

FOODLEVERS project: Leverage points for organic and sustainable food systems

Agroforestry for the Green Deal transition. Research and innovation towards the sustainable development of agriculture and forestry

EURAF 2022
Agroforestry for the Green Deal transition.
Research and innovation towards the sustainable
development of agriculture and forestry
Abstract

Corresponding Author:
Andrea Pisanelli

Email:
andrea.pisanelli@cnr.it

[Andrea Pisanelli](#)¹, Valerie Holzner², Laurence Smith³, Robert Borek⁴, Adrian Eugen Gliga⁵, Michael den Herder⁶, Lisa Arguile⁷, Hilde Wustenberghs⁸

¹ National Research Council, Institute of Research on Terrestrial Ecosystems, Italy

² Philipps-University of Marburg, Department of Geography, Germany

³ University of Reading, School of Agriculture, Policy and Development, United Kingdom

⁴ Institute of Soil Science and Plant Cultivation – State Research Institute, Puławy, Poland

⁵ University of Agricultural Science and Veterinary Medicine, Cluj-Napoca, Romania

⁶ European Forest Institute, Finland

⁷ Organic Research Centre, United Kingdom

⁸ Flanders Research Institute for Agriculture, Fisheries and Food, Belgium

Topic: Agroforestry in Society and Culture

Subtopic: Education, training, dissemination and promotion

Keywords: Agroforestry, organic farm, trade-off, consumers.

Type of presentation (oral or poster): Poster

Abstract

FOODLEVERS project focuses on how organic and sustainable food systems with long and short distribution chains contribute to reconnecting producers and consumers, to promote a more efficient resource use from farm to fork and to develop economic, environmental, social and governance dimensions of the system's sustainability.

Despite the recent uptake of innovative production systems, food systems continue to move on unsustainable trajectories through a focus on “highly tangible, but essentially weak, leverage points” (Abson et al. 2017). Thus, interventions fail to address key problems and there is the need to focus on three realms of “deep leverage” in affecting change towards sustainability: “Re-connect”: reconnecting people to nature to encourage sustainable behaviours whilst shortening feed-backs and improving wellbeing; “Re-structure”: re-organising institutions and considering how institutional dynamics can create an enabling environment for sustainability and; “Re-think”: considering how knowledge is created and used, shared and validated (figure 1). Research that addresses relationships between the above areas can build an understanding of effective practices and how these interact with the design of and intent behind food systems. Better understanding of how ecology and productivity interact with social processes is also required to influence innovation in ways that address all dimensions of sustainability. Innovative organic food systems may provide models for this holistic framing, but none excel in all aspects. More formal research and assessment is therefore required to better understand these systems, their benefits and the potential for individual socio-technical practices and organisations to facilitate sustainability transitions. Through such an innovative scientific enquiry it is possible to identify “configurations that work” in specific socioecological and socio-economic contexts. To close the gap between production, processing and consumption it is necessary to understand the role of all parts of a food system (FS). This project aims to analyse different forms of organic and sustainable FSs (e.g. organic, biodynamic, permaculture, agroforestry) in different geographical (rural, urban) and institutional (e.g. community supported agriculture) contexts to understand how different layers of efficiency (e.g. actors, processes, technologies, forms of organisation) can contribute to improve natural and human resource use efficiency. The project applies a multi-disciplinary approach to understand material, organisational and behavioural dimensions of FSs. FOODLEVERS analyses the characteristics of FS case studies in terms of agro-ecological factors, the value chains related to the FSs (food cultivation, various stages of processing/distribution, consumption) in terms of input-output relations and the interaction processes between actors and the decision-making processes in consumption. In particular, the project considers whether the way that innovative organic and sustainable FSs are pushing the boundaries of what is known, what is expected and what is thought to be do-able, contribute to social theory about re-organisation and restructuring FSs. In doing so the project identifies the leverage potential of different FSs to increase the performance of systems and to accelerate sustainability transitions.

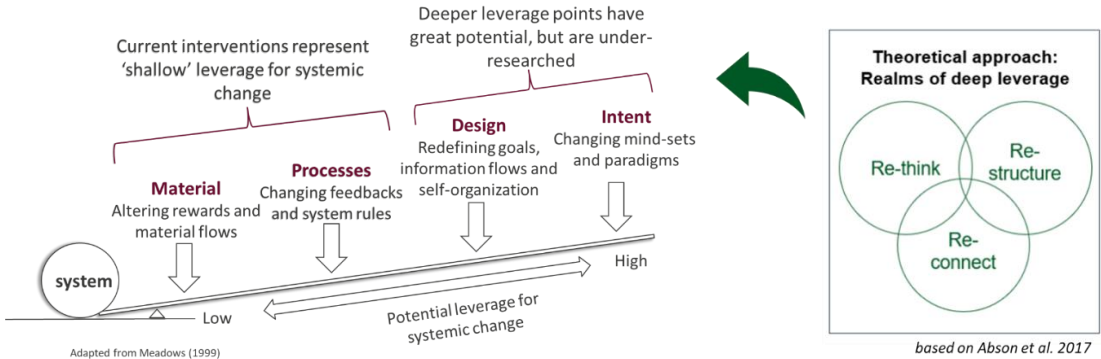


Figure 1: conceptual framework of potential leverage for systematic change

The authors acknowledge the **financial support** for this project provided by transnational funding bodies, **partners of the H2020 ERA-NETs SUSFOOD2 and CORE Organic Cofund**, under the Joint SUSFOOD2/CORE Organic Call 2019.

References:

Abson DJ, Fischer J, Leventon J, Newig J, Schomerus T, Vilsmaier U, von Wehrden H, Abernethy P, Ives CD, Jager NW, Lang DJ (2017) Leverage points for sustainability transformation. *Ambio* 46: 30-39.