

## Sustainable Healthy Diets: What do we mean? How do we promote them?

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### **Outline of Presentation**

- Two Main Challenges of 21 Century Malnutrition and Sustainable Food Systems
- FAO/WHO Sustainable Healthy Diets Guiding Principles
- How do we promote SHD?
- What Next?





# Malnutrition is a major challenge of the 21<sup>st</sup> century

All forms of malnutrition: Undernutrition, micronutrient deficiencies and overweight and obesity

### Global hunger increased under the shadow of the COVID-19 pandemic

Between 720 and 811 million people faced hunger in 2020 – as many as 161 million more than in 2019.

#### The pandemic heightened the challenge of eradicating hunger

More than 650 million may still be facing hunger in 2030, including tens of millions linked to possible lasting effects of the pandemic.

#### Nearly 2.4 billion people in the world lacked access to adequate food in 2020

The increase in moderate or severe food insecurity in 2020 equalled that of the previous five years combined.

### Healthy diets are out of reach for around 3 billion people

The increased cost of healthy diets and high levels of income inequality put healthy diets further out of reach in Africa and in Latin America and the Caribbean.

### The world is not on track to achieve global nutrition targets

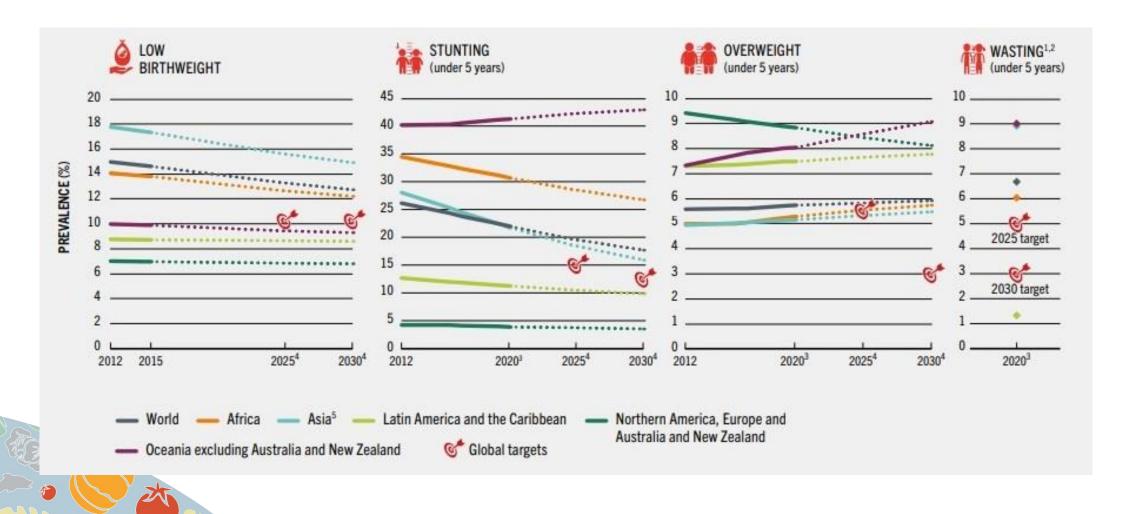
Some progress has been made, but the effects of the pandemic on nutrition will cause setbacks.

Source: The State of Food Security and Nutrition in the World (SOFI 2021)



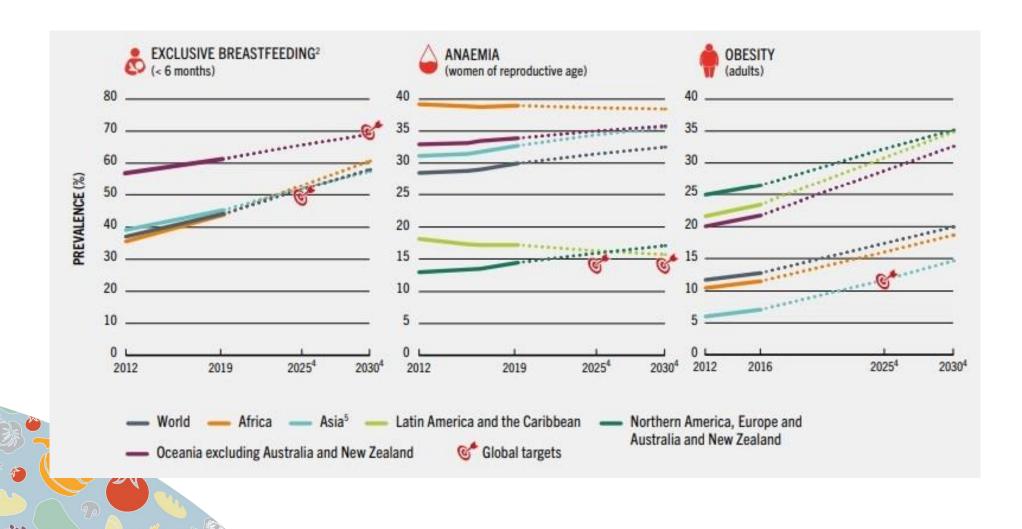


## Trends, Estimates and Targets of different forms of Malnutrition worldwide





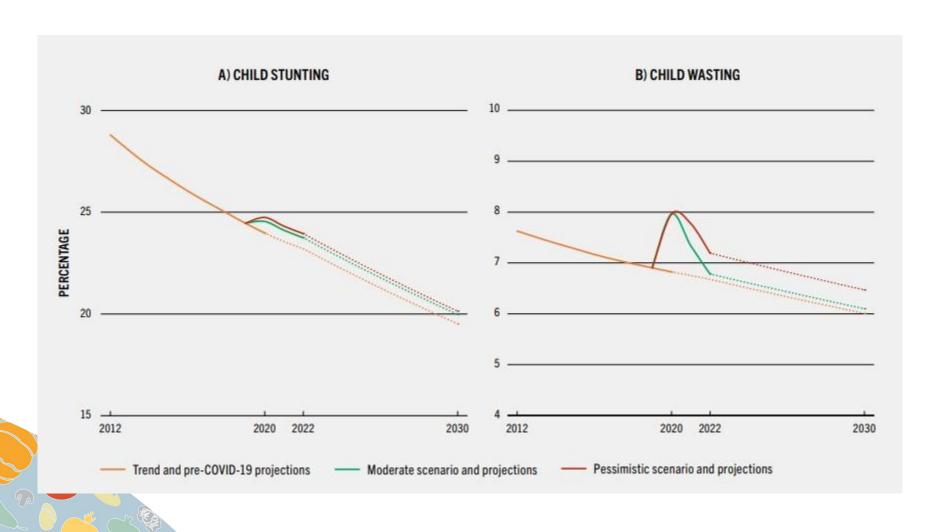
## Trends, Estimates and Targets of different forms of Malnutrition worldwide



Source: The State of Food Security and Nutrition in the World (SOFI 2021)



### Estimates of impact of COVID-19 Pandemic on Stunting and Wasting





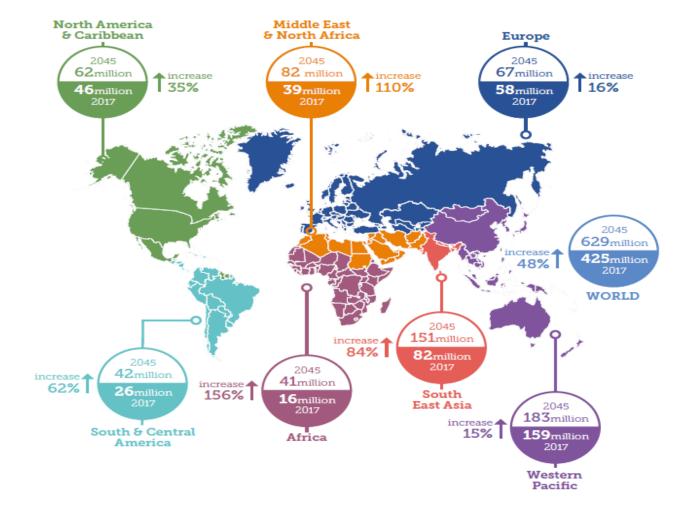
### Adults with diabetes, 2017 and 2045

2000 = 151 million

2017 = 425 million

2045 = 629 million

Diabetics 2-3x more likely to develop CVD

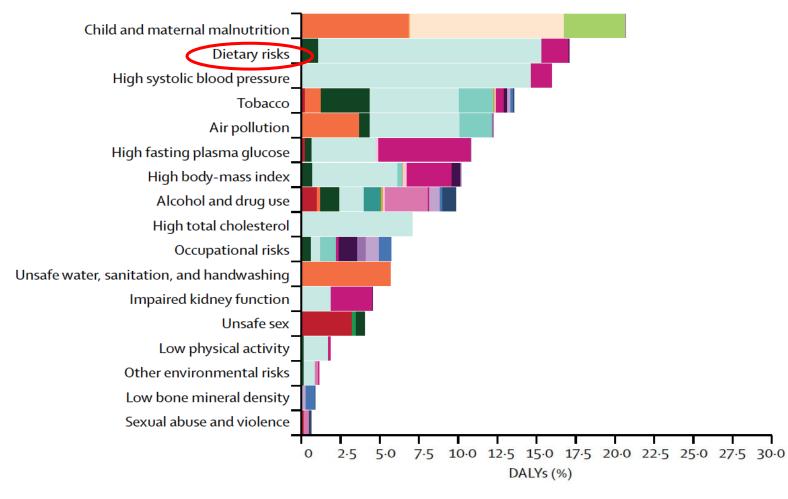




**Source: IDF Diabetes Atlas 2017** 



### Unhealthy Diets are Risk Factors for Disease



Source: GBD 2016 Risk Factors Collaborators (2017). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet



### Our Food Systems are failing us ...

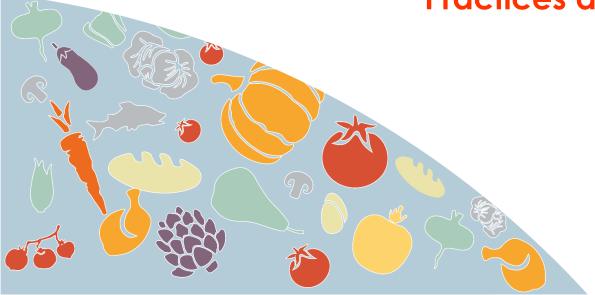
The FAO/WHO Second International Conference on Nutrition acknowledged that "current food systems are being increasingly challenged to provide adequate, safe, diversified and nutrient rich food for all that contribute to healthy diets due to, inter alia, constraints posed by resource scarcity and environmental degradation, as well as by unsustainable production and consumption patterns, food losses and waste, and unbalanced distribution".





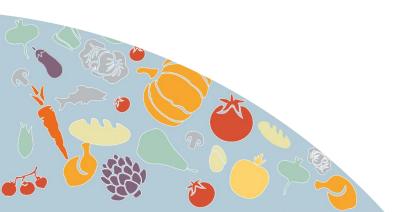
# Sustainability is another major challenge of the 21<sup>st</sup> century

Our Food Consumption and Production Practices are not sustainable



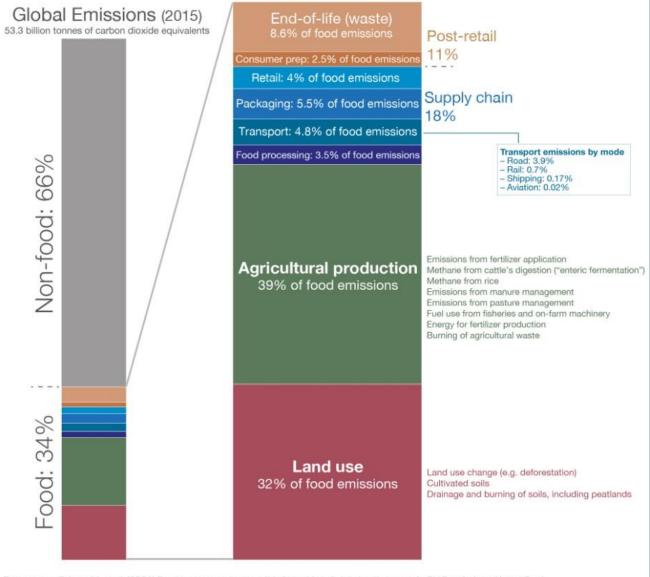


# What do we know about Climate and Food Consumption and Production?



### One-third of global greenhouse gas emissions come from food systems



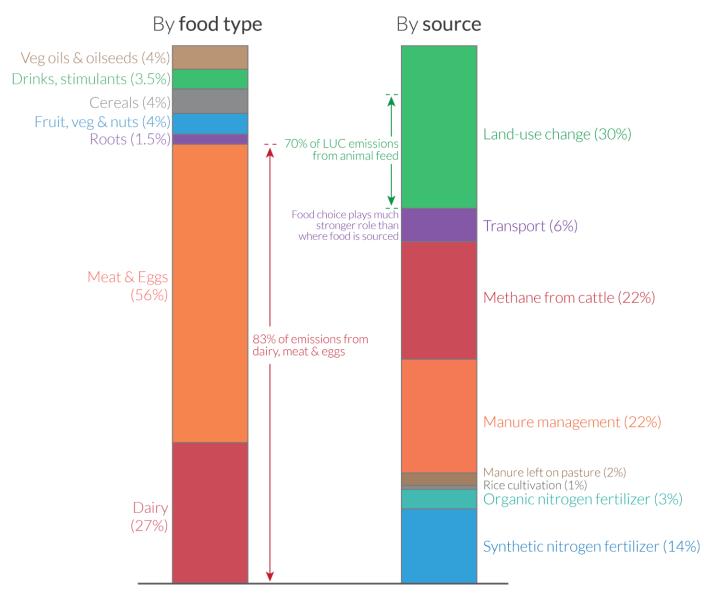


Data source: Crippa, M., et al. (2021) Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food.*OurWorldinData.org – Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Hannah Ritchie.



### Carbon footprint of diets across the European Union: Our World in Data by food type and source









### Food and Agriculture Organization Greenhouse gas emissions (GHGE) for average of the United Nations diets significantly increase with income

	Lower Middle	Upper Middle	High Income
	Income	income	Countries
GHG	1.1 kg CO2 eq	1.6 CO2 eq per	2.4 kg CO2 eq∙
	per person per	person per day	per person per
	day		day
Meat, Fish and	22%	65%,	70%
dairy account			
for emission			

Brazil and Australia\* have emissions over 200% higher than the average of their respective income groups.

United States\*\*, Canada\*\*, and Norwaył have emissions 40% higher than the average of their income group.

Source: adapted from Behrens et al 2017

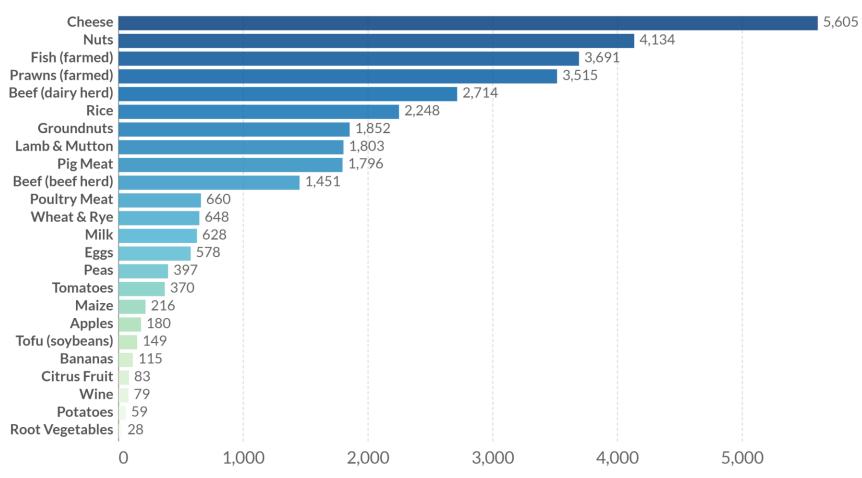


### Freshwater withdrawals per kilogram of food product

Our World in Data

Freshwater withdrawals are measured in liters per kilogram of food product.

# What about other issues in Environmental Sustainability?





Note: Data represents the global average freshwater withdrawals from food products based on a large meta-analysis of food production covering 38,700 commercially viable farms in 119 countries.

OurWorldInData.org/environmental-impacts-of-food • CC BY





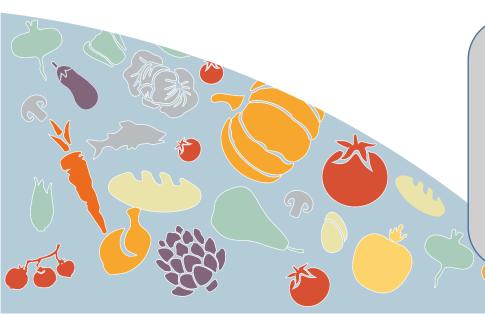
### Stylized facts...

- •What people eat impacts the entire food chain and the health and well-being of all of us.
- •Per capita food supplies have expanded in calories, protein and fat.
- •3 billion people worldwide were unable to afford healthy diets in 2019.

•Food production impacts water, soil, biodiversity, and greenhouse gases (GHG) more than any other human activity.



# A shift is needed to meet the global challenges that we face today including malnutrition, climate change, degraded lands and biodiversity loss.



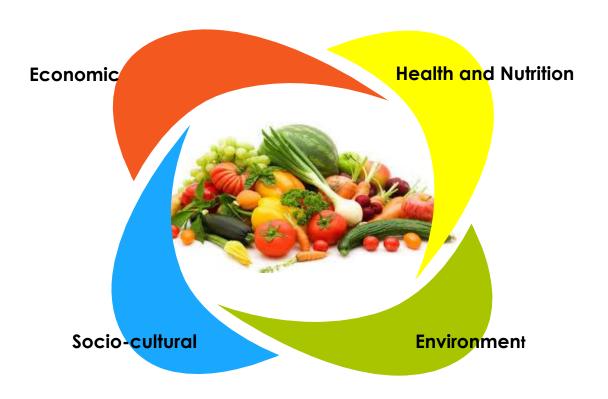
If significant transformation is not made in our current food systems, this would be the first in human history when the next generation would have shorter life expectancy than their parents (Lawrence O. Gostin, 2018).



### Diets Need to be Healthy and Sustainable

.... But what is sustainability? It is more than environmental sustainability.

### **Dimensions of sustainability**





.... Sustainable Healthy Diets take different forms depending on the local context of countries, regions, subregions, etc..

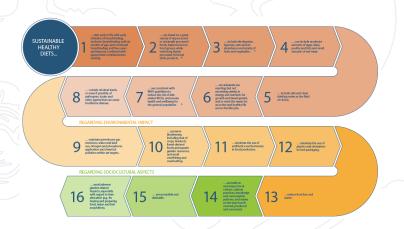




# SUSTAINABLE HEALTHY DIETS GUIDING PRINCIPLES

FAO/WHO International Expert Consultation, 1-3 July, 2019 Rome, Italy











### Sustainable Healthy Diets:

- are dietary patterns that promote all dimensions of **individuals' health and wellbeing**;
- have low environmental pressure and impact;
- are accessible, affordable, safe and equitable; and
- are culturally acceptable.

### The aims of Sustainable Healthy Diets are to:

- ✓ achieve optimal growth and development of all individuals and support functioning and physical, mental, and social wellbeing at all life stages for present and future generations;
- ✓ contribute to **preventing all forms of malnutrition** (i.e. undernutrition, micronutrient deficiency, overweight and obesity);
- ✓ reduce the risk of diet-related NCDs; and support the preservation of biodiversity and planetary health.

Sustainable healthy diets must combine all the dimensions of sustainability to avoid unintended consequences.

...start early in life with early ... are based on a great variety of unprocessed initiation of breastfeeding, **SUSTAINABLE** exclusive breastfeeding until six or minimally processed ... include wholegrains, ... can include moderate months of age, and continued foods, balanced across legumes, nuts and an amounts of eggs, dairy, HEALTHY abundance and variety of poultry and fish; and small breastfeeding until two years food groups, while and beyond, combined with restricting highly fruits and vegetables. 1 amounts of red meat. DIETS... processed food and appropriate complementary feeding. drink products. 10 ... are adequate (i.e. reaching but not ... are consistent with ... contain minimal levels, WHO guidelines to exceeding needs) in or none if possible, of ... include safe and clean energy and nutrients for reduce the risk of dietpathogens, toxins and drinking water as the fluid related NCDs, and ensure growth and development, of choice. other agents that can cause health and wellbeing for and to meet the needs for foodborne disease. the general population. 12 an active and healthy life across the lifecycle. REGARDING ENVIRONMENTAL IMPACT ... preserve biodiversity, including that of ... maintain greenhouse gas crops, livestock, emissions, water and land ...minimize the use of ... minimize the use of forest-derived use, nitrogen and phosphorus antibiotics and hormones plastics and derivatives foods and aquatic application and chemical in food production. in food packaging. genetic resources, pollution within set targets. and avoid overfishing and overhunting. REGARDING SOCIOCULTURAL ASPECTS ... are built on ... avoid adverse and respect local gender-related culture, culinary impacts, especially practices, knowledge with regard to time .. are accessible and ...reduce food loss and and consumption allocation (e.g. for desirable. waste. patterns, and values buying and preparing on the way food is food, water and fuel sourced, produced acquisition).

and consumed.





### 8 Principles on Health

 Breast feeding, Variety and balance across food groups, Whole grains, legumes, nuts and abundance of F&V, Moderate/small amounts of ASF, Safe of pathogens and toxins, aligned with WHO guidelines to reduce NCD, adequate but not exceeding needs, safe and clean water as fluid of choice.

### 5 Principles on the Environment

 Maintain GHG emissions, water and land use, nitrogen and phosphorous application and chemical pollution within set targets, preserve biodiversity, minimize uses of antibiotics and hormones in food production and plastics in packaging and reduce FLW

### 3 Principles on Socio-cultural aspects

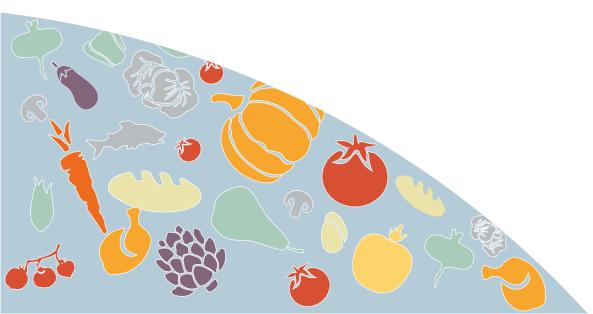
Built on and respect local culture, knowledge and consumption patterns, accessible and desirable and avoid adverse gender-related impacts.





### How can we promote SHD?

Ways to move toward SHD





### How can we promote SHD?

- Develop or revise AND implement national food-based dietary guidelines to inform policies and programmes all along food systems.
  - Development or revision
    - Multidisciplinary,
    - Multiple sectors ownership
    - conflicts of interest
    - Integraing sustainability –SHD GP
  - Implementation
    - Wide
    - Effective
    - Partnerships and collaborations





### Develop or revise AND implement national foodbased dietary guidelines

Diets and eating behaviours are influenced by many factors

#### INDIVIDUAL

Food preferences & enjoyment

Beliefs, attitudes, values, perceptions

Knowledge, skills

Empowerment

#### FAMILY / GROUP

Cultural & social practices Social support Networks Peer influence

### COMMUNITY /

Rules, informal structures
Child care organizations
Workplaces, schools
Neighborhoods,
shops, restaurants
Community
organizations
Information available
Recreational facilities.

#### NATIONAL

Health care system

Food assistance programs

Food industry

Food & agricultural systems

Policy

Political & social structures

Media

Social & cultural norms

- Enabling environment
- Policy coherence
- Food systems analysis
- Quantify & balance trade-offs
- Baseline for M&E
- Identify available and accessible foods
- Affordable and desirable foods for Sustainable Healthy Diets available and the "default" option
- Promote the practice of Sustainable Healthy Diets – Capacity Development



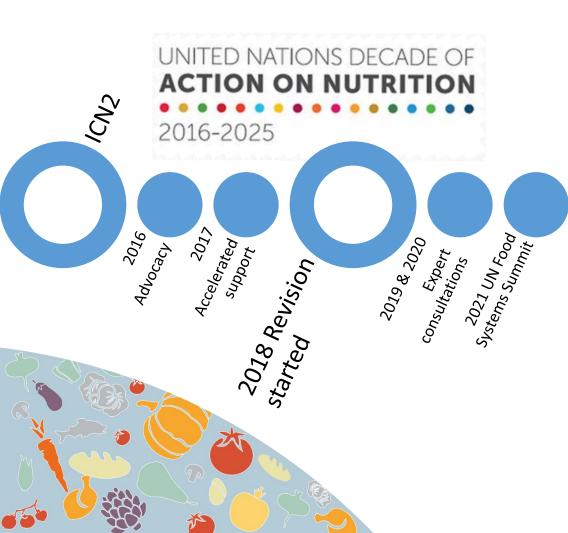








# Revision of the FBDG methodology



To increase their effectiveness:

- Food systems approach
- Behavioural focus Socio-ecological model
- Integrate sustainability
- Real multisectoral and multistakeholder involvement
- Address misconceptions/ shortcomings/criticism
- Strengthen Implementation and M&E

### What next?

- Finalizing the methodology to develop and revise
   Food system-based dietary guidelines
- Indicators to be used for each of the Sustainable Healthy Diets guiding principles
- Methodology for developing nutrition guidelines and standards for school meals



### Thank you

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