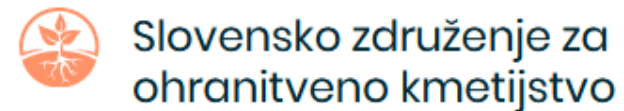


“Learning methodologies
and aspects of RA in adult
education:
Living laboratories as a
new integrative
knowledge nexus for RA”

LARA RESMAN

SLOVENIAN ASSOCIATION FOR CONSERVATION
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Living Labs

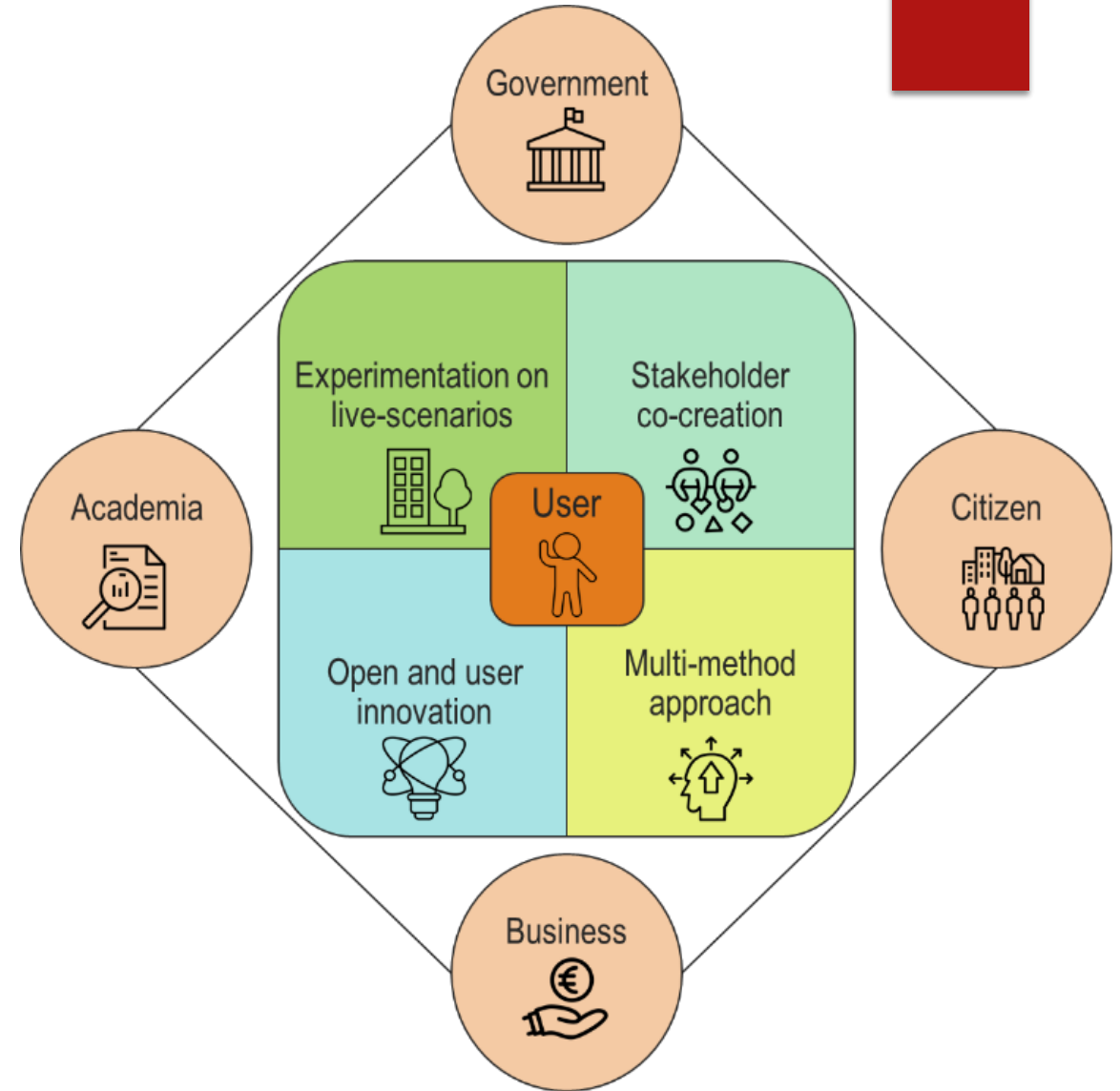
DEFINITION

- ▶ **Living labs** are open innovation ecosystems in real-life environments using iterative feedback processes throughout a lifecycle approach of an innovation to create sustainable impact. They focus on co-creation, rapid prototyping & testing and scaling-up innovations & businesses, providing (different types of) joint-value to the involved stakeholders. In this context, living labs operate as intermediaries/orchestrators among citizens, research organisations, companies and government agencies/levels.^[1]

LIVING LABS QUADRUPLE HELIX

► Living labs are defined as **user-centred, open innovation ecosystems** based on a systematic user co-creation approach integrating research and innovation processes in **real life communities and settings**. In practice, living labs **place the citizen at the centre of innovation**.

► Living labs are **organisations** involving stakeholders from the quadruple helix to create **a shared vision, mission and strategic goals** with/for their stakeholders and define multiple different innovation projects existing out of co-creation activities.



Key elements of a living lab

- ▶ Within a wide variety of different living labs, all living labs use the six same building blocks. ENoLL, the European Network of Living Labs, describes them as follows:
 - **Orchestration:** *the living lab operates as the orchestrator within the ecosystem to connect and partner up with relevant stakeholders*
 - **Multi-stakeholder participation:** *taking a holistic view on society, involving stakeholders from the quadruple helix model (government, academia, private sector, and citizens)*
 - **Active user involvement:** *a living lab involves relevant stakeholders 'actively' in all relevant activities, ensuring their feedback is captured and implemented throughout the whole lifecycle of the innovation*
 - **Co-creation:** *in a living lab, values are bottom-up co-created not only for but also by all relevant stakeholders, ensuring a higher adoption at the end*
 - **Real-life settings:** *a living lab operates in the real-life setting of the end users, infusing innovations into their real life instead of moving the users to test sites to explore the innovations*
 - **Multi method approach:** *each living lab activity is problem driven. Therefore, the methodological approach towards every individual activity will be selected based on the expected outcomes of the activity and the stakeholders who needs to be involved.*

SOIL LIVING LABS SUPPORT MECHANISMS

EU SOIL MISSION

- ▶ Missions are a novelty of the EU research and innovation programme, Horizon Europe. They are a new way of bringing concrete solutions to some of our greatest challenges. Restoring and maintaining soil health is one of these major societal challenges.
- ▶ The Mission “[A Soil Deal for Europe](#)” will support the transition towards healthy soils by 2030 by putting in place an effective **network of 100 living labs and lighthouses** in rural and urban areas. In addition to **creating knowledge and solutions for soil health**, the Mission will advance the development of a harmonised framework for soil monitoring in Europe and **increase people’s awareness** on the vital importance of soils.

Funding opportunities

- ▶ New funding opportunities are open to contribute to the Mission Soil. Calls for applications are open and will close on 20 September 2023.
- ▶ There are different topics open for the submission of proposals:
 - **subsoil;**
 - **soil pollution and digital tools;**
 - **innovations to prevent and combat desertification;**
 - **soil-friendly practices in horticulture;**
 - **spatial planning;**
 - **cultural and creative initiatives for bringing communities closer to soil, and**
 - **establish the first wave of Living Labs.**
- ▶ The Horizon Europe [Work Programme 2023 - EU MissionsEN•••](#) is published.

LIVING LAB

- ▶ Living labs are a core element of the Mission and key to accelerate the adoption of sustainable practices for soil management which are adapted to local conditions. Living Labs are real-life sites in rural or urban areas in which people from various sectors and backgrounds experiment and test solutions in a co-creative manner.

LIGHTHOUSE

- ▶ Each living lab is composed of a group of sites (e.g. farms, forest stands, urban green areas) working together at regional or sub-regional level.
- ▶ Lighthouses are individual sites of exemplary performance with regard to a certain practice.

LIVING LABS & EU SOIL MISSION SUPPORT

ENoLL



The **European Network of Living Labs (ENoLL)** is the **international, non-profit, independent association of benchmarked Living Labs.**

ENoLL facilitates knowledge exchange, joint actions and project partnerships between its **historically labelled +480 members in Europe and worldwide.**

Its aim is to **promote** the Living Labs concept in order to **influence EU policies, enhance Living Labs and enable their implementation at a global level.**

<https://enoll.org/>

Prepsoil



Preparing the European Mission towards healthy soils

project **facilitates the deployment of the Mission across European regions.** This will be achieved through the **co-creation and roll out of tools and spaces for interaction, knowledge-sharing and co-learning,** as well as **stocktaking and dialogue** to understand how regional assessment of soil needs, supported by harmonised monitoring mechanisms, can then lead to action in living labs and light houses for soil health.

<https://prepsoil.eu/>

Nati00ns



Supporting the EU Mission "A Soil Deal for Europe" across national communities

acts as a messenger for the EU Mission Soil through multiple activities:

- Raising awareness nationally and regionally
- Providing access to capacity-building materials
- Addressing regional soil needs through LL setups
- Fostering matchmaking for LL clusters

<https://nati00ns.eu/>

EXAMPLE: REGENERATIVE AGRICULTURE LIVING LAB, SLOVENIA

SACA

Slovenian association for Conservation Agriculture

- Multi-actors (research, academia, advisors, farmers...)
- Promotion of RA
- Knowledge transfer through seminars, field trips, information (web page, leaflets...), projects
- Consulting
- Policy influencing

PUBLIC AUTHORITIES

Chamber of Agriculture and Forestry Slovenia

- Public agricultural advisory service, knowledge transfer, CAP, communication with end-users

Ministry of Agriculture, Forestry and Food

- policy, CAP

Local municipalities, eg. Občina Ormož

- Promotion, policy, bridge to end-users

ACADEMIA

- Research
- Field experiments
- Knowledge transfer

Biotechnical Faculty Ljubljana

Faculty of Agriculture and Life Sciences Maribor

END USERS

Farmers from all over Slovenia

Approx. 70

- Practice
- Lighthouses
- Field trips
- Knowledge sharing

LL in action – Swiss NO-TILL 2023



EXAMPLE: REGENERATIVE AGRICULTURE LIGHTHOUSE – FARM CIGÜT, SLOVENIA

GENERAL INFORMATION

Location of farm: Slovenia	
Name of the farmer	Štefan Cigüt jr.
Size of farm	380 ha
Permanent staff	6 regular and 2 seasonal
Main products of farm	Crops (corn, wheat, barley, sunflowers, soybeans, alfalfa, triticale, pumpkins) and livestock production.



CURRENT REGENERATIVE AGRICULTURE PRACTICES ON THE FARM

Farmland cultivated with RA practices All	
Crops produced with RA practices	All of them
Duration of using RA practices	Since 2013

"With minimal interventions in the soil, we reduce the frequency of passages with machinery, which has a positive effect on less compaction of the soil. By using the methods of regenerative agriculture, we influence the entire agro-ecosystem. It is important that regenerative agriculture is carried out permanently, for several years."



THANK YOU FOR ATTENTION!

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