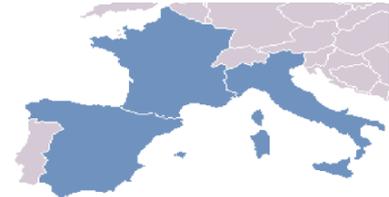


Identifying appropriate Metrics of Sustainable Diets and Food Systems

A Delphi expert consultation

- Objectives**
1. **Exploring the different approaches** to assess the sustainability of Diets and Food Systems
 2. **Establishing a multidisciplinary taskforce of experts**
 3. **Identifying a shortlist of indicators** for Sustainable Diets and Food Systems

Initial focus on Spain, France and Italy



3 Mediterranean countries facing similar food and nutrition security issues and exposed to common global and regional drivers of change

Reconsidering Nutrition

Overview The stark observation of the coexistence of undernutrition, nutrient deficiencies, overweight and obesity – the triple burden of malnutrition – is inviting us to **reconsider health and nutrition as the primary goal of food systems**. Agriculture and the food industry have made remarkable advances in the past decades, but have not entirely met health and nutritional needs. Moreover, they have generated unintended consequences including environmental losses. Simultaneously, several regions are experiencing unprecedented weather events caused by climate change and habitat depletion, in turn further destabilizing global food and nutrition security. This confluence of food crises with increasing environmental degradation suggests an urgent need for novel analyses and new paradigms to describe and understand the causes and facilitate adaptation and mitigation.

Participants at the 2010 international conference organized by the FAO and Bioversity International agreed on a common definition of Sustainable Diets that emphasizes the food and nutrition security purpose of food systems, and the need to maintain or enhance this outcome over time - across generations - by preserving essential human and natural assets and the flows of services they provide. The concept of Sustainable Diets promotes **economically, socially and environmentally sustainable food systems that concurrently ensure food and nutrition security**.

What is counted is what counts: Identifying Metrics

Rationale Modern societies depend on complex agro-ecological and trading systems to provide food. The move to sustainable diets calls for changes in the agricultural and food systems. **Policy-makers and other stakeholders need evidence-based information and assessment tools** to lead public policy interventions.

Metrics are an organized information system combined to provide a perspective. It targets three principal objectives:

- **Inform** civil society, industry, public officials and all stakeholders
- **Measure progress** toward defined goals
- **Aid decision making** processes

A sound theoretical framework is the starting point in constructing metrics.

Suggesting a framework

Framework

Sustainability – or Sustainable Development – is a necessarily complex concept that can have different understandings. In this exercise, we assume that a sustainability assessment aims at capturing the **ability of a system to maintain and enhance its essential functions over time**. Sustainability addresses threats to preserving life support systems, including their capacity to withstand and adjust. It is then key to assess stocks of and changes in human and natural assets. Derived from Sustainability sciences, the vulnerability approach, complemented by inputs from the resilience literature, is proposed to analyze the sustainability of critical food and nutrition security outcomes.

Vulnerability - as the degree to which a system is likely to experience harm due to exposure to a perturbation or stress - is a function of:

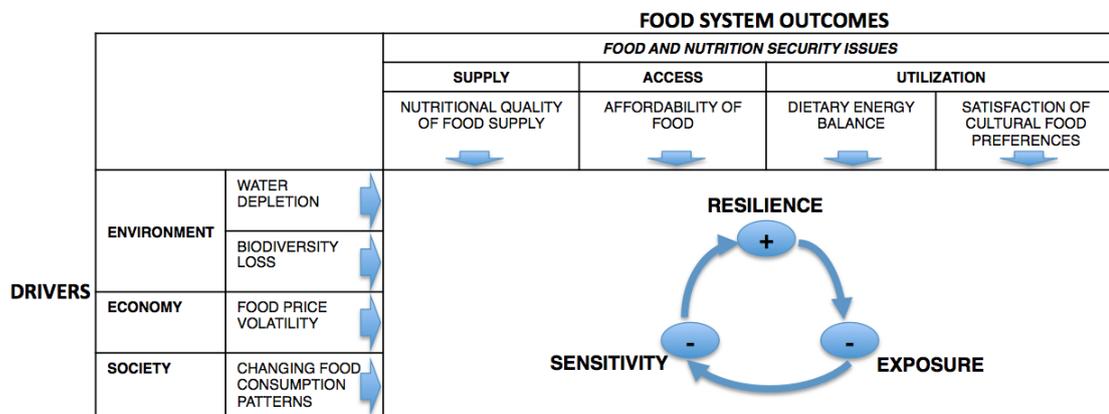
- **Exposure:** Nature and degree to which a system is likely to be affected by the occurrence of a change;
- **Sensitivity:** Degree to which a system is affected, either adversely or beneficially, by a change;
- **Resilience:** Ability of a system to anticipate, absorb, accommodate, or recover from the effects of a potentially hazardous event in a timely and efficient manner, through **ensuring the preservation, restoration, or improvement of its essential basic structures and functions** (IPCC, 2012).

Vulnerability/Resilience of what to what?

Main Facts

- Increasing consumption of nutrient-poor energy-dense foods and beverages
- Widespread **obesity** and overweight: France 46%, Italy 49%, Spain 58% among adults (WHO, 2013)
- Rising food cost especially in nutrient-rich and diverse foods, and increasing poverty
- **Water demand doubled** in 50 years in Mediterranean countries (UNEP, 2006)
- **Declining biodiversity in the Mediterranean** with 19% of the species threatened (IUCN, 2008)
- An ongoing **dietary transition** coupled with changing life and consumption patterns

Several **global and regional drivers** of change affect the structure and processes of the food systems, putting at risk context-specific **food and nutrition security outcomes**. Based on an extensive literature review, 4 critical food and nutrition security issues and 4 drivers of change have been identified:



(Adapted from Prosperi, Allen et al., 2014)

An expert consultation process

Delphi survey

The suggested framework and the initial short-list of indicators were developed in discussions with selected expert focus groups. We are now submitting them to a large panel of experts for further discussion. **A revised framework and a restricted set of indicators are expected from this consultation process.**

Following the protocol of the Delphi Survey, we ask participants to:

- Discuss and complement the framework and the underlying assumptions
- Test the framework by selecting *proxy* indicators

A Delphi Survey is a group interaction process directed in **iterative rounds of opinion collection and feedback**. After a first open-ended round, panelists will be presented with the opportunity to justify or amend their first choices. Succeeding rounds are designed to bring the group to focus or consensus.

More information:

<http://www.bioversityinternational.org/research-portfolio/diet-diversity/sustainable-diets/>
<http://www.iamm.fr/recherche/projets/Indicateurs-de-la-securite-alimentaire-durable-en-Mediterranee>

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