

Food Systems For Health: The Nutrition Transition

Some expériences from Sub-Sahara Africa

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- Globally agriculture systems produce enough food to feed all citizens of the world adequately
- Yet hunger and malnutrition remain pernicious and a threat to humanity and development
- The most malnourished people in this world are farmers and their families, especially women and children
- 12 people die of hunger and malnutrition every minute (UNICEF) – **higher than other causes**
- Malnutrition has huge human, social and economic consequences and costs – GDPs suffer
- Food is very political and continues to be worsening!



Agriculture production, Food Systems and Nutrition are intrinsically linked- **Yet...**

There are other systems to consider that include inter-alia

- Geopolitical
- Health
- Education
- Social Protection
- Gender and Youth
- Trade
- Culture and Knowledge Systems



- Adequate nutrition is essential for health and well-being
- Every person on this planet has a right to food that is safe, sufficient and nutritious and to be free from hunger and malnutrition in all its forms
- Yet, 1 in 3 persons globally suffers from at least one form of malnutrition - *undernutrition, micronutrient deficiencies, overweight and obesity* Malnutrition is estimated to rise to 1 in 2 people if current trends continue (GLOPAN, 2016 – Foresight Report)
- Different forms of malnutrition now co-exist within the same country, community, household or individual
- Combatting malnutrition in all its forms is one of the greatest challenges that countries are facing



Why focus on nutrition even more now?

The status of hunger, malnutrition and poverty is worrisome

- Complexities of the current crises;
 - Conflicts in Africa and beyond - Ukraine
 - Climate change
 - Cost of food
 - COVID-19
 - Cost of fuel
- ***Coordination, Cooperation and Collaboration across multiple sectors.



What are we really dealing with here?

1 in **7** PEOPLE
are **HUNGRY**



1/3 of FOOD
is **WASTED**



MALNUTRITION is a global problem

**1.9
BILLION**

adults are
overweight or
obese

**2
BILLION**

people suffer from
some form of
micronutrient
deficiency

**161
Million**

children under
the age 5 are too
short for their age

**795
Million**

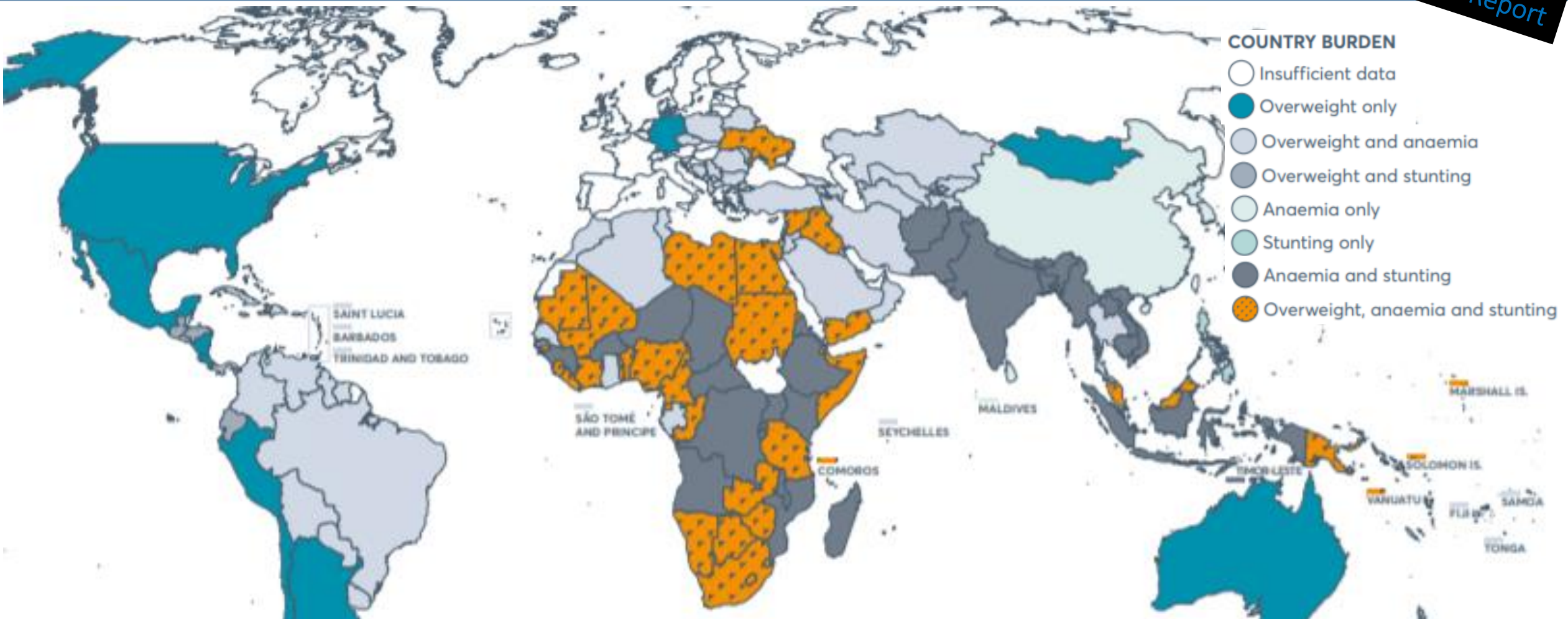
people do not get
the food they need
to live a healthy life

UNHEALTHY DIETS

are one of the leading causes of global **malnutrition**



Visualizing the multiple burden of malnutrition



- 143 countries (where there is data) experience at least one form of malnutrition at high levels
- 124 countries experience high levels of at least two forms of malnutrition
- Of the 124 countries, **37 experience high levels of all three forms of malnutrition**, mainly in Africa

30 out of 41

countries that struggle with high levels of all three forms of malnutrition are in Africa

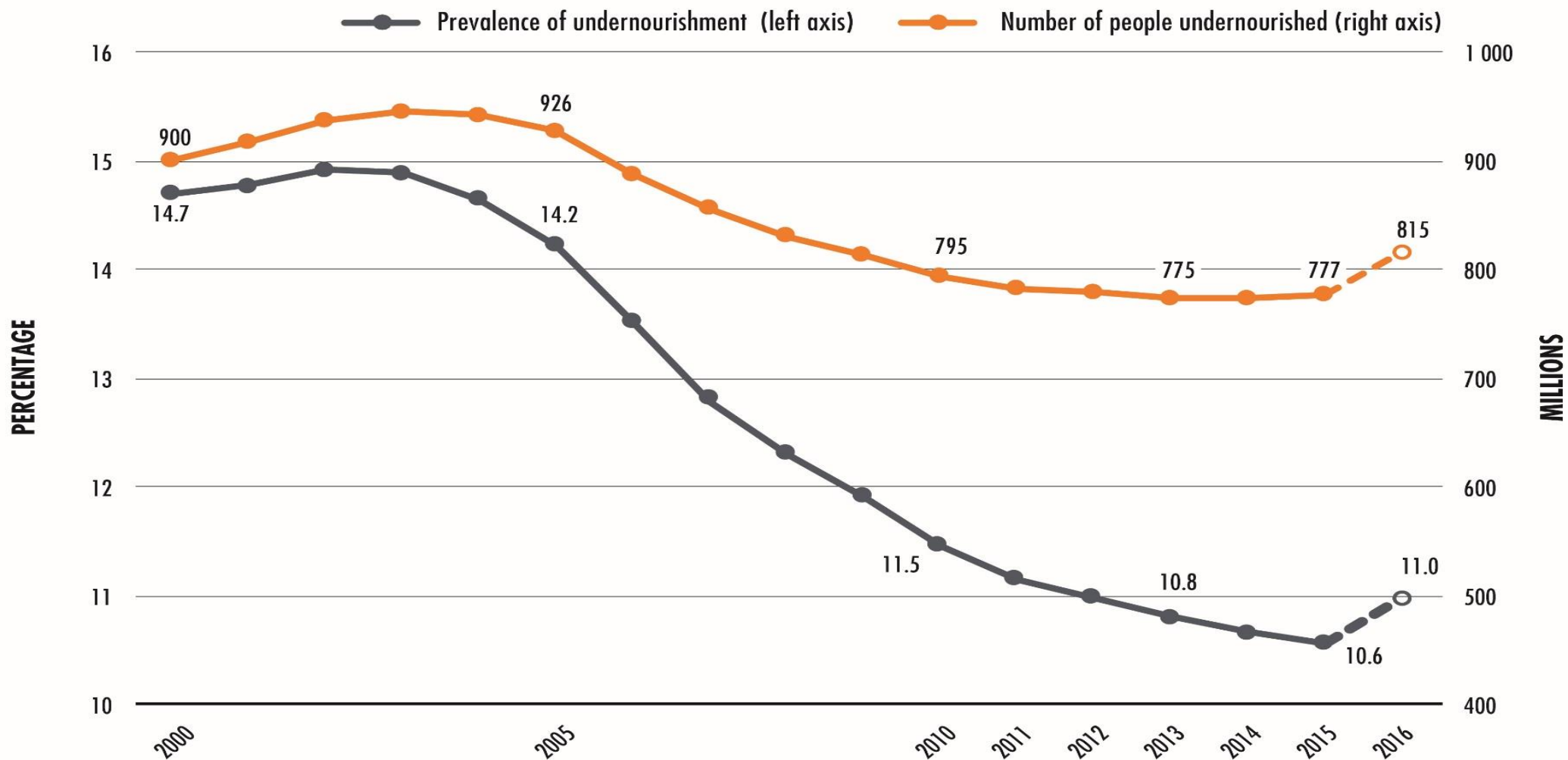
globalnutritionreport.org

Coexisting burdens of malnutrition affect millions of children, increasing their risk of poor health outcomes.



GLOBAL NUTRITION SITUATION

After a long decline, hunger is increasing

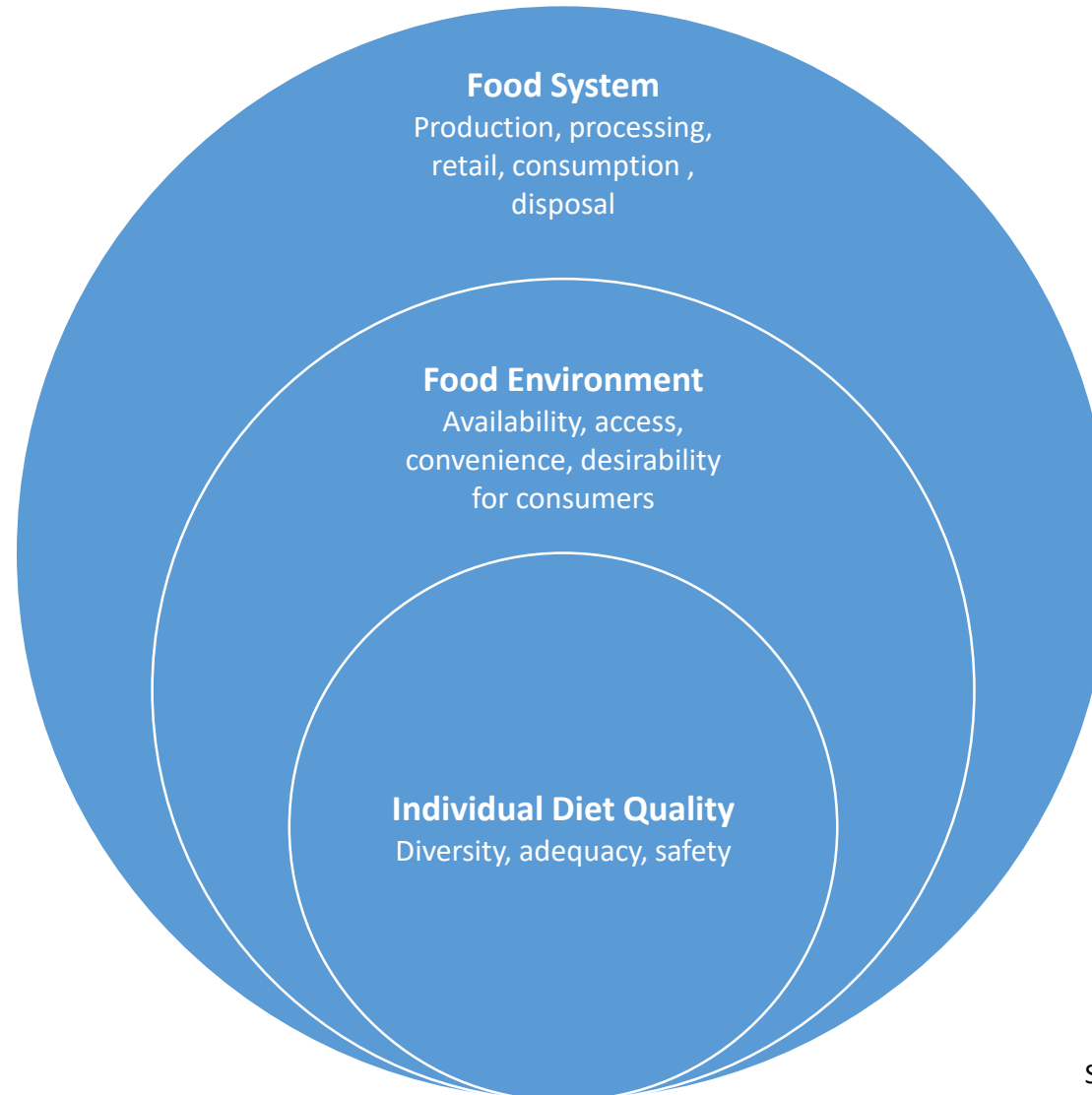


Source: SOFI 2017



HEALTHY DIETS ARE NOT THE DEFAULT

Food environments are shaped by food systems



Source: Meerman 2015



Low quality diets contribute to all forms of malnutrition

The food system presents a huge opportunity to act to improve diets

While the GLOBAL FOOD SYSTEM has succeeded in feeding a growing population in terms of providing enough dietary energy...

Ensuring availability and accessibility of a variety of foods and food products that contribute to healthy diets and good nutrition remains a challenge

Food systems need to be repositioned: from feeding people to nourishing people well

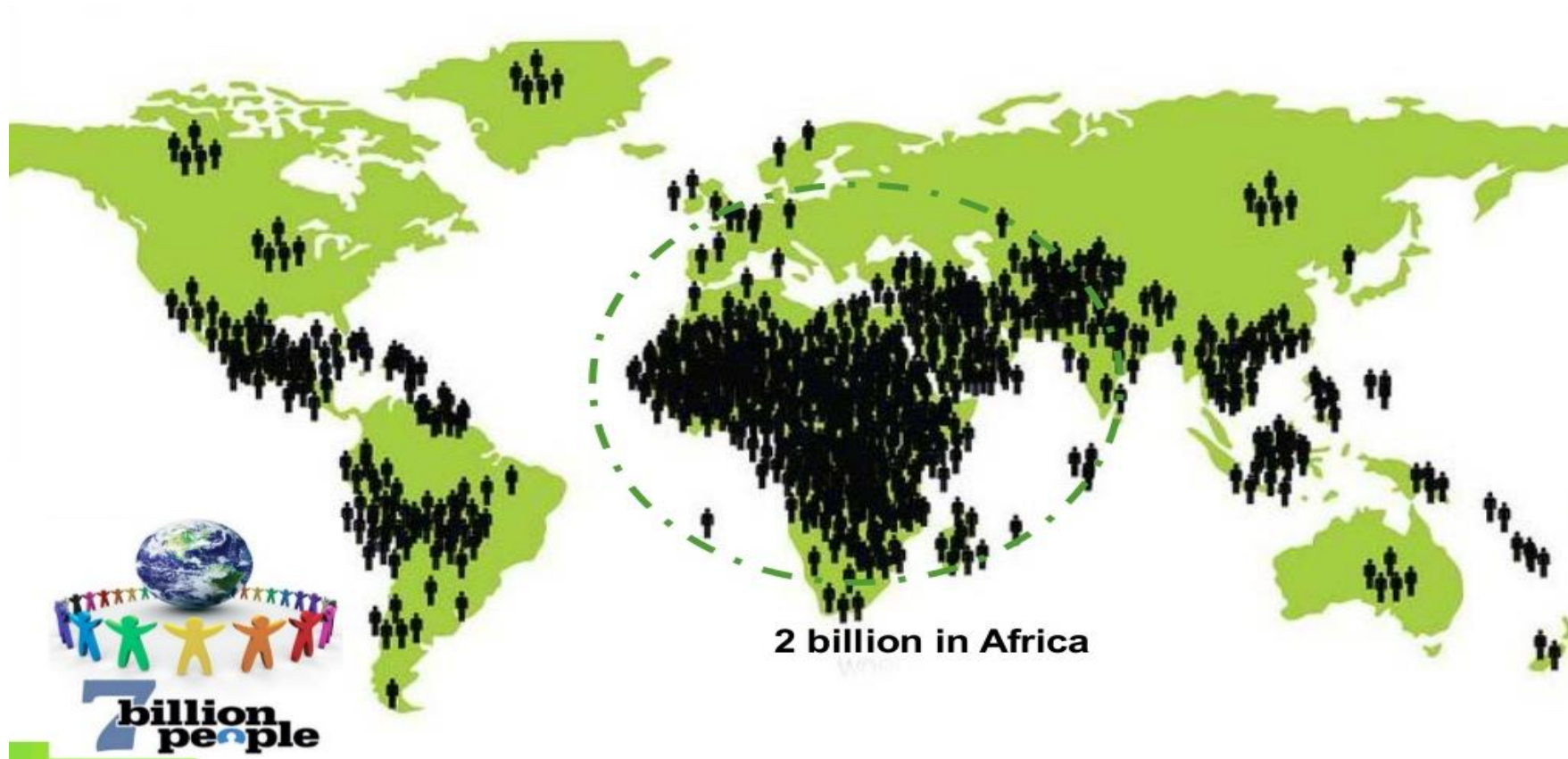
GLOPAN, 2016



Global Food Systems: Where we are and how we got here?



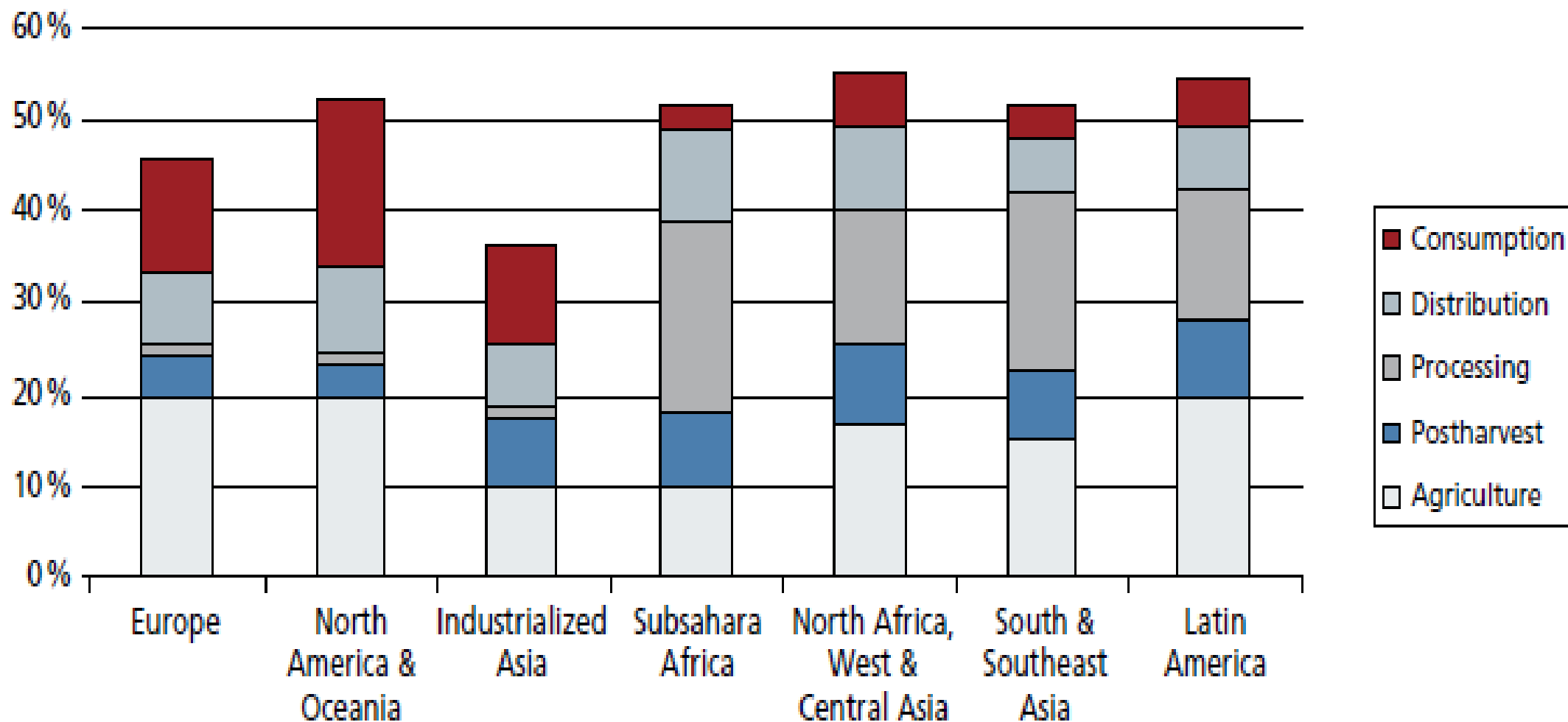
Demographics: Global population to increase to 9 billion by 2050



- **Climate change:** Depending on extent of temperature rise, Africa risks being able to produce only 13% of its food needs by 2050

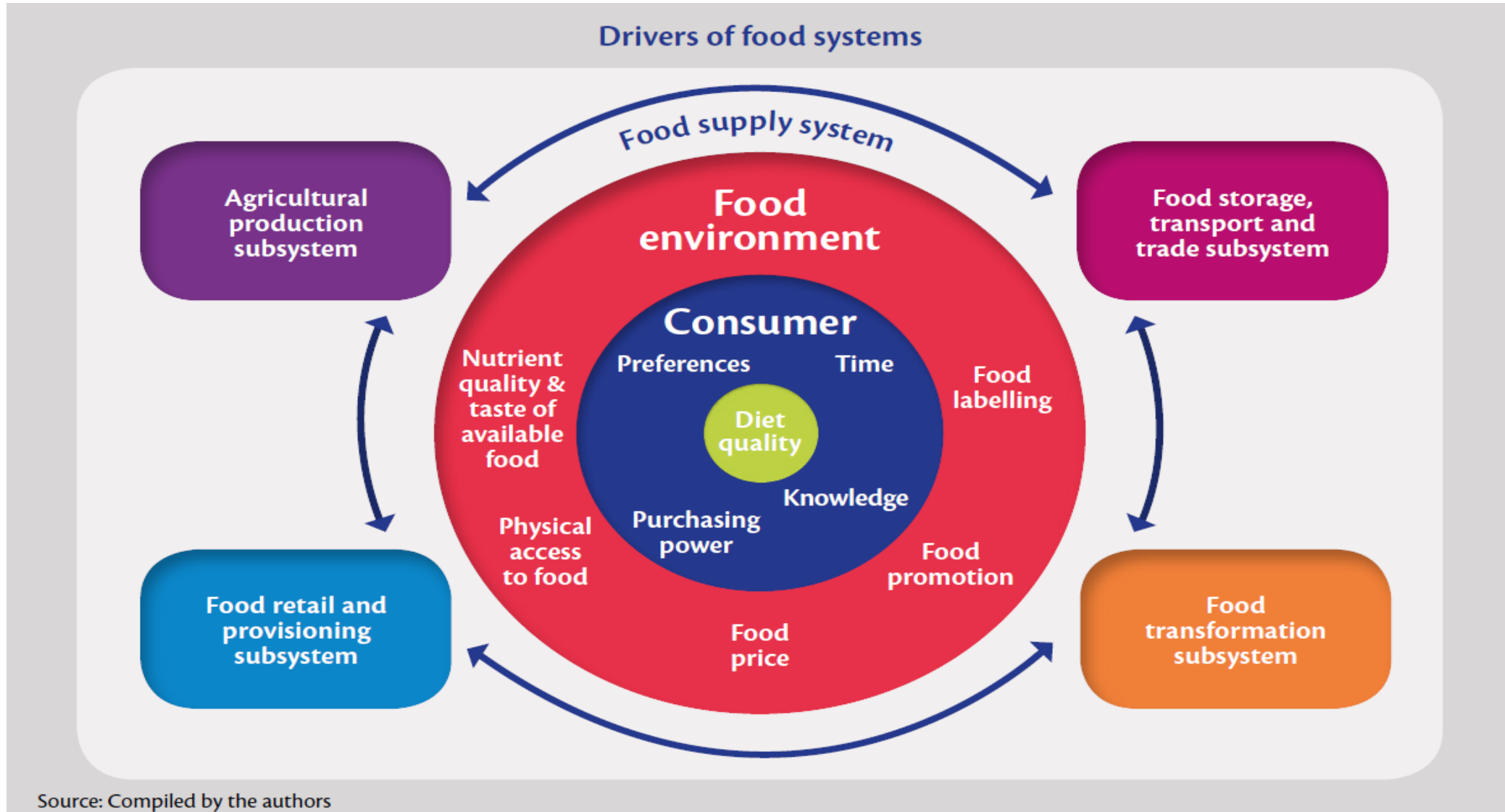


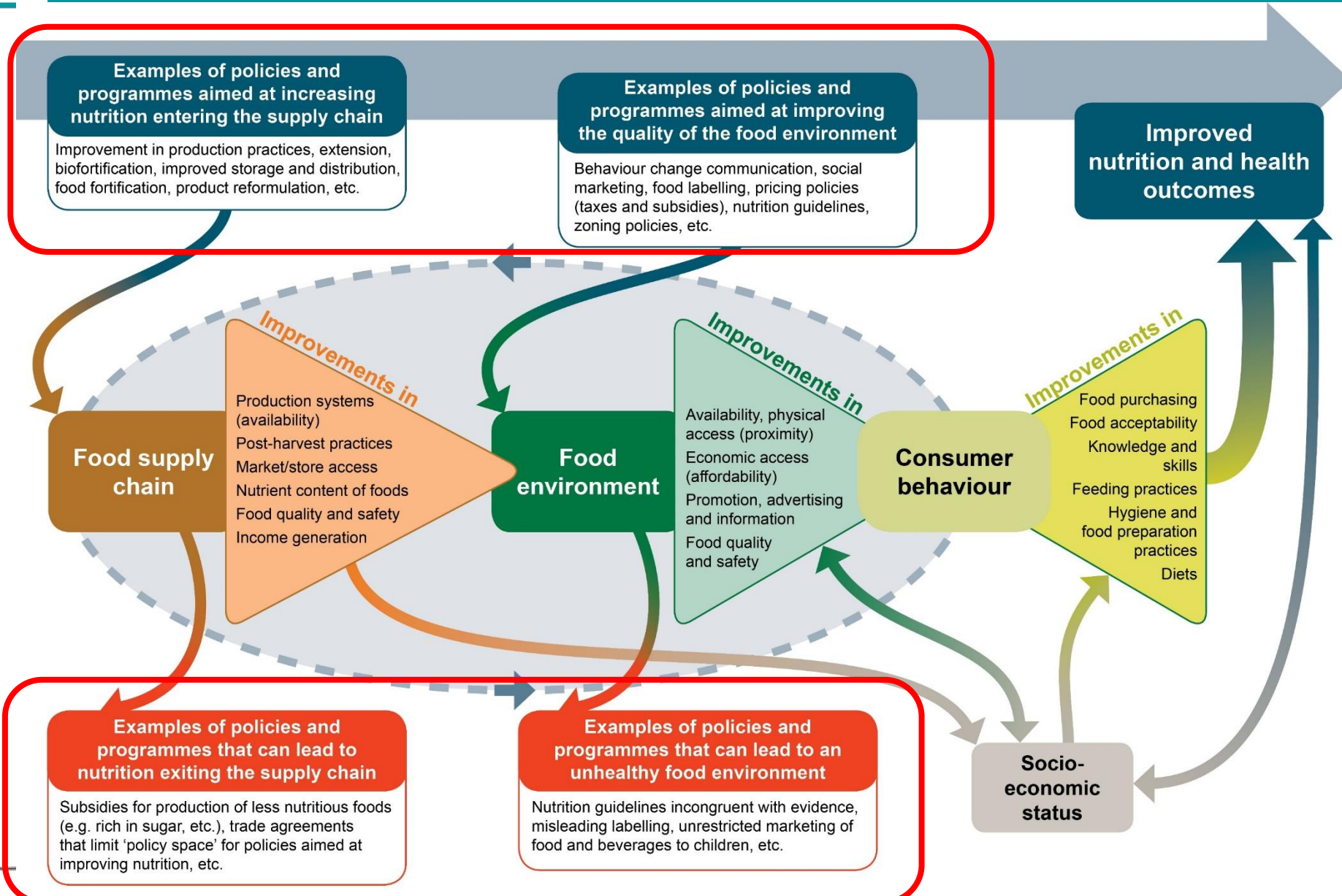
Food losses - Fruits & Vegetables



Ways to address nutrition across the food Systems

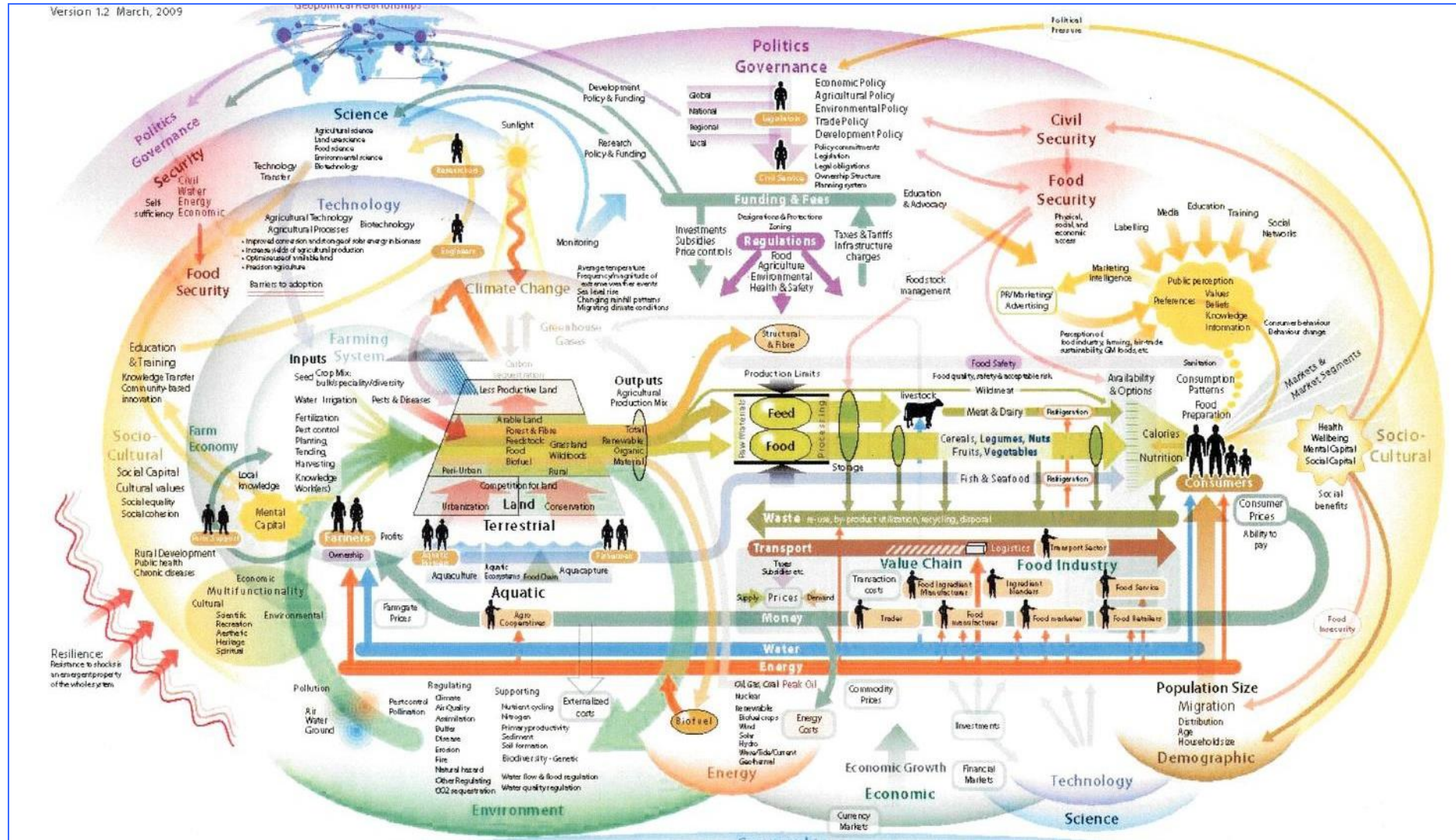






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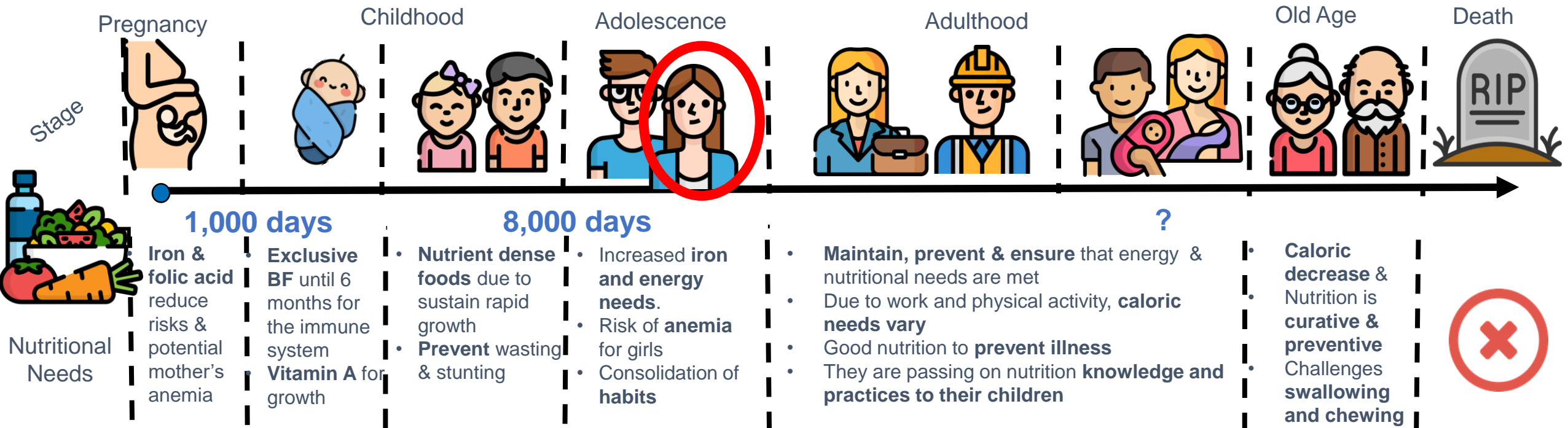


- Policy makers
- Parliamentarians
- Programme implementors
- Farmers/Farmer Associations
- Community Leaders
- Private sector (processing etc.)
- Civil Society
- Media (advocacy, communicators)

Scientists
Researchers
Teacher and Trainers
Influencers (from science to
action)



Requirements for energy and micronutrients change throughout the life cycle: Horticulture is key!



Fruits & Vegetables



Nutritional



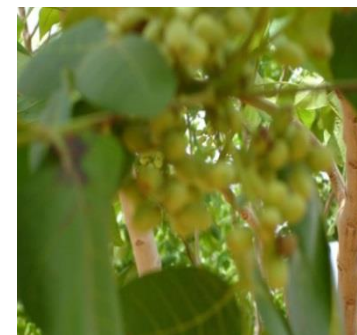
Carbs, Fats & Proteins



INCREASING AVAILABILITY AND AFFORDABILITY OF NUTRITIOUS, HIGH QUALITY FOOD



Maintaining agro-biodiversity of traditional food systems is key



Some Current ongoing Initiatives

- CAADP Maputo 2005 (6% Ag growth and 10% budget)
- CAADP Malabo Declaration
- ICN2 Rome Declaration and 17 Action Areas
- 2019 CFS Voluntary Guidelines on Food Systems and Nutrition
- 2021 UN Food Systems Summit
- 2021 Africa Common Position on Food Systems and Nutrition
- 2022 Africa Year of Nutrition
- Pan African Parliament



- Home Grown School Feeding Programmes (over 40 Countries implementing)
- Food Safety, Standards and Regulation
- Fortification and Biofortification
- Maternal and Child Nutrition (1st 1000 Days and 8000 Days)
- Overweight, Obesity and Non-Communicable Diseases
- Communicable Diseases; COVID-19, HIV/AIDS, TB, Malaria, Ebola
- Policy and Advocacy
- Public Consumer Nutrition Education and Media Engagement

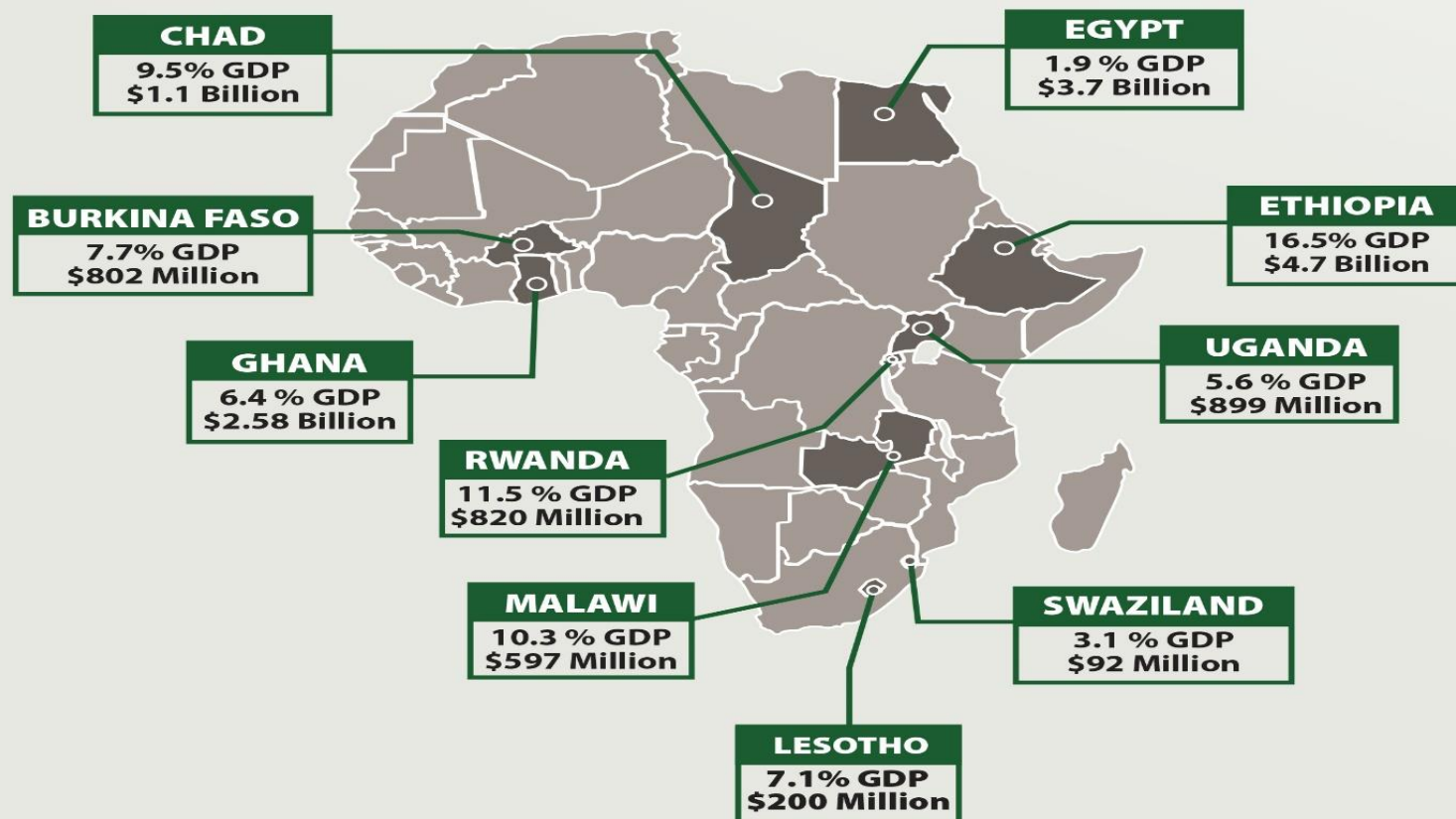




THE COST OF
HUNGER | **C**
IN **AFRICA** | **O**
A
SOCIAL AND ECONOMIC IMPACT
OF CHILD UNDERNUTRITION



ECONOMIC IMPACT OF CHILD UNDERNUTRITION



GDP(Gross Domestic Product)



Health costs of undernutrition

Country	Total Health Cost in Millions (USD)	% GDP
Burkina Faso	122	1.17
Chad	340	2.78
Democratic Republic of Congo	229	0.59
Egypt	213	0.11
Eswatini	7	0.24
Ethiopia	155	0.55
Gambia (The)	6	0.40
Ghana	199	0.49
Guinea Bissau	17	2.30
Kenya	212	0.34
Lesotho	4	0.15
Madagascar	169	1.59
Malawi	46	0.80
Mali	17	0.15
Mauritania	6	0.11
Mozambique	188	0.63
Niger	60	0.80
Rwanda	106	1.49
Sudan	800	1.03
Uganda	259	1.62
Zimbabwe	72	0.50
Total	3,227	

The treatment of undernutrition and related illnesses is a critical recurrent cost to health systems.

It is estimated that **24.5 million clinical episodes** in the **21 Member States** that have undertaken the study, were associated with the higher risk present in undernourished children resulting an estimated cost of about **USD 3.2 billion**.

A large proportion of costs related to undernutrition are borne by families (**USD 1.84 billion**) while the cost to the health system amount to **about USD 1.39 billion** bringing the total health cost to about **USD3.2 billion**.

Source: Model estimations based on 21 Member States that undertook the study



Total costs of undernutrition

Country	Productivity	Education	Health	% of GDP
Burkina Faso	\$ 743	\$ 1.73	\$ 122	8.3%
Chad	\$ 804	\$ 18	\$ 340	9.5%
DRC	\$ 1,467.51	\$ 74.21	\$ 228.86	3.9%
Egypt	\$ 3,423	\$ 49.22	\$ 213	1.9%
Ethiopia	\$ 4,538	\$ 7.92	\$ 155	16.5%
Ghana	\$ 2,376	\$ 8.30	\$ 199	6.3%
Lesotho	\$ 184	\$ 11.74	\$ 4	6.5%
Madagascar	\$ 1,353	\$ 11.43	\$ 169	12.8%
Malawi	\$ 537	\$ 13.86	\$ 46	10.3%
Mali	\$ 416.29	\$ 17.76	\$ 16.85	4.1%
Mauritania	\$ 750.31	\$ 1.47	\$ 6.46	13.5%
Mozambique	\$ 1,390.85	\$ 41.62	\$ 188.15	5.4%
Rwanda	\$ 710	\$ 3.87	\$ 106	11.5%
Swaziland	\$ 84	\$ 0.70	\$ 7	3.1%
Uganda	\$ 647	\$ 9.68	\$ 259	5.7%
Zimbabwe	\$ 1,569.89	\$ 12.58	\$ 72.23	11.5%
Niger	\$ 478.46	\$ 1.40	\$ 59.78	7.1%
Gambia (The)	\$ 70.20	\$ 0.02	\$ 5.92	4.6%
Kenya	\$ 4,004.59	\$ 36.78	\$ 211.79	6.9%
Guinea Bissau	\$ 52.30	\$ 0.96	\$ 17.30	9.4%
Sudan	\$ 1,191.03	\$ 24.31	\$ 800.14	2.6%
Total (In millions)	\$ 26,791.54	\$ 347.84	\$ 3,227.90	\$30,367.28

The methodology is used to analyse the impact of child undernutrition in different stages of the life cycle, without generating overlaps. As a result, the individual sectoral costs can be aggregated to establish a total social and economic cost of child Undernutrition.

- In the 21 Member States, the total losses of undernutrition is estimated at approximately **USD 30,4 billion**.

The largest share of productivity loss is as a result of **reduced productivity**

In the respective reference years, these losses varied from **1.9% of GDP (Egypt)** to **16.5% of GDP (Ethiopia)**



The 2030 Agenda for Sustainable Development: “...We pledge to leave no one behind”

KIM Food & Health



SUSTAINABLE DEVELOPMENT GOALS



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

Goal 3: Ensure healthy lives and promote well-being of all at all ages



Nutrition is central to the SDGs KIM Food & Health



SDG Vision for nutrition:
 End all forms of malnutrition, address the nutritional needs throughout the lifecourse, give universal access to safe and nutritious food sustainably produced and ensure universal coverage of essential nutrition actions.



“Agenda 2063 is a strategic framework for the socio-economic transformation of the continent over the next 50 years. It builds on, and seeks to accelerate the implementation of past and existing continental initiatives for growth and sustainable development.”



- Still a lot of Focus on **staple cereals, roots and tubers** (high carb diet)
- Not enough Livestock, Fish and Acquaculture products
- Not enough Horticulture consumption (esp. Fruits and Vegetables)
- Consumption of products from the wild e.g. crickets, carterpillars, termites, grasshoppers etc., leafy vegetables, fruits etc.

Highly processed foods;

- ❖ High in Sugar
- ❖ High in Saturated fats
- ❖ High in Salt
- ❖ High in addatives and preservatives



What about the links between income and nutrition?

- Better economic monetary income DOES NOT Equal
- Better food security DOES NOT Equal
- Better and improved nutrition

***Vulnerability and risk mitigation and to hunger and food insecurity:

Reduced food intake, less number of meals, and compromised meal quality leading different forms of malnutrition, ill health and low productivity.

A combination good food systems and social protection can be a real game changer!





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The Importance of Data and information

- Cost of Hunger in Africa
- Cost of Nutrition
- Filling the Nutrient Gap
- Household Food Security Access Scale
- Global Dietary Quality (Gallup, Harvard University and GAIN)
- Other innovative tools



- Working with the entire agriculture and food systems+
- Multi-sectoral and inter-disciplinary approach, with links to health systems, education, and social protection
- Policy coherence between agriculture, food, health, trade, education, social protection, youth, gender, environment etc.
- Increased investments for food systems and nutrition programming
- Capacity building at all levels and across sectors
- Continued advocacy by all to all
- Telling good stories for impact: good stories are usually not well covered in the news.
- Agriculture taking centre stage for optimum nutrition – beyond quantity
- Promoting good governance for food systems and nutrition
- Holding ourselves (individually and collectively) to account



We Need Functional and Effective Agro-Food Systems to Deliver

- Healthy Diets
- Healthy People
- Productive Populations
- Healthy Planet



Food Systems and Nutrition: Putting people at the heart of our work



Questions and Comments Welcome!

