

# Living Lab Essentials & How to Set Up a Living Lab

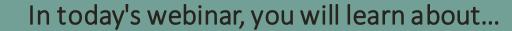
22 June 2023

10:00 - 11:30 CEST











# The EU Mission A Soil Deal for Europe

• The EU Soil Mission

Benefits of Soil
Health Living Labs
and Lighthouse

• Definitions of Soil Health Living Labs and Lighthouses

What are Soil Health
Living Labs and
Lighthouses

- What is and is not a Living Lab
- Why use a Living Lab and what are the benefits

Setting up a Living Lab

- The steps to set up a Living Lab
- Different roles in a Living Lab
- Living Labs pitfalls and challenges

NATIOONS Support to Applicants Activities

- Services offered by NATIOONS to support applicants
- ... and more!



## Please be aware:



Submit your questions via the Q&A box



We want to hear from you! Poll questions will be shared via slido.com



• If you have given your consent during registration to receive updates from NATIOONS and/or to receive information from other initiatives related to the EU Soil Mission, you have the right to withdraw your consent - by email to info@natiOons.eu



This event is recorded and the recording will be shared publicly.





Isabelle Couture Sr Project Manager European Network of Living Labs

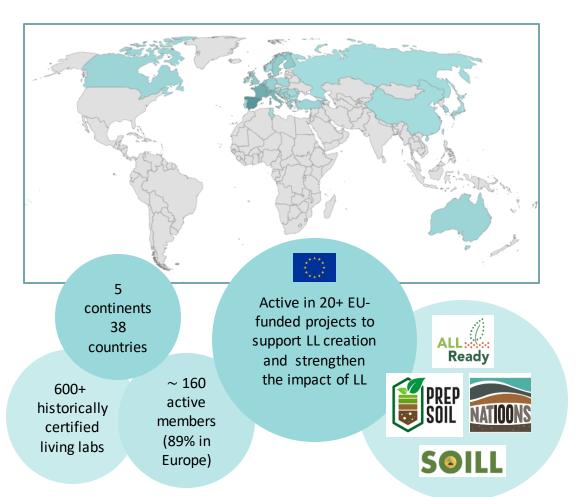


Vladislava Grbović Project Manager BioSense Institute



# **European Network of Living Labs - ENoLL**

**ENOLL** is the international non-profit association of certified Living Labs



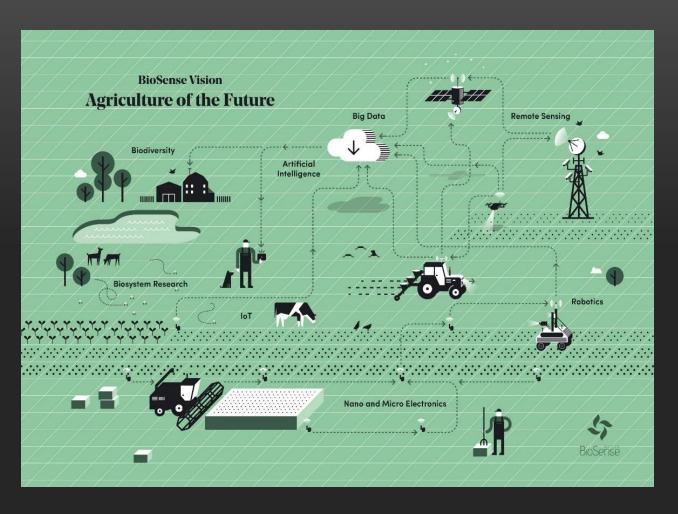
- Founded in 2006 under the auspices of the Finnish European Presidency
- ENoLL focuses on facilitating knowledge exchange, joint actions and project partnerships among its members
- Aim: Promote the Living Labs concept, support EU policies, enhance LLs and their sustainability and enable their implementation at a global level
- ENoLL growing community includes members that operate by the main living lab principles such as **multi-stakeholder co-creation**, **iterative active user involvement** and **real-life intervention**.





# BioSense Institute

R&D institute for Information Technology in Biosystems University of Novi Sad member Main focus – IT in Agriculture and Food Public Institute / First public start-up 137 permanent staff + 60 part-time staff Dynamic multidisciplinary international organization - Engineers, material scientists, biologists, agronomists... Participation in over 100 national and more than 50 H2020 and Horizon Europe projects Numerous national and international awards







This webinar is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.



The content developed and provided by ENoLL is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.



To view a copy of these licenses, visit <a href="https://creativecommons.org/licenses/">https://creativecommons.org/licenses/</a>.



# The EU Mission A Soil Deal for Europe

A Brief Introduction





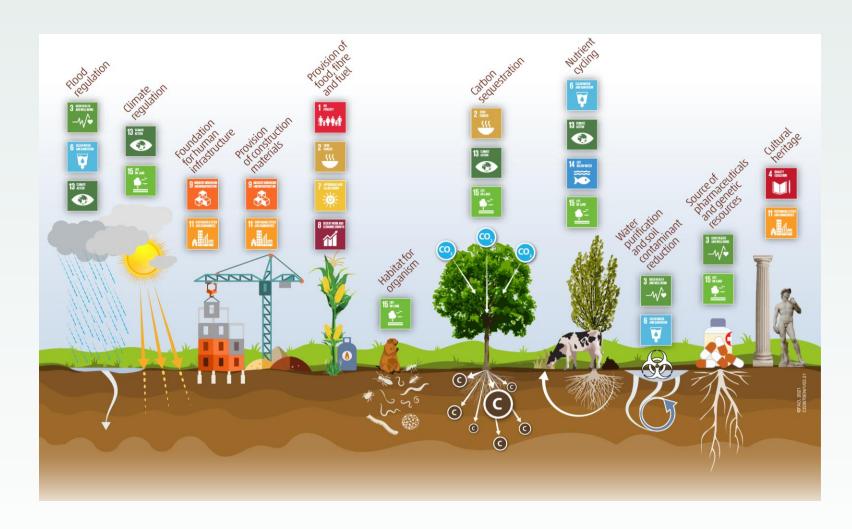






# Healthy soils

- are essential for all life-sustaining processes on Earth
- have the continued capacity to support ecosystem services.



Healthy soils, a prerequisite to achieve the SDGs. Source: fao.org



# **Unhealthy soils**

 Soils degraded by human activities, including anthropogenic climate change;

 Often enhanced by a lack of understanding or education;

 Concerns about 2/3rd of European soils: agricultural, natural and rural;

 Ecosystem services are limited, and costs of degraded soils are enormous (> 50 billion € yr<sup>-1</sup>).







## The Mission 'A Soil Deal for Europe'

- 1 out of 5 EU Missions;
- The Mission to lead the transition towards healthy soils in 2030;
- A Mission at the heart of the EU Green Deal: the transition to overcome threats by climate change and environmental degradation.



The benefits of the European Green Deal







2. Conserve and increase soil organic carbon stocks

3. Stop soil sealing and increase re-use of urban soils

4. Reduce soil pollution and enhance restoration



5. Prevent erosion

6. Improve soil structure to enhance soil biodiversity

7. Reduce the EU global footprint on soils

8. Improve soil literacy in society



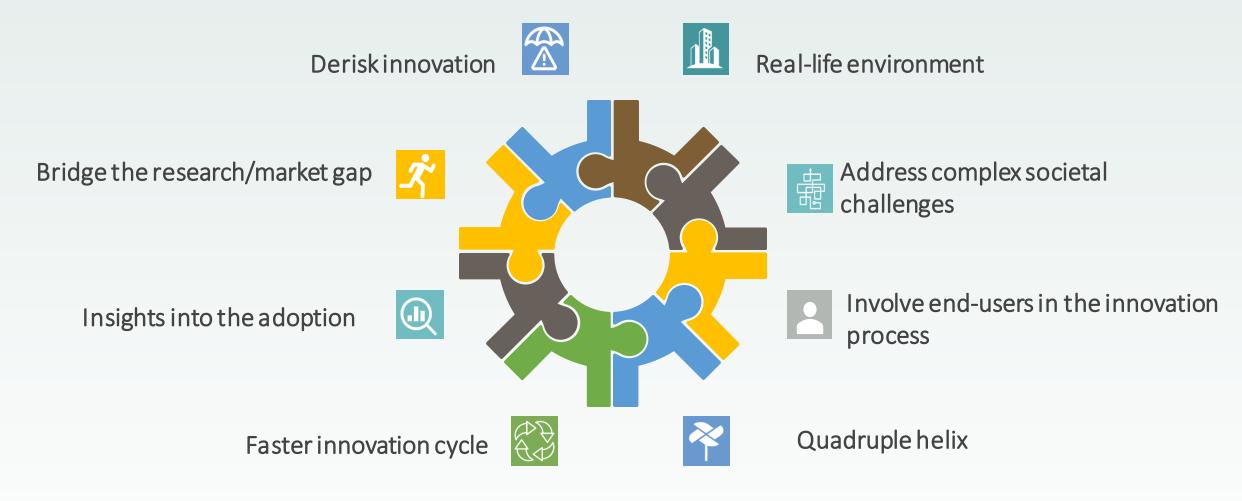
# Benefits of Soil Health Living Labs and Lighthouses











Living Labs provide a flexible and adaptable innovation approach that can help create positive change in society by addressing wicked problems through collaborative and participatory processes.







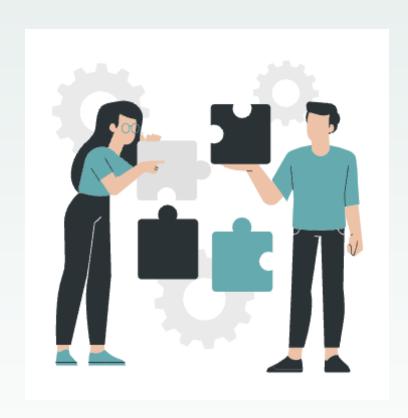
- Complex challenges cannot be solved by single stakeholders
- Lack of trust between stakeholders
- Different language
- Different approach (solution driven to problem driven)
- Different goals (solution for practice vs publishable results)
- Practical solutions from one farm are not widespread
- Practical solutions are not evaluated
- Lots of motivated farmers, still difficult for them to get heard
- ...



### Cooperating in a multi-stakeholder team makes you

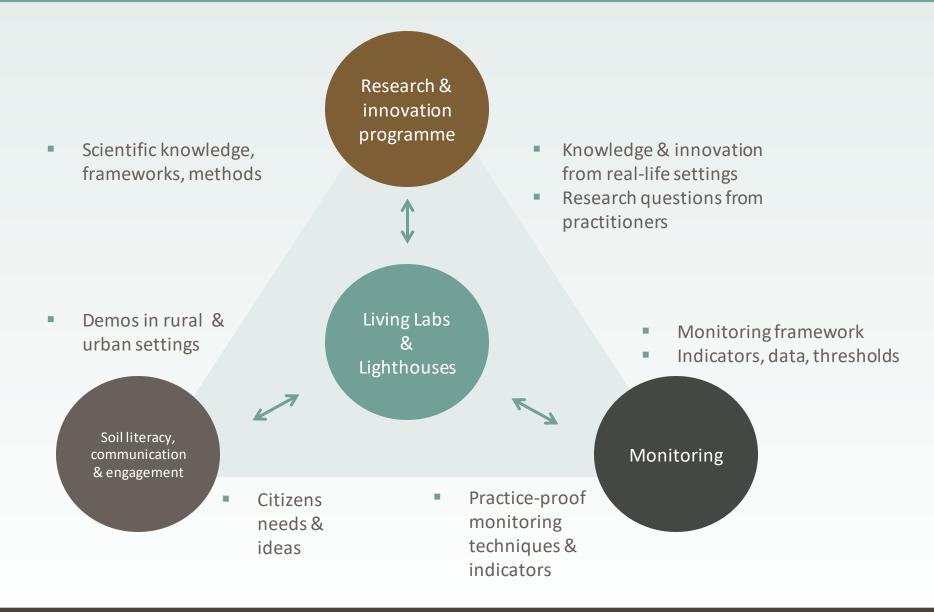
• • •

- ... become inspired
- ... learn to think out of the box
- ... better understand each other
- ... accept different perspectives from different stakeholders
- ... aim for the same goals
- ... work together instead of side by side
- ... quickly find solutions that have been thoroughly evaluated from different perspectives and that can be scaled more easily.





## The core element of the Mission: Living Labs and Lighthouses





# What are Soil Health Living Labs and Lighthouses











### Soil Health Living Labs \*



#### Collaborative initiatives to co-create knowledge and innovations

"User-centred, place-based and transdisciplinary research and innovation ecosystems, which involve land managers, scientists and other relevant partners in systemic research and co-design, testing, monitoring and evaluation of solutions, in real-life settings, to improve their effectiveness for soil health and accelerate adoption."

- User-centred, place-based and transdisciplinary
- **Multi-stakeholder**: Involve all relevant partners in co-design, testing, monitoring and evaluation of solutions,
- Use of **real-life** settings to accelerate adoption.
- Contain **several sites** (e.g. farms, forest exploitations, city parks) at **regional** or **sub-regional** level.

## **Soil Health Lighthouses**



#### Individual sites of exemplary performance

"Places for demonstration of solutions, training and communication that are exemplary in their performance in terms of soil health improvement"

- They showcase good practices and upscale solutions.
- They are places for demonstrations, training, networking and communication towards future users, policy-makers or the broader society.

<sup>\*</sup> This LL definition is customised for soil health LL and is provided within the "<u>A Soil Deal for Europe – Implementation Plan</u>". It aggregates elements of **ENOLL definition** with those of a WG of the G20 agricultural chief scientists on agroecological living labs.





#### A Living Lab is not...

**TEST BED** 

• "Pre-Living Lab" setting enabling rigorous, transparent, and replicable testing of scientific theories, computational tools and new technologies in a controlled environment with users (often mainly researchers).



• "fabrication laboratory" or fab lab - a small-scale workshop offering digital fabrication.

FABLAB

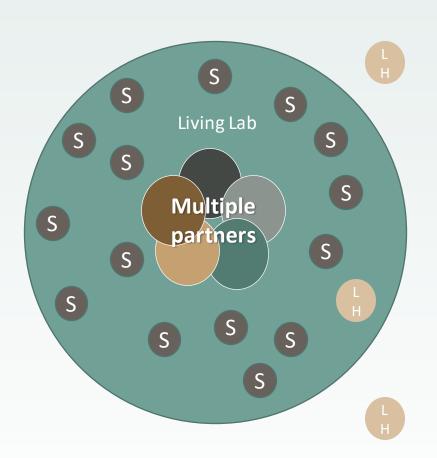
HOMELAB

• focus on testing and adapting new technologies based on their fit with the daily home environment.

Ballon, Pieter & Schuurman, Dimitri. (2015). Living labs: concepts, tools and cases. info. 17. 10.1108/info-04-2015-0024



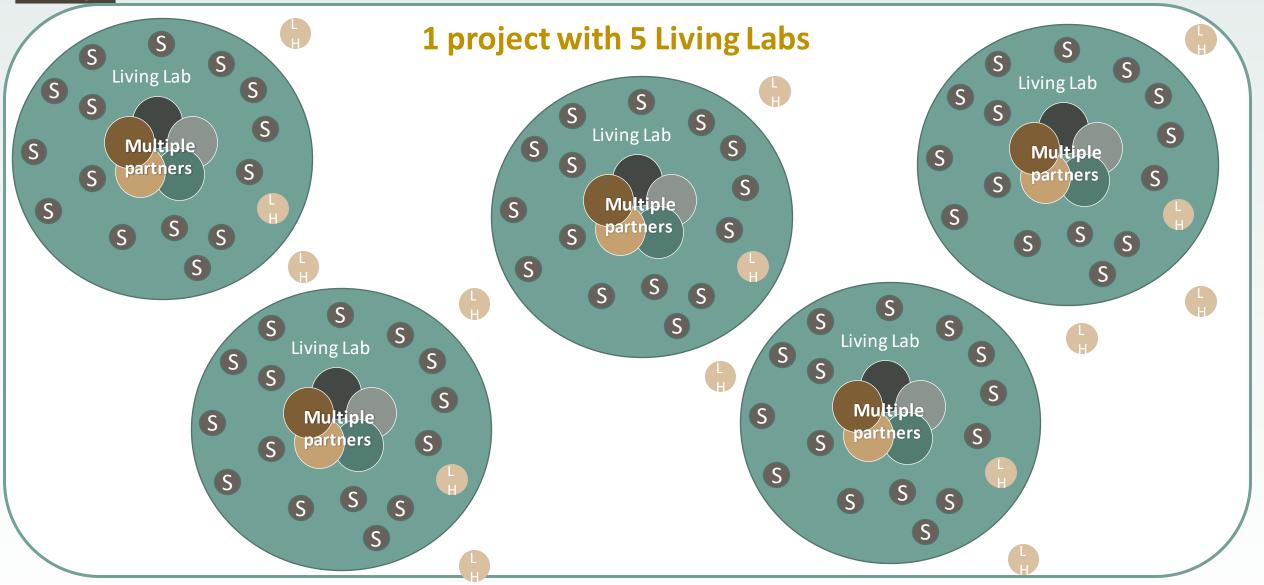




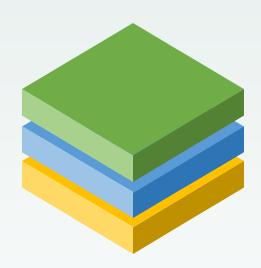
	Scale	Activities	Performance in soil health improvement
Living Lab	Regional/ subregional landscape	Coordinate experimentations & partners	In progress at landscape scale
Living Lab experimentation site	Local (one farm/forest, one urban site, etc)	Co-create knowledge and innovations	In progress on the site
Lighthouse	Local (one farm/forest, one urban site	Experiment and/or demonstrate	Demonstrated high performance











LAYER	DEFINITION	RESEARCH PARADIGM	LEVEL
MACRO	Living Lab constellation consisting of organised stakeholders	Open Innovation: Knowledge transfers between organizations	PPPP
MESO	Living Lab innovation project using Living Lab methodologies	Open & User innovation: Real life experimentation, active user involvement, multi-method and multi- stakeholder	PROJECT
MICRO	Individual Living Lab research steps and activities linked to the stakeholders' assets and capabilities	User innovation: User involvement & contribution for innovation	ACTIVITIES

#### A Living Lab focusses on

- a well structured organisation on the macro level
- with living lab projects in the meso level
- consisting of co-created activities in the micro level

© Dr. Dimitri Schuurman, imec – Ugent <a href="https://biblio.ugent.be/publication/5931264/file/5931265.pdf">https://biblio.ugent.be/publication/5931264/file/5931265.pdf</a>



## Essential Building Blocks of Living Labs





### Participants in the Living Labs: Quadruple Helix

#### Academia

Schools, colleges, universities, research institutes and innovation labs of all types, whether in the public, private or civil sectors

Academia



**PPPP** 

# Government & Public sector

Central, regional & local governments, intergovernmental organizations, government entities like ministries & agencies, public administrations & other publicly-owned entities

#### Citizens, civil society & users

Farmers, both non-profit formal organization like NGOs, charities, foundations, associations, trades unions & social entrepreneurs when not profit-seeking & more informal & loosely organized communities, land managers, citizens, interests groups & movements



Citizens



Industry

Government

#### Industry

Firms, companies, entrepreneurs, SMEs, corporates, other profit seeking organizations operating in the market, including commercial ICT & technology sectors, representatives of these stakeholders like employers' and trade organizations

Carayannis, Elias & Campbell, David. (2009). 'Mode 3' and 'Quadruple Helix': Toward a 21st century fractal innovation ecosystem. International Journal of Technology Management - INT J TECHNOL MANAGE. 46. <a href="https://doi.org/10.1504/IJTM.2009.023374">https://doi.org/10.1504/IJTM.2009.023374</a>.

Carayannis, E.G., Barth, T.D. & Campbell, D.F. The Quintuple Helix innovation model: global warming as a challenge and driver for innovation. J Innov Entrep 1, 2 (2012). https://doi.org/10.1186/2192-5372-1-2











**Agricultural LLs** 

Organic and mineral soils, specific farming systems approaches (organic, regenerative, conservation, precision), agroecology

Farmers and land users, agricultural advisors, agribusiness companies, etc.



**Urban LLs** 

Multi-use soils, soil threats, sustainable urban planning, etc.

Citizens, public administrations, inhabitants, civic groups, etc.



**Forestry LLs** 

Forest related measures (Forest Strategy 2030), land fragmentation, abandonment, landscape planning,

Landowners, forest managers, forest companies, forest owner associations, etc



**Industrial LLs** 

Multi-use soils, soil restoration, soil threats, soil sealing and pollution

SMEs, large industries, associations, consumers



## Soil Health Living Labs: Implementation Plan – Criteria\*

\*adapted from McPhee et al. (2021)

AIMS ACTIVITIES

PARTICIPANTS

CONTEXT

Source: EU Soil Mission Implementation Plan



#### Soil Health Living Labs: Implementation Plan – Criteria\*

\*adapted from McPhee et al. (2021)

AIMS

- Innovation, co-creation, formal learning
- Contribution to societal challenges, sustainability and resilience
- Improving soil health and related ecosystem services thereby achieving the soil mission objectives in a holistic manner (minimising trade-offs) in the specific context of the region in which it operates.





\*adapted from McPhee et al. (2021)



- Outreach and facilitation of engagement of the land users.
- Co-design/co-development/co-creation of innovations focused on improving soil health and ecosystem services, in major soils and land use systems in a given region/area.
- **Experimentation of innovative practices and solutions** using **transdisciplinary, multiactor, systems approaches, in real-life settings,** seeking to adapt scientifically-proven solutions to local conditions (on real farms, forest exploitation or urban soil management sites).

Source: EU Soil Mission Implementation Plan





\*adapted from McPhee et al. (2021)



- Measurement/monitoring/evaluation of impact of innovative practices/approaches on soil health and related ecosystem services at site and landscape levels, involving research and innovative measurement technologies (data management, sensing, monitoring, assessment modelling).
- Evaluation of socio-economic impacts and behavioural drivers and lock-ins related to the adoption of the innovations by soil managers.
- Contributing to **networking and knowledge exchange** with other sites/LL/LH & EIP-AGRI.
- Testing, validating and improving the comprehensive soil and ecosystem monitoring system through co-creation (including assessment, training and education on tools).

Source: EU Soil Mission Implementation Plan





**PARTICIPANTS** 

- **Public-Private-People partnership** involving if possible four groups: science, policy, practice, citizens.
- Active engagement in co-development and experimentation of the multiplicity of users having an impact on the achievement of the societal goals.
- Users of primary importance to achieve the soil mission objectives: soil managers (farmers, advisors, foresters, city greens managers, allotment holder, industries with impacts on soils etc.) and researchers. They would have the responsibility early in the process to connect with other interests such as: associations and organisations with an interest in soil health and related ecosystem services, local or regional government, scientists from a variety of fields outside soils (natural sciences, social and behavioural sciences etc.). The list of users may depend on the specificities of the places and challenges that are specific to that place.
- For demonstration activities: target audiences include soil managers, the public arena and relevant networks such as for example EIP-AGRI.





CONTEXT

- Transdisciplinary and participatory approach.
- Multi-method approach.
- Place-based; well defined system boundaries (e.g. farm, (sub)-watershed, neighbourhood, NUTS region, value chain) of relevance to soil challenges. This relates to specific regions and sectors.
- Real-life context = real farms/forest or urban/industrial sites, seeking to go beyond current practice.
- Long-term set-up.
- Openness, communication and dissemination and connection with networks.
- Multiple dimensions: technical, economic, social.
- Robust scientific set-up for ecosystem assessment.





# Criteria based on **exemplary performances** in terms of soil health and related ecosystems services

#### **ACTIVITIES**

- **Demonstration, dissemination and promotion** to soil managers, the public and the policy arena, at landscape scale and beyond, of land-use systems that satisfy criteria for sustainable development, in particular in terms of soil health and related ecosystem services.
- Reaching out to the policy arena linking results of the LH's to environmental rules and regulations. This in line with science based policy support and governance.

Source: EU Soil Mission Implementation Plan



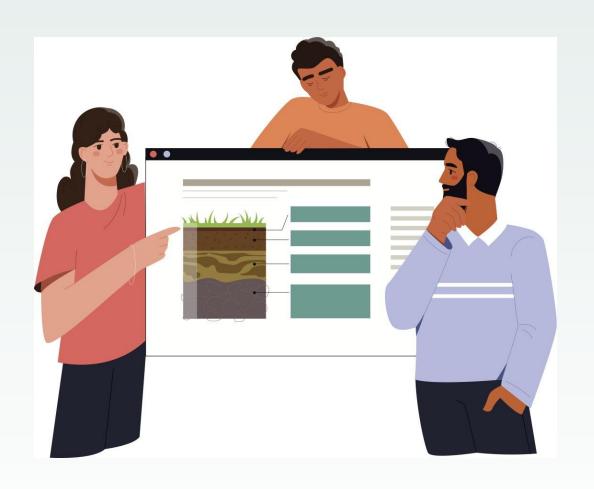
Setting-up a Living Lab











## Operation

Experience
Commitment
Openness
Communication

## Organisation

Partnerships
Management
Governance
Infrastructure

## Users

User engagement
User-driven
Co-created
Values
Reality

### **Business Model**

Innovation ecosystems
Lifecycle approach
Value chain coverage
Business models

Essential factors when setting up a Living Lab. Source: ENoLL (2019)







#### Living Lab Manager

- Most apparent internal role
- Initiator & keeper of LL strategy
- Everyday activities
- Maintaining LL effectively & sustainably



#### Panel Manager

- Recruiting & interacting with stakeholders' panel
- Selects stakeholders & communications



#### Pilot Manager

- Setup, run & scale up technologies during pilot project(s)
- Facilitate implementation and test of the innovation



# Human Interaction Specialist

- User-centred interactions
- Analyse results from human interaction methods
- Responsible for testing solutions before implementation



#### Project Manager

 Responsible for management of a particular Living Lab project



# Utilizers

'Customer' of the Living Lab

# Enablers

• Resource (financial) providers or faciliators

# Providers

 Infrastructure or service providers or faciliators

Users

Participants of the LL activities

Researchers

 Knowledge generators of the LL (user and stakeholder co-creation)





Define vision and mission, extract the purpose

SWOT analysis

Stakeholder mapping into quadruple helix Power vs Interest
Matrix of the
stakeholders

Value proposition

Stakeholder Journey canvas

Governance Model

Customers identification

Solutions (products-services) identification

Customer Journey

Business Model Canvas Strategic development plans



# Challenges in setting up a Living Lab

Assessing & measuring effects & effectiveness





Lack of structure

Suitable governance arrangements







Balanced representation

Creating a common vision





Motivation to participate

Individual interests and conflicting ideas





Integration of existing economic & political networks







- Not enough time to build trust
- Starting from technology or data
- No definition of a governance model
- Stakeholders' expectations
- No focus: addressing "everyone"
- Forgetting the role of the context
- Involving citizens at the end

UNALAB – Urban Nature Labs (Horizon 2020, GA 730052) <a href="https://unalab.eu/en/documents/urban-living-lab-handbook">https://unalab.eu/en/documents/urban-living-lab-handbook</a>



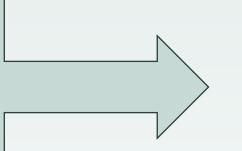
## Do not reinvent the wheel!



- Living Lab methodology handbooks
- Co-creation toolkits
- Start from existing communities
- Build on project results
- Attend dedicated trainings
- Learn from existing successful living labs!



The toolboxes contain the tools associated with the research methods and comprise practical templates and rules of the games



to help Living Labs managers, researchers and stakeholders achieve their objectives

## Examples of available toolboxes:











# Precision Agriculture for All

Bodrum Living Lab

Pomurje AGRIFOOD data lab





# PA4ALL

PRECISION AGRICULTURE FOR ALL

BioSense Institute



# STAKEHOLDERS ECOSYSTEM

- Farmers
- Citizens
- Academia
- SMEs & Entrepreneurs
- Policy makers











# **END USERS/ACTORS events**

Engagement with SMEs, startups, farmers, etc.







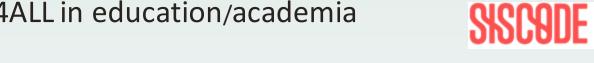


Annual Event - BioSense ecosystem



# BioSense Institute: PA4ALL Living Lab

## PA4ALL in education/academia





Prototyping in an agriculturespecialized school in Futog, Novi Sad, Serbia

PHASE 2

PHASE 1



PA4ALL concluded that the best solution would be to provide meteo stations and related trainings to schools



PHASE 4

PHASE 3

Desk research and context analysis Engage stakeholders





## PA4ALL in the industry

#### IPMWORKS project





- Regenerative agriculture
- IPMWorks project and IPM methodologies Serbian HUB (10 members)
- Sustainable farm management, integration of plant and animal production
- Integrated Plant Protection Methodology (IPM)
- Improving biodiversity for the agroecological ecosystem:
- Agroforestry
- Cover Crops
- Role of beneficial insects and flowers
- Push and pull principles
- Intercropping methods





# AWISH and piloting in EU project

#### Info Slaughterhouse

- Republic of Serbia
- Vojvodina region, Vrbas
- ●1500 pigs per day with a maximum of 280 pigs per hour on the production line
- Industrial slaughterhouse with mass processing of meat and final products

# aWISH

#### Actors involved

- •6 pig farms with an annual production of around 135,000 feeder pigs
- •5 trucks with 3 trailers for livestock transport into the slaughterhouse
- •State veterinarians, veterinarians on pig farms and in the slaughterhouse
- Associates from universities and institutes

#### Available AWI data

- Daily food consumption of the feeder pigs
- •Indoor environment and food level data on the pig farm
- •Food line failures with message alarms
- Low food-level message alarms





# BioSense Institute: PA4ALL Living Lab

## PA4ALL – Digital Village

 The project strives to educate and demonstrate how digital technologies transform agriculture followed by an example of the transformation of an entire Serbian village named Mokrin.

- Project programme:
- Educating farmers
- Installing meteostations on-farms in Mokrin
- On-farm demo events
- Software for farm insurance, crop monitoring, etc.





# **Bodrum Living Lab**





"Design Thinking and Services"



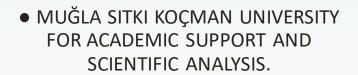
The goal is to apply and disseminate the living lab methodology via design thinking, public and scientific data, behavioural science, and green mission













• MARIN SPORTS ACADEMIES



• INA – INTERNATIONAL NAUTICAL ARCHAEOLOGY INSTITUTE BODRUM.







- Ministries of the Turkish Republic (Usually, Ministry of Environment, Urbanism and Climate Change, Ministry of Agriculture and Forestry, and Ministry of Culture and Tourism)
- Muğla Governance for governmental solution and support (Muğla Provincial Directorate of Environment, Urbanism and Climate Change, Muğla Provincial Directorate of Agriculture and Forestry)
- Local municipalities of the city (usually Bodrum Municipality)





NGOs related to agriculture, fisheries, environment, and tourism, usually from Bodrum, and/or Egean &, Gökova Region





- Muğla Chamber of Commerce,
- Bodrum Chamber of Commerce,
- Bodrum Chamber of Shipping,
- Muğla Technopark,
- Private farmers and fisheries companies
- International Association of Travel and Tourism Professional Bodrum (SKAL)
- International and National Regattas (Bodrum Sea Rescue Association), etc.





# Pomurje AGRIFOOD data lab





### Digital Innovation Hub - DIH AGRIFOOD:

- ITC Innovation technology cluster Murska Sobota, is focused on cross-sectoral innovation and "smartification" of rural sectors, based on the introduction of Information Communication Technologies (ICT)
- KGZS Institute of Agriculture and Forestry (public agricultural advisory service & research organization), KGZS has more than 6000 end-users (farmers), it is Member of the Chamber of Agriculture and Forestry of Slovenia, and
- **farmers**, different size, production type and structure, where pilot activities are implemented (like precision fertilization and spraying, remote sensing, tracking the farm activities through the use of tracking systems...).





The platform for data collection, analysis, and data space service for farmers, farm advisors, and other parties. Data include satellite & drone imagery, soil analysis data, fertilisation plans, use of fertilisers and phytopharmaceuticals, farm task records, data from machinery tracking systems, farm accounting data, data from weather stations and IoT devices, like sensors for temperature and humidity, pest detection cameras etc.

Precise fertilization and spraying service for farmers

FMIS named Farm Manager that is digitalized version and upgrade of the Catalogue of Farm Calculations, a tool that enables economic assessment of farm production, modeling, and advising

Blockchain technology for tracking the food from farm to fork

DIH AGRIFOOD Platform, a free and open networking platform, where different stakeholders can search for other organizations, projects, networks, products and services, innovation hubs from Agriculture and Food Production sector, as also participate on the platform.

DIH AGRIFOOD Data Space, federally organised and built modern data sharing platform, where data is shared among stakeholders from the Agrifood sector on the basis of pre-known policies and rules (EC guidelines) defined by the data management model.



## Pomurje AGRIFOOD data lab main Stakeholders

#### **Industry Providers**

Mainly SMEs providing technical solutions, like satellite, UAV, and navigation system services, tracking systems, IT solutions, remote sensing with IoT devices, and programming...)

#### **Government & Public Sector**

Chamber of Agriculture and Forestry of Slovenia, Ministry for Agriculture, local municipalities

#### **Citizens**

Farmers, also food processors, and consumers

#### **Academia**

The University of Maribor, Faculty for Agriculture and University of Ljubljana, Biotechnical faculty, researching the effects of different farm practices on the farm economy, environmental impact, soil...

University of Maribor – Faculty of electrical engineering and computer science is a developing partner in DIH AGRIFOOD Data Space



# NATIOONS Support to Applicants Activities









# NATIOONS: Engagement & Support to applicant LLs



Engagement events



Matchmaking – national



Factsheets & E-learning



Helpdesk & FAQ



Webinars LL methodology



Coaching



Thematic webinars



Matchmaking – International & thematic

Inform, engage & promote.

43 countries (EU MS + AC), national language

Facilitate creation of local LL.

Online and along engagement events

Inform & train.

LL, open call, types of LL peculiarity

Support.

Online, addressing all questions on LL creation

Train.

How to set up, develop and enlarge a LL.

Support.

Available in local language, appointed mentors.

Inform, train & engage.

Different themes for specific land uses.

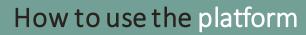
Facilitate creation of partnerships of LLs.

Online and along thematic events



# **Matchmaking opportunities**

13-03-2023 - 31-10-2024 Supporting the EU Transnational Mission "A Soil Deal nati00ns.eu for Europe" across matchmaking national communities Establish your Living Lab & consortium platform





Register

Make you profile attractive to others

Search for opportunities

Propose your expertise!





## **COMPANIES**

# **371** Organisations found Search PARTICIPATION TYPES **COUNTRIES ORGANISATION TYPES** Academia (102) Other (53) Industry (34) Category Association/Organisation (24)

## **PARTICIPANTS**

411 Participants found
Search
BOOKMARKED
MATCHMAKING
PARTICIPATION TYPES
Participant (380)
Coach (31)
ORGANIZATION TYPES

## **MARKETPLACE**

	nities found	
Search		Q
EXPERT	ΓISE (43)	
	CT COOPERATION (2	29)
STAGE Early (16)		
Planing (12	2)	
Execution	(8)	



# Other Resources











#### https://prepsoil.eu/living-labs-and-lighthouses/map





**Urban LLs** 



**Forestry LLs** 



**Industrial LLs** 



The map of LL and LH initiatives was initiated by the Soil Mission Support project (GA No. 10100025), which identified 180 initiatives with potential relevance for Living Labs and lighthouses. PREPSOIL aims to review these initiatives, refine the current map and supplement it with further data including those collected through a self-registration form. Thus, we expect that the LL and LH initiatives collected via this self-reporting will be aligned as much as possible with the criteria for the selection of a soil health LL/LH under the Soil Mission (as presented in the Mission Implementation Plan1). Currently, the map may serve as inspiration for networking and creating the right contacts between interested stakeholders.



- Different types of LLs/LHs
- Different land use
- Different socio-economic context

Inventory of BPs for current soil LLs and LHs

Definition of model BPs to help LLs/LHs to upscale (macro-level)





Needs assessment



Co-design, validate, and refine a "service package" to accelerate the adoption, maturity, and optimise the running of the Mission LLs/LHs under different land use contexts

Co-creation activities

Workshops with selected LLs & LHs



# Focus on maturity domains

- Themes
- Innovation processes
- Communications
- Financial sustainability

### Identification of:



- Development potential
- Needs to mature

Recommendations for future Soil LLs & LHs









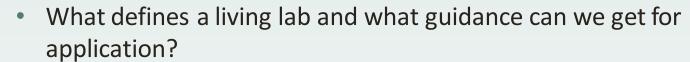












- How to set up a LL at regional level? Which are the challenges?
- Is there a size recommendation for Living Labs?
- Is there a Governance structure that you can recommend?
- Are there any formal (legal?) steps in establishing the LL?
- What are the main platform of communication for Living Labs?
- How can I join the European Living Labs network?
- How to scale up a Living Lab?

- Can a LL on agricultural soil health or Carbon Farming be created without citizens?
- What are the best methods of engaging the stakeholders?
- How many hectares or % of the farm might/shoud be necessary for showcasing the practices and becoming a Lighthouse?







- How can a Site be proposed so that it can be integrated into a LL?
- Where can I find other partners or other Living Labs?



### **SOIL**





- How to address the soil challenges and the needs of a region when creating a LL (get info with previous surveys? get info on the region in farmers and/or producers associations?)
- Is there any protocols developed for monitoring and measuring relative change in soil carbon content (SOC) or Soil Organic Matter (SOM)





Questions?



# **Concluding Remarks**











# Soil health (0108)

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

<u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-miss-2023-soil-01-08</u>

# Carbon farming (0109)

HORIZON-MISS-2023-SOIL-01-09: Carbon farming in living labs

https://ec.europa.eu/info/fundingtenders/opportunities/portal/screen/opportuni ties/topic-details/horizon-miss-2023-soil-01-09

- Deadline for applications: 20 September 2023 17:00:00 Brussels time
- Single-stage submission via the Funding & Tenders Portal;
- Research and Innovation Actions: 100% funding for any actor
- 4-5 Living Labs for each application in at least three different Member States and/or Associated Countries.





中心 • Connect with others (matchmaking!)



Ask questions (helpdesk!)



Next Webinar:





# Join the Community



nati00ns.eu



@nati00ns



nati00ns

# **Contact Details**

Isabelle Couture <a>isabelle.couture@enoll.org</a>

Vladislava Grbovic <u>vladislava.grbovic@biosense.rs</u>







