

Transforming food systems for better health



The 2018 edition of *The State of Food Security and Nutrition in the World* (SOFI) report,¹ published by the Food and Agriculture Organization of the United Nations (FAO) and its UN partner agencies, presents facts and figures that support the thesis of this *Lancet* Commission,² which is that the international community is facing a global syndemic of undernutrition, obesity, and climate change.

SOFI shows that, in 2017, world hunger increased for the third consecutive year. The number of undernourished people increased from an estimated 804 million in 2016 to almost 821 million in 2017.¹ This increase in hunger is associated with the rising number of conflicts, particularly in sub-Saharan Africa. Efforts to fight hunger must, therefore, be aligned to peace building.

The effects of climate change are another key contributor to this increase in undernourishment. Climate variability and extreme weather disproportionately impact the lives and livelihoods of the world's 2.5 billion farmers, forest-dependent people, herders, and fisherpeople whose food and income comes from renewable natural resources. One of the most direct effects is on food availability and accessibility for the rural poor.

But the impacts of climate change are also making food less healthy. Research indicates that increased levels of carbon dioxide in the atmosphere are reducing levels of nutrients, such as zinc, iron, calcium, and potassium, including in wheat, barley, potatoes, and rice.³

Overweight and obesity are increasing at a steady pace, affecting high-income, middle-income, and low-income countries. We are thus witnessing the globalisation of obesity. In 2017, more than 38 million children younger than 5 years lived with overweight or obesity—25% and 46% of this occurred in Africa and Asia, respectively.¹ More than 672 million adults worldwide were living with obesity in 2017.¹ In Africa, obesity is growing—eight of the 20 countries worldwide with the fastest rising rates of adult obesity are in Africa.

The main reason for the increase in the prevalence of obesity and overweight is the inability of food systems to deliver healthy diets. The consumption of industrialised and processed food that are high in trans fats, sugar, salt, and chemical additives is growing in most countries. Nutritious, fresh foods can be expensive.

If household resources for food become scarce, people may opt for cheaper, high-calorie foods that are low in nutrients. This type of consumption occurs mainly in urban settings and upper-middle income and high-income countries, although the negative impacts of food insecurity on diet quality also exist in low-income, middle-income, and high-income countries alike.

The *Lancet* Commission highlights how obesity and its determinants are risk factors for some of the leading causes of non-communicable diseases worldwide, including cardiovascular diseases, type 2 diabetes, and certain cancers. It also reports that the annual global economic costs of obesity are about US\$2 trillion, representing 2.8% of the world's gross domestic product. As the Commission highlights, these costs are roughly equivalent to the impacts of smoking or armed conflicts.

To address the global syndemic of undernutrition, obesity, and climate change, the international community needs to put in place food systems that provide healthy and nutritious food that is accessible and affordable for everyone.

This response includes the implementation of climate risk monitoring and early warning systems, as well as fostering of climate-smart agricultural practices for family farmers. These efforts also include addressing aspects of a food system such as consumer behaviour.

Obesity, for instance, must be considered as a public issue and not an individual problem. People must be aware about the pros and cons of what they eat, and be

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encouraged to eat healthy food. Yet consumers often do not even know what they are consuming because labels do not provide understandable information. Consumers must be empowered to make informed healthy dietary choices.

FAO has been strengthening its focus on nutritious and healthy diets. In 2014, FAO jointly organised with WHO the Second International Conference on Nutrition. FAO and WHO are now leading the implementation of the Decade of Action on Nutrition 2016–2025. FAO and WHO are supporting several countries to address the multiple burdens of malnutrition from different perspectives and actions—eg, the adoption of legislation to improve the labelling of products, the ban on harmful ingredients from food production, the introduction of nutrition in primary school curriculums, and the consumption of fresh food produced locally from family farming.

The work of this *Lancet* Commission builds on the efforts that are being made within the UN systems, and

will contribute to our efforts for achieving Sustainable Development Goal 2 of ending hunger, achieving food security, improving nutrition, and promoting sustainable agriculture.

José Graziano da Silva

Director-General, Food and Agriculture Organization of the United Nations, Rome, Italy
director-general@fao.org

I am Director-General of the Food and Agriculture Organization of the United Nations. I declare no other competing interests.

- 1 Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, UNICEF, World Food Programme, WHO. The state of food security and nutrition in the world 2018: building climate resilience for food security and nutrition. Rome: Food and Agriculture Organization of the United Nations, 2018. <http://www.fao.org/3/i9553EN/i9553en.pdf> (accessed Dec 14, 2018).
- 2 Swinburn BA, Kraak VI, Allender S, et al. The Global Syndemic of Obesity, Undernutrition, and Climate Change: *The Lancet* Commission report. *Lancet* 2019; published online Jan 27. [http://dx.doi.org/10.1016/S0140-6736\(18\)32822-8](http://dx.doi.org/10.1016/S0140-6736(18)32822-8).
- 3 Myers SS, Zanobetti A, Kloog I, et al. Increasing CO2 threatens human nutrition. *Nature* 2014; **510**: 139–42.