

Docent lecture in horticultural science, especially business administration by Fredrik Fernqvist, Dept. of People and Society, LTV Faculty, SLU, March 2, 2023

On horticulture and sustainable food systems - are details enough?

Horticultural firms compete in a dynamic environment. This requires the firm manager, often the owner of a small family enterprise, to have multiple skills to be able to transform inputs to outputs, to be able to sell the produce on an ever-changing market, to innovate new products and processes. He or she needs to know the biology of producing fruit, vegetables and ornamental plants, must know the technology that best works to make the production work, *and* have the skills in economics and business administration as regards everything from the management of limited resources, strategic thinking, marketing, leadership, organization, and so forth. Meanwhile, other actors in the food value chain put pressure on the horticultural producers: pressure from input suppliers, buyers, retailers and not least consumers, but also from other national and international competitors. Add to this the requirements from government and legislation. As if this was not complex enough to take into consideration for the horticultural firm, the whole food system is currently put under pressure by urgent environmental and socioeconomic forces: climate change, biodiversity losses, soil and water degradation, food waste, demographic change, public health issues, and more. These forces influence all actors in the food system, not only in horticulture, and may pose both as threats and opportunities for a firm in this system. To manage through this complex landscape, both specific knowledge and a broad view, depth and width, are needed. Knowledge on a few details is simply not enough.

A strong driver for my research has been to see the whole picture, to connect different parts of a complex system in order to understand how they relate to each other. My aim is to bring clarity to what this may imply for practitioners in horticulture and elsewhere in the food system.

In this lecture, I will talk about my research journey that has covered various aspects throughout the food value chain and the horticultural market, and what this means for practice: beginning with the consumer, going upstream the value chain to retail and producer. I will talk about how I came to set these perspectives into the frame of sustainable food systems. Much of my research has been made in collaboration with industry and some has been commissioned research for governmental bodies, which means that results have been of practical use for stakeholders at an early stage. Additionally, given the multifaceted character of horticultural science, many of the projects have been interdisciplinary.

Hence, my research has had a focus on practice and applicability of new knowledge, often grounded in current issues in industry and policy. I will give examples of my research on topics such as: how horticultural firms may respond to changing markets and consumer demands; how new technology can be adopted to respond to sustainability issues; how business models may take new directions to enable survival on a changing market while being sustainable in a broader sense. Finally, I will address the important dual role as a researcher and teacher in higher education. How the development of education leads to research on new topics, and how research influences education. I will also provide some thoughts on future research trajectories on the given topics.