

EU PERSPECTIVES ON (RURAL) LIVING LABS FOR ACCELERATING THE GREEN TRANSITION

THE ISSUES AND EU PERSPECTIVES IN SUMMARY

Green Deal/Farm to Fork and Biodiversity Strategy emission reduction targets require green transition in agri-food, that is based on new knowledge, new technologies and farming systems that are continuously developed, made relevant and adopted by farmers at an increasingly swift pace.

What works and what does not work?

How do we incentivize innovation within the agri-food sector?

Agri-food system living labs seen to address mozaics of complexity by bringing innovation users (incl. farmers, scientists, advisors, authorities and civil society) together in finding solutions

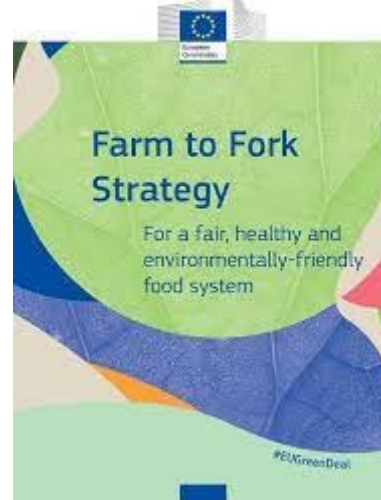
EU rural development discourse trajectory: ‘multi-actor, co-design and now ‘co-creation/co-design in living labs’.....reflecting increased ‘impact’ orientation

DEFINITIONS: FROM LARGELY URBAN/INDUSTRIAL TO RURAL CONTEXTS

European Network of Living labs (ENoLL): “*user-centred, open innovation ecosystems based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings*”. <https://enoll.org/about-us/>

Agroecosystem Living Labs: “*transdisciplinary approaches which involve farmers, scientists and other interested partners in the co-design, monitoring and evaluation of new and existing agricultural practices and technologies on working landscapes to improve their effectiveness and early adoption*” (MACS G20)

POLICY/PROGRAMME LANDSCAPE



HORIZON-MISS-2023-SOIL-01-08: Co-creating solutions for soil health in Living Labs

HORIZON-CL6-2023-FARM2FORK-01-1: European partnership on accelerating farming systems transition – agroecology living labs and research infrastructures

HORIZON-CL6-2023-FARM2FORK-01-9: European partnership on sustainable food systems for people, planet and climate

SCALES, SCOPES AND TARGETS THAT WILL DEFINE THINGS

A. Soil Mission: Improve soil health by setting up 100 + living labs and living lab lighthouses by 2030 - successive calls. 9 years, total budget? (first call EUR 95 million)

B. Cofunded Partnerships: Mix of research calls and supporting activities (80:20 of budgets):

- **Agroecology, Living Labs and Research Infrastructures Partnership:** Redesign farming systems by sharing knowledge and co-creating solutions **in living labs**. 7 years, Appx EUR 500 M.

- **Partnership for Sustainable Food Systems:** Change the way we eat etc through 'real-life experiments with place-based solutions, e.g. living labs'. 7 years, appx EUR 500 M

+ partnerships on **Agriculture of Data, Animal Health and Welfare** with living lab components.

Paradigmatic shift towards more open innovation with more research in living labs and living lab-like (open innovation) settings.

HOW DID WE GET HERE?

1. LIVING LABS IN *AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEM* TRAJECTORY

FRAMEWORK

Agricultural Knowledge and Innovation System

(AKIS) is used to describe the whole knowledge exchange system: the ways people and organisations interact within a country or a region. AKIS can include farming practice, businesses, authorities, research, etc. (EIP-AGRI)

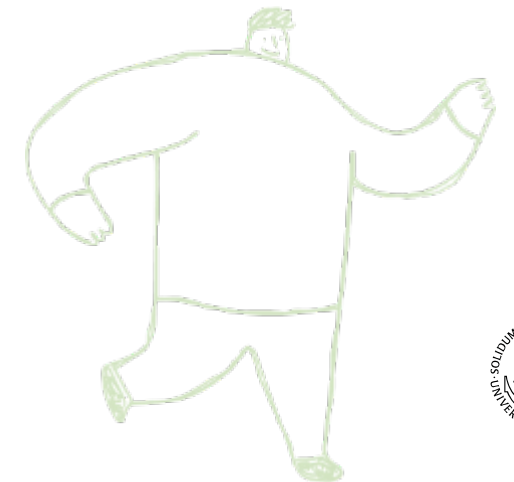
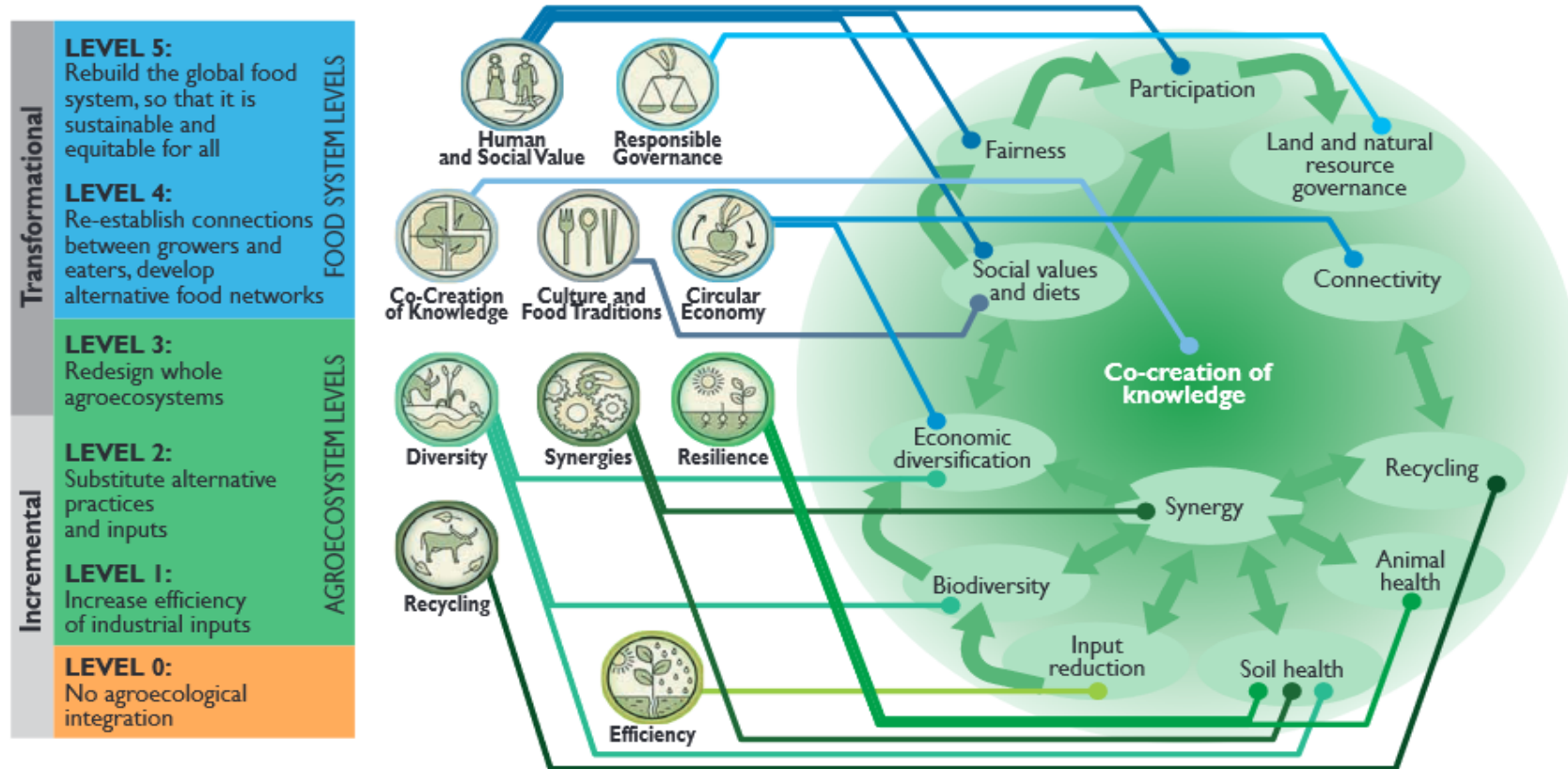
Dominant ideas in AKIS (adapted from Chambers and Scoones 2009)

Idea	Transfer of Technology	Farming Systems Research	Farmer First/Farmer Participatory Research	People-Centred Innovation/Co-creation	Agro-ecology Living Labs
	Training and visit				
	Since 1960s	Since 1980s	From late 1980s	From early 2000s	From 2018

Methods trajectory: epistemic communities, communities of practice, farmer-field schools, stable schools etc, now living labs....

HOW DID WE GET HERE?

2. DOMINANT UNDERPINNING CONCEPTUAL FRAMEWORK 1



▲ *Linking FAO's 10 elements, Gliessmann's 5 levels of food system transformation and the 13 HLPE principles*
 Correspondence based on Wezel et al., 2020. Agroecological principles and elements and their implications for transitioning to sustainable food systems.
 A review. *Agronomy for Sustainable Development*, (2020) 40: 40.

DIGGING DEEPER: THE 'KNOWLEDGE', THE 'LOCAL AND THE 'NO SIZE FITS ALL' RATIONALES

Agricultural practices that address sustainability are complex and knowledge intensive in contexts of:

- 'Local' ('territorial') physical conditions
- 'Local' socio-economic, cultural and political regulatory conditions

Hence standard(ized) solutions as in industrialized agriculture inadequate (Altieri et al 2011)

Rather, there is a need for **spatially** specific management and **place based innovation**, with:

- high levels of social capital/rural institutions for cooperation (Pretty 2018) to address knowledge intensiveness through better knowledge sharing (Wezel et al 2009) co-creation and and transdisciplinarity (Huyghe 2020)

The living lab approach is regarded as a methodology that can address both local knowledge needs and the scaling up of innovative practices in farming (networks of living labs)

EXPERIENCE

'...The concept of system redesign implies the establishment of new knowledge economies for agriculture and land. The past 20 years have seen the deliberate establishment of more than 8 million new social groups across the world....Social capital is generally seen as a prerequisite for the sustainable management of resources and for the development of approaches and methods across all geographical territories' (Pretty et al 2018, 2020):

Canadian Agroecosystem Living Labs key source of inspiration – MACS G20

The international Agroecosystems Living Laboratories (ALL) working group was formed following a presentation by Canada at the 2018 G20 Meeting of Agricultural Chief Scientists (MACS) in Argentina.

From local AE alternative producers to large regional LL's with conventional farms...

<https://biokutatas.hu/hu/page/show/onfarm>

experiments on landrace tomatoes and vineyards (Hungary)

<https://entreprises.nouvelle-aquitaine.fr/actualites/vitiev-innovons-pour-des-territoires-viticoles-respectueux-de-lenvironnement>

towards environmentally-friendly wine territories in Nouvelle-Aquitaine (France)

<https://liverur.eu/pilot-regions/> on meat and dairy quality and sustainable production in the Azores (Portugal)



CARBONFARM

VIDEN & INFORMATION OM

**PLØJEFRI DYRKNING
OG CONSERVATION
AGRICULTURE**

I ØKOLOGISK OG IKKE-ØKOLOGISK LANDBRUG

VOICED CHALLENGES

- Dilution of or adaptation of living labs concept? ('all things to all people' problem)
- Living labs represent a specific, structured approach, but:
Agroecological/green transition in agriculture solutions are context-specific, and arguably require context-specific approaches (?)
- How place based should rural living labs be – farm(s), agroecosystem, watershed, admin-physical boundaries or e.g. broader thematic level networks?
- The 'place-based dilemma' and knowledge sharing – how to scale-up something that is 'place based'? Networks as panaceas?
- Integration of 'off-station' (living lab) research vs 'station-based research' (research infrastructures) with respect to scientific paradigms and validation of scientific results.

ADDRESSING (SOME OF) THE CHALLENGES

Agroecology Partnership WP 7: Building capacities of agroecology living labs and research infrastructures:

Methodological guidance for developing and improving living labs.

....strengthening participatory methods for fostering LLs and multi-actor engagement

....strengthen participatory tools for monitoring and evaluating co-creation processes, knowledge creation and sharing within LLs:

....develop approaches to accelerating agroecology transition from institutional learning perspectives

- Fostering synergies and capacity building of Living Labs and Research Infrastructures:

..... improved understanding of barriers and enablers of existing agroecology living labs (LL) and research infrastructures (RI).....foster synergies between the LL approach and RI by (i) defining the requirements and conditions , (ii) preparing an accessible data infrastructure, and (iii) share best practices of integrating the LL approach with RIs to foster AE transition



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