Joint Action

Food and Nutrition Security

JPI OCEANS
Action Factsheet

Action Description

Lead country: Norway
Collaboration: JPI HDHL, JPI FACCE and JPI Oceans

About

Food and Nutrition Security (FNS) bridges a number of Societal Challenges; it encompasses the entire food system (land and sea) from farm to fork. In their Strategic Research Agendas, JPI Oceans, JPI Agriculture, Food Security and Climate Change (FACCE-JPI) and JPI A Healthy Diet for a Healthy Life (JPI HDHL) have identified different aspects of this challenge and have come together to coordinate efforts in this area. Coordination is needed to connect different research domains and national and international research investments and to ensure involvement of key actors (consumers, primary producers, industry etc.); to stimulate innovation and implementation.

Objectives

This action is a collaboration between three JPIs: Oceans, HDHL & FACCE. It aims to define a holistic research programme to address the challenge of Food and Nutrition Security. To do this, it is necessary to know both the composition of a nutritious diet and how climate change will affect the production and nutritional quality of food, through effects on the quality of agricultural and marine primary products.

With this information, it will be possible to develop effective solutions along the whole food chain. The approach consists of two transversal research components: a modeling component and an intervention component.

Cross cutting activities will be carried out, including education, outreach, data sharing, standardization and harmonization, to support a knowledge flow from scientific research towards practice. This will support a multidisciplinary approach and ensure the involvement of key stakeholders including:

- Consumers
- Industry
- Regulatory authorities

Progress

Joint JPI Workshop — **April 2016**
The 3 JPIs agreed to collaborate in the field of FNS and agreed to create a working group to define shared research themes and to preparation of a common document.

Expert Workshop — **July 2016**
The workshop aimed to further develop the working document produced during the JPI Workshop. The paper was updated and presented to the Governing Boards of the three JPIs and the European Commission.

Joint Paper Published — **April 2017**
The three JPI's published a new paper describing the scope of a proposed joint research programme on Food and Nutrition Security: A Multi-Disciplinary Integrative Food System Approach

Funders Meeting — **June 2017**
Funders from the JPIs met to explore the implementation of the action. It was agreed that the three JPIs should work towards a Knowledge Hub in the area of Food and Nutrition Security.

Impact

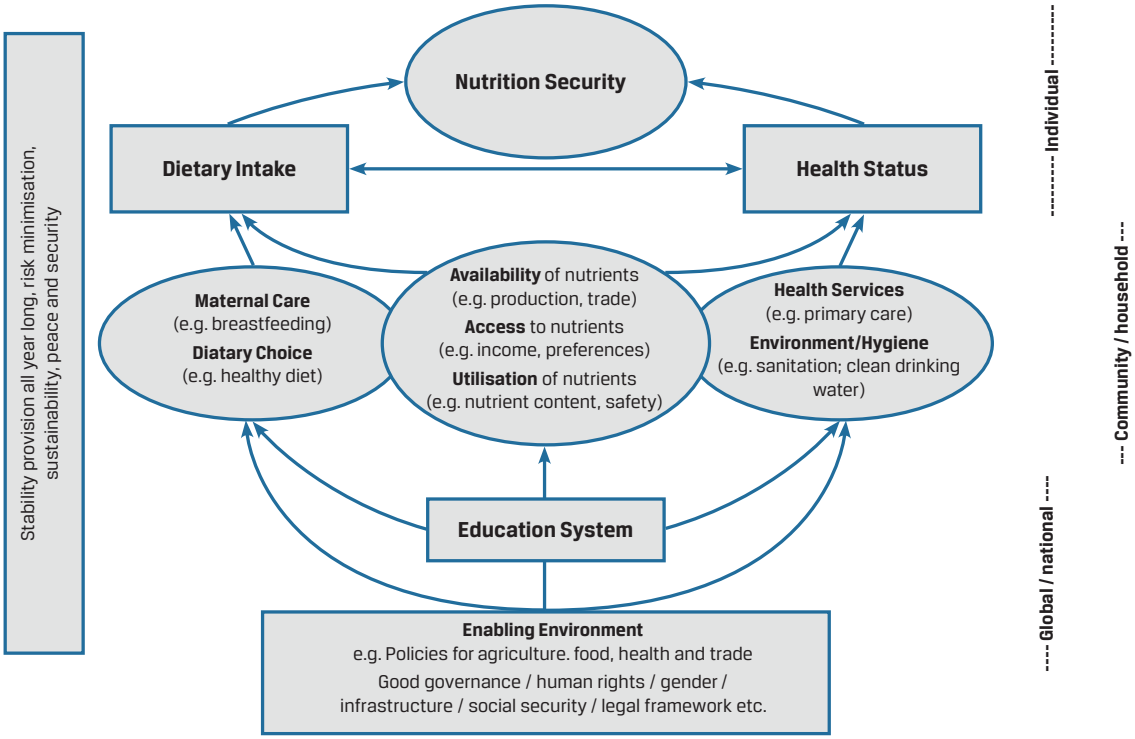
The research is expected to contribute to the implementation of the European Commission's FOOD 2030 initiative, but also to the UN Sustainable Development Goals, by connecting research communities along the entire food value chain to propose adapted, acceptable and sustainable solutions to achieving food and nutrition security. It will promote the building of lasting transdisciplinary coordination across a range of fields. It is expected that the research will help to provide solutions for providing sustainable, resilient food systems for nutritious food from land and sea to feed an ever-changing world.

Background

It is well known that the health, environmental, economic, and societal costs will be substantial if we do not change our course of action when it comes to the food system and the underlying challenge of Food and Nutrition Security.

Ensuring food and nutrition security is a complex issue, requiring an integrated food systems perspective. To achieve food and nutrition security, there is a need to understand what the "ideal diet" is for different specific populations (e.g. elderly, children…) and in different regions to generate profiles of nutritional needs (macro- and micronutrients) and the corresponding diets. There is also a need to understand climate change effects on food composition and the food system as a whole, again looking at macro- and micronutrients in order to develop resilient and sustainable food systems as well as feed for farmed animals on land and sea. With this information available, different interventions should be sought along the whole food value chain to achieving sustainable and resilient food systems – at the level of the farm, of food processing and transformation and at the level of human consumption. Research could include, for example, the potential of diversified food sources, the exploitation of genetic diversity for breeding nutritional and resilient plant and animal food sources, improved management practices, the role of industry and food retailers, with consumer acceptance as the key driver for bringing about change.

Factors Influencing Nutrition Security



Participating Countries (JPI Oceans)

Norway	Research Council of Norway (RCN)
Italy	National Research Council (CNR)
Portugal	Fundação para a Ciência e a Tecnologia (FCT)
Spain	Spanish Ministry of Economy and Competiveness (MINECO)
Sweden	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)