

Abstract: Food Systems in Crisis are Confronted with Hard Choices: the Opportunity for Innovations

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The global and many national food systems are confronted with the hard choice to address the challenge of systems' transformation toward sustainability and resilience, while also managing the acute food crisis with urgency. Food systems actually are impacted by a new set of multi-dimensional problems that have accumulated to a very serious crisis.

The set of problems include, Covid19 disrupting food value chains, wars further add to uncertainty and hinder trade, accelerating prices make healthy diets unaffordable for millions and increase raw material and processing costs, accumulated debts curtail social protection and nutrition programs, climate stress undermining food systems' resilience, destruction of nature and erosion of biodiversity undermine food security in the long run. These problems are interconnected and reinforce each other. A food systems perspective is required to identify the actions needed to achieve transformation toward sustainable food systems, while also managing the crises in the short term. This raises complex questions of tradeoffs and synergies of actions. At the center of solutions to the challenges are innovations, that is, policy-, technological-, and organizational innovations. These must be based on science, be context specific, and some must be international.

A set of seven key innovations are presented and elaborated in the lecture. They range from actions to address diet deficiency, to bio-science and processing technology innovations, to de-risking the food system, to natural resource management innovations, and the related investments in all of these. Costing actions and elaborating the true costs of food - including environmental and health externalities - provide a framework for priority setting of actions and implementation by public- and corporate sectors.

Excerpt from Plenary by Professor Sir Peter Gluckman, President, International Science Council

“Food security and adequate nutrition have implications to many of the SDGs, well beyond those most directly involved (eg SDG 2, 3, 12, 14). Food and nutrition scientists have broader and leadership roles to play as we address challenges to the global commons.”