



THE ROLE OF ACADEMIA IN TRANSITION TO SUSTAINABLE FOOD SYSTEMS

Silvia Gaiani, Urszula Ala-Karvia, Sami Kurki
Ruralia Institute, UH
4th of April, 2022

RURAL SOLUTIONS FOR A SUSTAINABLE FUTURE



UNIVERSITY OF HELSINKI RURALIA INSTITUTE

- The University of Helsinki (UH), established in 1640, is the largest institution of academic education in Finland (40,000 students and researchers, 11 faculties).
- Ruralia is part of the Faculty of Agriculture and Forestry, with units in Seinäjoki and Mikkeli.
- Multidisciplinary approach to rural research and development – one focus area is **sustainability transition of food system**. Other related areas include food business (SMEs), food chains, rural entrepreneurship, future sustainable food systems.
- Academic research and co-creating research-based solutions. Annually about 60 projects with more than 300 partners, benefiting businesses, as well as public and third sector operators.





WHAT IS RESILIENCE

Resilience thinking has its origins in ecology ([Holling, 1973](#)), but has been increasingly adopted as a generic approach to understanding social-ecological systems ([Adger, 2000](#), [Folke et al., 2010](#)).

Food systems are increasingly exposed to multiple internal and external drivers of change, ranging from sudden shocks to long-term stressors. Food systems are also intrinsically complex. With so much uncertainty and complexity, food systems must be able to fulfill their goals, even in the face of multiple, unpredictable drivers of change.

resilience:

“[t]he capacity of a dynamic system to adapt successfully to challenges that threaten the function, survival, or future development of the system.”

—Ann Masten, Professor, University of Minnesota
College of Education and Human Development





HOW CAN UNIVERSITIES IMPROVE THE RESILIENCE OF THE FOOD SYSTEM?

Johanson and Saint (2007) identify three ways in which academia contributes to innovation and resilience in food systems:

1. Universities are an important **source of stimulus for innovation**. They accelerate the flow of new ideas and play an important role within the information-sharing networks.
2. Universities help to **adapt innovations** produced elsewhere to local circumstances.
3. Universities have the capacity to **generate new knowledge** through research.

The role of universities is to ensure that food production stakeholders and the entire value chain are equipped with knowledge and skills to ensure a continuous and sustainable supply of safe food. Lifelong learning ensures that professionals in the field are able to cope with changing needs and sudden shocks.



A FOCUS ON FINLAND

Finland was ranked number one in the SDG Index of the Sustainable Development Report 2021 published by the Sustainable Development Solutions Network SDSN and the Bertelsmann Stiftung.

Why so successful? All stakeholders- including academia- are involved with the policy preparation.

The government is planning sustainable food systems policies based on scientific research and evidence (The Strategic Research Council (SRC) of the Academy of Finland grants funding for high-quality science and has launched FOOD programme in 2019).

In Finland research is largely driven by competitive funding, with governmental, international, and entrepreneurial sources having an impact on the volume and targeting of research.



WHAT ACADEMIC DIMENSIONS CONTRIBUTE THE MOST TO SUSTAINABLE FOOD SYSTEMS?

“Without research, we may not even perceive problems, let alone be able to solve them.”

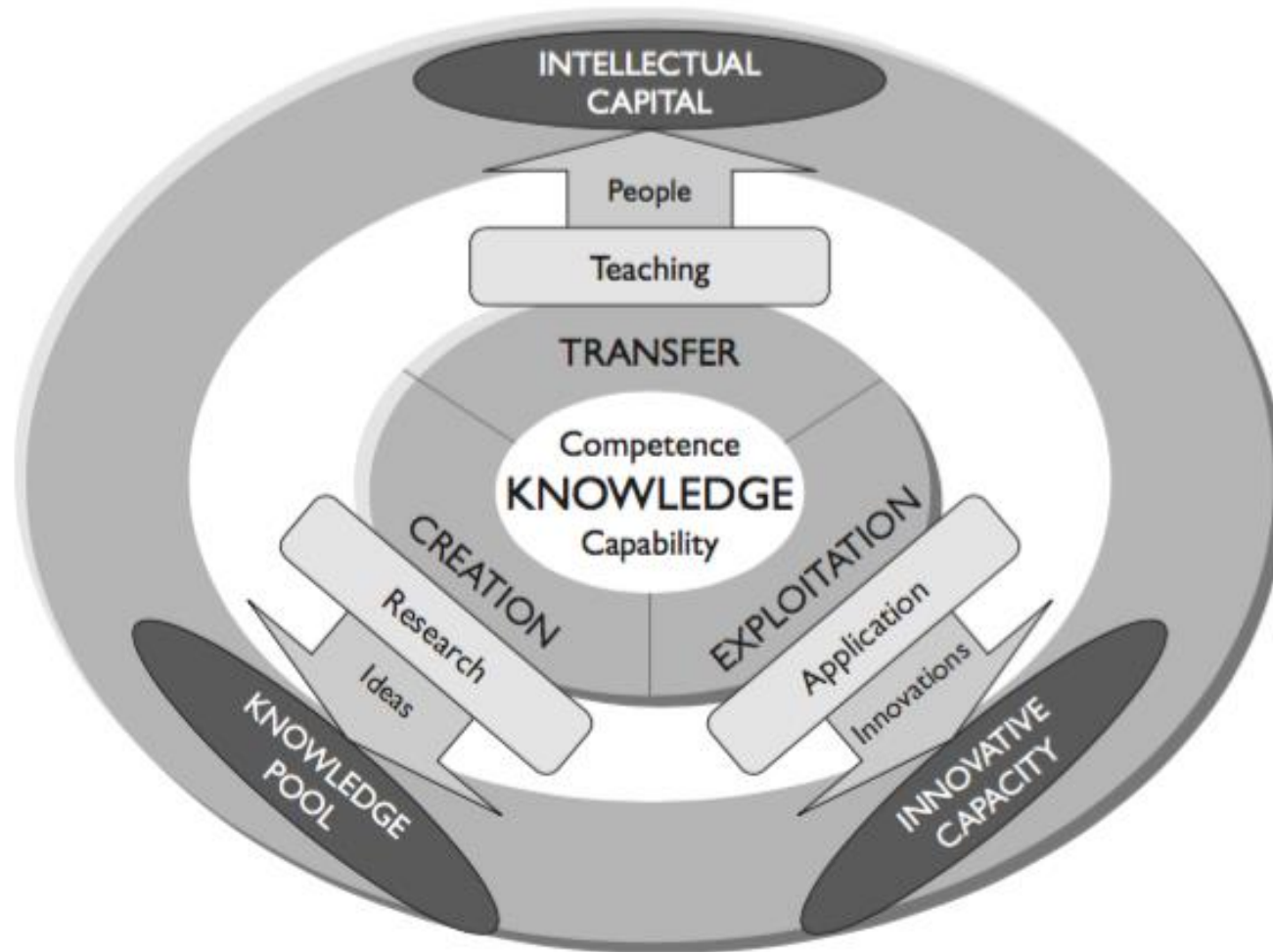
Tom Böhling, Vice-Rector of the University of Helsinki

Universities can be strategic partners for gathering data, providing multi-disciplinary scientific interpretation, synthesizing different types of specialized knowledge, while bringing technical training and teaching, critical thinking, practical skills, and public engagement.

Valorisation is at the centre of many debates on the future of academic research. Valorisation encompasses all activities that contribute to ensuring that the outcomes of scientific knowledge add value beyond the scientific domain.



THE THREE MISSIONS FOR UNIVERSITIES



Source: Kirsten J.F, Zuwarimne J., (2008) Social Capital, Lifelong Learning and the Management of Place.



ACADEMIC DIMENSIONS CONT.

Food Research and Innovation Strategy for Finland 2021–2035 has been developed by academic and research institutions and the Finnish Food Authority (Ruokavirasto): the aim is to position Finland as a key actor in the transition towards a healthful and sustainable global food system and make food and feed production competitive and resilient.

Strategic Plan of the University of Helsinki 2021-2030: “...in the spirit of global responsibility, we will build a sustainable future by generating knowledge for finding solutions to both local and global issues and thereby benefiting the global community. Our University is the best place to study and work. Our University is a leader in responsibility and sustainability.”

University of Helsinki has just published its **first sustainability and responsibility programme**. A long-term goal is to integrate sustainability and responsibility into all University operations.



RURALIA AND UH ON FOOD (CURRICULA AND PROJECTS)

- Research groups at the University of Helsinki: Food quality and safety, Meat science and technology, Senses and food (the interaction between human behaviour and sensory food perception), Family nutrition and well being, Food materials science
- Bachelor degree (Food Sciences, Agricultural Sciences, Environmental and Food Economics) Master degree (Food Economy and Consumption, Food Sciences, Human Nutrition and Food Related Behaviour, Agricultural Sciences) and PhD degrees (Food Chain and Health, Integrative Life Science)
- Current projects run by Ruralia:
 - YDIRE Through cooperation and digitalisation towards resilience in food systems
 - Saimaa Taste of Place. Food as a source of the sense of place and as a means to promote tourism (SToP)
 - Innovations of Green Economy - Boosting the Cooperation of Public and Private Sector in South Ostrobothnia (VITALI) and many others....



HOW CAN UNIVERSITIES SUPPORT POLICIES AND COLLABORATION AMONG DIFFERENT STAKEHOLDERS?

- Universities should aim at developing consensus on strategic vision, goals and priorities for action.
- In recent years, there has also been increasing pressure on Universities to shift from focusing primarily on teaching and performing research, and to add an equivocal **Third Mission (TM)**, labelled “a contribution to society”. The Third Mission represents the economic and social mission of the university and its contribution to communities and territories.
- The collaboration and interaction among the **education system**, the economic system, the natural environment, the media-based and culture-based public (also 'civil society'), and the political system is commonly referred to as **Quintuple Helix**.
- In Finland the Quintuple Helix model is used for example to foster participatory policy design in regional planning.



UNIVERSITY
OF HELSINKI
RURALIA

THANK YOU FOR YOUR
ATTENTION!

RURAL
SOLUTIONS
FOR
A SUSTAINABLE
FUTURE

Silvia, Urszula & Sami
silvia.gaiani@helsinki.fi
urszula.ala-karvia@helsinki.fi