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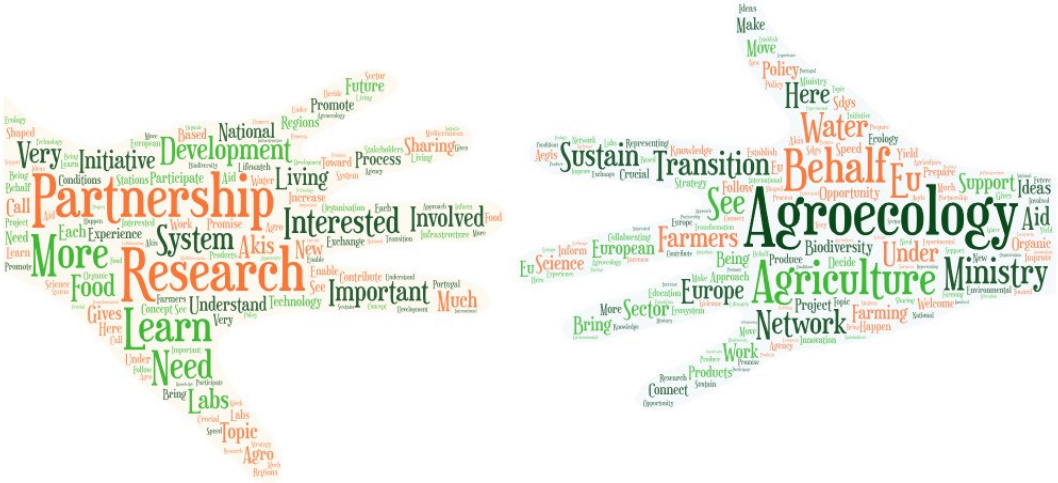

Building a partnership on agroecology living labs and research infrastructures

Webinars 1&2

Opening & building a shared understanding of the concepts

6-7 May 2020, Brussels

Report, 18 June 2020

Agriculture and Rural Development

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More information

You can find more information on the European Commission's website on:
European partnerships in Horizon Europe
European research and innovation on ecological approaches and organic farming
European research infrastructures

Disclaimer

This report assembles the contributions made by participants in the context of webinars held on 6-7 May 2020. These contributions do not represent the views of the European Commission.

Introduction

Less than a year ago, four hundred people joined the Agri-Innovation summit 2019 (Lisieux, Normandie, France) to reflect on how European innovation can pave the way to more ecological farming and the role that the agriculture European innovation partnership "EIP-AGRI" could play in speeding up the transition to agroecology. At the same time, the European Commission proposed to the Member States to build a new ambitious initiative that it would jointly fund with them and other interested parties under Europe's next research and innovation framework programme Horizon Europe: a research and innovation partnership provisionally entitled "Accelerating farming systems transition: agroecology living labs and research infrastructures". After first consultations confirming Member States' interest in this proposal, the European Commission kick-started the conversation on how to build this partnership.

Around 150 people joined the first two webinars organised on 6 and 7 May to **open the conversation on how to build the candidate Horizon EU partnership on agroecology living labs and research infrastructures**. The audience included representatives from Member States' research, agriculture and environment, education ministries and agencies, farmers and farm advisor organisations, industry retail and consumer representatives, research and innovation collaboration networks, academia and civil society organisations.

These first two webinars aimed at **opening the process** officially and at **building a shared understanding of agroecology, living labs and research infrastructures**. Others will follow.

Opening the process: why a partnership on agroecology living labs?

Nathalie Sauze-Vandevyver, Director in charge of quality, research and innovation and outreach in European Commission's agricultural department, opened the event together with **Javier Gracia Garza**, Acting Associate Assistant Deputy Minister for Agriculture and Agri-Food Canada, Science and Technology Branch.

Why a partnership on agroecology?

Nathalie Sauze Vandevyver explained that the European Commission proposed this partnership, in early 2019, *"because we believe that agroecology can provide a powerful contribution to long-term responses to the climate, biodiversity, environmental, economic and social challenges that our society is facing"*. She added that "*understanding agroecosystems better, learning to work more with ecosystem services and less with external synthetic inputs, is key to enable a transition to more sustainable farming"*. The potential benefits of this would not stop at the farm gate. Agroecology can also "*be the basis of more resilient farming systems, more closely connected to society that would deliver sufficient, healthy and nutritious food to people, while respecting planetary boundaries and rewarding farmers better"*. The initiative aims to make a lead contribution to the objectives of Europe's Green Deal, fits well with the orientations for Horizon Europe and could be of high relevance in the aftermath of the COVID-19 crisis.

Agri-innovation Summit 2019 report

Why focusing on living labs as an approach?

The choice of living laboratories - or "*living labs*" - as an approach is prompted by the imperative of engaging farmers and other stakeholders in developing jointly the solutions to problems they face in their locality or region, taking into account the specificities of farming systems and their environment.

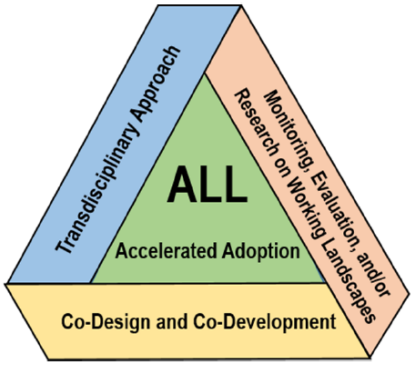


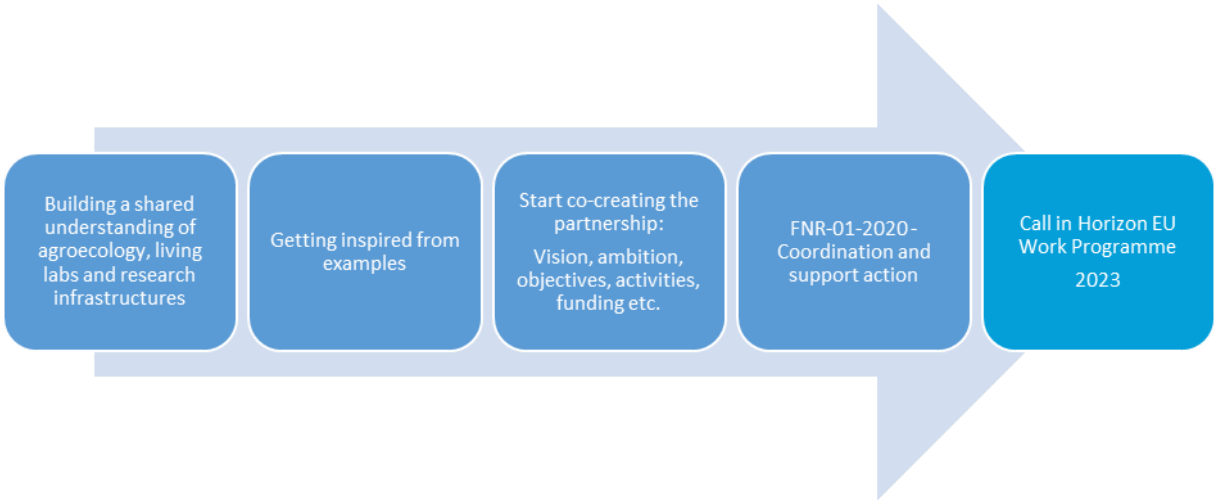
Figure 1: The three main ALL components

Javier Gracia-Garza, Canada's acting agricultural chief scientist, presented the conclusions of the work on agroecosystem living labs conducted with other agricultural chief scientists of 11 countries in the context of the G20 in 2018-2019. This group identified **transdisciplinary approach**, **co-creation** and **working in real landscapes** as the three key ingredients of a successful living lab approach[1]. He explained that Canada introduced this living lab approach to accelerate the development and adoption of beneficial management practices in farming, which can take 15 to 25 years using classical approaches. "*With the climate, environmental and food security challenges we are facing, we do not have the luxury of time*", he said.

How will the partnership be developed?

Nathalie Sauze-Vandevyver explained the different steps that the European Commission intends to take to prepare the partnership. The process has officially started with these two first webinars that aim to build a shared understanding of agroecology, living labs and research infrastructures, and will end with the publication - tentatively scheduled for 2023 - of the call in Horizon Europe work programme that will support the creation of the partnership.

Additional webinars are scheduled as from June to display concrete examples of what agroecology living labs could look like and to start creating the various elements of the partnership proposal. In addition, the European Commission will support coordination and support activities, funded under Horizon 2020 call FNR-01-2020, that will prepare the community and funders for the future partnership from autumn 2020 onwards.

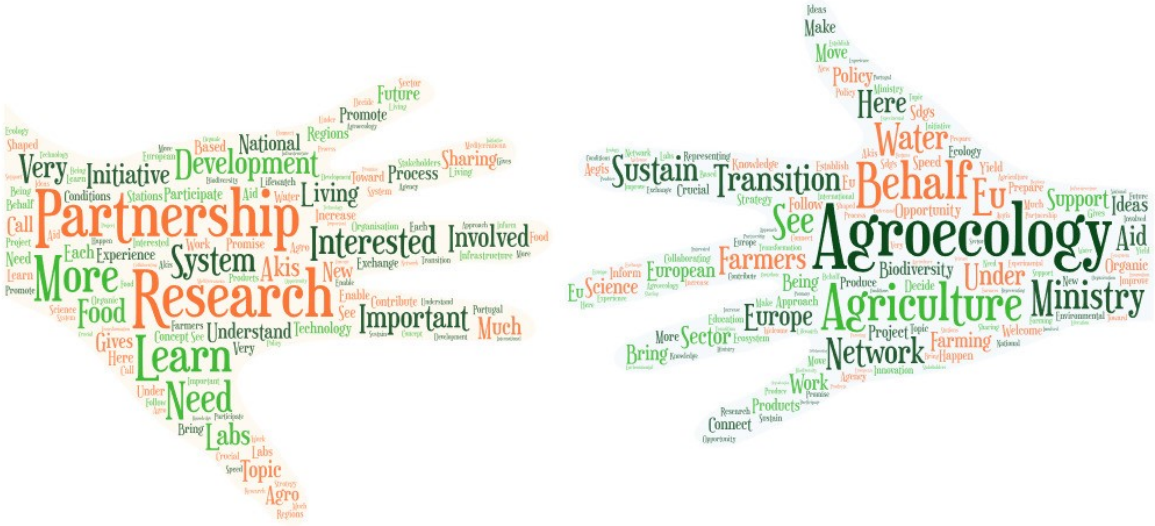


Nathalie Sauze-Vandevyver insisted on the importance to co-create the partnership with potential partners, stakeholders and beneficiaries.

[1] Executive report of the G20 MACS "Agroecosystem living lab" working group.

Why were participants interested in taking part in this process?

Participants were asked why they were participating in the webinars and why it was important for them to take part in this process. The outcomes are illustrated in the word cloud below.



Among the reasons, the most quoted included:

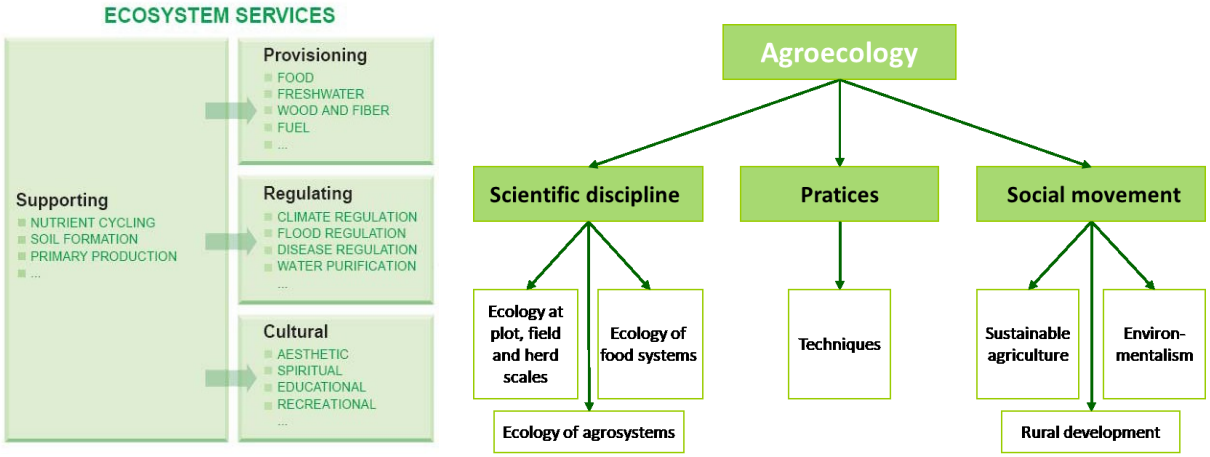
- wanting to **learn** about the partnership development or about agroecology or living labs and their potential contribution to sustainability;
- **believing** in agroecology or in living labs as promising approaches already to achieve sustainability;
- needing to **assess** the interest for their ministry or organisation to take part in the future development of the partnership;
- **being part** of an existing initiative or a group of actors that could **contribute** or **benefit** (labs, research infrastructures, agroecology project, stakeholders organisations)
- willing to **shape** the development of the partnership;
- willing to **exchange** knowledge and experience;
- willing to **link** discussions on existing initiatives with partnership discussions.

Building a shared understanding of agroecology (6 May)

Three speakers provided various views on how to understand agroecology. These were an input into further discussions on how the partners and stakeholders wish to approach these concepts in the context of the partnership. An exchange of views through the chat and live discussions followed the presentations.

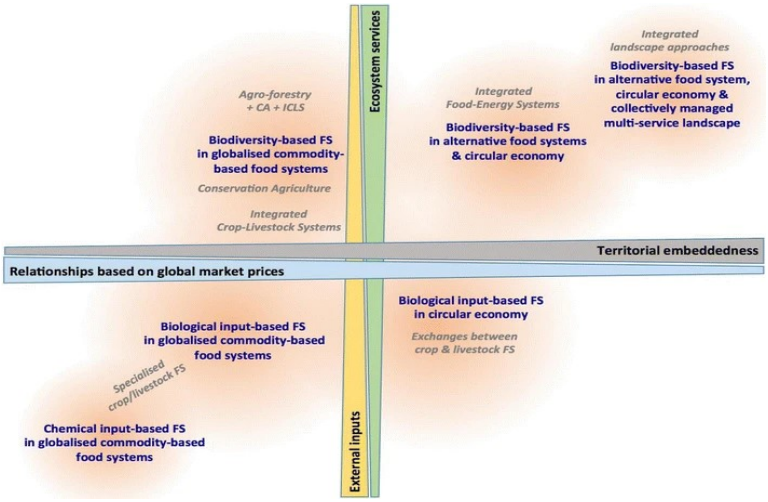
Several viewpoints

Christian Huyghe (INRAE, France) first introduced the concept of agroecology and its place in the thinking around farming sustainability and transitions. One way to approach sustainability transitions is to maximise, stabilise and add value to ecosystem services. As described by the Millenium ecosystem assessment (2005) there are four groups of ecosystem services, as shown below: supporting, provisioning, regulating and cultural. Enhancing them is one of the ways to respond to grand challenges such as food security, climate adaptation and mitigation, restoring biodiversity and water and air quality, as illustrated by a seminal paper from Hector et al. in 1999, that demonstrated that increasing species and functional groups diversity in grassland could actually increase grass production. Moving to agroecology as a concept, he explained, quoting Wezel et al (2009), that it is **a word with several possible meanings**. As shown below, it started to be a **scientific discipline (from 1930s)**, applying ecology to plots, fields, herds, agroecosystems or food systems. Then the word started being used to describe a **set of agricultural practices (from 1960s),** a **social movement (from 1970s)** and more recently even a **political movement**.



For Christian Huyghe, the core of the concept is that "*increasing functional diversity leads to increasing biological regulations*." Examples of such regulations are nitrogen cycling or pest and disease control. Increasing the number of species in a grassland decreases the likeliness of plants being infected. Interaction between species is likely to be impactful between plants, between animals, between plants and animals or even within the microbiome and between soils, plants, animals and human microbiomes. The idea of agroecology is to enhance **complementarity and facilitation mechanisms** that enhance the production of each component of the system (e.g. through mixtures of species, companion species, relay cropping etc.) Better understanding of chemical ecology is also of major interest, especially when it comes to managing insects by influencing their olfactory landscape. Agroecology brings new challenges for research in areas such as breeding (co-breeding), biocontrol (more attention to prophylaxy). "*Agroecology is a key lever for chemical pesticide-free agriculture*" he argued. Agroecology also brings new challenges and questions for social and human sciences, for example on how to foster the transition to agroecology-based food systems. The principles of living labs are to make people work together to co-design and co-develop. But people will accept to work together only if they share the same values. Another key dimension with living labs is working in real landscapes and real conditions.

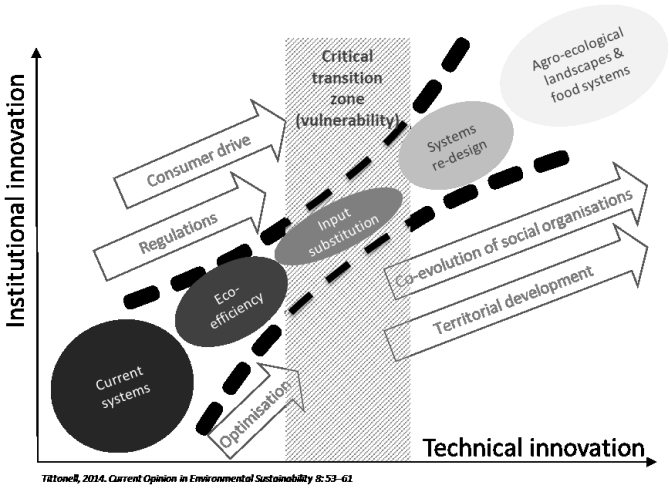
This is crucial for agroecology as "***with agroecology, you maximise dependency on local conditions***", as opposed to intensification and specialisation where you try to make a solution work everywhere. He ended stressing that it is not possible to achieve a major shift in the production system if there is no transition in the food system, offering the illustration on the right, by Theron et al (2017) of a typology of food systems based on various degrees of global market integration and ecosystem services use.



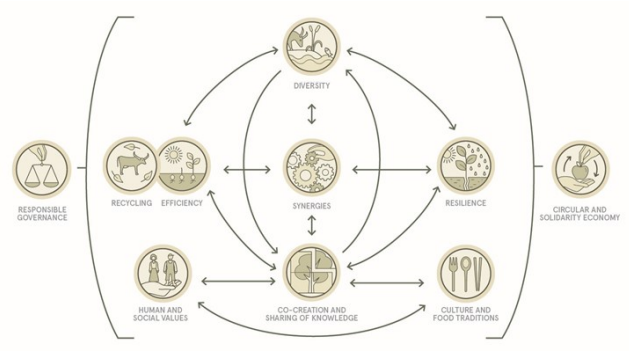
Then **Alain Peeters (Agroecology Europe and RHEA, Belgium**) presented a series of examples where agroecology is applied and how applying agroecology practices has changed the evolution of various farms. Beforehand, he endorsed the FAO ten elements of agroecology as the relevant framework to define agroecology, in combination with the 13 principles of food and nutrition security. He also introduced the Agroecology Europe network. He then explained the various components of the ecological strategy of agroecology which "***consists in replacing fossil fuels by ecosystem services provided by biodiversity***", building on a variety of examples going from soil carbon sequestration, to nutrient-absorption facilitation played by fungi or nodules of legumes that help fix nitrogen. "*Lucern or red clover in Belgium can help store between 300 and 400 kg of nitrogen per ha and per year, which is much more than what conventional farmers spread on their land*", he said. Part of the strategy is also to rely on local resources, including endogenous soil fertility, which declined after decades of input-intensive farming. Agroecology is rather intensive, but in "*observations, thinking and knowledge*", he said. He then explained two practical examples of agroecological systems, coming from the agroecological transition project that started 7 years ago and aims to inspire farmers to change. One of these systems is a legume-based temporary grassland rotation. It relies on i) **temporary grasslands** that sequester carbon, restore soil fertility, fix nitrogen and control weeds, ii) **long and diverse crop rotations** that alternate legumes and non-legume crops to reinject nitrogen in the system to increase yields, iii) **crop and livestock integration** as livestock transforms temporary grasslands in meat and dairy products. These systems also use "biomax" a mix of green manure that improves plant microbes diversity and weed control. The pictures below show a sunflower field that combines seven plant species and the destruction of the green manure to form a mulch in which the next crop is sown directly. The system hence combines harvesting and sowing in a single field intervention.

However, since arable farmers are increasingly reluctant to engage in livestock production, an alternative system was developed where temporary grasslands are replaced with a **permanent cover of white clover** in which crops are directly sown each year. This is very efficient to promote soil fertility and soil biodiversity, control weeds and fix nitrogen and carbon. He also mentioned the use of **pest-suppressive ecological infrastructure** (like herbaceous strips, designed to promote the natural enemies of crop pests), the use of **alternative cultivars**, for example wheat cultivars that are taller, with more horizontal leaves that can control weeds and can develop an extensive root system to catch nutrients and water. He also presented the case of the Velghe Farm in Belgium and the three phases the farm went through in order to become agroecological. From being highly specialised, the farm progressivey diversified, adopting sustainable farming practices leading to an enhanced environment with a reduction of production cost and increase of self-sufficiency. In a third phase, the farm developed product processing and targeted quality products and processing products selling in local markets, increasing the value added and creating jobs in the farm.

Finally, **Anne Mottet (Food and agriculture organisation of the United Nations, FAO)**, opened to a more global perspective and presented the **tool for agroecology performance evaluation** (TAPE) that is being developed to assess the performance of agroecology worldwide. She briefly explained the process the organisation had lead since 2014 with 1350 participants from 162 countries with the objective to come to a common understanding of agroecology at global level and that led to the definition of the '[''10 elements of agroecology''](). This process was important in coming with a definition that reflects at the same time the **specificities of agroecology in different regions** and what its **contribution to achieving the Sustainable Development Goals can be**. While agreeing on the overall approach of agroecology as a **science**, a **practice** and a **social movement,** she stressed that it is not, for FAO, "*a way of zoning territories or regions or systems, a type of production systems or a way to optimise production methods*". It is more complex than this. The process conducted worldwide highlighted that the understanding of agroecology varies greatly across the globe. "*What we name agroecology in one place can be named something else in another country*", she said. The **High-level panel of experts on food and nutrition security** (HLPE) report[2] (July 2019) provided a good reference to look into the history of the concept's development. She introduced as well the theoretical approach by Pablo Titonell (WUR, NL and INTA, Argentina) illustrated below. In this approach, agroecology involves **both institutional and technological innovation**. The pathway for transforming current systems involve various incremental changes driven by optimisation, regulations or consumer demand leading to the current situation of input substitution. But "*agroecology should go further than this in the transformation of our food systems by redesigning those systems and finally achieving agroecological landscapes and food systems*", she said. That requires a **co-evolution of social organisations and science** and some trends within **territorial development**.



[2] http://www.fao.org/3/ca5602en/ca5602en.pdf



FAO's **10 "elements" of agroecology** combine these different approaches and understandings. Some of them are biophysical, other about governance, others more cultural and social and some refer to "*emerging properties*" such as resilience. "*Those elements are not principles in the sense that they are not conditions to be met to be in an agroecological system but they are commonalities between the systems that were reported during the process*", she said.

She then moved to explaining the TAPE tool, whose objective is to produce a global and harmonized evidence on the multi-dimensional performance of agroecological systems in the different dimensions of sustainability. The FAO has developed the tool following the mandate given by the FAO governing bodies to **strengthening normative, science and evidence-based work on agroecology**, developing **metrics, tools and protocols** to evaluate the contribution of agroecology and other approaches to the transformation of sustainable agriculture and food systems. The tool aims at consolidating existing evidence and has been designed to be simple enough to be used by governments, farmers, scientists and extension workers. FAO designed the tool in a **step-wise approach.** In step 1, each of the elements of agroecology is unpacked in a number of indexes to characterise the current status of agroecological transitions (see example below on diversity). In step 2 core criteria of performance are defined for each main dimension (governance, economy, health & nutrition, society & culture, environment). In step 3 results are interpreted. All steps are completed using participatory approaches.

	Index	0	1	2	3	4
DIVERSITY	Crops	Monoculture (or no crops cultivated)	One crop covering more than 80% of cultivated area	Two or three crops	More than 3 crops adapted to local and changing climatic conditions	More than 3 crops and varieties adapted to local conditions. Spatially diversified farm by multi-, poly- or inter-cropping
	Animals (including fish and insects)	No animals raised	One species only	Several species, with few animals	Several species with significant number of animals	High number of species with different breeds well adapted to local and changing climatic conditions
	Trees (and other perennials)	No trees (nor other perennials)	Few trees (and/or other perennials) of one species only	Some trees (and/or other perennials) of more than one species	Significant number of trees (and/or other perennials) of different species	High number of trees (and/or other perennials) of different species integrated within the farm land
	Diversity of activities, products and services	One productive activity only (e.g. selling only one crop)	Two or three productive activities (e.g. selling 2 crops, or one crop and one type of animals)	More than 3 productive activities	More than 3 productive activities and one service (e.g. processing products on the farm, ecotourism, transport of agricultural goods, training etc.)	More than 3 productive activities, and several services

Example of indexes used to characterise the status of agroecological transition on diversity

The tool is being piloted in different regions and a global database from the data collected is also being developed. It is published online in three languages (EN, FR, ES). The next steps include to continue filling-in the global database from the different pilots, explore links with the EU initiative on agroecology and living labs, and explore links with the Horizon 2020 UNISECO project.

Interesting points from the discussion

The presentations triggered a **lively debate**, both in the chat and in direct interaction with the speakers, where the participants raised issues and provided inputs on several aspects.

In relation to the **different visions of agroecology and the partnership**, participants highlighted that agroecology offers the possibility of using an ecosystems services approach to capture and demonstrate the comprehensive performance of agroecology systems holistically, and that, as a systems approach, it requires adopting also a systems approach to its further development. In relation with this, they underlined the importance to define the contribution of agroecology to the resilience of agroecosystems, the impact of agroecological practices on aspects such as soil biodiversity and halting land degradation, and define strategies to design agroecological systems that also consider farm economics. Measuring the performance of agroecology and developing a common understanding on objectives an indicators for agroecology in Europe were considered key. The FAO TAPE tool was perceived as a good approach to measuring this performance.

In relation with the **partnership**, participants recognised the need for pluri-annual experimentation in order to get results in agroecological research, and pointed out the need to ensure that such European-wide partnership supports local, place-based innovation and avoids the risk that the already existing agroecology initiatives in Europe are pushed away by the bigger research players. They also called for the need to link existing R&I organic farming activities with agroecology and to consider existing participatory initiatives, such as community supported agriculture. The role of agroforestry within the partnership should also be explored.

In relation with **incentives for farmers and for the actors along the value chain to change practices**, participants emphasised that a limited number of farmers is motivated to change and this mostly happens when they experience economic benefits at farm level - cost reduction, revenue/price increase, autonomy and financial independence - hence the importance to consider socio-economic components and connection with the broader food system and consumers, as well as to support farmers in the transition. In relation with this, participants raised questions about how to improve society's interest in agroecological products, and how to connect agroecological systems with urban consumers? Some participants proposed branding as part of the answer, however others reminded that most branding relates to minor shares of the market, so the question is how to make it become the mainstream. One possibility mentioned by participants is by becoming organic, as it is a recognised standard and the label is well known by consumers. The role of retailers and processors was also mentioned and, although there are successful initiatives ongoing, it was felt that, in general, these actors only become active when simple standards exist and farms and food are certified.

Regarding co-**creation of knowledge**, participants underlined the importance to set up truly multi-stakeholder co-creation spaces that involve farmers, advisors, researchers, supply chain, retail, consumers, government and society, and where all actors participate on an equal footing. In this regard, participants reminded that information exchange is not enough, but knowledge has to be co-created for a real partnership to happen. Farmers' knowledge was considered as key, and trust was identified as the main trigger for farmers to uptake more sustainable practices, hence the need to further develop research methodologies towards participation and moving away from "top-down research''. In this context, the question of how to combine excellent academic research with farmer-researchers knowledge co-creation arose, and new methodologies, system thinking tools, facilitators were considered necessary in this process. Participants highlighted the need to better understand what are the incentives or barriers for the transition to happen, what the roles of different actors are and how to promote co-creation. Participants proposed to consider the role of policy and regulatory drivers as factors with potential to remove barriers and create incentives on the farmers' side to find solutions with researchers. They emphasized the importance to extract policy recommendations out of co-creation approaches. They consider it crucial to focus on the process, but feel discussion is also needed on how to support these processes (learning process by farmers, transition process of food system, policy process, and co-creation process). They also considered essential to develop a common framework to measure the transformation and to ensuring up and out-scaling of knowledge and practices after knowledge co-creation.

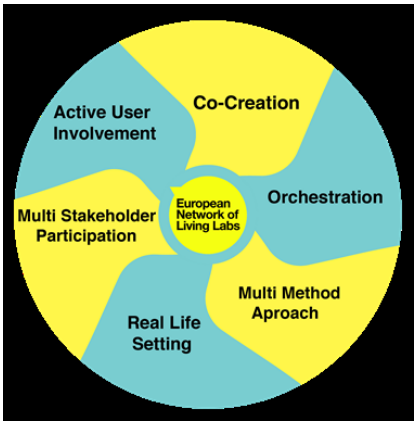
Finally, **participants discussed about the role of advisors**, and which revisions should advisory services undergo in order to be well equipped to promote agroecological approaches.

Building a shared understanding of living labs and research infrastructures (7 May)

Three speakers provided various views on how to understand living labs and research infrastructures. These were an input into further discussions on how the partners and stakeholders wish to approach these concepts in the context of the partnership. An exchange of views through the chat and live discussions followed the presentations.

Several viewpoints

Koen Vervoort (European network of living labs - EnoLL), presented the European network of living labs, that has been created in 2006 and includes 135 active members, 85% in Europe and 15% outside. He recalled that living labs are not a new thing and that over 450 globally have been certified along the life of the network. He then introduced the definition and key principles of the living lab methodology from a cross-sectoral point of view. For EnoLL, a living lab is an "***open innovation ecosystem where a multi-stakeholder approach - or multi-actor approach - is in place and acts in a real-life environment***". The difference with a test-bed or fab lab, he explained, is that instead of taking the end-user to the company's environment, you experiment in the **real environment of the end-user**. Two other important aspects are **co-creation**, which means creating innovation or services together with all users, and **iteration,** which means experimenting in an agile way, starting small, adapting and scaling-up, using a cycle ideation, design, experimentation and validation. Living labs are open and user-centred and mostly intermediaries within the "quadruple helix", a term that refers to the cooperation between government, industry (farmers here), citizens and academia. He then nuanced that there are very different kinds of living labs in the world and there is no common definition of what a living lab is that would apply to all. But there are 6 elements that come together, as illustrated in the diagram:



- **Real-life setting**: that is crucial to being a living lab;
- **Multi-method approach**: living labs combine many different types of activities (quantitative, qualitative, bottom-up and top-down etc.);
- **Multi-stakeholder participation**: "*it is very important that every type of stakeholder has an equal voice over the development of the services*";
- **Active user involvement**: it is not just a matter of asking feedback from stakeholders but actually doing this together with the user;
- **Co-creation**: developing innovation with all actors;
- **Orchestration**: every living lab needs to be managed and facilitated by someone who organises the activities.

He then introduced the **3-layered approach** of living labs. "*A living lab is not something that you can hold in your hands; it is not a place or a person*" he said, "*it is an organisation based on the three layers*". The top "macro" level corresponds to the **organisational level** of the ecosystem where the role of the stakeholders and how activities will be organised is decided. The middle or "meso" level is the **living lab project** level. The micro level is just one **innovation activity** within a living lab project.

He then introduced a series of concrete examples of existing living labs applying to agriculture and or territorial approaches, such as PA4ALL and ILVO Precision LL labs on precision farming, E2L on earth observations living labs, iSCAPE on urban labs to bring back nature in cities or LIVERUR on rural circular living labs. He ended by explaining how EnoLL can support the creation of future living labs. He introduced EnoLL action-oriented task forces, including the one on rural living labs, that aims to reverse the message on rural innovation potential "*Instead of saying we have to bring*

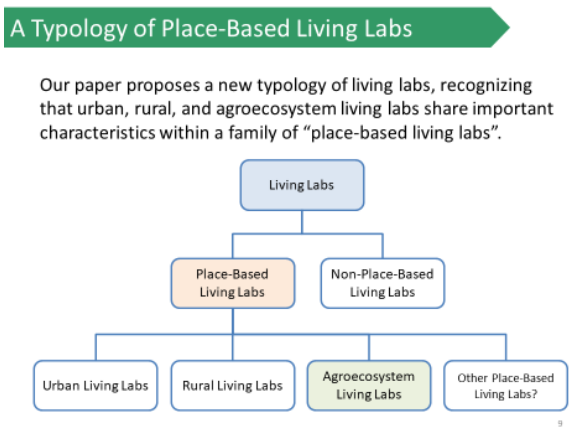
the opportunities to rural areas, we want to show that rural areas are the ideal place to innovate", he said. He also presented EnoLL high-standard certification process and capacity building programme (the learning lab).

Then, François Chrétien (Agriculture and Agri-Food Canada) presented the Canada agroecosystem living labs (CALL) initiative, the context in which it was developed and how it was co-developed with stakeholders. He first introduced the grand climate and food security challenges that drove the launch of the initiative. He explained that traditional agro-environmental approaches usually look at soil, water, climate in silos and fail to integrate a comprehensive economic analysis that could help identify e.g. barriers to adoption of best management practices (BMPs). These traditional approaches lengthen the innovation cycle and delay adoption. So the CALL initiative was developed to change this approach to innovation and speed-up the adoption on the ground.

He then introduced the understanding of living labs in this Canadian context as *"an integrated approach to agricultural innovation that brings many partners together to co-develop, test and monitor best management practices and new technologies in a real life context, meaning with the producer, on the producer farm, and with the producer being central to this approach"*. The initiative was developed to tackle climate alongside water, soil and biodiversity challenges. The three core principles retained to define living labs in the early days of the initiative include:

- **User-centred innovation**: *"the farmers are central to the process and work with the scientists throughout the innovation approach. They are not just consulted at the beginning to test an hypothesis and on the results in the end. They are a key participant in the innovation approach"* he explained.
- **The private-public-people partnership** – or "4P"- principle: *"all partners need to work together to tackle a common issue"*.
- **Real-life experimental setup**: working farms are the incubator of the innovative technology. *"We need to take the science out of the controlled environment and apply this in agricultural landscapes where there is a lot of variability"*, he said.

This approach fed into the work of the MACS, presented by Javier Gracia-Graza the day before, which in turn led to further research aiming at better understanding what makes agroecosystem living labs special and unique. François Chrétien shared the content of a paper under elaboration between AAFC and INRAE, which proposes a new typology of living labs that recognises that urban, rural and agroecosystem living labs are place-based living labs with well-known characteristics. It uses a framework developed by Steen and Bueren (2017) for urban living labs, which describes living labs based on their **aims**, **activities**, **participants** and **context**.



He described one approach of what the key defining characteristics of the agroecosystem living labs could be under these four categories, based on the Canadian experience, French "Territoires d'innovation" experience and the limited literature on the subject. Key points would be that ALL are i) **ambitious and broad in their aims** (sustainability and resilience), where other labs can be more focused; ii) integrate in their activities a **lot of agricultural research** in a **fairly long innovation cycle** linked to the growing season; iii) involve a **diverse set of partners** and a **fair share of public sector** researchers and participants, due to the public goods at stake and the lack of short-term economic return for producers; iv) work in the context of a **specific agroecosystem**.

He then described the different phases that underpinned the co-development of the Canadian living lab initiative, with pre-launch engagement activities, organised in the different territories, and phased implementation that allowed to adjust and modify the approach along the way.

Pre-launch activities used collective intelligence enhancing methods to explain the initiative, **define the local environmental and health challenges and priorities** that could be tackled by the future labs, identify **potential contributions of the various partners**, reflect on **what a living lab project and supporting structures could be** and co-design **criteria to guide the choice of ideal sites** for the first living labs. Five sites were chosen as a result of this process, with clear priority challenges for each of them co-developed with the partners. The implementation, supported by a science investment of around $70, was structured in two components: an internal component to support the contribution of federal scientists through collaborative research projects and an external component to mobilise external partners. It was organised in phases, with two labs to be launched every year, with the objective to learn and adjust along the way. Each lab involves 30-40 researchers, 7-15 external partners and a larger group of 50-70 participants. He provided the example of the Atlantic living lab, which targets soil, water and climate challenges related to potato production on the Prince Edward Island. The lab works along an iterative process as illustrated below in which potential beneficial practices are identified with farmers, tested, monitored and improved until "*the practice makes sense from both a scientific point of view and user point of view so they are ready for adoption*".

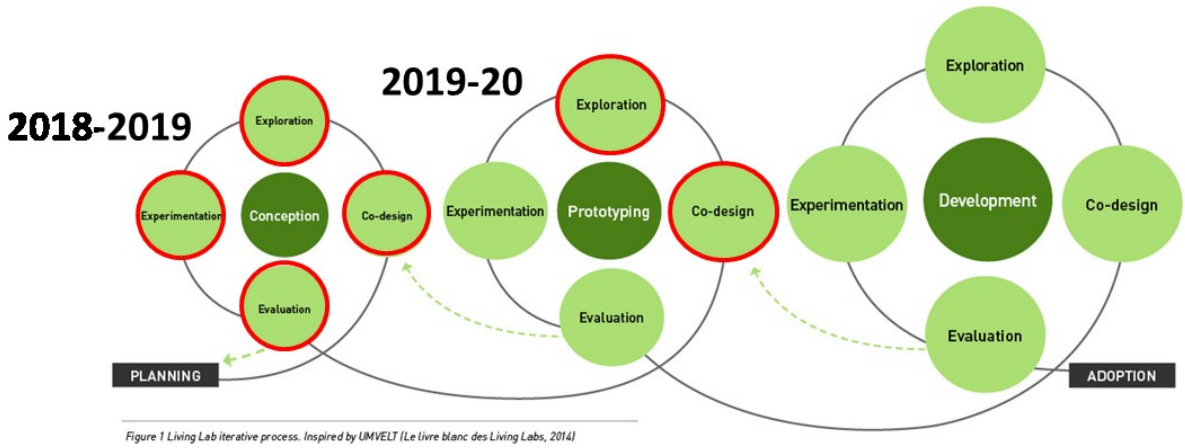


Figure 1 Living Lab iterative process. Inspired by UMVELT (Le livre blanc des Living Labs, 2014)

The various living labs are connected through the "Canadian agroecosystem living lab network" that promote multi-site and international scientific collaboration. François Chrétien explained that this is based on a strong data management strategy and centralised protocols without which interaction is not possible.

To conclude, he offered lessons learnt on three dimensions. Firstly, this is a **new way of working** that requires a paradigm shift. It implies more work and it takes more time, transaction costs are higher, but the signs of cultural change and impact on the nature of the collaboration between partners are already visible, he argued. In addition, this new way of working requires a type of programme that enables flexibility and adjustments and that requires to **adapt within research organisations**. Secondly, the approach relies on strong trust relationships. Building trust requires strong collaboration with **grassroots organisations** that have earned that trust from the local actors and it requires agreeing from the beginning on **common objectives** and priorities. Finally, communication and coordination are of utmost importance. Continued communication is needed to explain why this new way of working is needed and achieve the paradigm shift. And the skillset within organisation needs also to be adapted to make more space for e.g. innovation specialists, facilitators, social scientists.

Finally, Agnès Robin (European Commission, Research and innovation) introduced research infrastructures (RIs) in general and those that are active in fields of interest to agroecology in particular. She started by explaining what the European Commission considers as a research infrastructure. "*Research infrastructures are* ***facilities, resources and services that are used by the research communities to conduct research and foster innovation in their fields***", she explained. In practice, they can take many different forms: major scientific equipment, scientific collections, archives or data, computing systems, communication networks etc. Those that naturally come to mind are located on a single site, like a giant telescope or particle accelerator. But increasingly, the infrastructures developing in the European landscape are "distributed" on various sites, for example in health, life sciences, environment or social sciences. They can even be virtual, servicing researchers on-line. *"A centre of excellence or a group of people with expertise in one field is not a research infrastructure"* she also clarified. A research infrastructure is a facility that will provide a unique service to the scientific community.

She explained that the EU has decided to develop a **common approach to research infrastructures** because these are mostly under responsibility of the Member States. A common approach is needed to avoid duplications, ensure interoperability, save resources by avoiding duplication and promoting cooperation and access of researchers to these facilities across borders more easily. A key body in this coordination is the "European strategy forum on research infrastructures" (ESFRI) that develops and updates a strategic roadmap on research infrastructures. Agnès Robin also listed several initiatives that aim to facilitate the development, coordination and use of RIs across Europe such as the specific legal status created for them (the European research infrastructure consortium - ERIC), or the charter for access to RIs. She explained how the European programme for research and innovation supports strategic steps in the development cycle of research infrastructures, such as the design and preparation, business planning, user strategy development, data and access policies and funding models. These are needed to build commitment from the Member States. The EU may support early implementation but not the daily operation of the infrastructures, aside from integrating activities, which represents 55% of the financial support.

She then presented existing research infrastructures that could be of relevance to the future partnership, described below.

European Plant Phenotyping Network **EPNN provides access a number of genotypes and innovative techniques to measure their performance under controlled conditions. EPPN partners are involved in real field experiments where they work on plant-soil-microbiome interactions of relevance to agroecology.**	**Lifewatch ERIC** **Lifewatch is an e-science infrastructure for biodiversity and ecosystem research that facilitates the sharing and aggregation of data on biodiversity and ecosystems and can provide computational and modelling capacities to support better decision-making.**
Emphasis – European infrastructure on plant phenotyping **Emphasis seeks to understand plant-environment interactions and transform this understanding into adaptation strategies. They could provide sites for field experiments, data and modelling services.**	**eLTER, Long-term ecosystem research in Europe** eLTER will bring together 162 sites in 22 countries that will provide data on long-term trends in environmental change and test cases using these data to address a range of environmental and social issues.
METROFOOD – infrastructure for promoting metrology in food and nutrition **Metrofood seeks to enhance quality and reliability of measurements on food quality and safety. They can provide data, information and measuring tools. They work with living labs on issues such as processing or mycotoxins that could be relevant to agroecological transition.**	**AnAEE – Analysis and experimentation on ecosystems** AnAEE provides data and models to address challenges of food production, ecosystem services and the bioeconomy and enable experiments on managed and unmanaged terrestrial and aquatic ecosystems.

Interesting points from the discussion

The presentations triggered a lively debate, both in the chat and in direct interaction with the speakers, during which the participants raised issues and provided inputs on several aspects.

Concerning the **concept of living labs in relation to agroecology and the partnership candidate**, participants overall agreed that living labs are well suited to the 'spatially specific knowledge intensiveness' of agroecology and could complement existing open innovation arrangements and answer the demand of a push towards agroecology. Participants therefore considered that, in order to be successful, living labs need to be locally adapted. This calls for establishing multiple living labs in different sites, as well as for the sharing of best practices between living labs in different regions and counties, for the involvement of actors at the regional, national and international levels, and for well defining the relations and linkages between the various living labs in the network. Participants insisted on the need to ensure that farmers' needs, challenges and priorities are fully taken into account when building the partnership and to consider holistic approaches (farming and the rest of the value chain). Synergy and complementarity should be ensured with relevant ongoing initiatives under Horizon 2020, such as those looking at major challenges related to land degradation and restoring soil quality.

In relation with **actors, activities and links of living labs with the wider policy context**, participants raised several questions about the preparatory process needed in order to start a successful living lab. Questions were also raised about the governance requirements for living labs that ensure coordination between partners and ensure adequate management of the internal dynamics, the links with the wider national policy processes, the funding sources, the limiting factors for the lifecycle of living labs (funding, motivation, etc), the usual life span of living labs and their sustainability in the longer run, the links of living labs with spheres beyond research, the role of external actors, and how to link agroecosystem living labs with upstream research and with downstream upscaling/knowledge deployment. In relation to what would be the most efficient ways to involve the farmers in the living labs, participants underlined the importance to involve them from the outset since this ensures they have trust in the output and are willing to change their practices.

Participants raised questions about the level of overlap between rural living labs, agroecosystem living labs, and agroecology living labs and the implications this brings for the partnership, and about how to marry the dynamism of living labs with the more 'static' nature of research infrastructures.

Overarching questions and take-aways

Participants were finally asked to respond to two questions about (i) **how they see the link between agroecology and different places** and on (ii) **their main take-aways from the two webinars.**

On the question **''How do you see the link between agroecology and different places''**, the participants highlighted that agroecology is seen as an open concept for sustainable farming, that opens up the debate between usually contradictory approaches and provides a living and open space for developing something solution-oriented. It is seen as the way to improve sustainability of farming systems that needs to take into consideration the geophysical characteristics of each site. As agroecology should rely on local resources, R&I should be country-specific to ensure that all EU regions can develop a system most relevant to them. The implementation of the agroecology principles will therefore be unique in each place and their application should also go beyond the farm level to encompass culture and landscape. Thus, agroecology links local to landscape. The site-specificity of agroecology, its knowledge intensiveness and how to scale up are key challenges according to the participants. In this regard, they identified living labs as a central methodology to build an agroecology system that fits local communities and to provide R&I answers to agroecological conditions and products of each local and regional productions. They pointed out the importance for R&I in agroecology to be farmer focussed and implemented at a regional level, as

actual implementation will need to be slightly different according to the local conditions. They insisted on efficiently valorising farmers' knowledge, with their specificities and traditions, as well as on the need to construct spaces that put stakeholders in the middle and high-level education linked to extension services to better help farmers. Linkages with research, policy and companies have to be strengthened. Some participants underlined the importance of going beyond the farmer and farm level and to include the wider food system and related actors. Some participants referred to the multi-actor approach as essential when defining a living lab. Participants highlighted that aspects related with technology, education, policy, economics and social sciences need to be integrated in the living labs (e.g. market access, generation/sharing of knowledge, evolution of producers' organisations, etc.) and are key to move them forward and to ensure holistic perspectives. The potential of digital technologies in moving the agroecology transition forward was also underlined, as well as the importance for agroecology R&I to build on existing organic research, as the two approaches share the same objectives. Training on system and co-creation approaches were also considered as necessary, as well as a role for better regulation and standards as drivers for innovation and change towards agroecology.

Concerning the **main take-aways from the two days**, the participants confirmed their views that living labs are a convincing approach to initiate problem or opportunity driven research partnerships and that their use is likely to build trust and make it easier to spread the practices more widely and more quickly, if every participant can benefit from the process. The need to be pragmatic in defining what constitutes a living lab and narrowing down the concept to match the principles of agroecology was proposed, since elements are present in many existing approaches to innovation in agriculture. Some participants recognised that living labs are difficult but possible and that they are the way to move forward. A key learning was that living labs are a real option when it comes to farming and building agroecology and resilience in agriculture.

Finally, participants underlined that although agroecology has a strong regional focus, it would be very valuable to link different initiatives to benefit from exchanges on approaches, living lab methodologies, and getting more visibility for innovative initiatives. They also expressed doubts in relation with the long-term sustainability of living labs, and asked for more clarification about the complementarity and interaction between living labs and research infrastructures. The question of how to fit organic farming in the partnership was also raised, as well as the need to find complementarities with other partnership candidates under Horizon Europe.

Closure and next steps

The European commission concluded by presenting the next steps in discussing this candidate Horizon EU partnership. These include:

- Launching a mapping survey to collect examples of agroecology living lab initiatives in the EU;
- Organising two webinars on concrete examples (4 and 5 June 2020);
- Organising interactive sessions with potential partners to start co-creating the different elements of the partnership in practice (from June 2020 onwards);
- Starting preparation of the partnership thanks to projects funded under Horizon 2020 call FNR-01-2020.

Webinars agenda

EUROPEAN COMMISSION WEBINAR SERIES

BUILDING A PARTNERSHIP ON AGROECOLOGY LIVING LABS AND

RESEARCH INFRASTRUCTURES

WEBINARS 1&2: BUILDING A SHARED UNDERSTANDING OF THE CONCEPTS

6-7 MAY 2020

AGENDA

Wednesday 6 May

15:00 Opening session

- Why a partnership on agroecology? Opening statements by European Commission DG Agriculture and rural development – Nathalie Sauze-Vandevyver – Director for quality, research and innovation and outreach
- The potential of living labs to enable transition to sustainable farming - Opening words from MACS-G20 Agroecosystem Living Labs Working Group - Javier Gracia-Garza – Acting Associate Assistant Deputy Minister for Agriculture and Agri-Food Canada, Science and Technology Branch

15:35 Building a shared understanding of the concepts and scope

Several viewpoints on the concepts - Understandings of agroecology:

- Agroecology in sustainability transitions: concepts – Christian Huyghe, INRAE
- Evidence on the potential of agroecology in Europe – Alain Peeters, RHEA & Agroecology Europe
- An international perspective: ten elements of agroecology and how to measure its performance - Anne Mottet, FAO

16:40 Exchange on the presentations through chat and live

16:55 Wrap-up and next steps

17:00 End of webinar

Thursday 7 May

15:00 Building a shared understanding of the concepts and scope

Introduction by moderator.

Several viewpoints on the concepts

- Understandings of living labs and their application to agriculture:
    - A European cross-sectoral definition of living labs – Koen Vervoort - EnoLL

- Agroecosystem Living Labs defining characteristics and implementation in Canada – François Chrétien – Agriculture and Agri-Food Canada

- Understandings of research infrastructures
    - Overview of Research Infrastructures in the scope of the partnership – Agnès Robin – European Commission DG Research and innovation

16:30 Exchange on the presentations through chat and live

16:55 Check-out and next steps

17:00 End of webinar

Attendance list

This attendance list has been composed based on screenshots of the participants in the webinar and on the initial invitation list. Only people for whom there was a name and surname have been included. Affiliations and countries may not be totally correct. Participants who joined by phone are not included. Participants who joined in the middle and left before the end may also be missing.

Name/Firstname	Country	Organisation	Present 6/5	Present 7/5
Kurz Simone	AT	FFG - Europäische und Internationale Programme - Nationale Kontaktstelle für Lebensmittel, Land- und Forstwirtschaft, Biotechnologie	1	1
Ohrloff Chiara	AT	Federal Ministry for Sustainability and Tourism	1	1
Burssens Sylvia	BE	Uni Ghent - EURAKNOS, EUREKA	1	1
De Cock Lieve	BE	Institute for Agricultural and Fisheries Research (ILVO)		1
De Vos Liselotte	BE	Flemish Dept. of Economy, Science & Innovation	1	1
Delanoy Marleen	BE	LV VLANDEREN	1	
Depraetere Dieter	BE	INAGRO - Onderzoeksleider agromilieu - O&O Agro milieu: AGM		1
Lazzaro Mariateresa	BE	FiBL Europe	1	1
Lewis Jennifer	BE	IBMA	1	1
Liaigre Angèle	BE	Région Pays de Loire (bureau Bxl) - Chargée de mission politiques urbaines, environnement, bioéconomie		1
Magnus Isabelle	BE	DEPARTEMENT LANDBOUW EN VISSERIJ	1	
Marchand Fleur	BE	ILVO- Digital & Agroecology LL	1	1
Nyssens Célia	BE	European Environmental Bureau	1	1
Petit Carine	BE	SPW Recherche	1	1
Chretien François	CA	AAFC	1	1
Gracia-Garza Javier	CA	AAFC	1	1
Baur Robert	CH	Agroscope (Swiss centre of excellence for agricultural research, affiliated with the Federal Office for Agriculture)	1	1
Antoniou Leonidas	CY	Research and Innovation Foundation		1
Koníčková Naďa	CZ	Technology Centre CAS, PC H2020 SC2 member, expert to the shadow PC for cluster 6 phone +420 728 212 429	1	1
Buttler Manning David	DE	Forschungszentrum Jülich · Project Management Jülich (PtJ)		1
Ellermann-Kuegler Karin	DE	Association of Chambers of Agriculture / Verband der Landwirtschaftskammern - Brussels Office	1	1
Lampel Stefan	DE	Juelich	1	1
Michel Klaus Peter	DE	BMBF ref. 726	1	1
Rocha Bettina	DE	Ministry of agriculture - NRN-EIP	1	1
Saggau Elke	DE	ERANET SusAn + SCAR Sustainable animal production	1	1
Schneider Julia	DE	University of Hohenheim, Center for Organic Farming	1	1
Schubert Sebastian	DE	Bundesministerium für Ernährung und Landwirtschaft (BMEL)	1	1
Schwarz Gerald	DE	Von Thuenen Institute - Thuenen Institute of Farm Economics	1	1
Tesmer Maja	DE	Leibniz Centre for Agricultural Landscape Research (ZALF)		1
Tinois Nicolas	DE	JÜLICH	1	1
Berg Torsten Rødel	DK	Aarhus universitet	1	1
Gøtke Niels	DK	Ministry of research and Higher Education, Denmark		1

Name/Firstname	Country	Organisation	Present 6/5	Present 7/5
Thomsen Bjarne	DK	Ministry of Environment and Food Denmark	1	1
Trkulja Ivana	DK	ERANET Core Organic	1	1
Saar Kathrin	EE	ETAG	1	1
Talve Siret	EE	Ministry of Rural Affairs	1	1
Gypakis Antonios	EL	Policy Planning Department, MINISTRY OF DEVELOPMENT AND INVESTMENTS, GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY	1	1
Sarigiannis Dimosthenis	EL	Technologies Division, Environmental Engineering Laboratory, Department of Chemical Engineering, Aristotle University of Thessaloniki	1	
González Jose Manuel	ES	CDTI/ State Research Agency/National Institute for Agricultural Research (INIA)	1	1
González Lydia	ES	CDTI. Spanish expert to cluster 6	1	
González-Aranda Juan Miguel	ES	LIFEWATCH - E-SCIENCE EUROPEAN INFRASTRUCTURE FOR BIODIVERSITY AND ECOSYSTEM RESEARCH	1	1
Mosquera Rosada Maria Rosa	ES	University Santiago de Compostela	1	1
Sanchez Benjamin	ES	INIA	1	1
Vancanneyt Guy	ES	INIA. Research Prospection. Spanish expert to cluster 6	1	1
Ugarte Sagastizabal Eva	ES (Basque c.)	Innovation and Technology of NEIKER (Basque Institute for Agricutural Research and Innovation)	1	1
Andersen Ian	EU	European Commission - SCIC	1	1
Bingol Olcay	EU	ECVC	1	
Boyle Pamela	EU	European Commission - ENV	1	1
Choplin Gérard	EU		1	
Chovancova Svetlana	EU	European Commission - ENV	1	
Debernardini Mariana	EU	CEJA		1
Duponcel Marc	EU	European Commission - AGRI	1	1
Enfedaque Josefina	EU	European Commission - RTD-C1	1	
Gallardo Jesus	EU	LIFEWATCH ERIC	1	
Gaona-Saez Susana	EU	European Commission - AGRI	1	1
Hester Zachary	EU	European Commission - HR		1
Hostens Ivo	EU	CEMA	1	1
Hubert Lysiane	EU	European Commission - AGRI	1	1
Iglesias Marta	EU	EC - AGRI	1	1
Kuegler Michael	EU	EUFRAS / VLK (EU Bxl)	1	1
Lazaro Mojica Jonas	EU	Food Drink Europe + ETP Food for life	1	
Lutzeyer Hans-Joerg	EU	European Commission		1
Moeskops Bram	EU	IFOAM	1	1
Moraut Hélène	EU	CoR/EESC -section NAT	1	1
Muravjova Olga	EU	European Commission - HR	1	1
Niggli Urs	EU	FiBL Europe	1	1
Pasa Arianna	EU	European Commission - AGRI	1	1
Peppiette Zélie	EU	European Commission - AGRI	1	1
Petel Emmanuel	EU	European Commission - AGRI	1	1
Rega Carlo	EU	European Commission - JRC	1	
Robin Agnes	EU	European Commission - RTD	1	1
Rosenow Kerstin	EU	European Commission - AGRI	1	1

Name/Firstname	Country	Organisation	Present 6/5	Present 7/5
Rouby Alexia	EU	European Commission - AGRI	1	1
Sauze-Vandevyver Nathalie	EU	European Commission - AGRI	1	
Tranberg Anna	EU	ERRIN	1	
Lindholm Pirita	EU	ERRIN	1	
Van Oost Inge	EU	European Commission - AGRI		1
Vervoort Koen	EU	EnoLL		1
Von Der Decken Henrique	EU	European Commission - ENV	1	1
Vrublova Katerina	EU	COPA-COGECA	1	1
Karjalainen Eeva	FI	Ministry of Agriculture and Forestry	1	1
Sevon Aira	FI	Chair of Finland's organic cereal farmers´ cooperative, Kymi Organic Coop/member IFOAM EU/ESVY	1	
Bergeret Pascal	FR	CIHEAM-IAMM	1	1
Chourot Jean-Marc	FR	Ministère de l'agriculture et de l'alimentation	1	1
Hippolyte Isabelle	FR	ANR (Agence Nationale de la recherche)	1	1
Huyghe Christian	FR	INRAE	1	
Le Roux Xavier	FR	ERANET Biodiversa		1
McKahn Heather	FR	FACCE secretary general	1	1
Peyraud Jean-Louis	FR	Animal Task Force	1	
Savigny Geneviève	FR	EESC	1	1
Wezel Alexander	FR	ISARA	1	1
Krystallidou Evdokia	GR	American Farm School	1	1
Papadopoulos Filippos	GR	American Farm School - FRESHFRUIT S3 project	1	1
Hengl Brigita	HR	Center for Food Safety, Croatian Agency for Agriculture and Food, Croatia	1	1
Drexler Dora	HU	ÖMKi - Hungarian Research Institute of Organic Agriculture	1	1
Juhasz Aniko	HU	SCARAKIS	1	1
Kovacs Barna	HU	BIOEAST	1	
Kranitz Livia	HU	Hungarian Ministry of Agriculture, Department of Agriculture, Unit of Research, Development and Innovation	1	
Kunya Zsofia	HU	Hungarian Ministry of Agriculture, NCP, Department of Agriculture, Unit of Research, Development and Innovation	1	1
Hollosi Krisztina	HU	National Research, Development and Innovation Office, Dept for International Affairs, Unit for Horizon Europe / H2020 NCP	1	
Barrett Patrick	IE	Department of Agriculture, Food and the Marine	1	
Kelly Raymond	IE	TEAGASC	1	1
Kelly Tom	IE	TEAGASC		1
Mottet Anne	INT	FAO	1	1
Lucantoni Dario	INT	FAO - AGA	1	
Albertini Alice	IT	Italian Ministry of agricultural, food and forestry policies - MIPAAF	1	1
Boscaleri Fabio	IT	ERIAFF - Tuscany Region	1	1
Capolino Elena	IT	Italian Ministry of agricultural, food and forestry policies - MIPAAF	1	1
Cristiano Simona	IT	CREA	1	
Fava Fabio	IT	'Food security, sustainable agriculture..' Programme Committee	1	1
Grando Stefano	IT	Italian Ministry of agricultural, food and forestry policies - MIPAAF	1	1

Name/Firstname	Country	Organisation	Present 6/5	Present 7/5
Lo Porto Antonio	IT	Italian National Research Council | CNR · Institute of Water Research IRSA	1	
Peeters Alain	IT	AgroEcology Europe + UNIVERSITA DEGLI STUDI DI SCIENZE GASTRONOMICHI	1	
Puliga Serenella	IT	Italian Ministry of agricultural, food and forestry policies - MIPAAF	1	1
Rossi Daniel	IT	COPA-COGECA (R&I WP)		1
Rubini Andrea	IT	Water-oriented LL - WATER EUROPE	1	1
Silvia Baralla	IT	Ministry of Agriculture, Food, Forestry and Tourism, MIPAAFT	1	1
Stefanova Milena	IT	ENEA SSPT-BIOAG-SOQUAS	1	
Zoani Claudia	IT	ENEA SSPT-BIOAG (Italy)		1
Maziliauskas Antanas	LT	VMU Agriculture Academy	1	1
Betz Charles	LU	Luxinnovation	1	1
Zangerle Anne	LU	Ministry of Agriculture - CAP Strategic Planning Authority (AKIS designing)	1	1
Liepina Laura	LV	Ministry of Agriculture	1	1
Svane Baiba	LV	Ministry of Education and Science, RIS3	1	1
Attard George	MT	Ministry for Agriculture, Fisheries and Animal Rights	1	1
Fabri Anthea	MT	Malta Council for Sciene and Technology - Horizon Unit	1	1
Farrugia Josiane	MT		1	
Muscat Diane	MT	Ministry of Finance - Policy Development and Programme Implementation		1
Sammut Peter Paul	MT	Policy Development and Programme Implementation Directorate, Office of the Permanent Secretary, MT		1
Dawson Andrew	NL	WUR	1	1
Hassink Jan	NL	Agrosystems Research, Wageningen Plant Research	1	1
Koning Hillebrand	NL	FLEVOLAND Region	1	
Siegmund-Schultze Marianna	NL	Land Use and Food Security, Agrosystems Research, Wageningen Plant Research	1	1
Zweep Annet	NL	Ministry Agriculture, Nature and Food Quality	1	1
Anker-Nilssen Kirsti	NO	The Norwegian Ministry of Agriculture and Food	1	1
Gilberg Thorbjørn	NO	The Research Council of Norway	1	1
Langthaler Gudrun	NO	The Research Council of Norway (RCN)	1	1
Lieblein Geir	NO	Norwegian University of Life Sciences (NMBU) · Department of Plant and Environmental Sciences (IPM)	1	1
Cieślikowska Justyna	PL	Ministry of Agriculture and Rural Development		1
Foks Agata	PL	Ministry of Science and Higher Education	1	1
Grodzka Ewa	PL	Ministry of agriculture	1	
Fernandes Maria João	PT	ANI (National Innovation Agency)	1	1
Maçãs Benvindo	PT	INIAV	1	1
Maia Maria João	PT	FCT & Science Officer	1	
Mira da Silva Luis / Matos José	PT	INOVISA	1	1
Silva Natalia	PT	Azores government		1
Sutcliffe Ana	PT	ANI (National agency for innovation) - NCP and national delegate for Space and Cluster 6		1
Jitea Ionel Mugurel	RO	Agribusiness Financial Management and Agricultural Policies, Dept of Economic Sciences, University of Agricultural Science and Veterinary Medicine Cluj-Napoca		1
Trajkovic Milica	SB	EnoLL	1	1
Ivarsson Kjell	SE	COPA-COGECA (R&I WP)		1
Jeremiasson Alexandra	SE	Department for Agricultural Sciences, Swedish research council for environment agricultural sciences and spatial planning (FORMAS)	1	1

Name/Firstname	Country	Organisation	Present 6/5	Present 7/5
Šabec Marta / Ceglar Katja	SI	Ministry of Education, Science and sport	1	1
Baštáková Viera	SK	General state counselor	1	1
Hreňová Jana	SK	Ministry of Agriculture and Rural Development, officer	1	1
Hronček Stanislav	SK	General state counselor	1	1
Peskovic Dana	SK	University of Nitra	1	
Peškovičová Dana	SK	NPPC National Agricultural and Food Centre, Department of project management and external relations	1	1
Collins Mike	UK	Adviser's Office, Defra	1	1
Krysztoforski				1
Miron Elena-Teodora			1	1
Morell Angela			1	
Müller Wiebke			1	1
Ortolani Livia				1
Pavao Ana Luisa				1
Raap Edwin				1