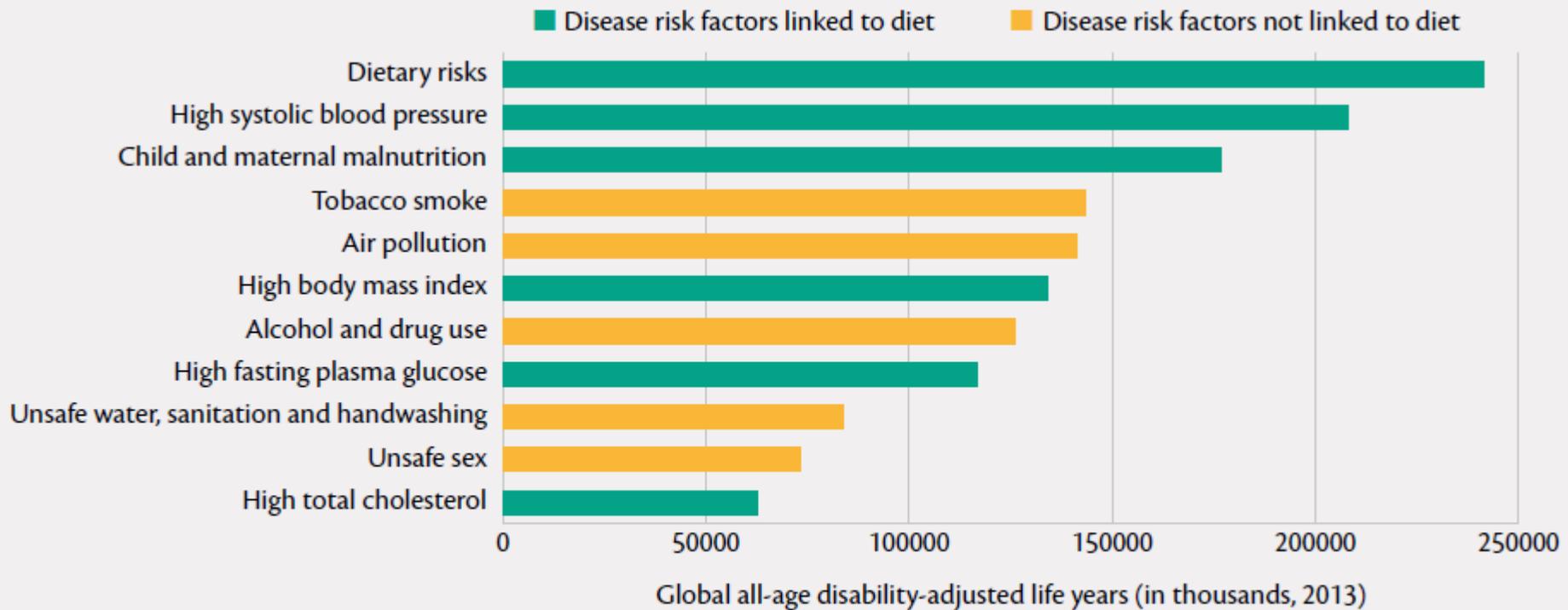


Malnutrition has severe consequences

- Burdens of malnutrition are high (and will get higher)
 - **45%** of all under 5 deaths
 - stunted children **33%** more likely to live in poverty as adults
 - in China, **16%** of household income lost due to diabetes
- Low quality diets are the **number one risk factor** contributing to the global burden of disease



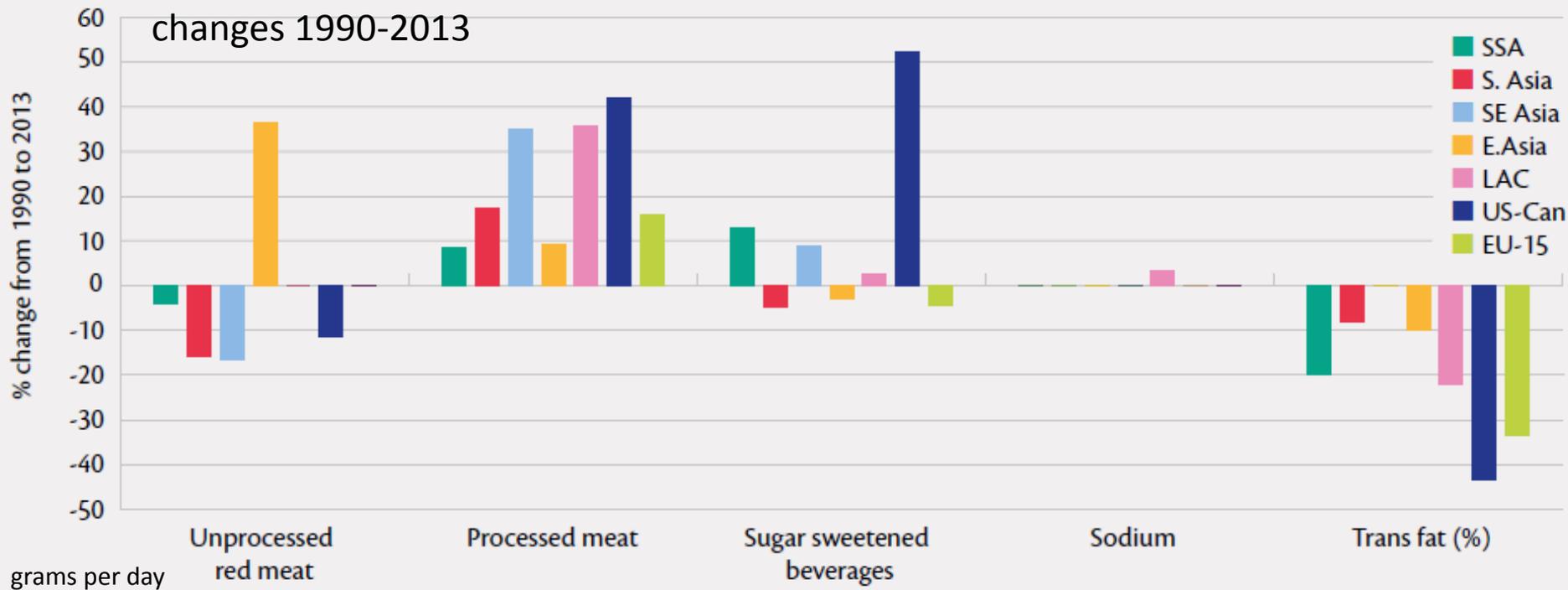
Most global burden of disease risk factors are linked to diet



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.

Diets do not automatically improve over time



Business as usual will generate catastrophic health burdens in the future

Globally, overweight and obese adults:
1.33 in 2005 → 3.28 billion in 2030

China: overweight & obese adults:
32.3% in 2012 → 51.2% by 2030

Nigeria: adults with diabetes estimated to double
between 2011 and 2030

Bangladesh: more adults with diabetes than Mexico
or Indonesia in 2030



Recommended diets look similar around the world

Recommended diets (WHO and National Food Based Dietary Guidelines) include:

- Diversity of foods and food groups
- Plenty of fruits, vegetables, pulses, nuts...
- Animal source foods at recommended levels
- Moderate consumption of “ultra-processed” foods

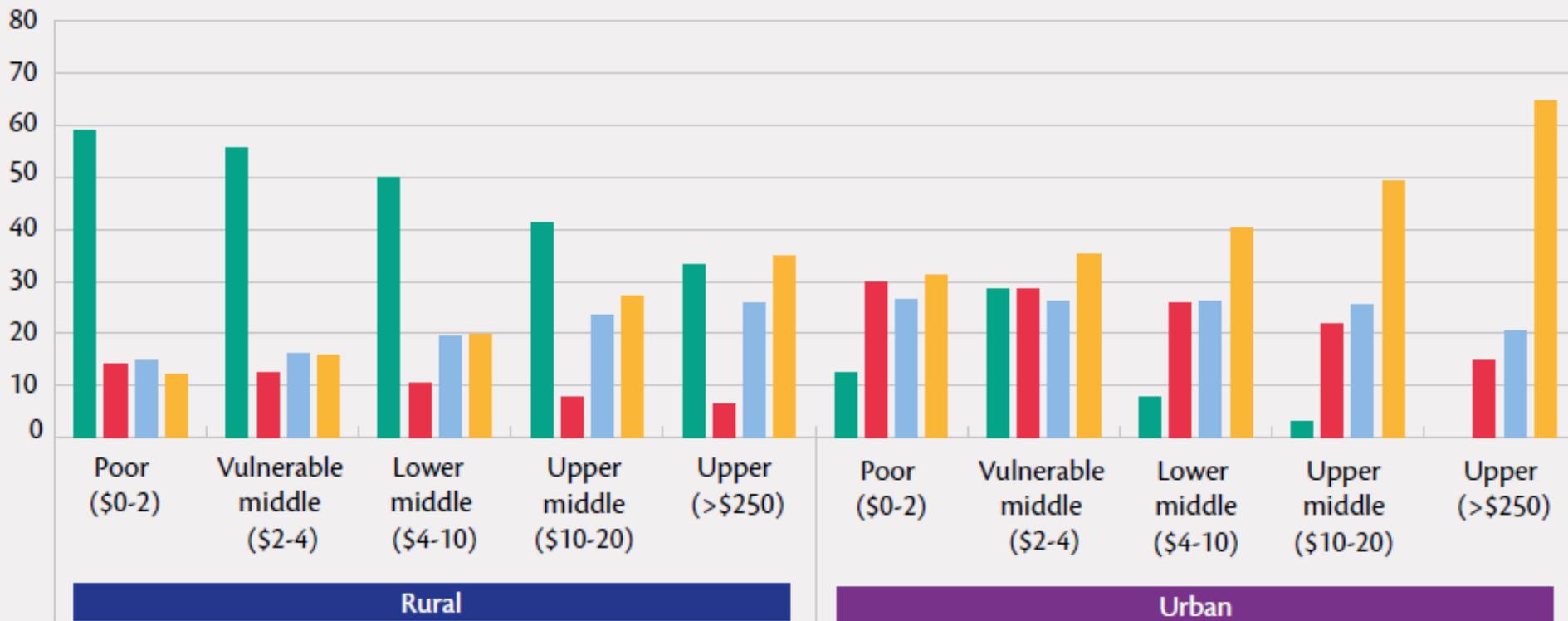


Urbanisation and Income drive types of food acquired

Data from Ethiopia, Uganda, Tanzania, Mozambique, Malawi and South Africa

Percentage of value of food consumed from different categories

Own production Purchase: unprocessed Purchase: low processed Purchase: high processed



Source: Compiled by the authors, based on data in Tschirley et al. (2015)

What are food systems?

Food systems go well **BEYOND PRODUCTION**:
to storage, transport, trade, transformation,
provisioning, retail

Food systems **GOVERN** the safety, nutrition
quality and affordability of food





Food systems need to make it easier to make nutritious food choices

- Food systems not intrinsically geared towards nutrition
- While consumers have co-responsibility, they make choices in their immediate **food environment**
- How **available**, **affordable**, **desirable** and **safe** are their choices?

Recent example of unhelpful “food environment”

Meeting the **“5 a day” fruit and vegetable** recommendation would cost low income households in Bangladesh, India, Pakistan and Zimbabwe

52%

of their household income



The Opportunity



Why now?

- Substantial **economic returns** from investing in nutrition
 - **10% of global GDP** gained by eliminating stunting
 - Investments to scale up nutrition programs give **benefit-cost ratios of 16:1**
- **SDGs & The UN Decade of Action** on Nutrition
- Low and middle income countries don't have to take the same **long, damaging path** towards recommended diets as high income countries did

Nutrition policy is complex and challenging

It can be made less so:

- We provide **tools** to help link diet problems to food systems
- We show **what works** in the programme and policy space - and what is worth **exploring**
- We point out where the **data and evidence** base need to be stronger



Policy approaches

Food system area	Policy type		
	current “quality”	potential modified “quantity”	potential “novel”
Production	biofortification	more agricultural R&D on F&V, pulses	introduce nutrient productivity metrics
Storage, transport and trade	trading standards for food composition for key foods	redefining sanitary standards to include diet quality	invest in community based technology to preserve nutritious foods
Transformation	labeling; regulation of marketing; regulations on product formulation	leveraged start up funds for SMEs that are engaged in value chains for healthier foods	corporate tax rates that incentivize higher nutrition quality product lines
Retail and provisioning	public procurement in schools, hospitals	incentives to street vendors to use healthier ingredients	premiums paid to wet market retailers if they meet above minimum food safety standards
Food environment	taxes on “bads”; voluntary codes on product placement	food price subsidies on staples extended to pulses, F&V	tax incentives for “nutrition retail zones”

Tool for navigating complexity

Identify diet quality goal

→ establish causes

→ link to food system elements

→ identify actions to take

→ align for coherence

→ leverage for sustainability

Diet quality goal	Agricultural production	Transformation	Storage, transport and trade	Retail and provisioning
Increase intake of legumes/pulses	Agricultural research into new varieties to boost yield	Develop fast cooking bean flour	Train farmers in management practices to reduce loss to insect damage	Food price subsidies for legumes where consumption is low

Call to Action

Much is context specific, but there are common elements

1. Focus **food system policies** on diet quality for infants and young children
2. Improve **adolescent girl and adult women's** diet quality in all policy making that shapes food systems
3. Ensure that food-based **dietary guidelines** ALSO guide policy decisions to reshape food systems
4. **Animal source foods** provide important nutrients. Policy support for these foods should be pragmatically evidence-based rather than driven by ideology
5. Make **fruits, vegetables, pulses, nuts and seeds** more available, affordable and safe for all

Call to Action

Much is context specific, but there are common elements

6. Makes policies on product **formulation, labelling, promotion** and **taxes** a priority
7. Improve **accountability** at all levels – food system **metrics**
8. **Break down barriers within governments** for dealing with the multi-sector problem
9. **Institutionalise** high-quality diets through public sector purchasing power
10. **Refocus agriculture research investments** globally to support healthy diets and good nutrition





Making food systems
be *enablers* rather
than *blockers* of
improved diet
quality is a
CHOICE

This is within policymakers' grasp

It will help achieve the SDG goal of
ending malnutrition by 2030

We all will reap benefits for decades to
come

Thank you

Download the report:
Glopan.org/foresight

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