Accelerating farming systems transition: towards European networks of living labs on agroecology and soils

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Canada Living laboratories initiative workshop
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Contents

• Why a growing European interest in living laboratories in agriculture?

• The Horizon EU partnership on agroecology living labs and research infrastructures

• Living labs under the Horizon EU mission on soil health
Change is urgent

The European Green Deal

CLIMATE FACT AND CLIMATE LAW

INVESTING IN SMARTER, MORE SUSTAINABLE TRANSPORT

PROTECTING NATURE

FROM FARM TO FORK

LEADING THE GREEN CHANGE GLOBALLY

MAKING HOMES ENERGY EFFICIENT

FINANCING GREEN PROJECTS

ELIMINATING POLLUTION

ENSURING A JUST TRANSITION FOR ALL

EU BIODIVERSITY STRATEGY

For a fair, healthy and environmentally-friendly food system

Farm to Fork Strategy

EUROPEAN COMMISSION
Key targets & objectives to be achieved by 2030

-50% chemical pesticides

-20% chemical fertilizers

25% share of organic production

Protect soil fertility, reduce soil erosion and increase soil organic matter

10% agricultural land under high-diversity landscape

Reduce GHG emissions by at least 55%

Time to step up the efforts…

…and many others

…by 2030 = 9 years = 9 growing seasons……
EU approach to agricultural R&I

Interaction innovation (multi-actor approach)

Farm policy (CAP)

Local innovation projects
(EIP-AGRI Operational groups)
(+/- 2000)

EU EIP-AGRI networking activities:
- Focus groups
- Knowledge exchange
- Web platform

R&I programme
(Horizon 2020)

Transnational
R&I (multi-actor) projects
190 – 1 bn€

Transnational
Thematic networks
40 – 80 M€

2015 > 2016
Sustainability
+ interactive innovation
How living labs came about?

Could LL be a powerful tool for change?

Multi-actor projects

Digital farming

G20 Agroecosystem living labs

European network of living labs (EnoLL)
How could living labs enrich our R&I approach?

Key components:

- Multi-actor approach
- Things that LL could strengthen
R&I programme for 2021-2027 « Horizon Europe »
Various instruments to power the transition

- Missions
  - Calls for collaborative projects
- Partnerships
  - Achieving goals

Large-scale portfolio of coordinated actions to reach a bold and inspirational objective
Soil health: « Caring for soil is caring for life »
- Living labs and lighthouse farms

Work programme for 2021-2022 coming in Spring 2021

Concerted R&I efforts with EU and Associated countries and/or private sector, foundations or stakeholders
- Agroecology living labs and research infrastructures
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Why living labs on agroecology?

We want to empower a rapid green transition:

• Agroecology = using ecosystem services better
• Agroecology can provide a powerful contribution
• R&I are needed that can empower uptake and scale-up
• Living labs have the potential to accelerate change

Agroecology elements fit well with living labs principles:

• Adapted to local ecosystems → « Place-based »
• Involving actors at territorial level to achieve large scale impact
• Social and behavioural dimensions
• Systems approach
Goal: accelerate the transition towards sustainable, climate and ecosystem-friendly farming practices by enabling to better grasp short to long-term agroecological processes from farm to landscape levels

Objectives:

- Strengthen the agroecology research and innovation ecosystem
- Improve farmers’ knowledge on implementation of agroecology and its benefits
- Improving the sharing of knowledge and experience across regions and countries

Activities:

- Set-up a common framework for methods, protocols, data management etc.
- Create spaces for long-term, site-specific and real-life experimentation and innovation (living labs or alike)
- Create a network of these spaces and knowledge-sharing mechanisms
Co-creation process
EC, SCAR SWG AE, ALL-READY & AE4EU

- 6 Webinars
- 270+ involved
- Share understanding of concepts and tasks

Kick-start dialogue (May-Oct. 2020)

Agreeing on governance (Jun -> Dec 2020)

- New SCAR group (1 Jan 2021) on agroecology => “drafters group”
- 22 countries signed-up
- DE, DK, ES co-chairs

First screening (Oct-Dec 2020) => 210 replies + concrete examples to start from

- Deeper mapping by CSAs (2021)

Mapping (Oct 2020 → end 2021)

- Vision and ambition
- Objectives
- Activities
- Funding scheme
- Monitoring

Two CSAs started

We are here

Co-creating the partnership concept (2021)

>> Develop a SRIA (2021-2022) > Pilot the network (2022) > Build capacities to create and run AELL (2022)

>> ALL-READY & AE4EU contributing to all steps of the process.
Why is it interesting for urban farming?

- **Place-based approach** offers possibility to **connect urban and rural**
- **Regions are involved** (workshop at #EURegionsWeek, ERIAFF and CoR involved in webinars)
- Living labs = opportunities for **citizens to get involved** (food issues)
- **Agroecology** in focus in many of the urban/peri-urban food gardening initiatives => lessons to be learnt
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• Opportunities for cooperation
Mission “Caring for soil is caring for life”
What does this mission want to achieve?

by 2030, at least 75% of all soils in each EU Member State are either healthy or show a significant measurable improvement for all indicators where levels are below accepted thresholds, to support the provisioning of essential ecosystem services

for food, people, nature and climate
What does this mission want to achieve?

1. **Reduce land degradation** (Restore 50% of degraded land moving beyond land degradation neutrality)

2. **Conserve soil organic carbon stocks** (Increase carbon concentration on cultivated land by 0.1-0.4% per year);

3. **Stop soil sealing** and increase re-use of urban soils (increase rate of soil re-use from current 13% to 50%)

4. **Reduce soil pollution and enhance restoration** (25% area under organic agriculture; + 5-25% of land with reduced risks)

5. **Prevent erosion** and **stop erosion** on 30-50% of land with unsustainable erosion rates

6. **Improve soil structure** to enhance habitat quality for soil biota and crops; reduction of high-density subsoils by 30-50%

7. **Reduce by 20-40% the global footprint of EU’s food and timber imports on land degradation**

8. Significantly improve **soil literacy** in all Members States
How to meet the mission objectives?

**The role of living labs**

- Mission built around four building blocks:
  1. Ambitious R&I programme
  2. EU-wide soil monitoring programme
  3. Communication and citizen engagement
  4. **Co-creation, testing and demonstration of solutions in living labs and lighthouses**
    - **Living laboratories** → create knowledge and design, test and disseminate innovative solutions
      - Various land-uses (*farming, forestry, urban, industry*)
      - *Diversity of themes, production systems, approaches*
    - **Lighthouses** → test and demonstrate good practices
Why is it interesting for urban farming?

• The mission will address all types of soils including urban in all countries
  => Opportunities to develop living labs in urban settings

• Opportunities to connect with other living labs => learning

• Approaches centred on soil health => urban farming can make key contribution

• Citizen engagement, soil literacy improvements are all opportunities for urban food & farming initiatives
Thank you
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• More information:
  • [European R&I partnership on agroecology living labs and research infrastructures](#)
  • [Webinars on building the European partnership on agroecology living labs](#)