

EXPLORING THE ROAD TO A LEDREBORG LANDSCAPE LABORATORY

**REPORT ON CONFERENCE AND WORKSHOPS
HELD AT LEDREBORG ESTATE - JUNE 2-3, 2025**



KØBENHAVNS
UNIVERSITET

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SKJOLDUNGERNES LAND

This report is published by Skjoldungernes Land National Park and Globe Institute at University of Copenhagen based on the output from a conference held at Ledreborg Estate, 2-3rd of June 2025.

Workshops during the conference were hosted by Asmus Gamdrup Jensen and Louise Beck Brønnum from Kost Studio. The analysis of the workshop outcomes and a report draft were produced by Asmus Gamdrup Jensen and Louise Beck Brønnum before being edited by Skjoldungernes Land National Park and Globe Institute.

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Se more <https://nationalparkskjoldungernesland.dk/projekter/ledreborg-landskabslaboratorie>

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October 2025

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An aerial photograph of a vast, rolling landscape. The foreground is dominated by vibrant green fields, some with visible furrows from plowing. A small, dark pond is nestled in a valley. In the middle ground, there are more fields, some with patches of yellow and orange, suggesting autumn. A line of trees with similar autumnal colors runs across the landscape. The background shows a hazy horizon under a sky filled with large, white and grey clouds. The overall scene is one of natural beauty and tranquility.

” This landscape offers all the opportunities we need to do experiments on adapting to climate changes but actually also preventing them from happening“

Minik Rosing, Professor,
Globe Institute, University of Copenhagen

THE LEDREBORG LANDSCAPE LABORATORY

On June 2-3, 2025, a group of Denmark's leading researchers, practitioners, policy makers and other stakeholders met on the Ledreborg Estate, just outside Copenhagen. They spent two days collectively exploring the need and potential of establishing a landscape laboratory to address national and global societal challenges within climate, environment, biodiversity, and food and forest production.

The workshop venue was chosen for its historical importance and relevance for becoming the nucleus of a landscape laboratory of international significance. The conference took place in the estate that was built more than 250 years ago, by the former Minister of State, Johan Ludvig Holstein. Back then, in the 18th century, an enormous reform took place in Denmark, restructuring the landscape, forest and food production to secure sufficient resources and meet new demands of the rising, modern society. An important part of this societal transformation was The Royal Danish Academy of Sciences and Letters, founded in 1742 by Johan Ludvig Holstein et al.

Once again, the Ledreborg Estate has the opportunity to play a vital role in the urgent need for transforming our landscapes, this time on a global scale. The big question is how. How do we solve the urgent and multifaceted challenges that spans biodiversity, food systems, forest systems, CO₂ emissions, water environment. And how can a landscape laboratory in the undulating landscapes of Ledreborg become a significant force of global change in the green transition?

These questions were fundamental to the conference held at Ledreborg on June 2-3 2025, initiated by Skjoldungernes Land National Park and Globe Institut at University of Copenhagen in collaboration with Ledreborg Estate and funded by the Novo Nordisk Foundation. How can a scientific research and demonstration laboratory be built that can test new innovative solutions, methods and technology – explore, fail and succeed – on a scale representative for our ecosystems? And how can it be done fast enough?

The conference aimed to explore the need and potential for establishing platforms based on scientific excellence and practice-oriented innovation to address global societal challenges, while also testing and developing innovative solutions for the Green Tripartite at a landscape scale and fostering societal engagement in the green transition.

This report will analyse the outputs from the conference and has three main aims:

- i) to evaluate the landscape laboratory's potential to support research and innovative land use,
- ii) to recommend development strategies for the laboratory,
- iii) to provide guidelines for establishing large-scale living labs.

The report and its conclusions are based upon the inputs from the participants; the leading researchers, practitioners, policy makers and other stakeholders in the country, during the two days of the conference. The inputs from the participants materialized as presentations, discussions, workshops and polls at the conference, as well as through follow-up conversations with the project partners after the conference.

The report starts with a brief examination of how the conference unfolded. Thereafter, the main part of the report is dedicated to evaluating the potentials of the Ledreborg Landscape Laboratory, and the road to get there.

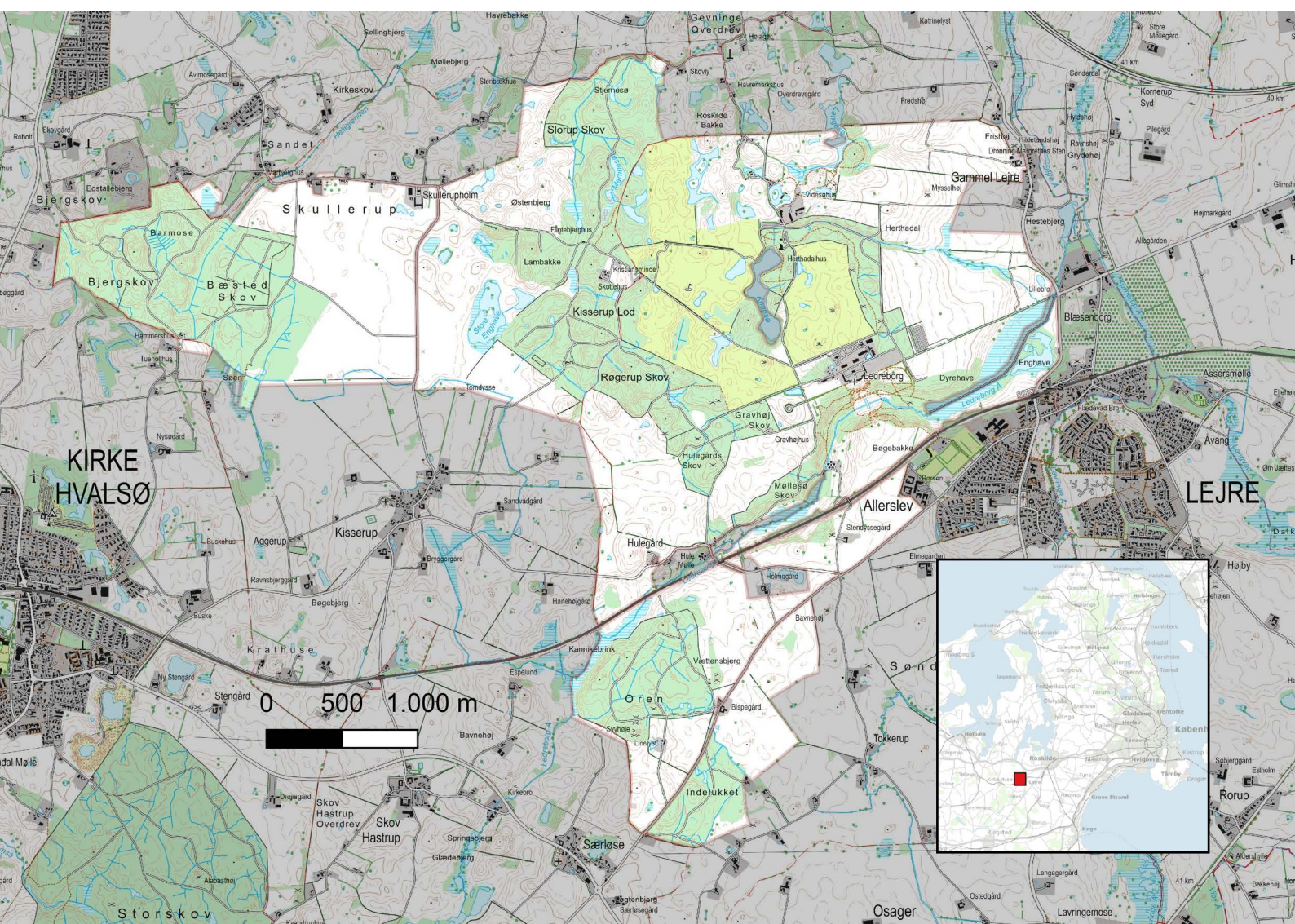
The report has been edited and published by Skjoldungernes Land National Park and the Globe Institute, based on a draft by Asmus Gamdrup Jensen and Louise Beck Brønnum from Kost Studio, who also facilitated the workshops during the conference. As organisers of the conference, we would like to thank Asmus Gamdrup Jensen and Louise Beck Brønnum for their guidance, all the participants for their valuable contributions,



the Novo Nordisk Foundation for their support, and Silvia and John Munro at Ledreborg Estate for providing such an inspiring venue. We look forward to continuing our collaborative efforts with the Ledreborg Landscape Laboratory, building on the encouraging support, recommendations and guidelines from the conference.

Anders Johannes Jensen, Globe Institute &
Anders Bülow, Skjoldungernes Land National Park

October 2025





It is also significant that Ledreborg Estate holds archives that document 300 years of land-use, which could provide a baseline for experiments in the landscape laboratory. The exceptional opportunities at the Ledreborg Estate will be evaluated in detail later (Ch.3).

The neighboring surroundings also comprise a rich experience and history of engagement and out-reach through the Land of Legends and Skjoldungernes Land National Park. These local strengths could become resources for the laboratory to potentially build upon in establishing a visitor centre and an opportunity for the public, nationally as well as internationally, to understand, interact and engage with the landscape of the green transition.

” This gathering might plant a seed, a partnership, where landscape science and practice work hand in hand, not just observing nature but working with it..[].. we would be very proud to explore and share new ways to use this landscape for the benefit of all but most of all future generations.“

John Munro, Ledreborg Estate.

THE PURPOSE OF THE CONFERENCE

The purpose of the conference was fourfold:

- 1) to discover and understand the landscape laboratory and the rationale behind the idea,
- 2) to discuss and evaluate the feasibility of creating a facility that can support excellent research, innovative land use, production and global out-reach,
- 3) to formulate recommendations pertaining to the development strategies of a landscape laboratory, and finally – if the conclusions support the establishment –
- 4) to discuss and formulate the outline of a “manifesto” that can work as guidelines for establishing large-scale living labs at Ledreborg and beyond.

These four purposes align with the three earlier mentioned aims of this report, namely to evaluate the support for the laboratory (i) and to recommend development strategies (ii) and to provide guidelines for large-scale living labs (iii).

PARTICIPANTS

The ambition was from the start to invite key stakeholders from a diverse range of research disciplines, practitioners, policy makers and beyond. An initial list of participants covering a broad range of disciplines, affiliations and stakeholders was invited. Successively, snowballing based on suggestions from members of the initial list resulted in additional invitations and totally eighty participants. The diversity, excellence and number of participants (see full list in appendix) for the two days at Ledreborg went far beyond what the partners had expected. The span of world leading researchers, disciplines, practitioners, farmers, policy makers, politicians and innovators that enthusiastically interacted during the conference confirmed in itself the relevance of the initiative, and gave crucial inputs highlighting both opportunities, challenges and paths forward. This report examines how.



2. THE CONFERENCE

The conference was divided into three overall parts (see appendix for the full programme and list of contributors):

- 1) Setting the Scene,
- 2) Field trip into the landscape,
- 3) Workshops.

The program was structured to facilitate opportunities for the participants to give inputs, discuss and help develop recommendations during the conference.

participants, focusing on the urgent need for new models, interdisciplinary approaches and methods to address the diversity of current challenges, ranging from nitrogen leaching and carbon emissions, biodiversity, water environment and groundwater, securing essential nutrients, food and fiber. It was underlined that the Ledreborg Landscape Laboratory should be understood as a world-leading research and demonstration landscape for The Green Tripartite, and an opportunity for excellent researchers and practitioners to explore local and global solutions at landscape level.

2.1 SETTING THE SCENE

In the first part, the participants met in the Family Hall of the Ledreborg Estate. The Globe Institute at Copenhagen University, Skjoldungernes Land National Park and the Ledreborg Estate, introduced the initiative and the urgent context of both global challenges and the Green Tripartite. The vision of the initiative, the ambition and the locality was presented to set the scene for the

” If not here in Lejre, then where?
If not now, then when?“

The Mayor of Lejre Municipality,
Tina Mandrup



2.2 FIELD TRIP

In the second part, the conference moved into the landscape. A three hour tour through the different landscape types of the laboratory with meadows, forests, farmed land, wetlands, streams, bogs and swamps. At nine stops along the way various leading researchers and key practitioners briefly presented their relevant work and what potentials they saw in the landscape, in an engaging exchange with the other participants.

” **Ledreborg is a unique opportunity to study the limits to biodiversity recovery across a landscape with small, diverse habitats within a mix of production systems, agriculture, and recreation** “

Signe Normand, Aarhus University.

The tour presented projects and experiments that could potentially unfold, and how they in different

ways addressed urgent challenges and the Green Tripartite. The various landscapes gave opportunities to address a number of different themes: resilient food production, water management, afforestation and forest production, biodiversity, carbon emissions – capturing and sequestration – economics, regulation and law, land use and public engagement, education and demonstration, presented by some of the leading stakeholders.

” **The Ledreborg Landscape Laboratory provides us with the opportunity of whole ecosystem approaches and can give us important new knowledge on the effects of different management practices on the biodiversity in our forests.** “

Inger Kappel Schmidt, Professor, IGN, University of Copenhagen.

The importance of having a diverse and multi functional landscape to test, validate and explore



FOTO KAREN BIE LILLEØR

was underlined; a landscape to explore novel solutions in relation to the Green Tripartite with both vertical layers of usage over time, and horizontal layers with a diverse landscape with multiple land uses.

2.3 WORKSHOPS

In the final part, a number of workshops hosted a discussion about opportunities, potential projects, obstacles, necessary infrastructure and long term solutions that can be explored in the landscape laboratory. This part unfolded over two days, built to be interdisciplinary and gradually develop pathways towards a laboratory.

Workshop 1: Landscape of Opportunities.

An opportunity for the participants to present their work and engage in groups. Initial idea generation, explored how existing research and innovative land use can be unfolded in the landscape laboratory (List of ideas in appendix).

Workshop 2: Factory of Ideas.

Day 2. The participants were divided into nine groups according to the main themes of 'food', 'timber and fiber', 'landscape management and governance', 'water environment', 'biodiversity' and 'dissemination and engagement', developing and discussing specific project ideas for the Ledreborg Landscape Laboratory.

Workshop 3: Principles of the Future Ledreborg Landscape Laboratory.

The groups presented and discussed their ideas, highlighting interdisciplinary overlaps with the aim of facilitating synergies between the different projects. A digital poll provided final inputs on guidelines for, and on the feasibility of, establishing a Ledreborg Landscape Laboratory.

All these inputs from presentations, field trips, workshops and polls are evaluated and discussed in the next part.



” You brought together a truly fantastic group of people and in such unique surroundings. It’s probably one of the most amazing events I’ve experienced in relation to my work.“

Tage Duer, CONCITO

3. EVALUATING THE POTENTIAL OF THE LEDREBORG LANDSCAPE LABORATORY

In the following three chapters of the report, we will address the correlating three report aims described initially:

- i) to evaluate the landscape laboratory's potential to support research and innovative land use
- ii) to recommend development strategies for the laboratory
- iii) to provide guidelines for establishing large-scale living labs.

The different points will sometimes overlap and reflections partly be repeated, but the main part of this chapter 3 will evaluate the landscape laboratory's potential to support research and innovative land use. The evaluation will be built on analysis of the inputs from the participants and on conversations with the project partners and key stakeholders after the conference.

3.1 HOW THE STAKEHOLDERS EVALUATE THE INITIATIVE

”Ledreborg offers a unique opportunity for us to explore planting some of the different crops we are developing based on nature's own solutions to climate change, while at the same time making these visible to the Danish community. The opportunities for addressing a number of diverse challenges at Ledreborg are even larger than I thought.”

Eske Willerslev, Professor,
Globe Institute, University of Copenhagen.

As the final part of the conference, the participants were asked to answer a digital poll (see full list of answers in appendix). The participants answered a number of questions, anonymously, intended to gain conclusive inputs on the relevance and feasibility of establishing the Ledreborg Landscape Laboratory

The fundamentals first: Did the participants consider the Ledreborg Landscape Laboratory to be a relevant, important and solutions-oriented initiative?

The short and evident answer is 'yes'. The overwhelming majority, 90%, of the participants considered the initiative to be important with 8,5% answering they were 'not sure'.

In addition to this, around 70% of the participants even confirmed individually that they already have specific ideas that would fit into the Ledreborg Landscape Laboratory.

Interdisciplinarity

The support for the initiative seems to span broadly across the disciplines. In another question, the participants were asked to relate their project idea to a theme, selecting only one. As seen below, the diversity of potential projects addresses a wide range of disciplines and critical agendas.

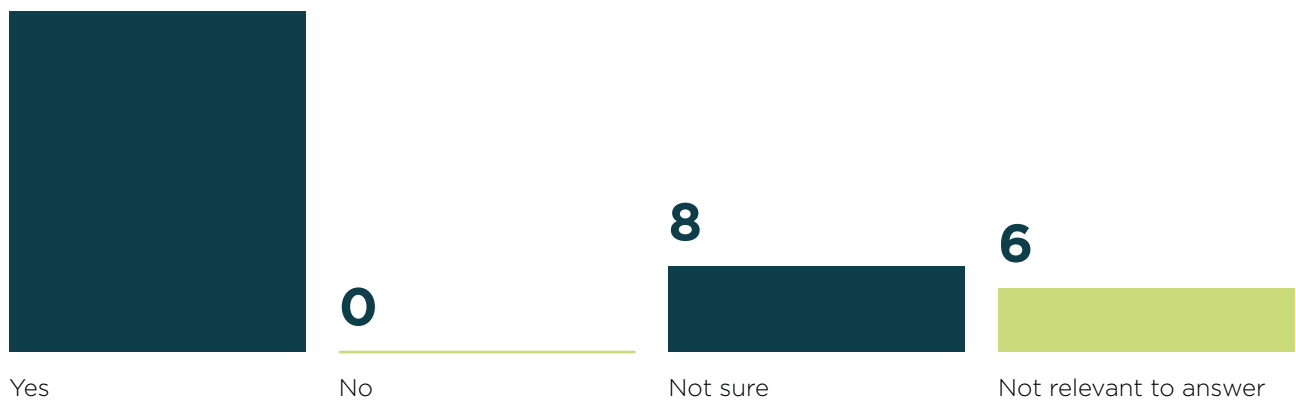
The Landscape Lab is an important initiative to create new research and solutions for the Green Tripartite?

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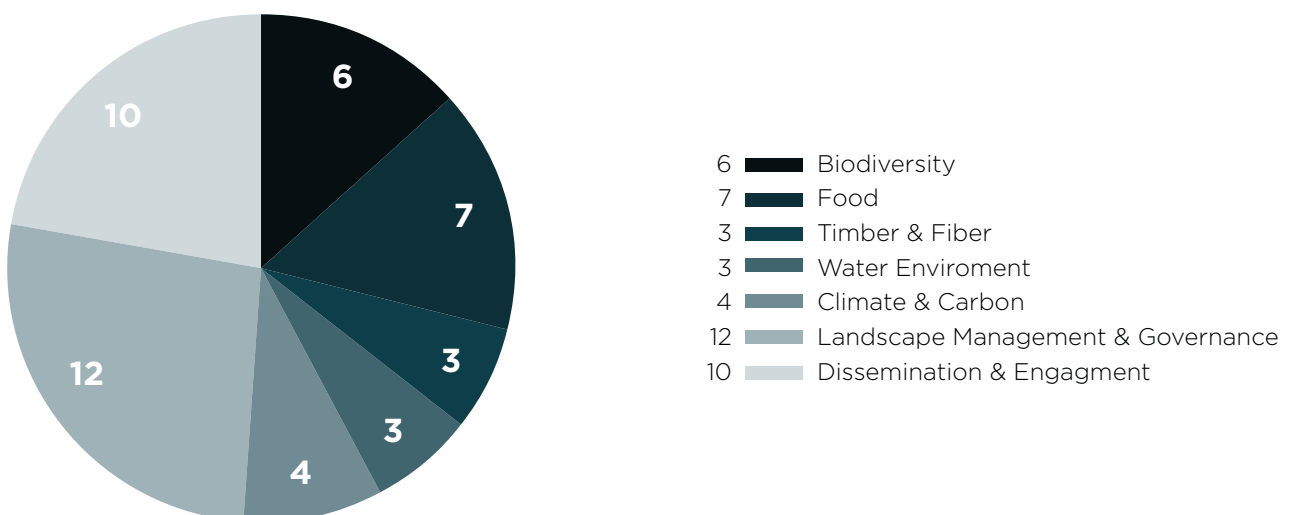


I have a project or an idea for a demonstration and research project that would fit into the Landscape Lab

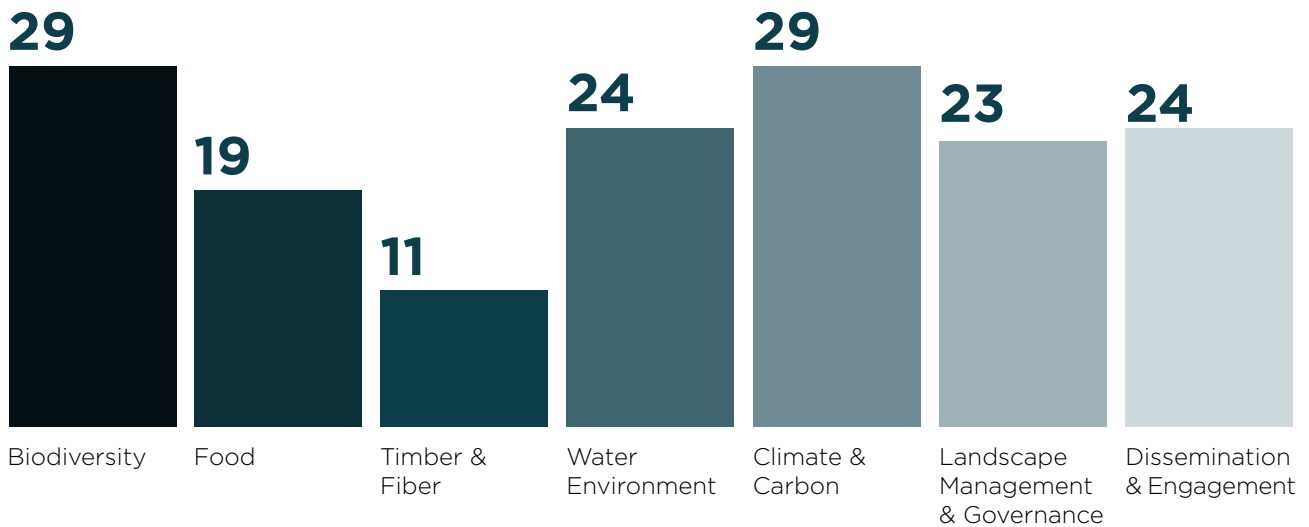
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If yes, which theme does your project idea or research and demonstration project fall under? (select only 1)



Which other theme (s) does your project idea or research and demonstration interact with?



3.2. INTERDISCIPLINARY OPPORTUNITIES AND THE NEED TO FACILITATE COLLABORATIONS IN THE LEDREBORG LANDSCAPE LABORATORY.

Interdisciplinarity, multidisciplinary, multi-functionality and interdisciplinary collaboration are some of the words that were repeated most often by the participants as strengths of the potential landscape laboratory. This seems clear in both the digital poll and during the workshops, and the diverse span of excellent research and demonstration to potentially unfold is exciting. The Ledreborg Landscape Laboratory does represent an opportunity to explore systemic, interdisciplinary solutions on future land use.

” Projects that bridge across several disciplines can be initiated here to study aggregate and systemic effects on the entire landscape system.“

Andreas Aagaard Christensen, Associate professor, Landscape Solutions Lab, University of Roskilde

Interdisciplinary project collaborations do not, however, happen automatically, and many participants highlighted the need for facilitating project collaboration across disciplines, and between research and practice. This facilitating role could be integrated into the landscape laboratory, creating workshops and strengthening the network and communities between participants with the aim of creating a shared database and a shared platform within the laboratory, developing interdisciplinary projects on a landscape level.

The need for facilitation is also evident to ensure collaboration between research and practice, ensuring that practitioners are also equally integrated into the landscape laboratory. It seems important to be aware of not just supporting collaboration between stakeholders within each discipline, but to facilitate a wider interdisciplinarity to ensure a true multifunctional exploration and synergy.

The diversity of disciplines, practitioners and agendas does also represent a risk of complexity, which further highlights the need for facilitating collaboration, building communities, sharing knowledge and data, and translating between the stakeholders of the landscape laboratory.

The Landscape Lab represents something new that can complement existing test plots/fields?

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3.3 HOW DOES THE LANDSCAPE LABORATORY POSITION ITSELF IN RELATION TO EXISTING TEST PLOTS?

Around 96% of the participants found that the Ledreborg Landscape Laboratory represents something new that can complement existing test plots/fields.

In what way does the landscape lab represent something new? Through workshops and presentations, both spatial and temporal arguments were emphasised.

Christoph Dockter, PI AEGIS PLUGIn Barley, Carlsberg Research Laboratory highlighted the opportunities to participate in research and demonstration communities, and the opportunities of outreach with the nearby proximity to Copenhagen. He expressed an interest in establishing test plots to Ledreborg.

” It is an obvious possibility to lay out 1 ha with a mosaic of trial fields with different barley varieties or AEGIS variants. It is generally important to test plant varieties that are more climate resilient or that might have improved nitrogen use efficiency. Larger AEGIS trial fields could also be located on Ledreborg Landscape Laboratory, where the dissemination potential is very large.”

Christoph Dockter, PI AEGIS PLUGIn Barley, Carlsberg Research Laboratory

Kurt Kjær, professor at Globe Institute, Copenhagen University, emphasised the ‘plug and play’ opportunities at the Ledreborg Landscape Laboratory. It will be ‘easy’ to initiate projects, and there are potential synergy effects in accessing other projects, experiments and data. Kurt Kjær also emphasised the layers of historical landscapes that are represented on the Ledreborg Estate.

” From these lakes, you can take a lake core and from the first pile, you can compare this with the information in the archives at Ledreborg – what crops have been grown around here – and then compare those two and use it to calibrate our eDNA information. It would be very valuable to be able to compare the biomass with what is found in the eDNA.”

Kurt H. Kjær, Professor, Globe Institute, University of Copenhagen

As Kurt H. Kjær points out, the premises and landscapes of Ledreborg also offer a temporal opportunity of historical land use that will be explored further below in 3.4. In conclusion, the Ledreborg Landscape Laboratory represents something new and different from regular test plots by offering interdisciplinary research at a landscape level, large scale in an area of profound historical significance.

What are the three main strengths and opportunities of the Landscape Lab (wordcloud)?



In the figure above, the size of the words grows according to the number of times they are mentioned by the stakeholders in the voting.

3.4. THE UNIQUE LOCALITY

A number of arguments for placing the landscape laboratory at exactly Ledreborg were discussed by the participants during the conference.

The scale and importance of the landscape

With more than 1000 connected hectares of land from one single landowner, the opportunity to do research and testing at this scale is unique in itself. The undulating mosaic landscape once shaped by ice glaciers and dead ice and now covered by cropland, forests, meadows, bogs, lakes etc. constitutes a diverse landscape, which provides opportunities to e.g. experimental biodiversity projects via corridors, extending into the farmed areas. The diversity of the landscape was also highlighted as the key strength and opportunity of the Landscape Laboratory throughout the conference. The locality gives room for a holistic approach, testing synergies and functionalities between different types of land use and research.

” What’s unique here is the scale and the landscape diversity. You have agricultural production, you have forestry and all sorts of other areas. And it is the spatial extent and diversity that I think we should build on. The starting point is simply unique in my opinion.“

Steffen Brøgger-Jensen, Programchef,
15. Juni Fonden

The proximity to Copenhagen

It is only 40 km from the Ledreborg Estate to central Copenhagen, an advantage highlighted by many of the participants. By car, you can reach the Ledreborg Estate from all the important research institutions and universities in Copenhagen, and therefore an opportunity for hands-on research and demonstration on a day-to-day basis.

With this proximity to Copenhagen, the potential to create an important site for education and outreach is also evident. It represents an opportunity for the public to engage with the transformations and experiments through a visitor centre that can attract locals, visitors, decision-makers, tourists, international guests and schools, engaging with the green transition and the research connected to it.

The position on Zealand does, of course, also represent a limitation. The distance from stakeholders in the western part of Denmark is more substantial, and though the landscape at Ledreborg is diverse, it does not represent all types of landscapes and soils, and not all results might be directly transferable to other landscapes. However, the Ledreborg Landscape Laboratory represents most landscape types east of the Main Ice Margin Line in Denmark, and could become exemplary for establishing large scale landlabs in other landscape types and regions of Denmark and internationally.

The temporal dimensions – The archives

Besides the landscapes, the proximity to Copenhagen and the historical significance of the area, the Ledreborg Estate sits on cultural heritage and descriptions of how the land has been structured and used since the beginning of the estate. Two old archives containing documents predating Ledreborg Estate itself sit underneath the old buildings, offering a unique opportunity to create a baseline of how the land has been used from 1750 until present.

Descriptions reach back to the early 18th century, describing farm processes, crops, forestry, the fish ponds and much more in pre-industrial times, as well as year-to-year documentation of land use in the transition from pre-modern to modern land use.

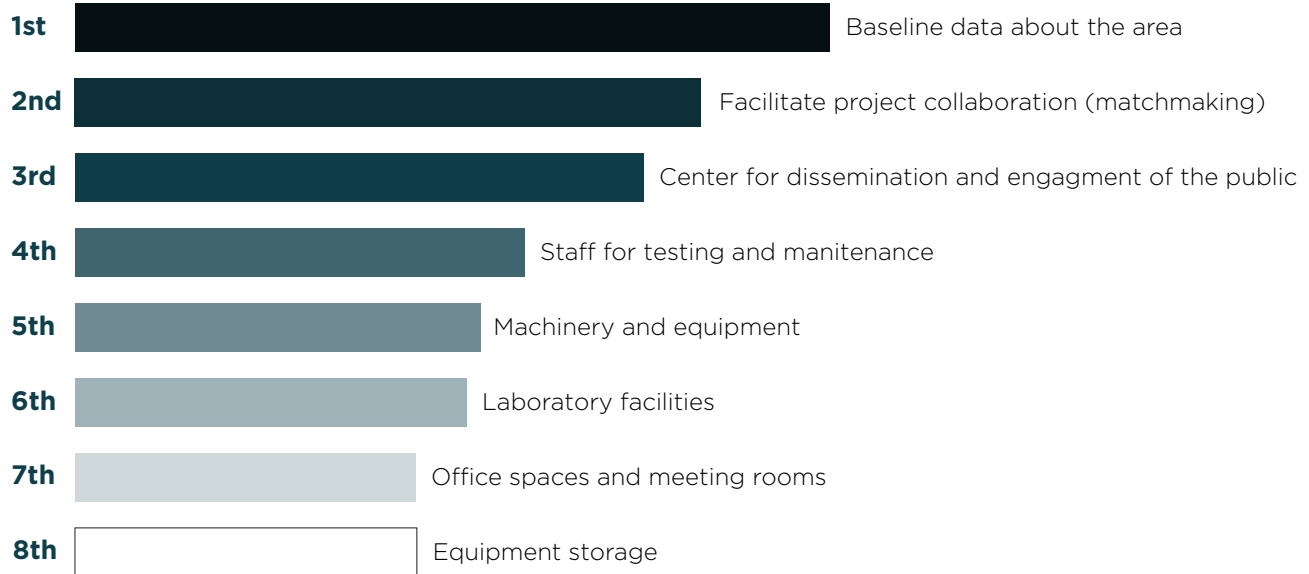
The archive also consists of approximately 300 historical maps of the premises that can be used as a geographical foundation for connecting the information of historical land use to locations in the present landscape.

Unlocking the historical data

The data from the historical documents are currently 'locked' in the analog archives, and not accessible. To be actively integrated into the Landscape Laboratory they need to be digitalised.

An attempt of pre-mapping the archives and locating the most relevant source material has however been initiated by the project partners since the conference. A detailed register of the archive has been digitised, and the physical state of the archive has been evaluated by professionals to ensure a safe working environment. On the 6th-8th of August 2025, a workshop was also held by the project partners at the Ledreborg Estate inviting external expertise to help pre-evaluate the archive, with participation of experts like The Scientific Manager of the Norwegian Language Collection – Peder Gammeltoft – and Senior Researcher at the Royal Danish Library – Stig Svenningsen. This process confirmed, among others, the presence of yearly data about types of crops grown on each of the fields on the estate.

Which facilities and services are particularly important to offer in the landscape lab (choose and rank)



3.5 ENABLING INFRASTRUCTURE: THE NECESSITY OF BASELINE DATA

To get valuable inputs on the necessary development strategies and relevant infrastructure for the laboratory, the participants were asked to prioritize the most important facilities and services that the landscape laboratory should offer. 'Baseline data about the area' was mentioned by most participants.

The baseline data could span widely and become an important key in creating impactful, interdisciplinary solutions. As described above, the historical land use can be documented from the archives of Ledreborg, and could work as an important shared historical baseline for different themes and disciplines if digitised. In addition to this, there is a demand for establishing baseline data within each thematic area, creating layers of baseline data as foundations for interdisciplinary project collaborations.

During the workshops, the need for baseline data was highlighted across the groups. In 'water environment', Inger Kappel from Copenhagen University, Heidi Barlebo from GEUS and Claire Treat from Aarhus University expressed a need for and a willingness to contribute to establishing baseline data on water, including nitrogen retention of the soil, defining relevant areas and data.

Building a platform to collect data

A suggestion to establish a 'digital twin' as a scientific framework for future projects was also put forward. It could be a GIS-model, containing the different baseline layers, to be activated when researchers initiate projects. Once a research project generates new data, this data could be integrated into the model and made available for everyone within the system. In this way, accumulating baseline data could gradually evolve, strengthening long term insights across disciplines.

The importance of synchronizing baseline data also highlights the importance of getting inputs from key stakeholders on relevant data within each theme. A suggestion could be to host a workshop for stakeholders specifically on defining key baseline – to ensure a broad relevance of the data from the beginning.

The need for establishing a shared and dynamic digital platform for the landscape laboratory was also highlighted, accessing both baseline data and relevant research data from other projects. Here, AI-driven tools like Amass could be an interesting option to investigate further, with the aim of not just creating structured, shared scientific data, but also offering a potential AI-platform to help the researchers actively engage with the data across disciplines and projects.

3.6 PUBLIC ENGAGEMENT WITH THE GREEN TRIPARTITE AND THE GREEN TRANSITION

In inputs from the workshops, an emphasis was put on the need for outreach, demonstration and engagement with the public. As described earlier, the area has a long history of public engagement through Lejre Land of Legends, Skjoldungernes Land National Park and ROMU, and the Ledreborg Landscape Laboratory could work closely together with these partners, bridging between different outreach initiatives in the area.

In itself, the Ledreborg Landscape Laboratory could become a demonstration landscape for the Green Tripartite. An opportunity for the public to engage in tangible ways with the Green Tripartite, and gain insights of the fundamental restructuring of the Danish landscape, the reasoning behind it and the research and experiments that addresses the necessary transition of our landscapes and society.

Educational hub

In general, an opportunity to create a tangible learning landscape was highlighted. The Ledreborg Landscape Laboratory could become an educational hub, from primary school to universities and across disciplines, for everyone engaging with the green transition. Agricultural education and future farmers could gain important insights on future farming methods and crops, vocational schools and students in food craft could gain insights in development of products, crops and meals for the future, while students from different disciplines at universities could gain important on-site, practical experience of working with both research and demonstration. The laboratory could even offer teacher training.

In this way, the engagement initiatives could potentially stretch beyond a visitor centre, activating educational facilities in Copenhagen and the rest of the country.

In the workshops, the importance of creating an engaging and tangible interaction with the public was emphasised. It should be an experience to see, feel, taste and touch, an opportunity to engage directly with the projects through activation of the senses, concrete activities, festivals and other types of hands-on events. One of the key take-aways in this context, is to build on en-

gagement rather than dissemination, it should be considered as an interaction and exchange.

In this way, the landscape can also be understood as an edible landscape, an opportunity to experience new crops, new farming systems and new foods. One of the thematic groups on Food suggested establishing a food development lab, translating new crops and technologies explored in the laboratory into food products and flavorful experiences for the public. Suggestions from the workshops range from tasting the landscapes through dinners, cooking workshops, creating foraging trips in the landscapes, fermentation demonstration lab, and many more.

The landscape could also be understood as a recreational landscape, offering a place to connect, or maybe re-connect, with nature in a tangible way. This was highlighted in the first part of the workshops. In this way, Ledreborg also offers a rich diversity of recreational sites, and an opportunity to both mentally and physically connect with nature and a living landscape.

3.7 CHALLENGES AND RISKS

Though the overall impressions from analysing the inputs of the conference are very positive, it is important to also highlight some of the risks and potential challenges that might hinder or weaken the initiative. Some have already been mentioned.

Funding

In the poll, the potential lack of funding was mentioned as the number one challenge of establishing the landscape laboratory. It goes without saying that establishing a research and demonstration laboratory for world leading stakeholders to unfold needs funding. The relevant infrastructure, shared baseline data and an organisational model to facilitate the work needs to be established. In addition, a funding model for projects unfolding within the laboratory also needs to be decided on.

Complexity, interdisciplinarity and risk of a too narrow focus on research

The diversity of disciplines, practitioners, agendas and engagement opportunities also represents

What are the three main weaknesses and the threats of the Landscape Lab?



In the figure above, the size of the words grows according to the number of times they are mentioned by the stakeholders in the voting.

a risk of complexity. There might be a natural tendency to focus work within each own discipline, missing the potential gains from having a diverse range of projects. Collaboration needs to be facilitated across disciplines, and translation between stakeholders might be needed.

represented by both research and practice, or set up as an advisory board with representatives from a range of disciplines. The ambitions described in relation to the engagement and the educational hub above will also demand a certain skill set to support initiatives.

With the ambition of building on world-leading research, it is also important to highlight the risk of a too narrow research focus, mainly facilitating research projects and excellent researchers, and undervaluing the importance of connecting research and practice. If an ambition of also unfolding public engagement and creating a learning landscape or an educational hub is to succeed, it seems valuable to build the ambition of combining research and practice into guidelines and values of the landscape laboratory.

There is also an obvious need for establishing a platform that can contain layers of baseline data, synchronizing data between the projects and the stakeholders. This also includes the necessary need for digitising and establishing a baseline of historical land use, unlocking the archives of the Ledreborg Estate.

Need for a strong organisation model and baseline data

To handle both the interdisciplinarity, research, demonstration and engagement, there will be a need for a strong organisation to facilitate the Ledreborg Landscape Laboratory. This organisation might need in itself to be interdisciplinary.

The legal and local barriers

The locality of Ledreborg might be unique, but the protections of the land might also set limitations. There might be legal, judicial and planning barriers to overcome. In addition, it will be important to ensure that research and demonstration explored at the Ledreborg Estate will be translatable and scalable to the rest of society. This could be built into the criteria for unfolding a project at the Ledreborg Landscape Laboratory.



A range of trial activities have been initiated. Here a core of material is taken up from the lake bed of Martine Sø by the AEGIS project at Globe Institute. Also Aarhus University has initiated activities, by combining detailed harvest information with satellite images. Other projects are in pipeline and some of the participants have arranged network meetings at Ledreborg and field trips to the land of the laboratory.

The urgency

There is an urgent need to develop solutions for the green transition and Green Tripartite now. It will take time to establish the Ledreborg Landscape Laboratory, but the time to act is now. This urgency was highlighted by a number of stakeholders. Since the conference, a number of trial actions have already been initiated to get started right away. A workshop with key stakeholders on how to digitise the data from the archives was held in August 2025, and in the same month, trial drills by Globe Institute and the AEGIS project took place on the estate. Besides these trial actions, a first phase baseline mapping and a landscape analysis has been initiated with funding from 15. Juni Foundation.

Once established, there is also the challenge of translating findings from Ledreborg, implementing solutions developed for example biodiversity, forestry, food, crops, water environment, climate, carbon into 'real-life' solutions on a larger scale. This will be addressed when discussing the guidelines below.

EVALUATING OPPORTUNITIES AND POTENTIAL RISKS

Highlighted opportunities and advantages in establishing Ledreborg Landscape Laboratory:

- Landscape diversity at Ledreborg
- 1000 hectares with a single landowner
- Proximity to Copenhagen
- Temporal dimensions – the archive and the historical heritage of the area
- Opportunity to find scalable solutions to urgent, complex problems
- World-leading scientific excellence
- Confirmed interest in Ledreborg Landscape Laboratory by all stakeholders
- ‘Plug and Play’
- Aggregate effects and systemic effects in the entire landscape system
- Opportunity of whole ecosystem approaches
- Representation of diverse challenges of biodiversity, timber and fiber, food, water environment, climate & carbon, landscape management & governance, and engagement
- Potentials for transdisciplinary research
- Opportunity to strengthen world leading research and demonstration communities
- Public engagement with the green tripartite and the green transition
- Ledreborg Landscape Laboratory as an educational hub

Main risks in establishing the laboratory as mentioned through presentations, workshops and votes:

- Lack of funding
- Complexity
- Legal barriers
- Urgency and time
- Securing necessary inputs from a wide range of key stakeholders
- Need for a strong organisational model to facilitate collaboration
- Need for organisational and educational skills to support and develop engagement
- Need for a shared platform for synchronization of baseline data
- Unlocking the estate archives becomes too expensive
- Implementing research into green transition and green tripartite
- Establishing common goals and values
- If activities across disciplines and between research and practice are not prioritized or facilitated

4. RECOMMENDATIONS OF DEVELOPMENT STRATEGIES FOR THE LEDREBORG LANDSCAPE LABORATORY

Through the analysis above, a number of opportunities, challenges and risks have been identified. The development strategies for establishing the laboratory will address these. The following contains recommendations on how to proceed with the Ledreborg Landscape Laboratory. It should be considered as suggestions for pathways, based on the analysis of inputs from the participants.

4.1. A STRONG FACILITATING ORGANISATION, INFRASTRUCTURE, SERVICES AND COMMUNITY BUILDING

It seems fundamental that a strong facilitating organisation with an infrastructure and a set of services needs to be established.

Securing inputs on relevant baseline data, contemporary and historical

As mentioned, a key infrastructure is establishing baseline data about the area and the landscapes, today and in the past. The archives and the historical data on 300 years of historical land use, including maps of the landscape and its modifications, could work as a foundation for a number of research projects, if they are digitised fully or partially. The digitisation and transcription with use of newly developed AI-tools is a research project in itself.

An important starting point for the digitisation of the historical data and establishing other types of baseline data, is to gain inputs from the stakeholders on which data is most relevant.

A suggestion could be to host a workshop with a diverse set of stakeholders from different disciplines, who will use the landscape laboratory in the future. Aim should be to get more detailed inputs

on relevant baseline data. It would be beneficial to host such a workshop prior to the digitisation of the archives, so the most relevant data is defined.

Both historical data from the archive and the current baseline data should be stored in a shared geographical information system (GIS). Forthcoming spatial data from research and innovation projects could be stored as new layers in the GIS. This means easy access to spatial information across projects and endeavors.

Facilitating collaborations

Besides baseline data, the participants emphasised that the facilitating organisation should help facilitate project collaborations, matchmaking, to ensure synergies between disciplines and between research and practice. The organisation could host matchmaking network meetings and create a database of both ongoing and projects in pipeline.

For ongoing projects in the Ledreborg Landscape Laboratory, the organisation could facilitate network meetings between project leaders to secure exchange of knowledge and ideas, and strengthen opportunities for future collaborations.

Some physical infrastructure needs to be established as well, machinery, equipment, storage and staff who know the equipment and land, and who can help test and maintain the necessary machinery.

4.2. AN OPPORTUNITY TO ENGAGE AND EDUCATE

The Ledreborg Landscape Laboratory could become an interesting demonstration and outreach site for The Green Tripartite, visualizing how a



FOTO: MYNNE SØRGÅRD

solution-oriented exploration of the green transition could look like at a landscape level. At the same time, and equally important, it could also be a relevant opportunity for The Green Tripartite to engage directly with the public, with researchers and practitioners, as a mutual exchange, gaining insights and inputs on the different transformative initiatives.

It is an important point to emphasise 'engagement' rather than 'dissemination'. Many people are looking for ways to not just understand, or receive information, but to take part, ownership and actively engage in the green transition. The Ledreborg Landscape Laboratory represents an opportunity for this. It could become a centre of both research, demonstration and engagement, combining activities in both a central facility and different locations in the landscape.

The engagement could obviously take many shapes and forms. From knowledge-based to recreational, engaging, tangible and sensory. It could be an opportunity to try new crops, new fermentations and new foods and give instant feedback in a mutual exchange, through dinners, cooking workshops or foraging trips. Experiencing new farming systems, on-site biodiversity trials, multifunctional future forestry etc. The Ledreborg Landscape Laboratory could be an

opportunity to experience, taste and help shape the future by combining activities in a central facility with educational hubs/sites at different locations in the laboratory, connected by experiential/thematic trails through the landscape. Here, the neighboring Land of Legends could also, with their long history of engagement, represent an opportunity for collaboration.

The Landscape Laboratory has also an opportunity to become an educational hub. It could educate and engage future generations in sustainable transformation, from primary school, via vocational schools to universities, getting hands-on experience at a landscape level.

4.3 HOW TO PRIORITIZE PROJECTS AT LEDREBORG AND DEFINING SPECIFIC GOALS

With the enormous range of projects that could potentially unfold at Ledreborg, a suggestion is to decide on a set of guiding standards as a tool for the organisation to choose between projects. This would also be a way of securing that aims of interdisciplinarity, engagement and green tripartite are aligned with each project in the Ledreborg Landscape Laboratory.

Potential guiding principles for projects at Ledreborg could include:

- All projects should have a defined strategy of collaborating across disciplines with at least one other project or discipline at Ledreborg.
- All research projects should aim to demonstrate scientific excellence on an international level.
- All projects should have a defined strategy for engagement.
- All projects should define and demonstrate specific goals on sustainable impact in 5, 10, 20, 100 years.
- All projects should describe how they contribute to sustainable development and how they might be of relevance for the Green Tripartite.
- It is mandatory for all projects to share data from research and practice with other stakeholders at Ledreborg.
- It is mandatory for all projects to participate in matchmaking and network activities in the Ledreborg Landscape Laboratory.
- All projects should align with the value base defined in the manifest of Ledreborg Landscape Laboratory.

A suggestion could be to host a specific workshop on defining the criteria for approval of project applications to Ledreborg Landscape Laboratory in line with the visions.

Developing a research and innovation strategy for Ledreborg and beyond

In addition, it would also be important to develop a research and innovation strategy for the landscape laboratory with a set of goals and a time plan. What are the success criteria for the landscape laboratory and what is the necessary time plan to be able to address the urgency of the situation in time? This could also be synchronized with The Green Tripartite. In line with this, it would also be a suggestion to define a plan or a draft on how to translate insights from Ledreborg to the rest of society.

One idea could be to establish an 'advisory board' with representatives from all relevant parts of society, who are not part of the landscape laboratory, but could work as mediators between the laboratory and 'the rest of society'.

4.4 ESTABLISHING A SHARED, AI-SUPPORTED PLATFORM

Another suggestion would be to establish a shared digital platform for all participants in the Ledreborg Landscape Laboratory. The platform should contain both baseline information about the area and landscape, the historical data from the archives and an accumulating amount of data from all the different projects that unfold over time at Ledreborg. Such a platform could become an interesting interdisciplinary tool for connecting different types of data sets, research projects, disciplines and practice. Potentially also an opportunity for stakeholders to engage directly with each other and for researchers to engage with each other's dataset.

An opportunity could be to explore using an AI-tool like Amass as the digital platform. A Ledreborg language model could be trained over time with all the baseline data and project findings, creating synergies between all the projects unfolded at Ledreborg.

It could also work as a scientific, AI driven search-engine that would make it possible for researchers to engage directly with the data, and support research teams to engage with other disciplines. A suggestion could be to test such a tool in a preliminary phase of the project.

TEN RECOMMENDATIONS FOR DEVELOPMENT STRATEGIES AND INITIATIVES FOR LEDREBORG LANDSCAPE LABORATORY

- Develop an overall strategy for research, innovation and engagement including guidelines and principles for projects in the Ledreborg Landscape Laboratory
- Create an organisational frame and facilitate the network and community building including advisory board, thematic workshops and (bi)annual Ledreborg conferences
- Expand the baseline mapping in collaboration with relevant partners and build a shared GIS and data platform
- Digitise relevant parts of the Ledreborg Estate archives to integrate a strong temporal dimension and a baseline of historical land use
- Establish an AI-supported digital platform for stakeholders to upload and share each other's data
- Plan for the physical structures, machinery, offices, equipment and other infrastructures that support both research, innovation and engagement
- Build on 'engagement' and tangible experiences rather than 'dissemination' by combining a visitor centre with thematic hubs and experiential trails in the landscape
- Involve educational institutions from all levels to explore the opportunity of establishing an educational hub for learning and engagement
- Initiate trial actions, larger research projects and engagement activities, and support the realisation of the Green Tripartite from day one.
- Raise funding that secures stable conditions for the initiated research, innovation and engagement activities as well as successive development of the laboratory.



FOTO: JENNE SØRGÅRD

5. GUIDELINES FOR ESTABLISHING LARGE SCALE LIVING LABS

Some of the above mentioned recommendations are not necessarily unique to Ledreborg, but Ledreborg Landscape Laboratory could potentially become a leading example for establishing interdisciplinary landscape laboratories elsewhere. This is an attempt to look beyond Ledreborg, reflecting on guidelines for establishing other large scale living labs.

Mapping uniqueness of the particular site

An interesting perspective could be to potentially establish a landscape laboratory in the western part of Denmark as well. Ledreborg is unique

with its history and archive, its diverse landscape types, and its proximity to Copenhagen. But how about establishing a complementary large scale living lab in other parts of the country, where the soil types and historical land use are different? If linked through a network and a shared data-platform, these large scale living labs could create large scale synergies, validating the solutions for better future systems in diverse circumstances. If established, Ledreborg Landscape Laboratory could become exemplary for new landscape laboratories in other regions and countries.

Inputs from stakeholders and a diverse partner organisation

It seems evidently useful to gain insights from key stakeholders and co-create the pathways for establishing the living labs together with those stakeholders, who will use the living labs in the future. It could be through workshops or conferences as in the Ledreborg case – both to secure inputs but also to spark collaborations and ownership among the stakeholders from day one.

It is also important to establish a diverse partner organisation. In the case of Ledreborg, it seems as a strength that it consists of three diverse entities: A university, a national park and large landowner and primary producer. Other useful partner groups could be imagined, including stakeholders from other parts of the value chain, the educational sector or industry.

Creating a scalable and exportable structure

For a living lab, and a landscape laboratory, to have impact, it is important to think of a scalable and exportable structure from the beginning. This could be done in a number of ways, e.g. mandatory sharing of data, through establishing criteria for how future projects plan to translate insights to the rest of society or through establishing an advisory board from all relevant parts of society. The establishment of an open source database could create a foundation for synergies with other projects and living labs.

Establish shared baseline, guidelines, goals and values

As a starting point, it seems important to establish a shared, place specific baseline of the area and the landscape. In the case of Ledreborg, also of the historical land use.

It would also be relevant to establish a set of guidelines and goals, development strategies to guide the work in the landscape laboratory in a unified way.

As a value-driven summary from the conference, we have developed a first draft of a set of principles for the Ledreborg Landscape Laboratory. They might work as a guiding tool for other landscape laboratories as well.

- 1) **To acknowledge** that the planetary boundaries have been exceeded, and that this may have serious consequences for people and ecosystems both locally and globally.
- 2) **To view** landscapes as part of a coherent planetary ecosystem, where every decision and action has significance and consequences.
- 3) **To develop** biodiversity and sustainable land uses to ensure a better environment and climate for future generations.
- 4) **To unite** the value chain in a more circular approach, where research, innovation, and communication mutually contribute to one another.
- 5) **To work** across disciplines by combining research with practice in the landscape around Ledreborg.
- 6) **To support** projects that can be scaled and implemented in the rest of society outside Ledreborg.
- 7) **To invite** the public, both in Denmark and internationally, to collaborate on the landscape laboratory.

6. CONCLUSIONS

We are confronted with a task of immense proportions. A number of planetary boundaries have already been violated and a multifaceted challenge spans biodiversity, food systems, forest systems, GHG emissions and water environment. Extraordinary challenges call for extraordinary, multidimensional measures. The Green Tripartite is such an initiative at a national level. The solutions developed at Ledreborg Landscape Laboratory could go even further and become leading examples on a global scale. The laboratory could become a unique, solution-oriented research, demonstration and engagement site for the green tripartite while aiming for research at the highest scientific level with international outreach.

The leading researchers, practitioners, policy makers and other key stakeholders concluded during the conference that the initiative of the Ledreborg Landscape Laboratory is a good idea. They underlined that the laboratory could create opportunities to find common, scalable solutions for future sustainable land use across disciplines and fields. Solutions with global perspectives based on the highest scientific standards.

But the urgency was also underlined. A number of participants explicitly mentioned that they were ready to start exploring and testing as soon as possible. Some initiatives have already been initiated over the summer. A workshop and a pre-mapping of the archives has been completed, locating information on historical land use, preparing a possible digitization of the archives. The AEGIS-project has initiated test-drillings on the estate. The first took place in August.

Though many relevant participants are eager to get started, it is also important to build the right foundation from the start. A list of recommendations was elaborated in chapter 4 and they are summarized in the box.

As it was 250 years ago, our lives and landscapes, forests and food production again need to be fundamentally restructured. Once again, the Ledreborg Estate could play a decisive role in shaping solutions for the future

RECOMMENDATIONS FOR ACTION

See the full text on page 28

- Develop an overall strategy including guidelines and principles for activities
- Create an organisational frame and facilitate the network and community building activities
- Expand the baseline mapping and build a shared GIS and data platform
- Digitise relevant parts of the Ledreborg Estate archives and the historical maps
- Establish an AI-supported digital data platform
- Plan for the physical infrastructures
- Build on 'engagement' and tangible experiences rather than 'dissemination'
- Establish an educational hub for learning and engagement
- Initiate trial actions, larger research projects and engagement activities, and support the realisation of the Green Tripartite from day one.
- Raise funding that secures stable conditions for activities and development

7. APPENDIX

APPENDIX 1

LIST OF PARTICIPANTS

The list is only containing the participants who accepted sharing this information

Alexander Munro	Ledreborg Slot
Anders Bülow	Nationalpark Skjoldungernes Land
Anders Christian Erichsen	DHI
Anders J. Hansen	Globe Institute, University of Copenhagen
Andreas Ibrom	Technical University of Denmark
Andreas Aagaard Christensen	Landscape Solutions Lab, University of Roskilde
Anna Munro	Ledreborg Slot
Anne Scherfig	HOFOR A/S
Asmus Gamdrup	Kost Studio
Bodil Højland Lorentzen	Danish Technological Institute
Camilla Roed Otte	Haver til Maver
Caronline Vandt Madsen	Bikuben Fonden
Chresten Petersen	Klimaskovfonden
Christoph Dockter	Carlsberg Research Laboratory
Claire Treat	Department of Agroecology, Aarhus University
Dixi Louise Strand	Nationalpark Skjoldungernes Land
Emilie Refsgaard	Bikuben Fonden
Eske Willerslev	Globe Institute, University of Copenhagen
Grethe Nørtoft Saabye	Lejre Municipality/Local green Tripartite Isefjord & Roskilde Fjord
Helle Tegner Anker	IFRO, University of Copenhagen
Henrik Vejre	IGN, University of Copenhagen
Inger Kappel Schmidt	IGN, University of Copenhagen
Irene Asta Wiborg	SEGES Innovation
Isabella Bugge Nielsen	Landscape Solutions Lab, University of Roskilde
Jens Peter Simonsen	Nature Agency/Naturstyrelsen
Jette Bredahl Jacobsen	IFRO, University of Copenhagen
John Munro	Ledreborg Slot
Jonas Astrup	Meyers
Joshua Evans	Technical University of Denmark
Karen Lilleør	Nationalpark Skjoldungernes Land
Katherine Richardson	Globe Institute, University of Copenhagen
Kim Hebelstrup	Department of Agroecology, Aarhus University
Kirsten Holst	Innovationscenter for Økologisk Landbrug
Kristian Kristiansen	Gøteborgs University and Globe Institute
Kurt H. Kjær	Globe Institute, University of Copenhagen

Lars Holten	Sagnlandet Lejre
Lars Vedsmand	Former Head of Nationalpark Skjoldungernes Land
Louise Beck Brønnum	Kost Studio
Mads Pipenbring Jørgensen	Landbrug & Fødevarer
Martin Skipper	Earthbreak
Mette Stenby Andresen	LIFE Fonden
Mikkel Tamstorf	Department of Ecoscience, Aarhus University
Minik Rosing	Globe Institute, University of Copenhagen
Mogens Worre-Jensen	Ledreborg Slot
Mohamed El-Shemy	Copenhagen University
Morten Meldgaard	Globe Institute, University of Copenhagen
Morten Winther Vestenaa	Innovation Centre for Organic Farming
Niels Elers Koch	Lex – Danmarks Nationalleksikon
Niels Otto Lundstedt	Ledreborg Slot
Nynne Sørgaard	Nationalpark Skjoldungernes Land
Palle Madsen	InNovaSilva
Peter Friis Møller	GEUS
Peter Nøhr	Kost Studio
Rasmus Fensholt	IGN, University of Copenhagen
Rikke Munck Petersen	IGN, University of Copenhagen
Rosa Klitgaard Andersen	KR Foundation/Fonden Arkaia
Sheng Wang	Department of Agroecology, Aarhus University
Signe Normand	Department of Biology, Aarhus University
Silvia Munro	Ledreborg Slot
Steffen Brøgger-Jensen	15. Juni Fonden
Susanne Wiesner	Technical University of Denmark
Søren Knudsen	Carlsberg Research Laboratory
Søren Præstholm	Nationalpark Skjoldungernes Land
Tage Duer	CONCITO
Thomas de Bang	Novo Nordisk Foundation
Thomas Kær Mahler	VisitFjordlandet
Thomas Nord-Larsen	IGN, Universitet of Copenhagen
Thomas Vestergaard-Nielsen	Nationalpark Skjoldungernes Land
Tobias Mortensen	Lejre Bibliotek & Arkiv
Torben Flinch	Nationalpark Skjoldungernes Land
Torben Hansen	VKST landboforening
Veronica Sinotte	Department of Food Science, University of Copenhagen

APPENDIX 2

QR-CODE TO A VIDEO DOCUMENTATION FROM THE WORKSHOP



APPENDIX 3

WORKSHOP PROGRAM

MONDAY, JUNE 2ND

09.30 - 10.00 Arrival and breakfast in the Family Hall at Ledreborg Castle

10.00 - 11.10 Setting the Scene

Welcome by the project partners

Morten Meldgaard, Professor Globe Institute, Anders Johannes Hansen, Head of department Globe Institute, Torben Flinch, Chairman of the Board National Park Skjoldungernes Land

Where are we - Ledreborg and Lejre

*Silvia and John Munro, Ledreborg Castle
Tina Mandrup, Mayor of Lejre Municipality*

A researcher's view on the potentials of a landscape laboratory at Ledreborg

Eske Willerslev, Professor Globe Institute

The ambitions of the Green Tripartite and wishes for research

Panel debate with representatives from the Green Tripartite: Grethe Nørtoft Saabye, Vice Mayor, Lejre Municipality, Sebastian Jonshøj, Vicepresident, Danish Society of Nature Conservation and Torben Hansen, Head of board, VKST. Moderated by Anders Bülow, Head of Skjoldungernes Land National Park.

The Novo Nordisk Foundation's contribution to the green transition

Thomas de Bang, Senior Scientific Lead, Novo Nordisk Foundation

11.10 - 11.20 Energizer

11.20 - 11.50 The Landscape Laboratory

Introduction

Søren Præstholt, Project Manager National Park Skjoldungernes Land

The landscape from below - the geomorphological basis

Kurt Kjær, Professor Globe Institute

The landscape from above - video as a means to change

Rikke Munch-Petersen, Associate Professor, IGN institute

12.00 Departure by bus to Restaurant Herthadalen

12.05 - 13.00 Lunch at Restaurant Herthadalen

13.00 - 16.15

Fieldtrip

The bus leaves Restaurant Herthadalen at 13.00. Boarding the bus at 12.55. By bus and on foot we visit the 1000 hectare landscape laboratory. Short presentations from a number of researchers, supplemented by perspectives from other actors who collaborate with research on new forms of production, food and nature and environmental protection.

Coffee and cake in nature

16.15 - 16.45

Arrival at Lejre Land of Legends – break

16.45 - 18.00

First workshop

The session will begin with a short introduction to Lejre Land of Legends by Director Lars Holten

First workshop round – “Landscape of opportunities”

Facilitators Asmus Gamdrup Jensen and Louise Beck Brønnum from Kost Studio

18.00 - 18.30

Refreshments in Land of Legends

18.30 - 20.30

Dinner in Kongehallen

20.30 -

Bus departure for Sonnerupgaard Estate

Nightingale walk and bonfire at Sonnerupgaard Estate.

TUESDAY, JUNE 3RD

08.20

Bus departure from Sonnerupgaard Estate

09.00 - 11.45

Second and third workshop

At Lejre Land of Legends:

Second workshop: "Factory of ideas"

Third workshop "Principle of the Future Landscape Laboratory

Facilitators Asmus Gamdrup Jensen and Louise Beck Brønnum from Kost Studio.

11.45 - 12.00

Wishes from the Minister

Demand for new knowledge, innovation and tools to implement the ambitions of the Green Tripartite

Minister for the Green Tripartite Jeppe Bruus

12.00-12.15

Wrap-up, thank you and next steps

Grethe Nørtoft Saabye, chair of the local Green Tripartite

(22 municipalities) Morten Meldgaard, Globe Institute

Anders Bülow, Nationalpark Skjoldungernes Land

12.15 - 13.00

Lunch

APPENDIX 4

INPUTS FROM WORKSHOP 1

Grouped in themes during the analysis after the conference

- 1 A learning landscape and an educational hub
 - an opportunity to engage with the green tripartite and green transition at all levels of society.
- 2) An edible landscape
 - Tasting the landscape, experiencing new crops, new farming systems, new food, foraging, 'from field to fadøl'
- 3) A multifunctional, mosaic landscape
 - spatial, multiple functions at one time in one place
- 4) A multitemporal landscape (multiple layers of usage from different periods in one place)
 - a digital twin of past, present and future
- 5) A fluid landscape
 - Wetlands, ground water environments, nitrogen fixation and ecosystems
- 6) A shared baseline across disciplines
 - a common interdisciplinary language and baseline of the area and historical land use.
- 7) Measuring entire ecosystems
 - aggregate and systemic effects in the entire landscape system

APPENDIX 5

INPUTS FROM WORKSHOP 2

List of potential project ideas from workshop 2

- Digital twin
- Utilizing the past from the archives
- Living Wetlands Labs
- Carbon and water scaping
- AEGIS. An agri-eco-foodsystems in past, present and future
- Biodiversity dynamics in an changing agricultural landscapes
- Landscape democracy and landscape safari
- Multifunctionality in landscapes
- Afforestation
- Mosaic Landscapes
- Future, foreign land - engagement
- Food and fermentation labs
- From field to “fadøl”

APPENDIX 6

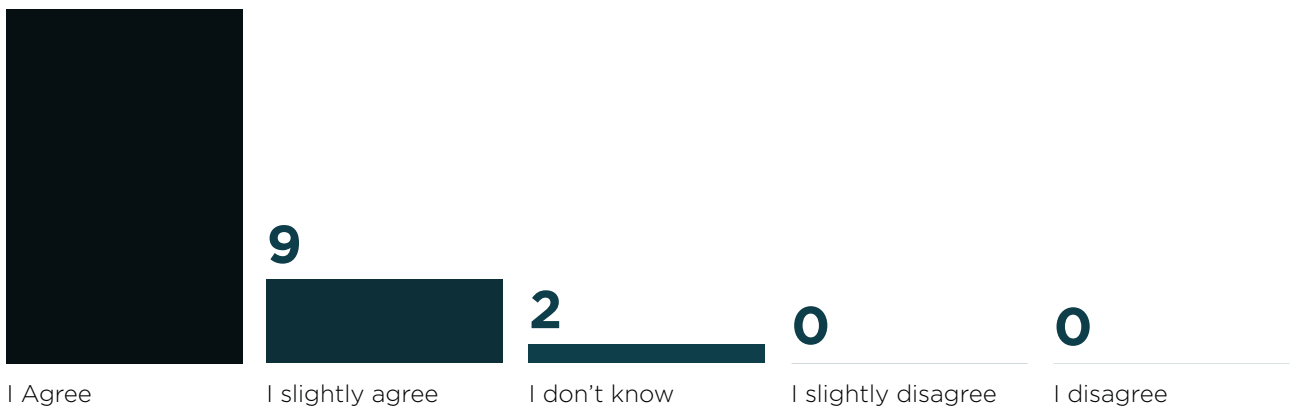
The Landscape Lab is an important initiative to create new research and solutions for the Green Tripartite?

42



The Landscape Lab represents something new that can complement existing test plots/fields?

38



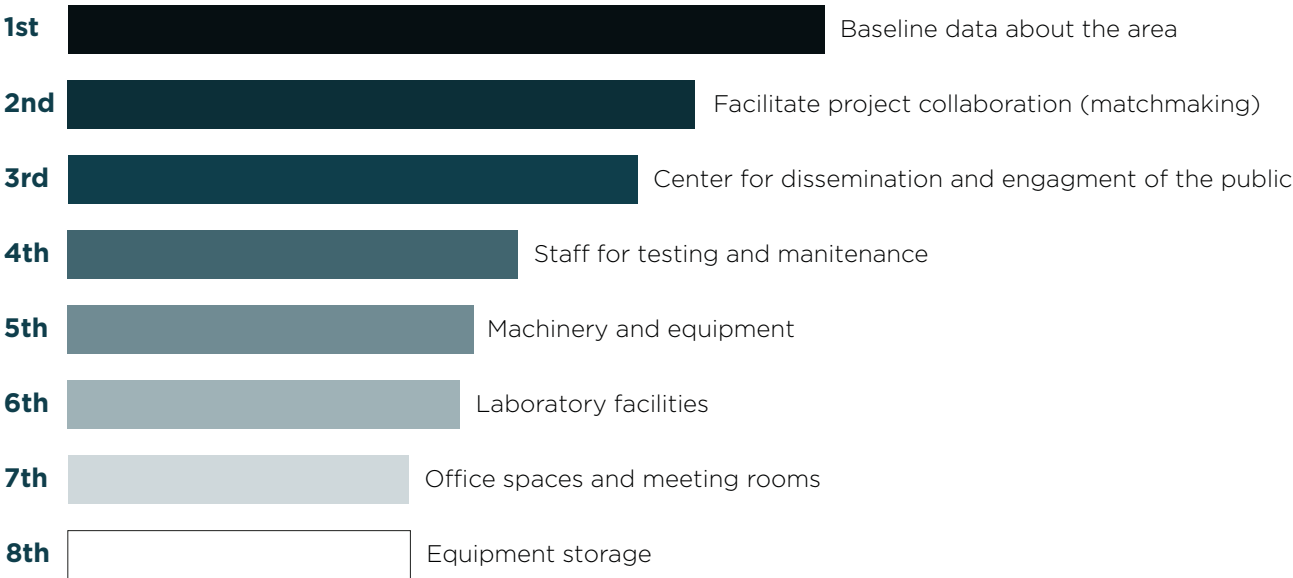
What are the three main strengths and opportunities of the Landscape Lab (wordcloud)?



What are the three main weaknesses and the threats of the Landscape Lab?



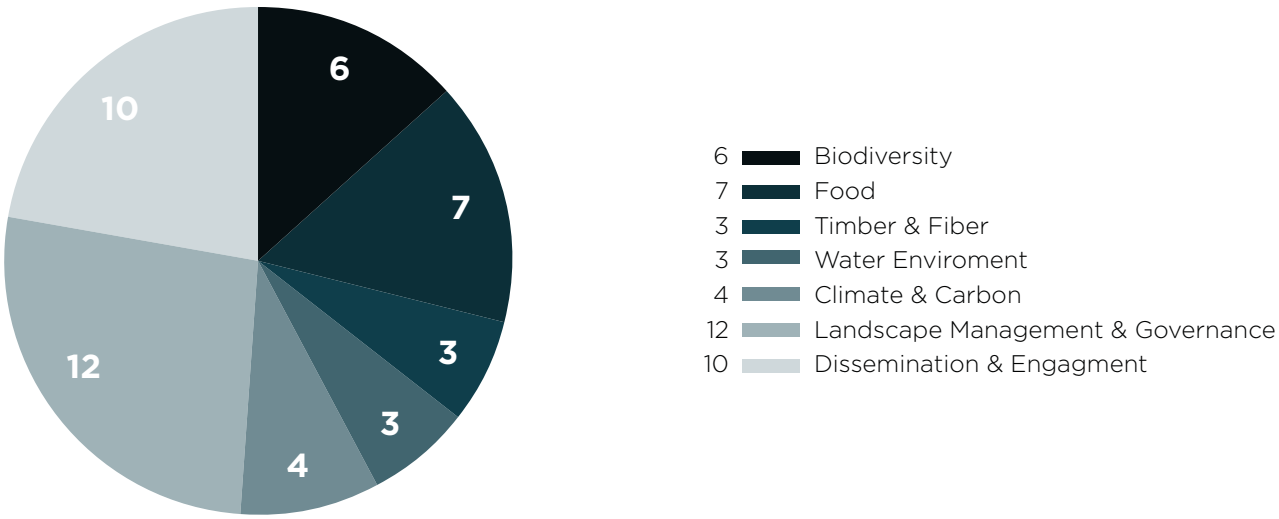
Which facilities and services are particularly important to offer in the landscape lab (choose and rank)



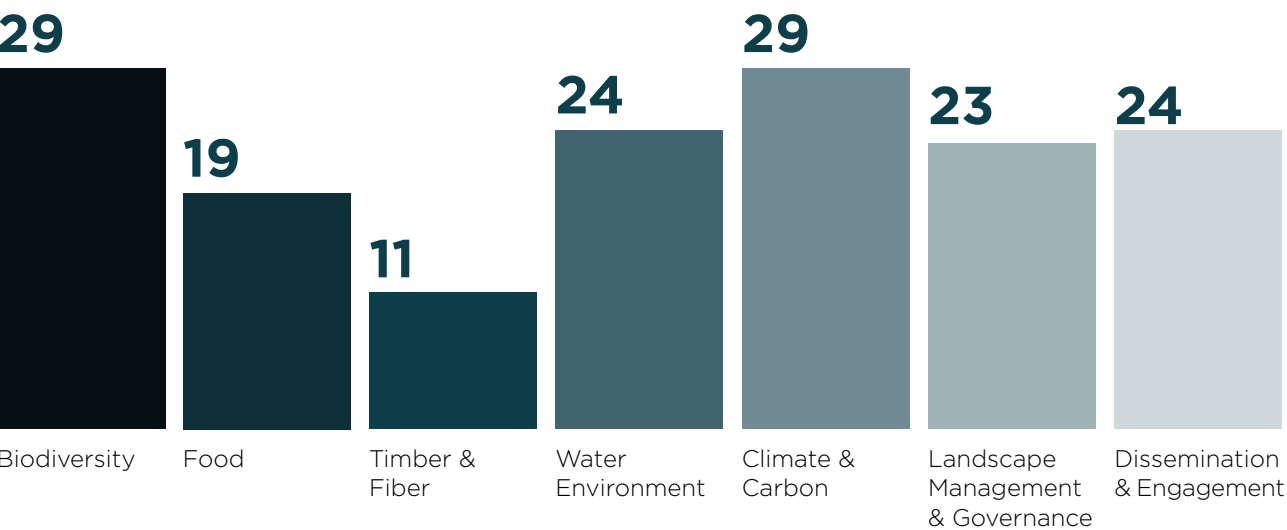
I have a project or an idea for a demonstration and research project that would fit into the Landscape Lab



If yes, which theme does your project idea or research and demonstration project fall under? (select only 1)



Which other theme (s) does your project idea or research and demonstration interact with?



I want to hear more and get involved in the further development of the Landscape Lab

49



Yes

1



No