

POLICY BRIEF



Diversity on the plate is diversity in the field

A fairer and more sustainable food chain requires cooperation throughout the chain

A one-sided food system threatens humanity's ability to adapt to future changes. Unilateralism undermines Finnish security of supply and livelihoods, and is a threat to health as well as to the environment. A versatile and fair food system supports resilience; it is sustainable and creates new opportunities for both consumers and business.

The importance of the versatility of the whole food system needs to be identified and taken more fully into account in designing future policy measures. ScenoProt researchers point out ways in which changes could be made to the Finnish protein system. Better protein self-sufficiency is also based on the versatility of the food system.

POLICY RECOMMENDATIONS

Political action can accelerate the development of the protein crop range and diversify food chain market channels. This is how to promote and maintain the wellbeing of nature, for example by increasing biodiversity.

- Create a strategy for versatile plant breeding.
- Reform agricultural subsidy policies and encourage the utilisation of crop rotation and experimenting with new crops.
- Develop the knowledge base of farmers and develop farming techniques.
- Take measures to make the entire food system more just, by ensuring that the economic needs and interests are balanced.
- Offer low-threshold support to cover the research, product development and marketing needs of small- and medium-sized food companies.
- Support consumers' opportunities to obtain food from various marketplaces, for example, through digitalisation.
- Support the formation and diversification of food production and consumer communities both in urban and rural areas.
- Strengthen food system research and innovation by ensuring adequate funding.



VERSATILE FOOD SYSTEM PROMOTES A GLOBALLY MORE EQUAL DISTRIBUTION OF RESOURCES.

The 2030 Agenda for Sustainable Development

A versatile food system is an essential part of national well-being and public health

At present, 75% of dietary energy comes from only twelve plant species and five animal species. Diversity in food culture, food markets and food products would be seen as versatility in the fields, better biodiversity, climate resilience and would support more broadly sustainable development.

Food and energy security are linked together. One-sided cultivation requires fertilisers and pesticides produced using fossil fuels. On the other hand, legumes bind the nitrogen from atmosphere and thus reduce the need for mineral fertilizers. Long-rooted plants, such as beans and hemp, also work as carbon binders and improve soil quality. The agricultural profitability crisis has led to unilateralism to make production more economically efficient. The benefits of this, however, are not enjoyed by farmers. This is also

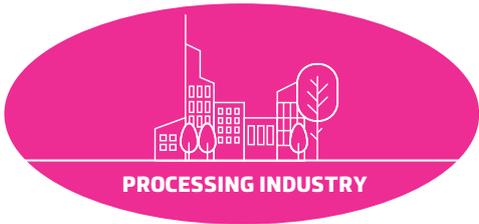
a threat to the attractiveness of agricultural entrepreneurship. The average age of agricultural entrepreneurs is increasing in Finland and Europe, and so young people with the courage to take up agriculture are needed urgently.

The versatility of the food system cannot be increased just in any one part of the system, but requires changes in attitudes, operating models and structures. Changes can be brought about through guidance, culture, markets or technology.

A versatile food system responds to multi-valued demand from consumers. Primary production is innovative and a wide range of crop varieties are in cultivation are wide; food processing companies also create new products for export, and the food trade is conducted on a variety of platforms and in new types of marketplaces.

• New Finnish products have growth opportunities at home as well as considerable export potential.

• Diverse cultivation that responds to consumer needs, strengthens biodiversity and opens up new opportunities for primary production.
• The cultivation of legumes binds nitrogen from the atmosphere and thus reduces the need for mineral fertilizers. Deep-rooted plants also act as carbon binders and improve soil quality.

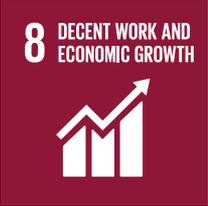


Innovative primary production and processing of products are in line with multi-valued demand



• A diverse food system is resilient and able to adapt to unexpected changes in the production environment.
• Biodiversity is strengthened and natural resources are saved. Versatility and recycling ensure sustainable development.

• With diverse and multi-valued demand, we promote the development of supply chains and catering services.
• Our diet becomes more diverse and we value seasonal, varied and responsibly produced food and balanced wellbeing.



CLEAN WATER AND CLEAN ENERGY ARE THE BASIS FOR MULTI-VALUED INNOVATIONS IN THE FOOD SYSTEM.

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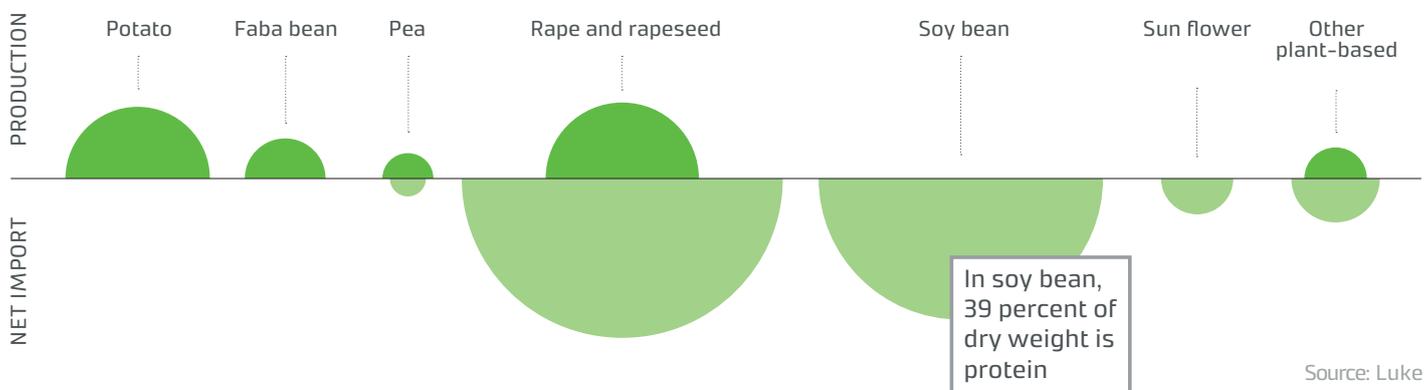
Healthy food, a responsible food chain and food cultures matter to consumers

Consumers want to live by their values when buying food, and the range of what is on offer should respond to multi-valued demand, thus opening new business opportunities.

According to consumer studies by ScenoProt, most of consumers would like to experiment with plant-based food varieties, if only they were easily accessible from grocery stores. A quarter of consumers actively seek information about new products to buy. The market for new protein

products in Finland is still under-developed compared to the markets in Germany or the Netherlands, for example. There are growth opportunities for Finnish products in domestic markets as well as widespread export potential.

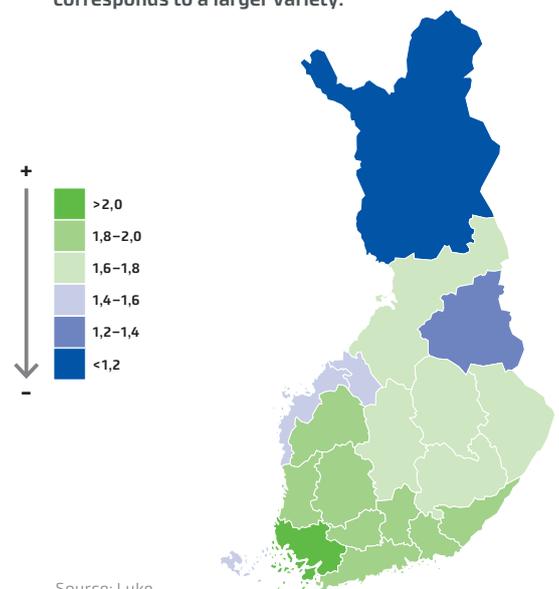
The self-sufficiency of Finland's plant-based protein is lowest in rapeseed, rapeseed and soybean. Production and net import (import and export) of plant-based raw materials (excluding cereals and grass).



The diversification of farming by adding special crops requires changes to the entire food system. Domestic plant breeding should also have resources for less cultivated plant species. When developing new cultivation, storage and process technologies, the needs of new raw materials should be taken into account.

In the future, the area for plants that promote diversity could almost be doubled in Finland. Comprehensive plant production will respond to the growing demand for plant protein from households. It is imperative that there be cooperation in the food system, and that investments be made into research in the field. By diversifying our plant production, we will be able to meet the growing demand from households for plant proteins.

Variety of field crops by region 2012-2016 according to the Shannon Index, where the larger number corresponds to a larger variety.



A VERSATILE FOOD SYSTEM AND SUSTAINABLE USE OF RESOURCES ARE A PART OF RESPONSIBLE CONSUMPTION.

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9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

THE DIVERSITY OF THE FOOD SYSTEM IS STRONGLY FEATURED IN EUROPEAN POLICIES

- Paris Agreement – Intelligently implemented diversification opens up opportunities for land use optimisation and reduces climate emissions.
- Agenda 2030 – versatility of the food system and biodiversity is associated with all sustainable development objectives.
- Commission Communication to the European Parliament, the Council, the European Economic and Social Committee and the Regions to the Committee – To safeguard the future of food and agriculture, the agricultural community needs new blood to make the industry more dynamic and open to ongoing technological change.
- Food 2030 – EU research and innovation policy built on the following food and nutrition security priorities: nutrition for sustainable and healthy diets, climate smart and environmentally sustainable food systems, circular economy and resource efficiency of food systems, and innovation and empowerment of communities.
- The Protein Challenge 2040 – a ground breaking global coalition combines the producers of animal, plant and new sources of protein and global environmental and health organisations. Through cooperation, the sectors are managed to steer protein production and consumption in a more sustainable direction.



A MULTI-VALUED CONTROL OF AIR, WATER AND LAND ARE THE BASIS FOR JUST FOOD SAFETY.

The 2030 Agenda for Sustainable Development



TOGETHER WE CAN DO THIS.

The 2030 Agenda for Sustainable Development

The ScenoProt project aims for a more versatile and sustainable protein system. The project is funded by The Strategic Research Council (SRC) at the Academy of Finland.

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