Welcome to today's public webinar!

"Towards sustainable European land-use strategies – the importance of participatory approaches"

23 January 2024, online

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Agenda –23 January 2024

13:00-13:05	**Brief introduction of the Europe-LAND project** *Franziska Wolf (Hamburg University of Applied Sciences, Germany - HAW)*
13:05-13:20	**Co-creating a common understanding of the socio-ecological system with participatory modelling** *Veronika Gaube (University of Natural Resources and Life Sciences, Austria - BOKU)*
13:20-13:35	**Multi-actor approach for co-creating local and regional strategies for sustainable land management** *Danka Moravcikova (Slovak Agricultural University in Nitra, Slovakia - SUA)*
13:35-13:50	**Living Lab methodologies – Europe-LAND perspectives** *Mihaela Sima (Romanian Academy, Institute of Geography, Romania - IGAR)*
13:50-14:00	**Q&A and End of webinar**

23 January 2024, online

Speaker:
Franziska Wolf, Hamburg University of Applied Sciences, Germany

“Introducing the Horizon Europe project “Towards Sustainable Land-use Strategies in the Context of Climate Change and Biodiversity Challenges in Europe”

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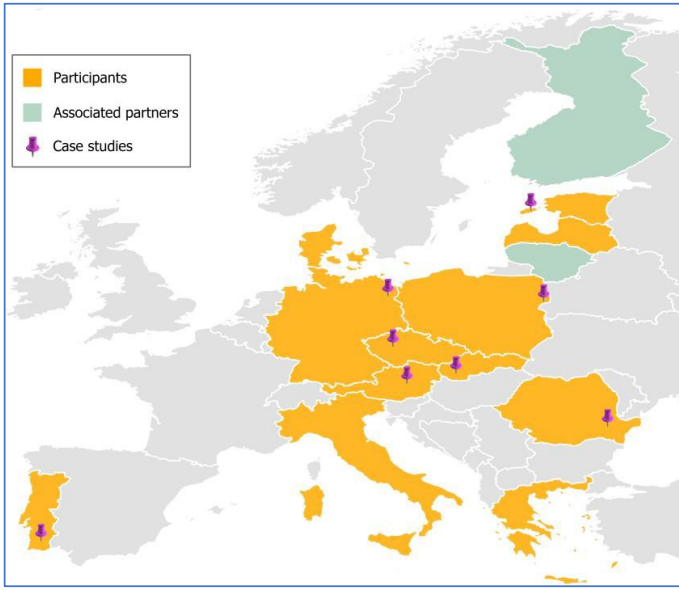
Europe-LAND in a nutshell



- **Consortium**: 13 partners (12 countries, 8 cases), 2 Associates (FIN, LIT)
- **Duration:** 1 June 2023 til 31 May 2027

Main Objective:

to identify, develop, test and implement integrated tools to **improve the understanding of the factors behind land-use decisions** as well as the **stakeholders' awareness and engagement** in terms of climate change and biodiversity challenges across Europe.

This includes **increasing the knowledge base** on how such decision can be oriented towards the efficient and socially responsible pursuit of multiple policy objectives on various scales in order to **gain a national, regional and pan-European vision** that supports land-use strategies, climate change mitigation and adaptation, as well as biodiversity conservation.

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Methodology

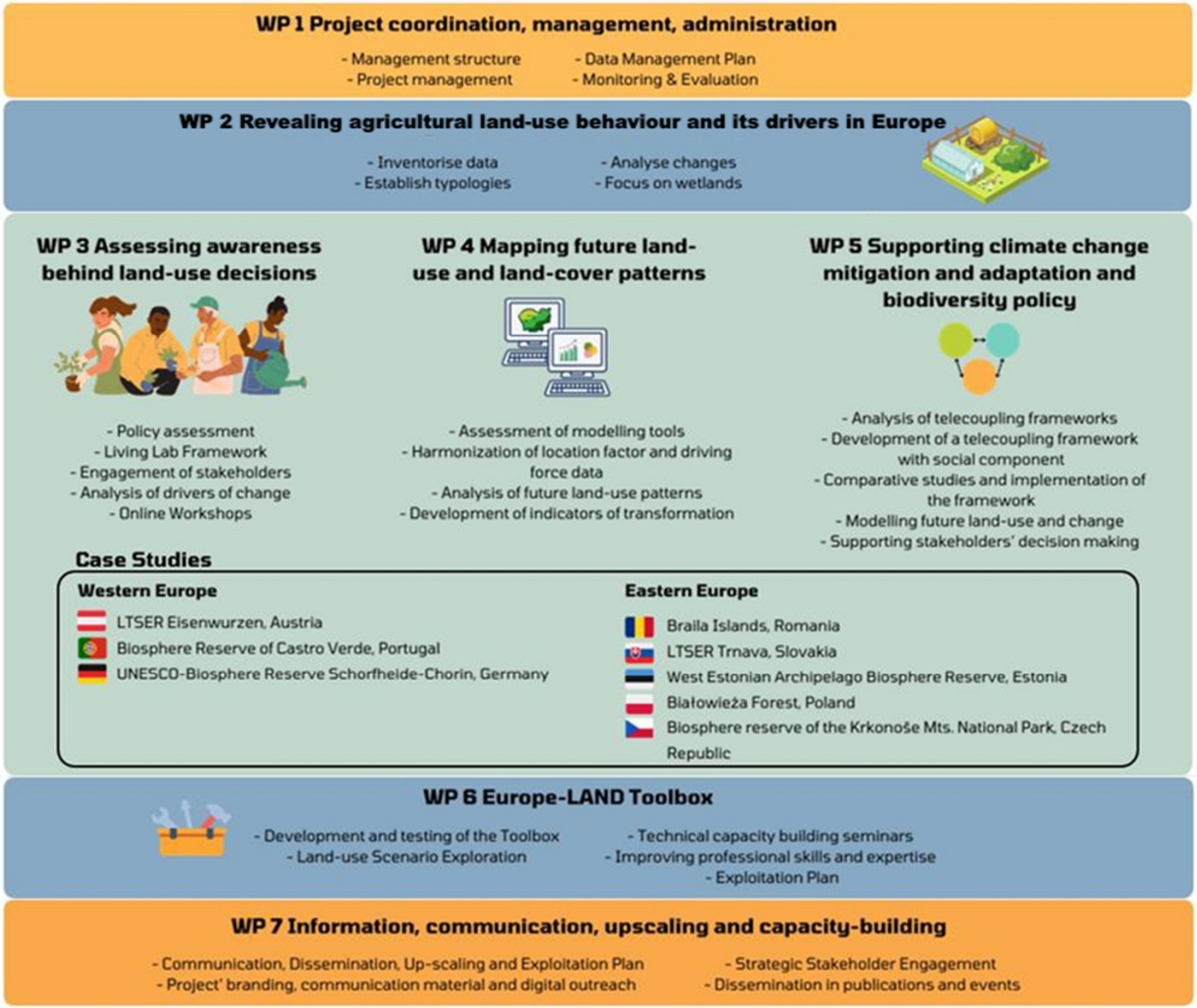
Tasks include:

- **national-level analyses** (e.g. harmonization of fragmented European data) - **land use/land management surveys**,

- **modelling** of land-use changes (basis: CLUE model), complemeted by

- **cross-cutting feature: 8 local cases** (allowing for East-West comparison) as demonstrators and

- **capacity-building** (open access!)



Save-the-dates
Upcoming project activities

- **15 Feb 2024 – Europe-LAND's 4th public webinar on "Future land-use and land cover patterns"**
- **14 March 2024 – Europe-LAND's 5th public webinar on "Introducing the Europe-LAND Case Studies"**
- **18 April 2024 – Europe-LAND's 6th public webinar on "Exploring the potential of Telecoupling for improving European land management"**
- **For EU Research Projects + EU Policy Officers: EU Science Policy dialogue**, first virtual gathering on 16 April 2024 (online registration opens soon!)

All events are announced on the project website **www.europe-land.eu**

Thank you for your attention!

Team Hamburg
Prof Walter Leal, Franziska Wolf, Jasmin Röseler, Dominique da Silva

Hamburg University of Applied Sciences, Research and Transfer Centre „Sustainable Development and Climate Change Management“, Ulmenliet 20, D-21033 Hamburg, Germany

Contact: info@europe-land.eu / **Project website**: www.europe-land.eu
Feel free to join our **LinkedIn Community** at https://www.linkedin.com/company/europe-land/

23 January 2024, online

Speaker: Veronika Gaube & Barbara Smetschka
Institute of Social Ecology, BOKU, Vienna

Co-creating a common understanding of the socio-ecological system with participatory modelling

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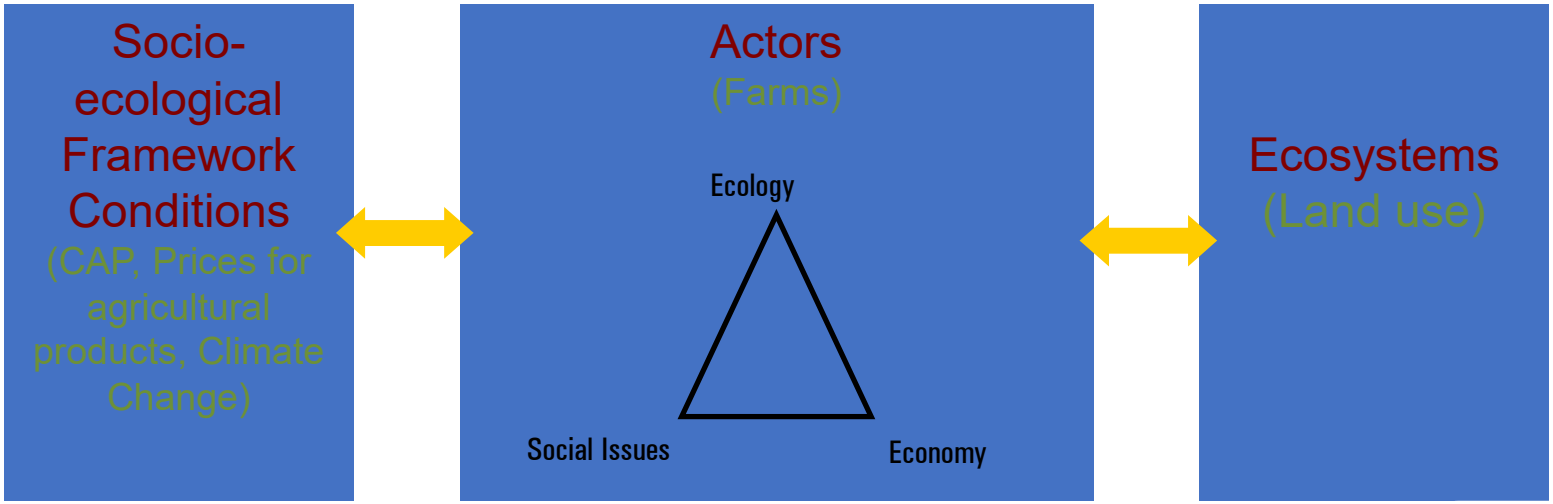
Why: participatory modelling

- bringing diverse stakeholders, experts and representatives into the process in order to enhance **quality** of data, results, learning and implementation
  - gathering mental modells (crucial factors, causal loops) of stakeholders (data)
  - shared understanding of system dynamics resulting in new insights, scenarios and strategies (results)
  - fostering exchange between stakeholders and creating a room where model results can be discussed and have an impact on mental models (learning)
  - developing / assessing of strategies by stakeholders (implementation)
- helping to **illustrate** system dynamics
- structuring **communication** processes for problem solving

Context / Research question

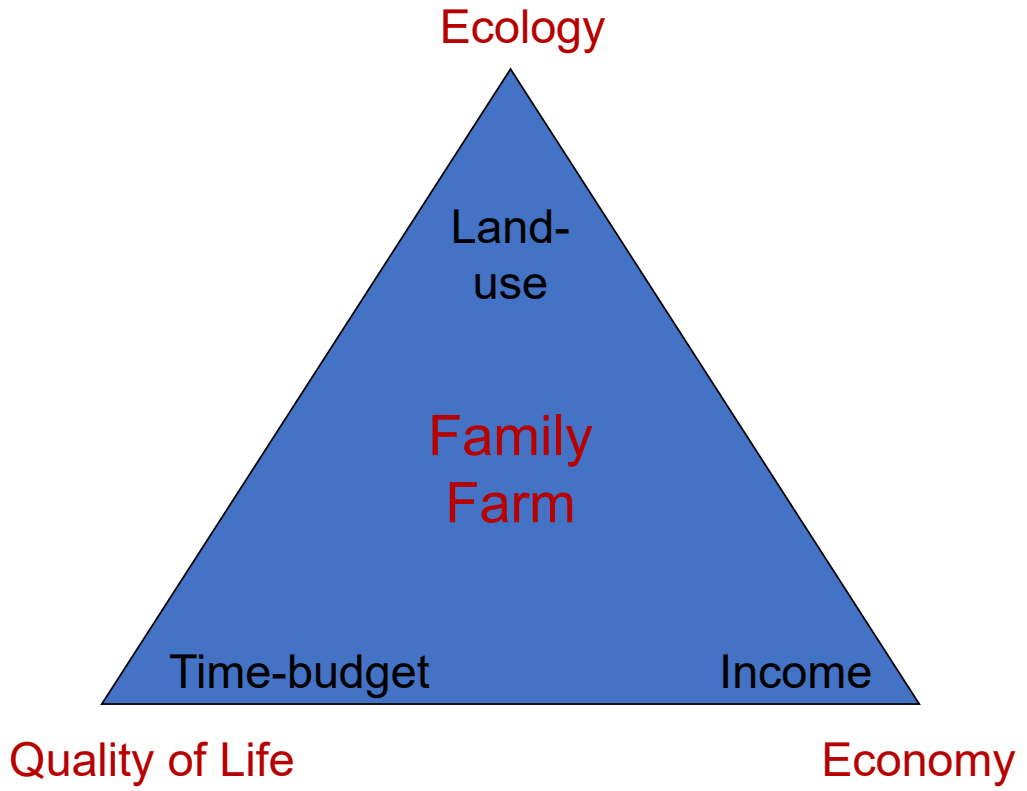
How do different framework conditions influence decision making of agricultural actors?

How do decisions on food production impact ecosystems?

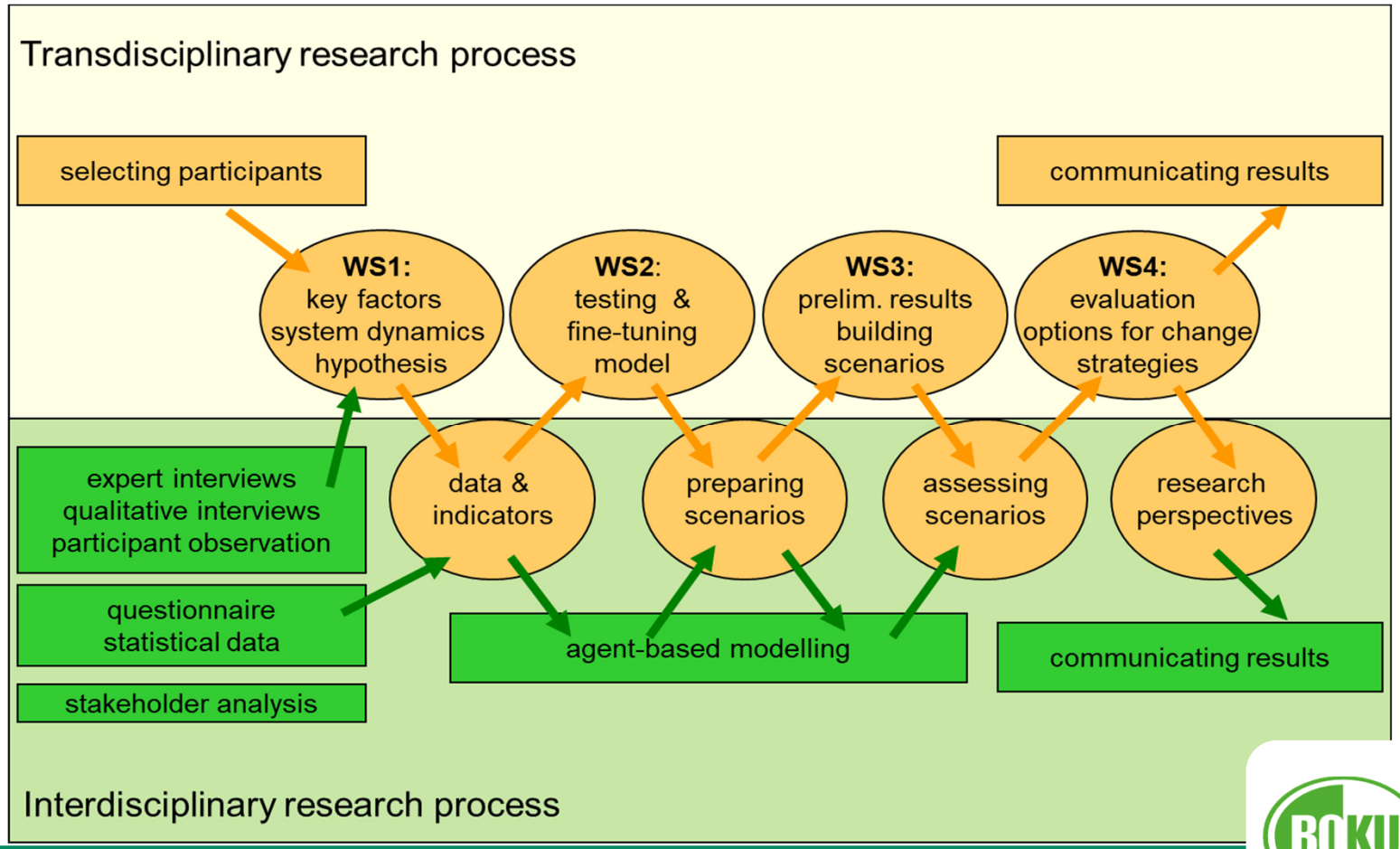


Context / Research question

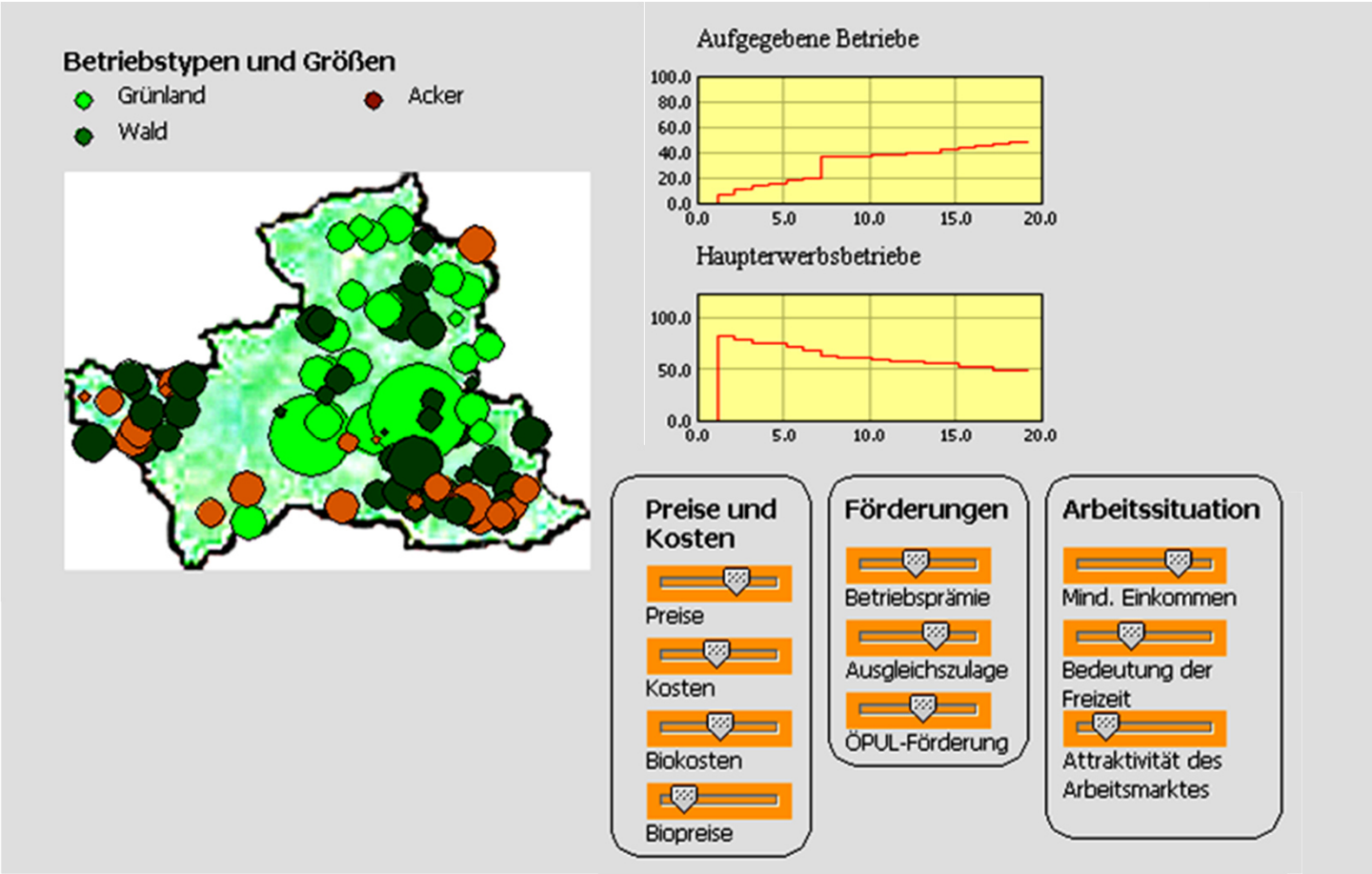
Complexity of decision making of food producers



How we designed a participatory modelling process



model interface: computer game?



Learnings: what can be expected?

		combined to	
	Participatory research using mental models	**Participatory development of formalized simulation models**	**Formalized / agent-based modelling**
Strength	Robust knowledge; Open process improved communication	Results for scenarios; Integration across social and natural sciences; Enables deliberation	Abstract, complex; Logical rigor, accuracy; Need for reduction
Weaknesses	Doubts on accuracy and effectiveness	Time consuming; Demanding	Abstract, complex; Alienating to some disciplines
Expected achievement	Dialogue	Creative irritation; Interactive interface; Options for change	Systems thinking

Table 3: Advantages and disadvantages of components of participatory modelling methods

Source: Smetschka, B.; Gaube, V. (2020): Co-creating formalized models: ENVIRON SCI POLICY

crucial issues / questions

- Stakeholder selection
- ID cooperation: qualitative and quantitative data and modells
- Problem framing: Find a topic interesting for all partners

- Method: modelling — is demanding for all partners, but
  - formulating questions
  - being able to design the relevant controllers and results
  - developing scenarios
  - trying to understand and discussing modell runs — can be attractive to all partners

- As long as you are aware, that expectations on results differ:
  - strategies and measures for stakeholders and experts
  - knowledge on socio-economic and biophysical dynamics for scientists

BOKU SEC Institute of Social Ecology

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Thank you!

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23 January 2024, online

Speaker: Danka Moravcikova, Slovak University of Agriculture in Nitra (SUA), Slovakia

A multi-actor approach for co-creating local and regional strategies for sustainable land management (social sciences perspective)

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Content

I. Main aspects of multi-actor approach

II. Participatory research: key principles

III. Participatory research methods

SUA
Slovak University
of Agriculture
in Nitra

I. Main aspects of multi-actor approach

- participatory research process in which various actors contribute with their knowledge and experience in different ways
- integrated approach, involves an understanding of technological aspects, economic constraints, social behavior, the legal and institutional framework, and contextual practices
- approach that involves looking at different dimensions, including technical, organisational and social aspects, which helps to bridge the gap between science and practice, applying a “systems approach”
- approach that can help in decision-making procedures and should empower stakeholders to have an impact on policy

II. Participatory research: key principles

Strategies used in participatory research focus on *process and capacity building*.

The process of conducting research is as important as the research outcome, you need to:

1. **clarify** purpose of the research and **establish** a common understanding of the issue;
2. **build** relationships and trust;
3. **establish** working practices;
4. **observe, gather** and **generate** materials; and
5. **realise** collaborative analysis (+ plan and take action).

II. Participatory research: soft skills of the researcher

- Respect for others' knowledge and the expertise of experience
- Ability to be comfortable with discomfort
- Trusting the process
- Patience
- Acceptance of uncertainty and tensions
- Openness to learning from collaborators
- Self-awareness and the ability to listen and be confronted
- Willingness to take responsibility and to be held accountable
- Confidence to identify and challenge power relations

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III. Participatory research methods

Participatory methods constitute a strategy for analysing different aspects of social facts.

It is a set of logical procedures used to investigate, describe and analyse the

current social reality.

It also refers to a process through which knowledge of a given social reality is co-constructed by the subjects, who possess the knowledge, and the external researcher.

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III. Participatory research methods

Participatory methods include a **flexible set of techniques**.

There is no one set of techniques that can be mechanically applied in all contexts for all participants.

Participatory research draws upon **all available social science research methods**, e.g.:

observation, archival and library research, document, content and footprint analysis, personal history, narratives and storytelling, questionnaires and interviews, etc.

III. Participatory research methods

Qualitative (ethnographic) methods:

- observation
- narrative discourse
- secondary data analysis (documents, media, artefacts)

Learning together (selected methods):

- participatory workshops
- public meetings
- dialogue
- drawings
- focus groups
- interviews (in-depth, semi-structured)

III. Participatory research methods

Visualisation methods:

- mind maps (social and individual)
- time related methods
- problem and preference ranking
- + video, digital methods

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Thanks for your attention.

Qs?

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Slovak University
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in Nitra

23 January 2024

Speakers: Sima Mihaela and Ines Grigorescu
Institute of Geography, Romanian Academy, Romania

Living Lab methodologies – Europe-LAND perspectives

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Why do we use participatory approaches (Living Lab) in Europe-LAND?

- LLs as a research methodology and a support environment for developing, testing and scaling up innovative solutions on land use, climate change + biodiversity showing their feasibility and impact
- To better understand the factors that influence the decision-making in land management
- To explore the awareness about climate change and biodiversity challenges and the willingness to address them among key actors at various scales
- To explore the stakeholders' interest in the adoption of new or different practices for sustainable land management as well as the barriers to climate change adaptation
- To gain insight into land users' behaviour by analysing the conditions of local land-use decision-making across relevant European case study regions
- To understand how policies shape land use and contribute to climate change adaptation

WP3. The awareness behind land-use decisions related to climate change and biodiversity

T3.2. A Living Lab Framework for understanding the awareness of climate change and biodiversity challenges
T3.3. Engagement of multi-level stakeholders in sustainable land use management
T3.4. Analysis of local land-users´ drivers of land-use + land-cover change (LULCC)

Living Labs methodologies – main features

Living Labs (LLs) draw on a long tradition of user-centred and participatory research which become effective examples and models of (transformative) social innovation (Ruijsinkand Smith, 2016) by bringing together users/consumers/citizens with the aim of generating ideas, knowledge and experiences (Eriksson et al., 2005)

LLs approaches have already proven successful in providing innovative and creative solutions through participatory tools and multi-stakeholders engagement EU financed initiatives, including **Horizon 2020 (i.e., SmartCulTour, DESIRA, LIVERUR, SMS, ALL-Ready)**

LLs are made of heterogeneous actors, resources, and activities that enable and support (co)innovation, and collaborate for the creation, prototyping, validating, and testing of new technologies, services, products, and systems in real-life contexts (Leminen, 2013; Dell'Era and Landoni, 2014; Compagnucci et al., 2021).

LLs = multi-stakehoders platforms (Metta et al., 2022)

Relevant terms for the Living Lab approach (Major and Ratajczak, 2018)

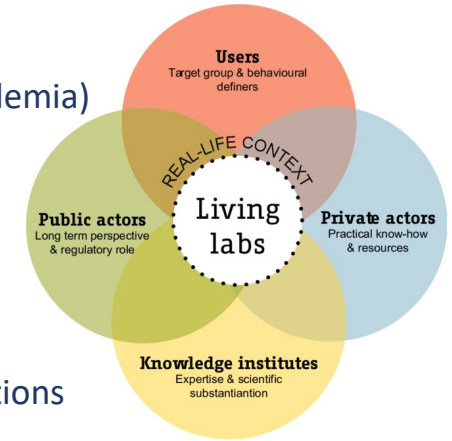
Main actions driving LLs:

- to assume real-life environments (context) (Almirall and Wareham, 2008; Hossain et al., 2019);
- to involve multi-stakeholders: academics, developers, industry representatives, citizens, users, various public and private organizations (Ballon and Schuurman, 2015; Schuurman et al., 2011);
- to be spaces for co-innovation, through participatory, transdisciplinary systemic research (Bouma and Veerman, 2022).

Outcomes/results of LLs are generally related to innovation, both ***tangible*** (i.e., models, products, prototypes, solutions, systems) and ***intangible*** (i.e., concepts, ideas, intellectual property rights, knowledge, services) (Buhl et al., 2017; Dell'Era and Landoni, 2014; Evans et al., 2015).

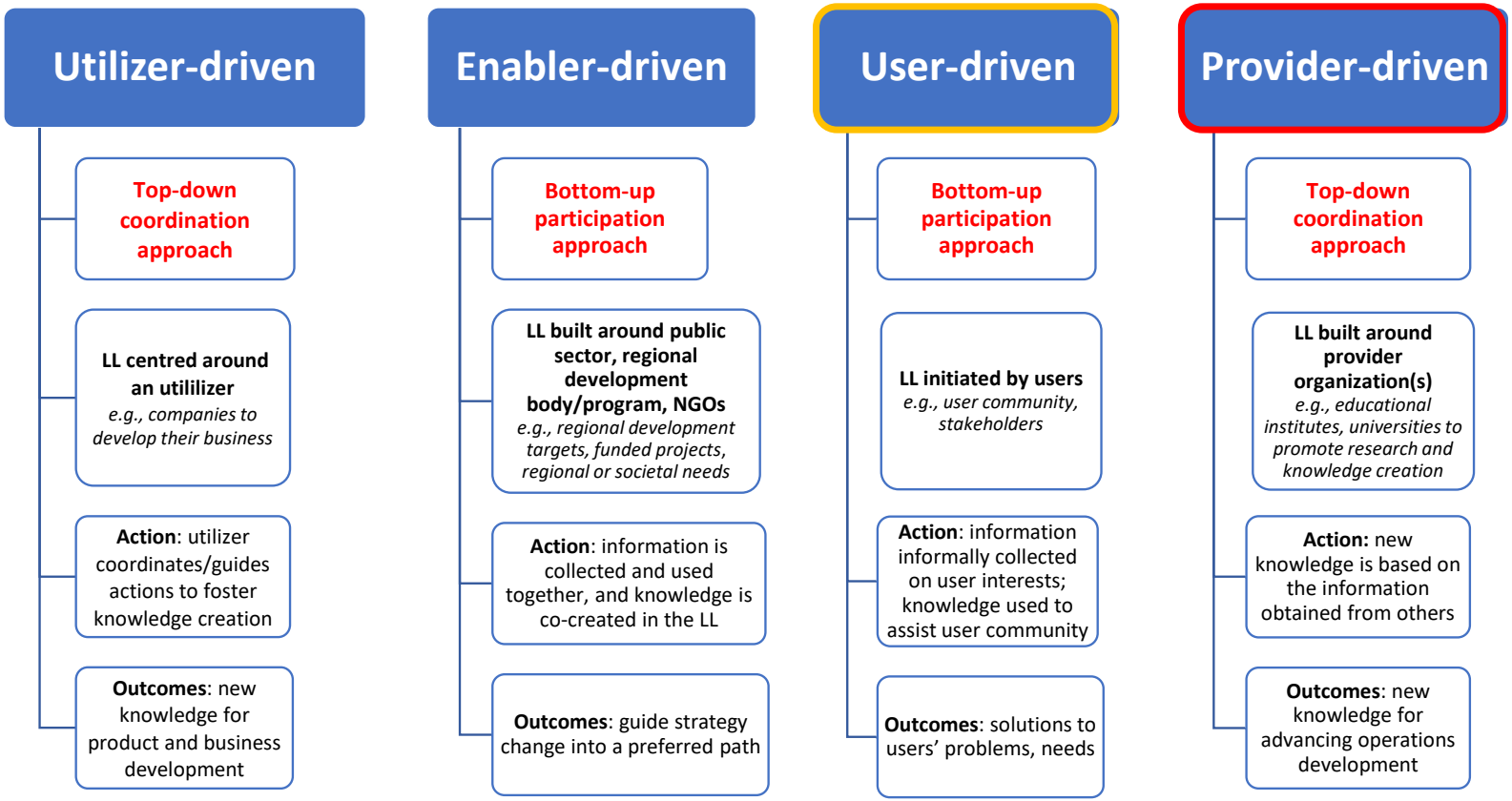
Key features of Living Labs approaches

- **User-Centered/User-driven** - prioritize user engagement to shape and drive the innovation process (based on user needs, preferences)
- **Multi-Stakeholder Engagement** - Quadruple Helix Model (i.e., citizens, government, industry + academia)
- **Multidisciplinary Collaboration** among stakeholders from various fields (i.e., research, design, social sciences, industry, business)
- **Co-creation** and fostering a co-creative environment where ideas are generated collectively
- **Innovation and Prototyping** - technologies, services, products in real-life settings
- **Real-life conditions** through real-world deployment for practical feasibility and relevance of innovations
- **Innovation** allowing external input and knowledge exchange to enhance the innovation process
- **Adaptability** to changing circumstances, technologies, and user needs throughout the innovation lifecycle
- **Knowledge Sharing** among all participants involved in the Living Lab
- **Evaluation and Learning** - assess the outcomes and impact of innovations, incorporating lessons learned into future projects (= scalability and transferability)
- **Community and Social Impact** – focus extends beyond technological solutions to address broader societal challenges and enhance community well-being



Steen and van Bueren, 2017

Models of LLs according to the actors driving the activities

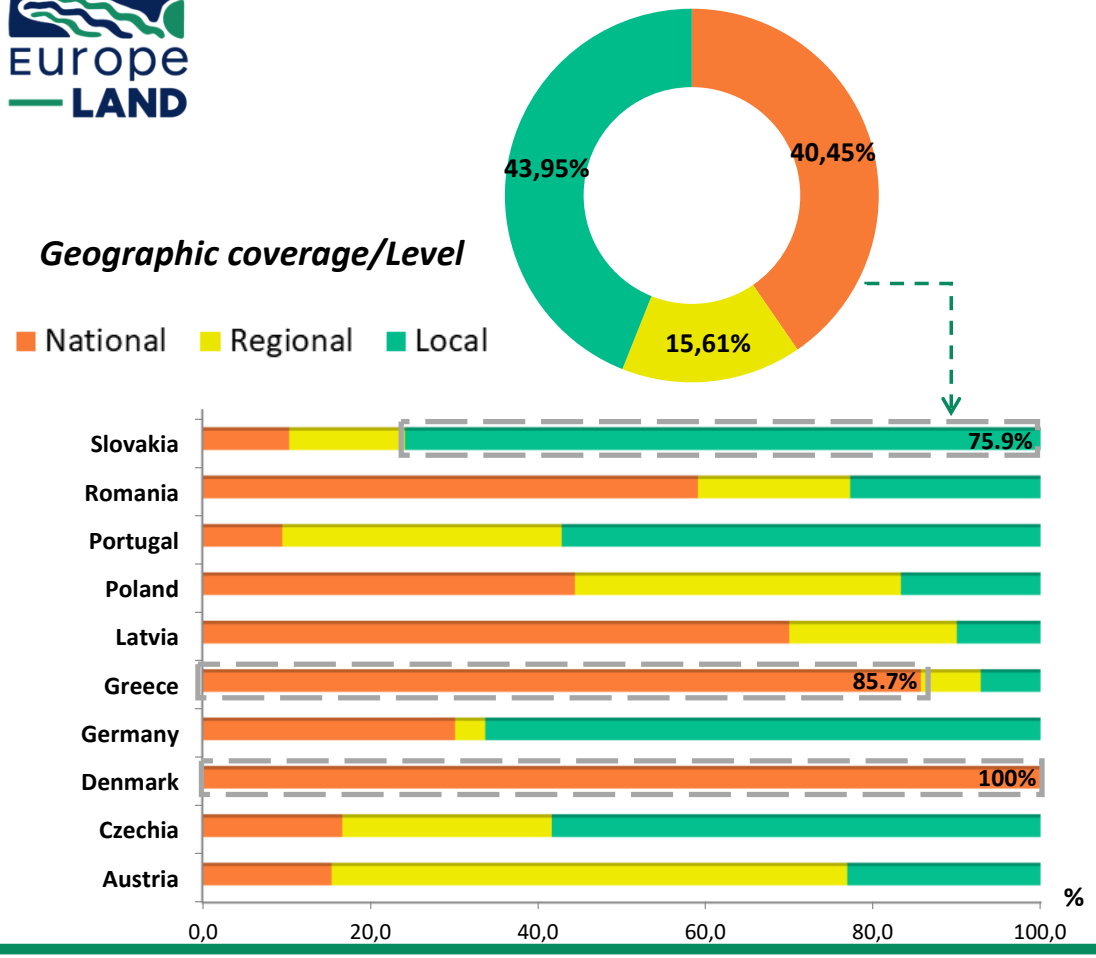


Adapted after Leminen et al., 2012; Compagnucci et al., 2021

Recent development of Living Labs

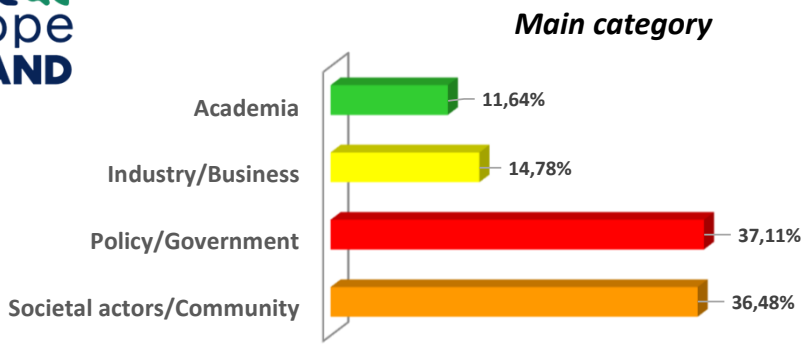
- **2005 – pan-European network of LLs - European Network of Living Labs (ENoLL)**
  - LLs = "*user-centred open innovation ecosystems based on a systematic user co-creation approach, integrating research and innovation processes in real-life communities and settings*" .
  - Five key components (https://enoll.org/): *i) active user involvement ; ii) real-life setting ; iii) multi-stakeholder participation ; iv) multi-method approach; v) co-creation*.
- **EU Mission "A Soil Deal for Europe" (2021):** aims to integrate 100 living labs and lighthouses as active hubs for practical experimentation in real-life conditions, fostering innovation and collaboration to achieve healthier soils by 2030
- **Horizon 2020** - integrated the concept of LL across various thematic areas with a focus on smart cities, digital innovation, and sustainable development or as platforms for testing and implementing innovative solutions = **bridge the research-to-market gap by involving end-users and stakeholders in the innovation process**
- **Horizon Europe** - continue and expand the support for LLs in research and innovation with a strong emphasis on user-centricity, open innovation, and addressing global challenges;
  - Horizon Europe introduces a **mission-oriented approach**, addressing major societal challenges through targeted missions that emphasize real-world testing and user engagement for mission success

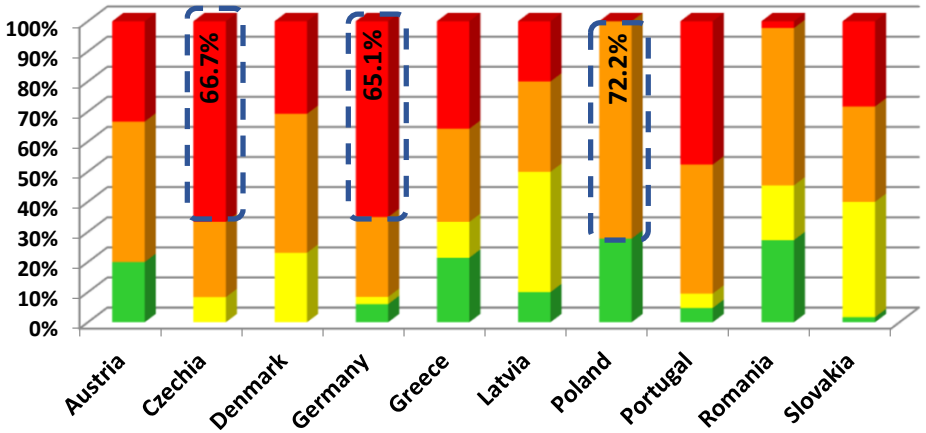
Stakeholders identification in Europe-LAND

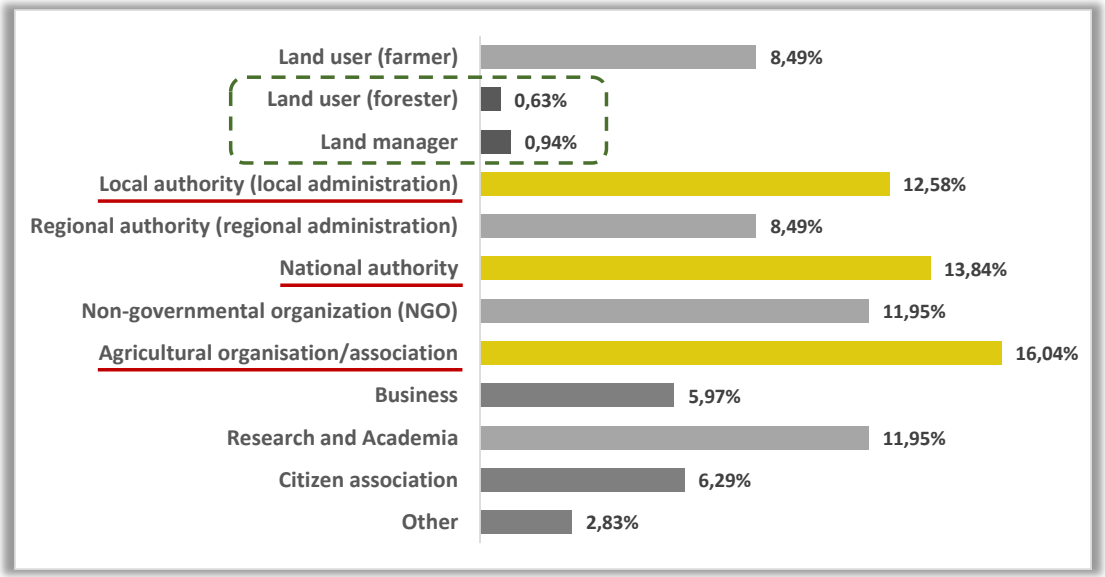


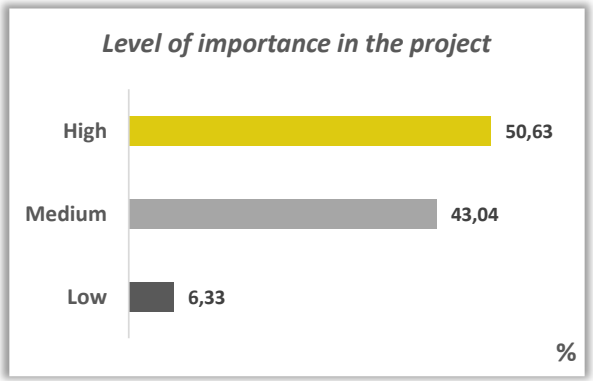
Quadruple Helix Model

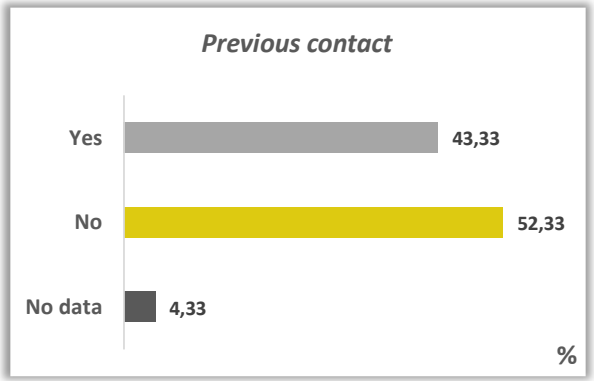
Who are the main stakeholders in Europe-LAND?





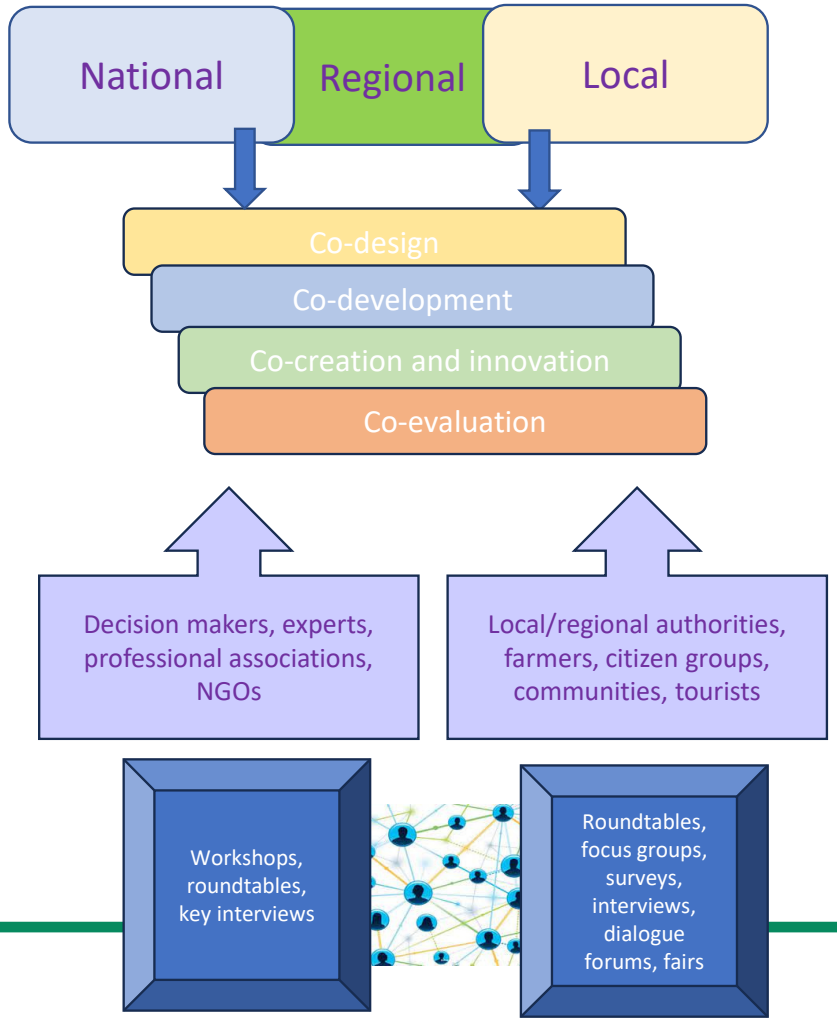




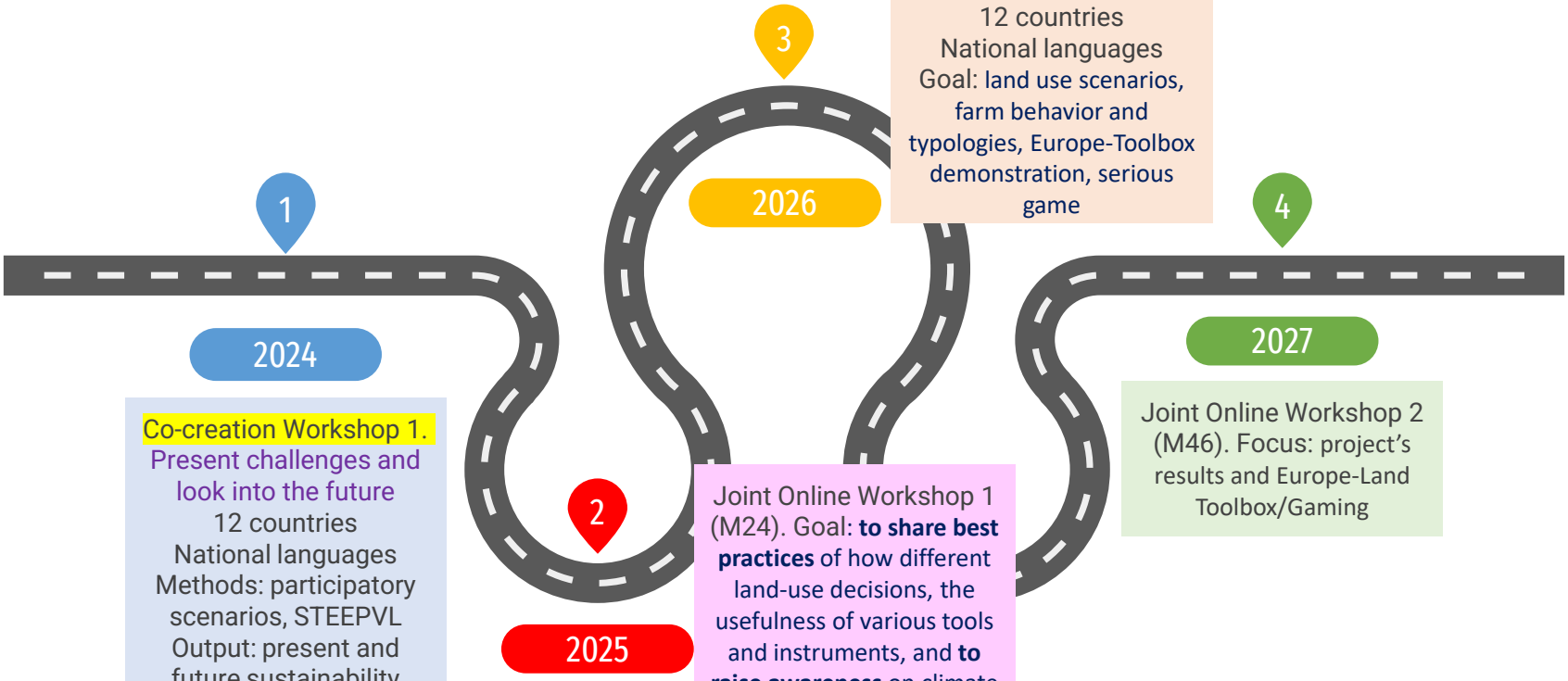


The main features of Europe-LAND Living Lab approach

- From national to regional and local level approaches
- Different target groups and categories of stakeholders
- Multi-methods
- Various co-creation levels across case studies – solving specific questions raised by stakeholders
- LL approach – secondary support tool

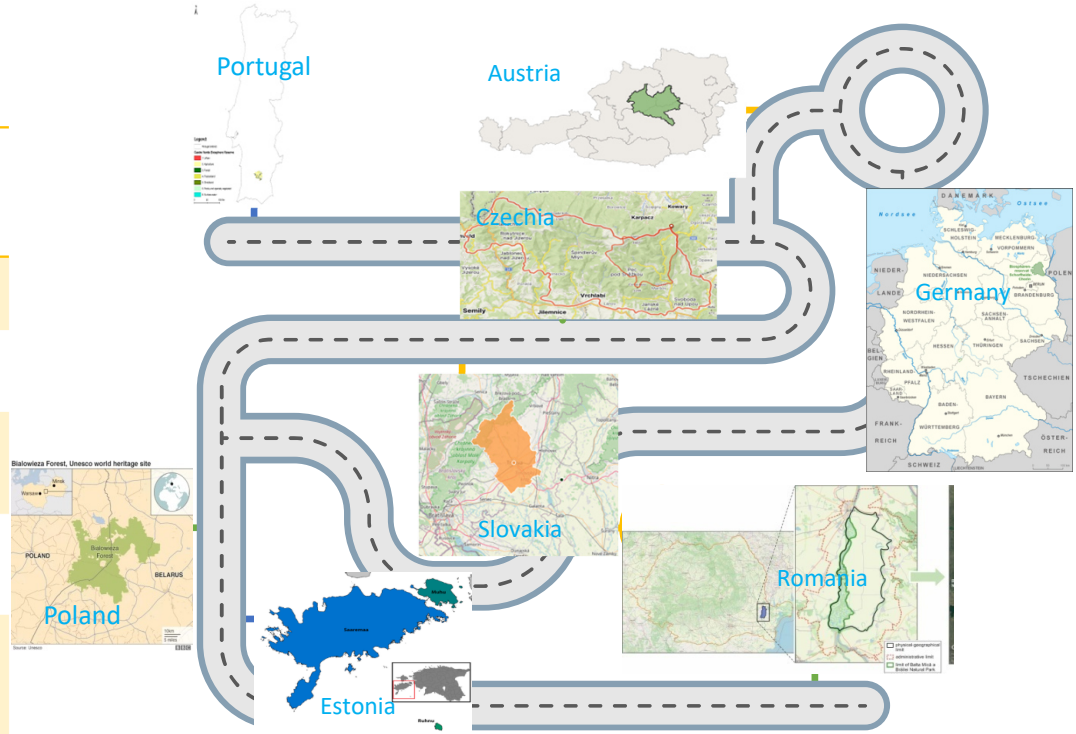


Roadmap for Living Lab approach at the national/regional levels



Roadmaps for Living Lab approach at the regional/local levels

No	Name of the case study	Country	Surface	Main focus	Previous connection	Co-created research questions
1	**LTSER Region Eisenwurzen**	**Austria**	5,904 km²	Agriculture+forestry	Yes	Yes
2	**Braila Islands**	**Romania**	970 km²	Agriculture+protected area (wetland)	No	No
3	**LTSER Trnava**	**Slovakia**	364 km²	Socio-economic drivers of LUC, community-oriented	Yes	No
4	**Białowieża Forest**	**Poland**	1,250 km² (580 km² Polish side)	Protected area (forestry) – world heritage	Yes	Yes
5	**The Krkonoše Mts. National Park**	**Czechia**	42 km²	Protected area (forestry)	Yes	Yes
6	**Saaremaa County**	**Estonia**	2,938 km²	Agriculture+cultural landscape	Yes	No
7	**Schorfheide-Chorin Biosphere Reserve**	**Germany**	1,300 km²	Protected area (forestry, agriculture) – biosphere reserve	Yes	Yes
8	**Castro Verde Biosphere Reserve**	**Portugal**	567,2 km²	Protected area (biosphere reserve)+agriculture	Yes	Yes



Case Studies Webinar – 14th March 2024

WP3 - The awareness behind land-use decisions related to climate change and biodiversity

Thank you!

Mihaela Sima (email: simamik@yahoo.com)