Food System Metrics and Indicators Approaches & Application for Assessing Nutrition Security

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Food systems are inherently complex, involving numerous domains, sectors, and actors interacting throughout and across time and space. A conceptual framework of food systems by the High Level Panel of Experts on Food Security and Nutrition incorporates biophysical, technical, political, economic, socio-cultural and demographic drivers; interacting with food supply chains, food environments and consumer behaviour; linked to social, economic and environmental impacts; and diet, nutrition and health outcomes. Within each of these nodes, there is a vast and expanding literature on indicators and metrics, with numerous methodologies for measuring and capturing these interrelationships. Yet there are also gaps in our understanding, and a clear need for a coherent framework that allows us to 'measure what matters, while not drowning in complexity'. Several frameworks exist, each with their own strengths and limitations. A key challenge in application of such frameworks, particularly in low and middle-income countries is the availability of quality data. However, such challenges should not deter us from utilizing available data sources where appropriate; for example, household income and expenditure surveys are a valuable but underutilized source of data on dietary patterns. The science community has a crucial role in ensuring that sustainable food system indicators are interpreted appropriately according to the contexts in which they are applied. This includes an understanding of trade-offs and synergies across multiple food system functions. The application of indicator frameworks are an essential tool for guiding decision making in the transition towards healthy and sustainable food systems.