

# What is needed to ensure a sustainable Swiss Food System?

**The Swiss Food System will only be competitive and resilient against future challenges when it balances all three aspects of sustainability (i.e., economy, society, ecology).**

- This study was commissioned by the Swiss Federal Office for Agriculture to inform the agency as it develops its next research strategy.
- We synthesized global trends, their drivers and the big challenges the world food system will be confronted within the next 20 to 30 years. We then analyzed the key implications of these macro-trends for Switzerland and identified the main challenges the SFS will face in the future.
- Our conclusions are based on a comprehensive literature review, a series of semi-structured interviews with leading representatives of Swiss federal offices, and an online survey of almost 500 stakeholders representing sectors that span the entire Swiss Food System.
- We found that policymakers and stakeholders have a very comparable understanding of the challenges the Swiss Food System will be facing in the next 20 years and strong agreement about research needs among stakeholders from different sectors and backgrounds.

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## Foresight Study: Research for a Sustainable Swiss Food System

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# Challenges and Research for a Sustainable Swiss Food System

The challenges cited most frequently by survey respondents correspond to the findings from our review of the global macro-trends and are consistent with those identified by policymakers.

## The most frequently mentioned include:

Competitiveness	Food safety
Loss of land	Resource scarcity
Climate change	Sustainability
Food quality	Conflict of interests
Diet-related diseases	Structural change
Food waste	Resistance to antibiotics
Self-sufficiency	Healthy food
Sustainable production	Local markets and products
Prices	Ecological production
Liberal markets	Population growth
Consumption pattern	Biodiversity loss
Resource-use efficiency	Traceability
Education (nutrition)	Productivity
Food security	Resource degradation
GMOs	
Environmental protection	

## More information

[www.worldfoodsystem.ethz.ch/research/special-collaborations/foresight.html](http://www.worldfoodsystem.ethz.ch/research/special-collaborations/foresight.html) →

The research topics identified by survey respondents as most critical for building a sustainable Swiss Food System in the coming 20 years clearly reflect the importance of a systems approach.

## The top 10 topics (in decreasing order) are:

- Soil health and fertility in agricultural production systems
- Resistance to antibiotics
- Energy-use efficiency along food value chains
- Reducing food waste
- Sustainable diets
- Nutrient-use efficiency along food value chains
- Impact assessment of local vs. global food production
- Reducing losses in food value chains
- Nutrient cycling in agricultural production systems
- Policy development for sustainable food systems

We define the Swiss Food System (SFS) as all food (and feed) products produced, but also consumed in Switzerland, while considering national actors and national economic, political, societal, and environmental boundary conditions. Although the SFS is clearly embedded internationally, in this study, we mainly focus on Switzerland. In contrast to many earlier studies which focused on single sectors or actors, this study addresses all critical drivers, relationships and feedbacks as well as boundary conditions framing and affecting the food system.

# Recommendations

## Policy

- Develop and implement a coordinated, multi-stakeholder strategy addressing the entire Swiss food system
- Identify a leading house for such a strategy process
- Establish a knowledge and communication platform
- Set up targeted research toward a sustainable Swiss food system

## Research

- Encourage multiple research and communication approaches
- Include stakeholders in targeted research
- Carry out research using a systems approach, especially in the following main areas:
  - Efficient use, conservation, recycling and restoration of natural resources such as land, soil, water, nutrients, and biodiversity
  - A framework that aims at national (e.g., agricultural) and international (e.g., trade) policies, which are strongly linked to the food system as well as to the food system boundary conditions
  - Sustainable diets that consider environmental aspects and nutrition, health and diseases, and consumption
  - Issues that cut across the Swiss food system, addressing their drivers, mechanisms and impacts along all stages and across the food value chains