



Welcome

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On April 1, 2016, the United Nations General Assembly proclaimed a UN Decade of Action on Nutrition, to run from 2016 to 2025. The resolution calls for collaboration between a wide group of actors. In this spirit, we are delighted to collaborate with the World Food System Center at ETH Zurich for this edition of *Sight and Life* magazine to **bring grist to the mill** – that is, perspectives from thought leaders belonging to two traditionally distinct camps: agriculture and health. These perspectives are here brought to bear on the common theme of “food systems for improved nutrition.”

We all connect over food so much that food-related phrases are an integral part of our daily conversations, across languages and cultures, as you will also see in this editorial. With this edition, we hope to shed some light on the potential offered by food-systems approaches to address food and nutrition security, including both quantity and quality. Quantity and quality are like **two peas in a pod**: they are intimately connected and must be considered together.

It is undeniable that great progress has been made in addressing certain food and nutrition security challenges globally. However, as we try to tackle the multiple health burdens of malnutrition at a time when the environmental basis for food production is a **fine kettle of fish**, it is necessary to disrupt current approaches and **to cut the mustard** with new ways of thinking and working.

A food system considers the multiple activities, resources and actors engaged in producing, processing, distributing and consuming food. These are all shaped by, and interact with, **everything from soup to nuts** – i.e., all the environmental, social,

political and economic boundary conditions that determine what type of food can be produced where, how it is used, and by whom. All these elements are strongly influenced by global change drivers such as population growth, changing consumption patterns, biodiversity loss, and climate change. Given that our food systems are already struggling to **bring home the bacon** (i.e., to deliver on their intended outcomes of global food and nutrition security) these increasing pressures will catapult our tasks **out of the frying pan and into the fire**.

“A food system considers the multiple activities, resources and actors engaged in producing, processing, distributing and consuming food”

In order to ensure food and nutrition security for all, it is important to look at the issues in an integrated manner. This of course does not exclude the essential need for expert knowledge, but it does suggest that we need to spend more time understanding how issues are connected, their root causes, and where critical leverage points might be. This calls for greater exchange across disciplines, sectors and scales, and for new ways of thinking and working. We are grateful to the contributors to this issue for providing some **food for thought** about such approaches.

“We need to spend more time understanding how issues are connected”

The infographic at the beginning of this edition is from the prestigious journal *The Lancet* and captures a **seed change** in thinking about how governments can support healthy food preferences. Designing policies for food systems with the indi-

vidual at the core is a welcome change. This issue of our magazine starts with two articles that provide an overview of the concepts of “sustainable” and “resilient” food systems. John Ingram explores the question “What are sustainable food systems for a healthy world?” considering our understanding of the relationships between food systems and environmental and human health. Jonas Jörin and co-authors elaborate further on these concepts to define food system resilience – an important approach, as we face the prospect of increasing shocks and unexpected disturbances that will further challenge food systems and their capacity to deliver food and nutrition security. **In a nutshell**, both highlight the need for new approaches to help us to navigate complexity and work with a variety of different stakeholders and interests.

For that to happen, Jess Fanzo provides a **fresh** insight into how food and health systems need to work synergistically in order to bring about effective change for health, nutrition and well-being. Jess discusses the steps taken by the SDGs to include the pressing global burden of obesity and non-communicable diseases (NCDs), and outlines how to fill the important gaps. Shauna Downs builds the argument further through her analysis of food-system drivers and solutions. Tackling the nutrition transition in Latin America is no **piece of cake**, but Diana Parra sheds some light on the approaches that have been used in Colombia so far, and makes suggestions for integrated interventions and policies for the future that can effectively tackle the double burden of malnutrition and at the same time build sustainable food systems.

Scientists from CGIAR and McGill University **whet our appetite** about how two of their pioneering initiatives are bringing forward intersectoral collaborations on convergent innovation platforms, while Tom Gill and Rickey Yada bust common myths associated with food processing.

The best thing since sliced bread in this issue is a set of tools, models and frameworks by a number of authors for practitioners in the food and nutrition ecosystem. John Fiedler emphasizes the data deficit for measuring programs and explains how household surveys, which are already popular in many countries, can be made practical and be triangulated with other measurement tools. And co-authors provide a framework for assessing and enhancing food-systems resilience, and apply it to a case study on *tef* in Ethiopia. The article on innovative financing captures an overview of promising models and instruments for bringing in funds from untapped sources or for maximizing impact for investors. Corey Luthringer and Greg Garrett share lessons in building national premix supply systems to ensure a sustainable supply of premix for food fortification.

A new crop of ideas emerges in the articles on protein and crop yields. With protein back in the spotlight, Gilbert Weber addresses how to sustainably meet the global demand for animal-

sourced foods. Simon Billing maps the global protein system and identifies six areas of innovation that need to be nurtured through a full systems approach. Leslie Ziegler, a food entrepreneur committed to sustainability, shares her thoughts on using more water-efficient protein ingredients such as cricket flour for cookies and chips. Marco Ferroni reminds us of the crucial role of smallholders in farming, especially in low- and middle-income countries, and discusses how we can support them to improve crop yields. Jennifer Baxter explains how engineering systems can be used to both reduce food waste and provide heat and power to communities.

We are **sure as eggs is eggs** that collaborative partnerships across disciplines and sectors are the way to build sustainable and resilient food systems. We hope that this edition will give you some **food for thought** about these approaches, and we look forward to hearing your perspectives!

Sincerely,

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