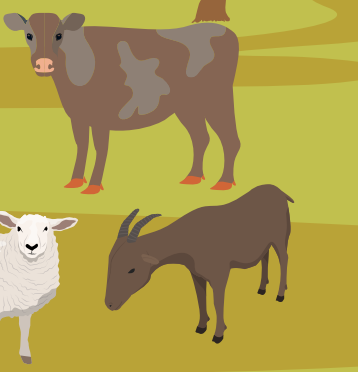
Food and Agriculture Organization of the United Nations

IMPROVING HUMAN AND PLANETARY HEALTH THROUGH HEALTHY DIETS FROM SUSTAINABLE AGRIFOOD SYSTEMS

A **healthy diet**, as defined for the 2021 UN Food Systems Summit, is one that promotes human health and helps to prevent disease. This diet provides an adequate (but not excessive) amount of nutrients and health-promoting substances from nutritious foods, while avoiding the consumption of health-harming substances (Neufeld, Hendriks and Hugas, 2023).

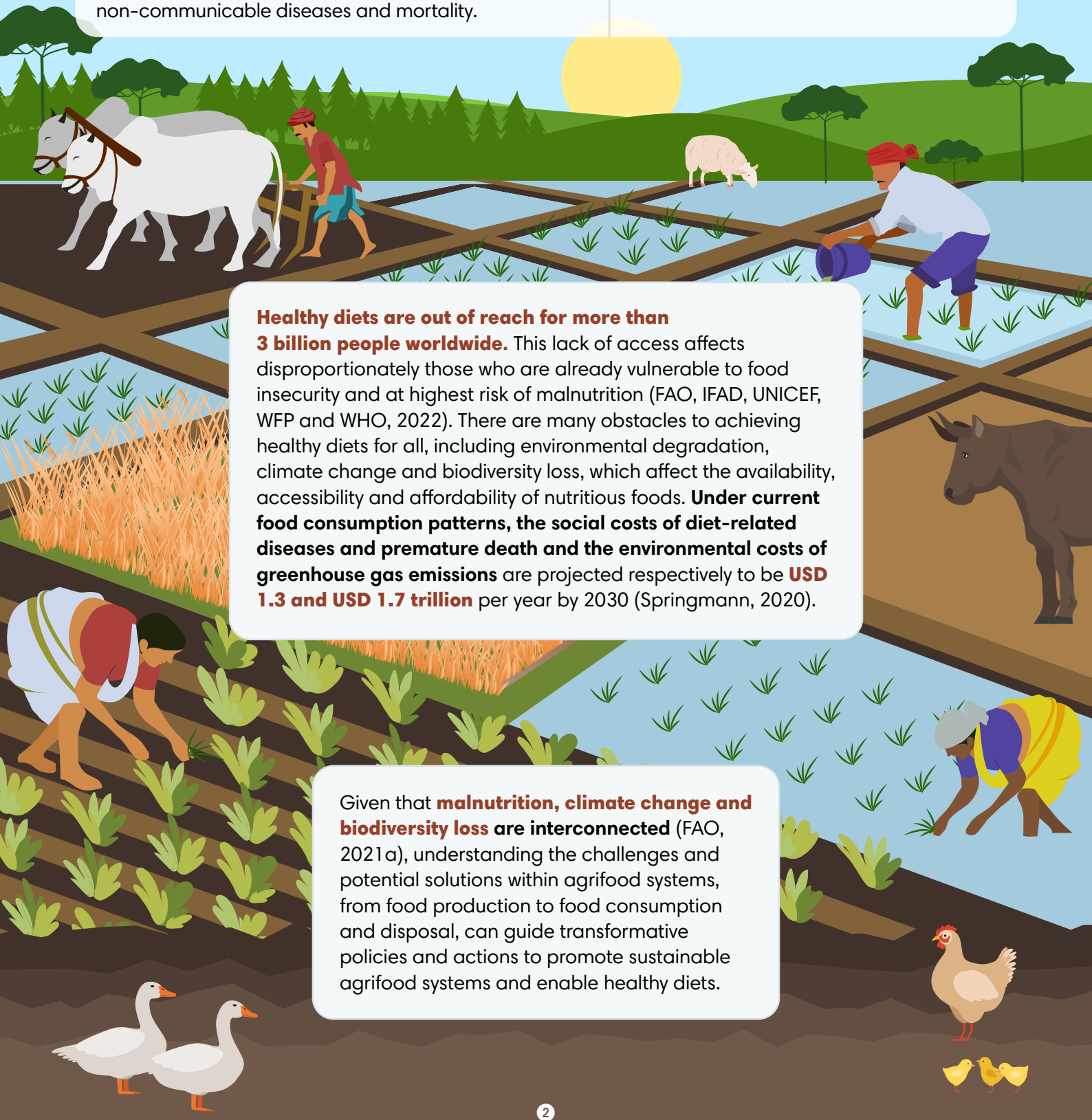
The Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) consider **healthy diets** to be sustainable when they promote all aspects of individuals' health and well-being; have low environmental pressure and impact; are accessible, affordable, safe and equitable; and are culturally acceptable. All these dimensions of sustainability must be combined to avoid unintended consequences (FAO and WHO, 2019).



This brochure is intended for policymakers and programme planners. Its primary objective is to elucidate how healthy diets from sustainable agrifood systems can improve nutrition outcomes and contribute to both human and planetary health.

Healthy diets and sustainable agrifood systems are key to improving human and planetary health

Human health	Planetary health
Healthy diets help to achieve optimal growth and development and to support functioning and physical, mental and social well-being at all life stages. They also prevent all forms of malnutrition, including child stunting, child wasting, micronutrient deficiency, overweight and obesity, and reduce the risk of diet-related non-communicable diseases and mortality.	Sustainable agrifood systems can minimize diet-related greenhouse gas emissions, reduce water and land use, enhance biodiversity, reduce food loss and waste, and improve the resilience of agrifood systems to shocks and stresses.



Healthy diets are out of reach for more than 3 billion people worldwide. This lack of access affects disproportionately those who are already vulnerable to food insecurity and at highest risk of malnutrition (FAO, IFAD, UNICEF, WFP and WHO, 2022). There are many obstacles to achieving healthy diets for all, including environmental degradation, climate change and biodiversity loss, which affect the availability, accessibility and affordability of nutritious foods. **Under current food consumption patterns, the social costs of diet-related diseases and premature death and the environmental costs of greenhouse gas emissions** are projected respectively to be **USD 1.3 and USD 1.7 trillion** per year by 2030 (Springmann, 2020).

Given that **malnutrition, climate change and biodiversity loss are interconnected** (FAO, 2021a), understanding the challenges and potential solutions within agrifood systems, from food production to food consumption and disposal, can guide transformative policies and actions to promote sustainable agrifood systems and enable healthy diets.

In this context, FAO supports **agroecological principles** to optimize human–environment interactions, placing biodiversity and natural resources at the centre of efforts to build environmental and socioeconomic resilience (FAO, 2018a; HLPE, 2019).

PODCAST: Climate change, biodiversity and nutrition – the nexus

Listen to expert testimonies on entry points across agrifood systems for simultaneously addressing climate change, improving biodiversity and enhancing nutrition: **bit.ly/3zS2BUB**

VIDEOS: Stories from local heroes

Discover the stories of local heroes fighting climate change, biodiversity loss, and the multiple forms of malnutrition in their communities. These stories are gathered by FAO through a participative video storytelling initiative:

- Apollo - Helping family farmers save food in Kenya: **bit.ly/3MjzSxV**
- Dennis - Going organic in Ecuador: **bit.ly/49hl251**
- Dominic - Regenerative agriculture and food security in Nigeria: **bit.ly/45ZncTT**
- Evelyn - Sowing satisfaction – Dorka's family garden in Venezuela: **bit.ly/3MjA9AX**
- Nina - Non-conventional food plants for biodiversity and nutrition in Ecuador: **bit.ly/45T1yRi**
- Gabriel & Dennis - Intiñan llama breeders restoring the Andean moorlands: **bit.ly/498q9V4**

FAO vision and recommendations to achieve healthy diets from sustainable agrifood systems

Fulfilling **FAO's vision for nutrition** of "a world where people consume healthy diets from efficient, inclusive, resilient and sustainable food systems" (FAO, 2022a) will require tackling malnutrition and environmental crises simultaneously, engaging decision-makers to **shape legislation and budgetary allocations**, and supporting **capacity development for all actors** involved in agrifood systems (IPU and FAO, 2021; FAO, 2023a). To achieve this, programmes and investments in agrifood systems must be **nutrition-sensitive** throughout, from ecosystems and food production all the way to food consumption and disposal (FAO, 2016a). The section below leverages the **toolkit on nutrition-sensitive agriculture and food systems** to identify promising entry points for this process, bringing together the most relevant FAO tools within each component of agrifood systems (FAO, 2017a).[1]

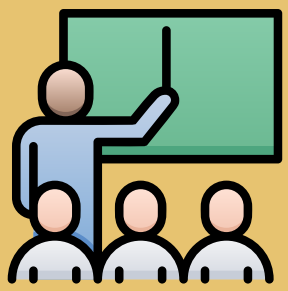
Understanding the food and nutrition situation

To understand the food and nutrition situation in target communities, and subsequently monitor and evaluate the impact of programmes and policies on healthy diets, it is essential to incorporate explicit nutrition objectives and indicators.

USEFUL TOOLS:

- **How to conduct a nutrition situation analysis:** This e-learning course teaches how to go through the steps of a nutrition situation analysis (FAO, 2018b).
- **The Minimum Dietary Diversity for Women (MDD-W):** This course has been designed to explain how to use the Minimum Dietary Diversity for Women (MDD-W) indicator, with a view to contributing to improved diets among nutritionally vulnerable women of reproductive age. (FAO, 2023b).
- **The FAO/WHO Global Individual Food consumption data Tool (GIFT) platform** shares dietary surveys from all over the world. The information in these surveys helps further our understanding of people's food consumption and nutrient intake while examining the environmental impact of their diet. Comparisons with dietary recommendations can be made to understand gaps or excesses in nutrient intake (FAO, 2023c).

1 As only FAO tools are referenced, this compilation does not represent the entirety of available resources.



Designing nutrition-sensitive investments and interventions

Drawing on the results of the food and nutrition situation analysis (see above), nutrition-sensitive investments can be designed to help meet the challenges identified and enable healthy diets.

USEFUL TOOLS:

- **Designing agrifood systems pathways to healthy diets** (FAO, 2023d)
- **Compendium of indicators for nutrition-sensitive agriculture** (FAO, 2016b)
- **Agreeing on causes of malnutrition for joint action** (FAO, 2013)

Social inclusion

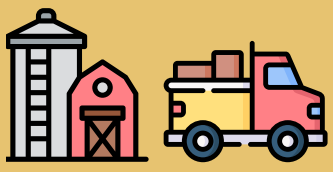
It is paramount, in all interventions, to take into account groups in situations of vulnerability, such as women, youth and Indigenous Peoples. A social inclusion approach can improve nutritional outcomes and address current inequalities through appropriate actions and activities.

USEFUL TOOLS:

- **E-learning course on developing gender-sensitive value chains** (FAO, 2020b)
- **Gender in Food and Nutrition Security:** this e-learning course teaches how to tackle gender inequalities and enhance nutrition outcomes through tailored actions and activities (FAO, 2014a).
- **Strengthening the links between resilience and nutrition in food and agriculture:** this discussion paper looks at improving the equity and resilience of groups in vulnerable situations (FAO, 2014b).

By looking in more detail at each component of agrifood systems, we can identify several entry points and actions to promote healthy diets. This also ensures that all components operate effectively and interact with each other.

Food supply chains



As food supply chains encompass all activities that move food – from production to consumption, including storage, distribution, processing, packaging, retailing and marketing (HLPE, 2017) – they can play a pivotal role in improving nutrition and facilitating access to healthy diets.

USEFUL TOOLS:

- **Sustainable Food Value Chains for Nutrition:** this e-learning course teaches how to leverage value chain approaches to improve nutrition (FAO, 2020a)
- **E-learning course on Small and Medium Enterprises and Nutrition – making the business case** (FAO, 2021b)
- **E-learning course on Small and medium enterprises and nutrition – upgrading business models** (FAO, 2022b)
- **Food loss analysis case study methodology:** this e-learning course teaches how to identify and adopt feasible food loss reduction solutions and strategies (FAO, 2018c).

Food environment

The food environment includes the physical, economic, political and sociocultural context in which individual consumers engage with the food system to acquire, prepare and consume food. Through aspects such as physical and economic access to food (proximity and affordability), food promotion, advertising and information, as well as food quality and safety, the food environment can influence food choices, food acceptability and diets (HLPE, 2017).

USEFUL TOOLS:

- **Unleashing the potential of territorial markets for food security, healthier diets, and better nutrition** (FAO, 2022c)
- **Public food procurement for sustainable food systems and healthy diets** (FAO, Alliance of Bioversity International and CIAT and Editora da UFRGS, 2021)
- **Homegrown school feeding programmes:** this e-learning course covers how school feeding programmes can support livelihoods and diversified production while simultaneously enhancing nutrition outcomes for children and environmental sustainability for farmers (FAO, 2020c).
- **Assessment of food retail environment and green spaces for healthy cities:** this study provides methodological guidance based on experiences in Dar es Salam, Lima and Tunis (FAO, GAIN and WOF, 2022).

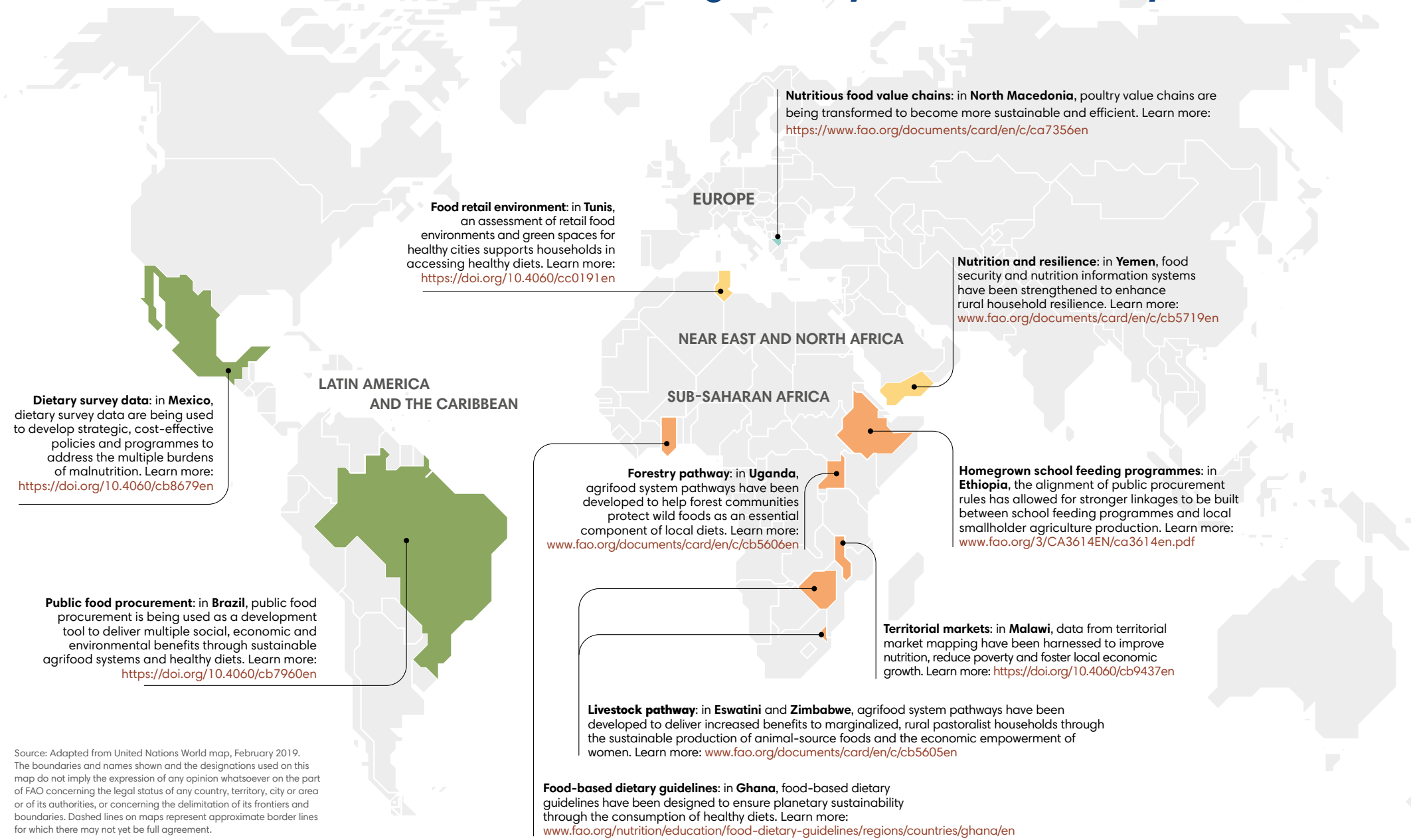
Consumer behaviour

Actions and/or decisions taken by consumers at societal, household or individual level about the sourcing, use and disposal of food and feed have an equally important role to play in improving human and planetary health. It is necessary to address consumer behaviour, as both supply and demand actions are needed to enable a transformation of food systems towards healthy diets

USEFUL TOOLS:

- **Food and nutrition education** can help people make long-lasting changes in their diet and eating behaviour, thus improving human and planetary health (FAO, 2023e).
- **Geographical indications** can encourage sustainable consumption and production by providing consumers with information on the specific quality of products, linked to their origin (FAO, 2023f).
- **Consumer tips** can help to reduce food loss and waste (FAO, 2017b).
- **Food-based dietary guidelines** are designed to foster sustainable, healthy eating habits and lifestyles, and to inform nutrition-sensitive investments, policies and programmes in agrifood systems (FAO, 2023g).

FAO in action towards sustainable agrifood systems and healthy diets



Nutritious food value chains: in **North Macedonia**, poultry value chains are being transformed to become more sustainable and efficient. Learn more: https://www.fao.org/documents/card/en/c/ca7356en

Food retail environment: in **Tunis**, an assessment of retail food environments and green spaces for healthy cities supports households in accessing healthy diets. Learn more: https://doi.org/10.4060/cc0191en

Nutrition and resilience: in **Yemen**, food security and nutrition information systems have been strengthened to enhance rural household resilience. Learn more: www.fao.org/documents/card/en/c/cb5719en

Dietary survey data: in **Mexico**, dietary survey data are being used to develop strategic, cost-effective policies and programmes to address the multiple burdens of malnutrition. Learn more: https://doi.org/10.4060/cb8679en

Forestry pathway: in **Uganda**, agrifood system pathways have been developed to help forest communities protect wild foods as an essential component of local diets. Learn more: www.fao.org/documents/card/en/c/cb5606en

Homegrown school feeding programmes: in **Ethiopia**, the alignment of public procurement rules has allowed for stronger linkages to be built between school feeding programmes and local smallholder agriculture production. Learn more: www.fao.org/3/CA3614EN/ca3614en.pdf

Public food procurement: in **Brazil**, public food procurement is being used as a development tool to deliver multiple social, economic and environmental benefits through sustainable agrifood systems and healthy diets. Learn more: https://doi.org/10.4060/cb7960en

Territorial markets: in **Malawi**, data from territorial market mapping have been harnessed to improve nutrition, reduce poverty and foster local economic growth. Learn more: https://doi.org/10.4060/cb9437en

Livestock pathway: in **Eswatini** and **Zimbabwe**, agrifood system pathways have been developed to deliver increased benefits to marginalized, rural pastoralist households through the sustainable production of animal-source foods and the economic empowerment of women. Learn more: www.fao.org/documents/card/en/c/cb5605en

Food-based dietary guidelines: in **Ghana**, food-based dietary guidelines have been designed to ensure planetary sustainability through the consumption of healthy diets. Learn more: www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/ghana/en

Source: Adapted from United Nations World map, February 2019. The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

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