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# Co-designing nature-positive and socially just landscapes: nine lessons from and for scientists

I.J.M. de Boer, G. Bonekamp, E.S. van Klaveren, S.A.M. van Rooij, A.G. de Vlieger, A.L. Wortel and J.V. Zwartkruis



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# Co-designing nature-positive and socially just landscapes: nine lessons from and for scientists

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Samenvatting. Dit onderzoek is tot stand gekomen vanuit een samenwerking tussen onderzoekers en betrokkenen uit het casusgebied in de Achterhoek. Dit rapport belicht de belangrijkste lessen voor wetenschappers die voortkwamen uit het co-creëren van een toekomstvisie binnen een Living Lab.

Summary. This research was conducted through a collaboration between researchers and stakeholders from the case study area in the Achterhoek. This report highlights the key lessons for scientists that emerged from the co-creation of a future vision in a living lab context.

This report can be downloaded for free at <https://doi.org/10.18174/693806> or at [www.wur.nl/livestock-research](http://www.wur.nl/livestock-research) (under Wageningen Livestock Research publications).



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# Summary

Addressing current sustainability challenges requires context-sensitive and iterative redesigning of our landscapes. Transforming complex systems, like landscapes, is known to be more likely to happen when key stakeholders feel ownership of their future. This knowledge boosted living lab and participatory research. One of the key challenges of participatory research is the renewed role of scientists. Working at the intersection of science and practice to spark transformative change, however, is challenging and full of choices. In this spirit, the authors of this report step into the story themselves, sharing their lived experiences and lessons learned from a living lab on sustainable landscapes, rooted in the Achterhoek (region in the east of the Netherlands). We learned that you need a heterogeneous and adaptive group of scientists that is able to truly connect and listen to local actors; that energy in the local network is key; that we need to act small to enable big changes; that scientists are more than just process facilitators; that being trusted by local stakeholders for knowledge sharing and co-designing requires time, and that acknowledging this renewed role of scientists is essential in order to contribute to negotiating better futures and transformative change.



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# 1 Introduction

It is widely recognized that the physical limits of the Earth set the ultimate boundaries for all human economic activity (Fischer et al., 2007). The pressing challenge ahead is clear: how can we meet the basic needs of future populations – such as food, drinks, clothing, shelter - without running out of resources or destroying Earth’s ecosystems – in other words, without exhausting the ecological and physical resources of the planet. Yet, a truly nature-positive future must also guarantee essential rights for both humans and animals, such as the right to healthy and safe food, fair labour conditions, and farm animals expressing their species-specific behaviour (Muscat et al., 2021).

Many of these key challenges come together in, and often require a redesign of, the landscape. Here, landscapes are defined as ‘spatially-heterogeneous social-ecological systems that develop in a geographically limited area through the interaction of landscape-ecological processes and interventions by the community of land-owners and users’ (Opdam, 2018). Literature clearly suggests that transformation of these socio-ecological systems is more likely when key stakeholders feel ownership of their future environment (Armitage et al., 2009; Opdam, 2018). It has been demonstrated that collaborative and participatory approaches enable better use of local knowledge, enhance social learning, and foster greater ownership during implementation (Armitage et al., 2009).

A variety of collaborative approaches to landscape management have emerged, with living labs as one notable example. Over the past few years, living labs have gained prominence as an essential approach for advancing sustainability transitions, particularly within food systems and landscape management (Bouwma et al., 2022). Though no single definition has gained widespread acceptance, we consider a living lab in the field of sustainable landscape management as a location where different parties achieve a joint understanding of the complexity of the sustainability challenges and aim for a more sustainable future (McPhee et al., 2021). It is a co-creation platform in which a variety of stakeholders have a unique role, including scientists. Living labs, moreover, are collaborative by nature.

One of the grand challenges of living labs in the coming decades, however, will be how to leverage sustainability sciences to enable navigating towards desired nature-positive and socially just futures. Or in other words: what is the role of scientists in living labs? Scientists may contribute to understanding the urgency and complexity of the sustainability challenges, and may provide options for change. They are also seen as organizers and facilitators of the process of joined vision building and decision making (Opdam, 2018). Working at the intersection of science and practice to spark transformative change, however, is challenging and full of choices. Who do you bring in the room? What conversations do you open? How do you ensure every voice counts? And where should the research go next? (Wittmayer et al., 2024). In this spirit, the authors of this report step into the story themselves, sharing their lived experiences and lessons learned from a living lab on sustainable landscapes, rooted in the Achterhoek (region in the east of the Netherlands). We first describe the case region and the living lab process and then present and discuss the main lessons learned from and for science.

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## 2 Approach

### 2.1 Case region

Our lived experiences and lessons learned are grounded in our participation in a living lab, based in the Achterhoek, specifically in the area known as HOE (short for Haarloseveld and Olden Eibergen). We chose to collaborate with HOE for two key reasons. First, this rural region provides not only food but also drinking water, and its community is highly motivated to preserve and enhance its cultural landscape. In this way, this community, founded by a local resident and several farmers in the region, brings together a range of key sustainability challenges. Second, a diverse group of stakeholders in the region had already formed collaborations and were eager to invest in achieving a shared goal for a sustainable landscape. Before we describe the main lessons learned from and for science, we first summarize the participatory process in the HOE region.

### 2.2 Living lab process

To navigate HOE towards a nature-positive and socially just future, scientists and stakeholders co-designed visions for the landscape in 2070 and explored potential transition pathways. To this end, we used a participatory approach and designed a workshop series based on tenets and tools of existing frameworks in the field of participatory research, design thinking and landscape governance (Bertella et al., 2021; Bouwma et al., 2022; Buizer et al., 2015; Van Rooij et al., 2023).

We started our journey by *setting the scene* (see Figure 1), to get to know each other and to agree on project aims. In step 2, we *unravelling the current state and key sustainability challenges* of the region. In step 3, we *revealed common values and selected building blocks* for the landscape in 2070. Based on all above described outcomes, we *identified a common set of design principles and formulated future narratives*. Finally, we *created some pathways* to move towards this commonly defined future. Below we describe each step in more detail, after which we will dive into the role of the researchers in this, and other, living lab process(es).

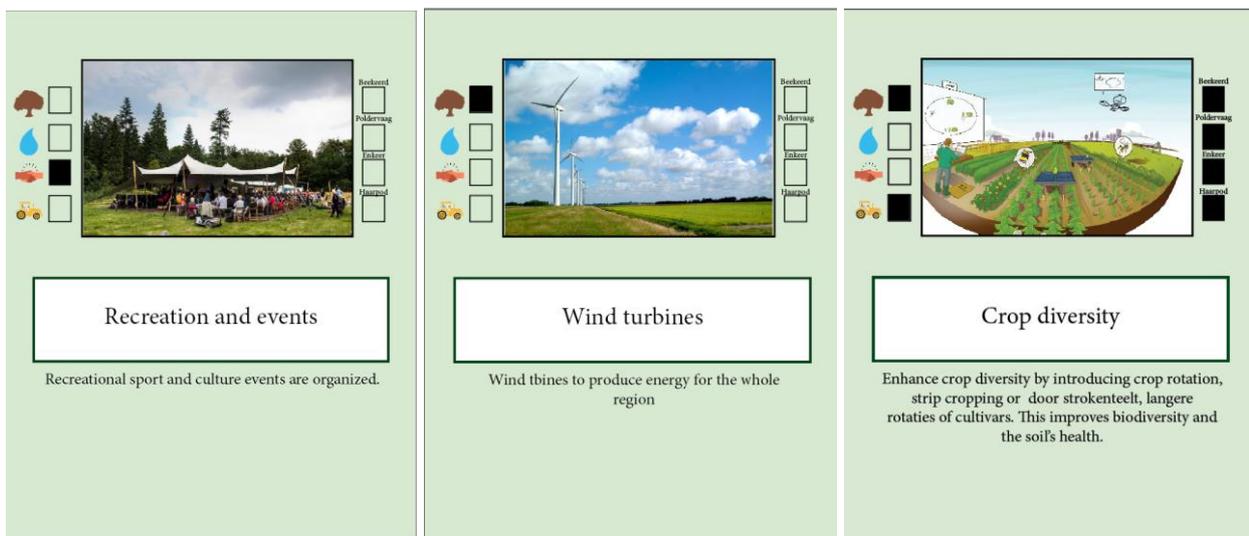


**Figure 1** Interactive visualisation of a participatory process to navigate living labs towards nature-positive future.

1. *Setting the scene.* The primary aim of the first meetings was to get to know each other and establish the goals of this living lab. Researchers met representatives from HOE, and together, agreed to initiate the project and explored the appropriate stakeholders to invite (i.e. groups directly connected to the landscape). The stakeholder group consisted of farmers from the region, residents from three different generations, and representatives from a drinking water company, the local Water Board, a nature conservation organization, the municipality and the provincial government. In a follow-up meeting, scientists and stakeholders collectively discussed and acknowledged the need to build a future for the HOE region that fits the carrying capacity of the environment and respects essential rights for humans and animals, a concept also known as the Donut-framework<sup>1</sup> (Raworth, 2017).
2. *Unravelling the current state and key sustainability challenges.* To foster a shared understanding of the *current* state of the landscape, researchers initiated and conducted a historical analysis (1860-now) of the HOE landscape structure, based on, among others, information about the natural soil and water systems (e.g. soil types, (ground)water levels, and geomorphological data). Such an analysis of the evolution of the landscape structure is important for envisioning a nature-positive future (Van Buren, 2022). The landscape structure map was a spatial-visual representation of the main arrangements of the landscape, including the main land use types, water (flows), infrastructure and buildings. Furthermore, scientists applied the Donut-framework to define the environmental and social ceilings, and to identify the key environmental and social challenges within the HOE region (Zwartkruis et al., 2024). Both the historical analysis and the review of sustainability challenges were presented and discussed during a workshop with the stakeholders to validate and add on to the gathered information, and to create common ground. The workshop resulted in consensus on the urgent need to compensate farmers for ecosystem services beyond food, such as provisioning of clean drinking water or restoring the landscape.

<sup>1</sup> Our Donut framework, adapted from Raworth (2017), is a model for sustainable development that focusses on meeting the needs of all people while respecting both the environmental ceiling and social foundation, which includes essential rights for humans as well as animals.

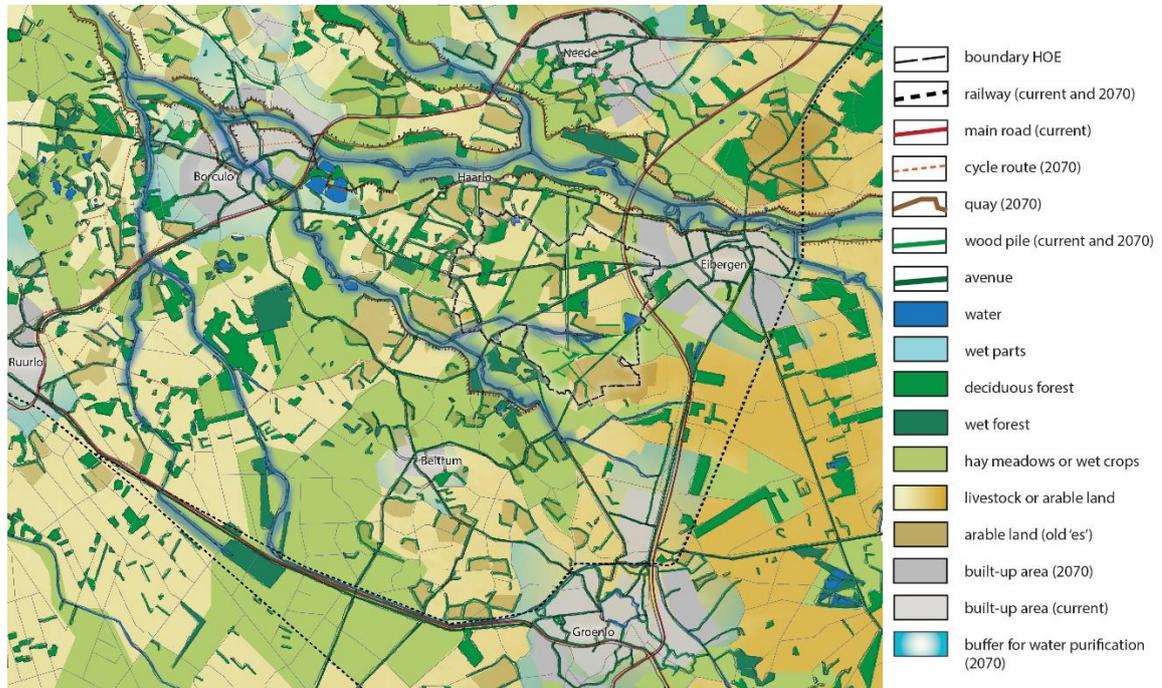
3. *Revealing common values and associated building blocks.* To gain in-depth knowledge on values of stakeholders, fourteen semi-structured interviews were performed, where stakeholders were asked to share their view on the current landscape in HOE and to envision the landscape in n 2070. The interviews covered themes such as food production and consumption, nature, water management, the role of communities and education, based on the Donut-framework and a recently developed dialogue framework for the Dutch context (Bos et al., 2023). Audio recordings of interviews were transcribed and analysed for underlying values. These values were presented and refined in a next workshop. We collectively identified four main shared values for the future of HOE: (1) a beautiful, biodiverse landscape, consisting of a variety of fields and small-scale characteristics; (2) sufficient and clean (drinking) water; (3) the area-specific sense of community, known as Naoberschap<sup>2</sup> and (4) a new role of farmers, that includes providing services beyond food and obtaining a decent standard of living. These values provided a trustworthy common among stakeholders to collectively build future narratives. After common values were found, we organized a workshop in which participants were divided into groups and assigned to choose between different building blocks for a nature-positive and socially just landscape in 2070. These building blocks (for examples see Figure 2) addressed the envisioned future at different levels of change, for example by adjusting conventional practices, such as extensifying or nature-inclusive farming practices, or by introducing completely new ones, such as community supported agriculture, insect farming or payment of farmers for production of clean drinking water. A card with a specific building block also provided information on its contribution to the various collective values. Besides choosing relevant cards, participants were also asked to share their insights on challenges and opportunities of selected building blocks for the region. This assignment provided insight into practicalities of a vision for the future and provided input for a future narrative.



**Figure 2** *Three examples of building blocks used in the design process. On the left side of the image on the card, icons are showed that resemble shared values. If filled in black, the building block addresses the value in some way. On the right side of the image, different soil types (names in Dutch) are shown. Since some building blocks were only applicable to specific soil types, relevant boxes are filled in when applicable.*

4. *Identifying design principles and formulating future narratives.* Based on the outcomes of step 2 and 3, the research team created a set of design principles and a first future narrative. While doing so, the team realized that they could challenge HOE region stakeholders a bit more by also creating a more transformative alternative. Both narratives were presented by the researchers and discussed in a workshop, which surprisingly resulted in overall agreement on the more transformative future narrative for HOE region in 2070. This narrative, was translated to a map of 2070, where the results of building blocks result in a different landscape (Figure 3).

<sup>2</sup> Naoberschap is a sense of community. It refers to social relationships within a small community, historically often farmers, aimed at mutual support during important life events.



**Figure 3** *The possible landscape structure in 2070 of the area Groenlo-Eibergen-Borculo, with wet stream valleys, more deciduous forest and wet cultures for biobased materials. Livestock farming is still there, but in an extensive way. The old convex fields ('essen') are agricultural lands, often bordered with plantings. Cities are larger, with green interlacing and gradients.*

5. *Creating pathways towards the commonly formulated future.* In the final workshop, researchers wanted to guide the participants from a theoretical narrative to practice. To achieve this, a thinking exercise was created. Participants were split into groups and received two of the earlier chosen building blocks. For these building blocks, the group had to answer the following questions:
- How are we executing this building block? What are the next steps?
  - What is the priority of this building block?
  - How does this building block relate to other building blocks?
  - What stakeholders are involved and who is the building block initiator?

Answers to these questions created a pathway of different steps to realize the building blocks. Following this exercise, stakeholders and researchers discussed collectively how to place these steps-to-action on a timeline: from now until 2070. Surprisingly, the majority of all steps were placed between now and 2030. This might suggest that participants are really eager to realize the future narrative for the HOE region, but could also imply that it is still very hard for participants to envision plans for the far future.

Next to setting up this action plan and future timeline, stakeholders also reflected on the process. This could be done anonymously, as well as plenary. Reflecting as a group is an important step in learning and will also help us, researchers, in future participatory processes.

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## 3 Lessons learned from and for science

Here we present nine lessons learned from and for scientists that are valuable in participatory research. We feel that we need to better acknowledge and discuss these lessons in order to contribute to negotiating better futures and transformative change.

### **1. A heterogeneous and adaptive group of scientists is important**

To guide stakeholders in their journey towards a sustainable landscape, we need a diverse and flexible team of scientists. This group should span disciplines – both natural and social sciences – and represent a range of ages, personalities and gender, and possess the capacity to address the multifaceted nature of sustainable development. This team must be able to navigate the complexities of sustainable development while connecting authentically with every stakeholder in the region. Because the journey ahead is unpredictable, this group must remain fluid, growing and evolving with the changing needs of the mission toward a sustainable future.

### **2. Energy in the local network is key**

It is important to recognize that landscapes are self-organizing systems, and researchers are not the primary drivers of change. Meaningful change only occurs if key stakeholders succeed in achieving a sufficient degree of agreement to navigate towards a particular transformation (Giller et al., 2008; Leeuwis et al., 2021). With this insight, we chose to engage with an established network of stakeholders in the HOE region – one already committed to collaboration, and willing to invest energy in pursuing a collective goal. This strategy proved fruitful: we, as scientists, drew inspiration from their commitment and are confident that our involvement has reinforced the network's momentum, ensuring continuity beyond our project. To be truly effective, however, we recognize the importance of aligning with the energy already present in the living lab, responding the interests and motivations of its stakeholders. By doing so, researchers can contribute to the motivation for and negotiation of change.

### **3. Small acts, big change**

We collaborated with stakeholders of a rather small region, of about 1200 ha of land, including approximately 600 ha of agricultural land and 680 inhabitants. This relatively small scale, however, enabled embracing and addressing the inherent complexity of changing landscapes. Moreover, it allowed including stakeholders of all relevant scales, such as farmers and drinking water companies but also representatives from the local municipality and Water Board (Giller et al., 2008). Demonstrating transformative change at a relatively small scale is a fruitful strategy to contribute to system transformation (Termeer and DeWulf, 2019).

### **4. Scientists are not just messengers of knowledge**

In line with earlier findings (Giller et al., 2008), we experienced that scientific knowledge on how to transform towards a more sustainable landscape is fundamentally negotiable. This is, partly due to existing trade-offs between different aspects of sustainability, such as improving animal welfare or restoring nature and farmers' livelihoods. It is also because stakeholders bring varied views, interest and perspectives to the table, especially on complex sustainability themes, such as animal welfare or climate change (Leeuwis et al., 2021). Our role as scientists in societal processes such as living labs, therefore, goes beyond the mere sharing of knowledge. It involves empowering stakeholders to grasp the broader picture, understand historical dynamics to envision sustainable futures, assess the benefits and costs of potential landscape changes, and engage in collectively development of scenarios that can guide the negotiation process towards a sustainable future. This, however, also implies consciously reflecting on and mirroring the results of each meeting/workshop and iterating and discussing main findings during a next meeting/workshop. While doing so, we must remain aware of existing power dynamics – recognizing that some individuals hold more power

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than others. It is essential to challenge these dominant power structures and actively work towards inclusion of marginalized voices, including those of non-humans, like nature and farm animals (De Bruin et al., 2024).

## **5. Being trusted by local stakeholders requires time**

A project of two years is not enough to achieve actual impact, we need long-term projects. We experienced that it required nearly a full year to establish trust between local stakeholders and the scientific team. Only then, in the second year, were we truly able to begin co-designing the future landscape together. This also has consequences for the type of research funding. We need to, at least partly, move away from competitive funding that builds on milestones and high-impact publications and also make room for participatory science. We need inclusive seed-funding to go and build long-term collaborations with stakeholders in our (local) environments, and contribute to decision-making in their search towards their desired future. And maybe future PhDs can be evaluated on their contribution to societal transformation instead of only on their journal publications.

## **6. The power of truly listening**

Given the often conflicting interests and views of stakeholders, we need different ways to listen to individual stakeholders, varying from individual interviews, group meetings, and informal meetings. Triangulation of methods to be able to listen to stakeholders allows for different voices and ways of communication. Interviews support individual voices, which could have been overheard during group meetings. In our experience, more outliers are heard during individual interviews. Group meetings do in their way contribute to the results, by showing group dynamics and gaining an idea of what the majority has to say. Furthermore, it is very important to take stakeholder needs into account in relation to their ability to participate. For example, farmers can be very busy during specific periods of the year, such as the harvest season. Only if scientists give full attention to a conversations, stakeholders will remain involved in co-designing a desired future.

## **7. Shared values are the basis of pathways for transformation**

The apparent consensus on values provided a sound basis for formulating future narratives. Literature also shows that meaningful change is only to happen if key stakeholders succeed in achieving a sufficient degree of agreement on the future (Leeuwis et al., 2009). We, moreover, observed that having shared values motivated stakeholders to participate and stay involved in the co-designing process.

## **8. We need to acknowledge that scientists are not neutral**

Like stakeholders, scientists need to accept that we are not neutral. Even if we try to be as 'objective' as possible, our research and action is always value-driven (Alroe and Kristensen, 2002). It is important that we acknowledge and discuss not only the interests and views of the various stakeholders, but also our own interests and views. In the social sciences this is known as acknowledging your own positionality (Qin, 2016). This is essential because scientists also are part of the collective search towards a more sustainable future.

## **9. Stipends are a form of acknowledgement**

In collaborative trajectories, it is essential to allocate funding not only for the working hours of scientists but also those of farmers and others that are not automatically financially rewarded. Farmers and citizens, for example, contribute valuable expertise and play a crucial role in these processes. Recognizing their time and knowledge through payments, such as stipends, is vital to ensure they feel valued and to sustain their engagement throughout the collaboration.

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## 4 Acknowledgements

We thank all stakeholders who have participated in this project for the great lessons we collectively learned. This research, furthermore, was funded by the Wageningen University & Research Knowledge Base Programme KB34 "Circular & Climate Neutral Society" (KB-34-002-010) that is supported by financing from the Dutch Ministry of Agriculture, Fisheries, Food security and Nature.

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# References

- Armitage, D.R., R. Plummer, F. Berkes, R. Arthur, A.T. Charles, I.J. Davidson-Hunt, A.P. Diduck, N.C. Doubleday, D.S. Johnson, M. Marschke, M. .... Adaptive co-management for social-ecological complexity. *Front. Ecol. Environ.* 2009, 7, 95-102.
- Alroe, H.F. and E.S. Kristensen. 2002. Towards a systemic research methodology in agriculture: rethinking the role values in science. *Agriculture and Human values* 19: 3-23.
- Bertella, G., S. Lupini, C.R. Romanelli and X. Font. 2021. Workshop methodology design: innovation-oriented participatory processes for sustainability. *Annals of Tourism Research* 89: 103251.
- Bouwma, I., Wigboldus, S., Potters, J., Selnes, T., Van Rooij, S., & Westerink, J. (2022). Sustainability transitions and the contribution of living labs: A framework to assess collective capabilities and contextual performance. *Sustainability*, 14(23), 15628.
- Bos, A.P., B.C. Breman, P.L. de Wolf, P.L., J.C.M. Van Meijl, A.F. Geerling-Eiff, A. Jellema, E.L. De Jonge, J. , Dekker, L.M. Fuchs, L.M., D. Puente-Rodríguez, M. Van Ree, M., L. Van Wassenauer, M. Wesselink en S.A. Wigboldus. 2023. WUR-perspectieven op landbouw, voedsel en natuur. Wageningen University & Research, Wageningen, rapport.
- De Bruin, A., I.J.M. de Boer, N.R. Faber, G. de Jong, C.J.A.M. Termeer and E.M. de Olde. 2024. Easier said than defined? Conceptualizing justice in food system transitions. *Agriculture and human values* 41: 345-362.
- Buizer, M., B. Arts, and J. Westerink. Landscape governance as policy integration 'from below': a case of displaced and contained political conflict in the Netherlands. *Environment and planning* 34:
- Fischer, J., Manning, A.D., Steffen, W., Rose, D.B., Daniell, K., Felton, A., Garnett, S., Gilna, B., Heinsohn, R., Lindenmayer, D.B., MacDonald, B., Mills, F., Newell, B., Reid, J., Robin, L., Sherren, K., Wade, A., 2007. Mind the sustainability gap. *Trends Ecology and Evolution* 22, 621-624.
- Giller, K.E. 2008, C. Leeuwis, J.A. Andersson, W. Andriessse, A. Brouwer, P. Frost, P. Hebinck, I. Heitkönig, M.K. van Ittersum, N. Koning, R. Ruben, M. Slingerland, H. Udo, T. Veldkamp, C. van de Vijver, M.T. van Wijk, and P. Windmeijer. 2008. Competing claims on natural resources: what role for science. *Ecology and Society* 13(2): 3.
- Leeuwis, C., Boogaard, B.K., Atta-Krah, K., 2021. How food systems change (or not): Governance implications for system transformation processes. *Food Security* 13, 761-780.
- McPhee, C., M. Banczerz, M. Mambrini-Doudet, F. Chrétien, F., C. Huyghe and J. Gracia-Garza. 2021. The Defining Characteristics of Agroecosystem Living Labs. *Sustainability* 13: 1718.
- Musacchio, L.R. 2011. The grand challenge to operationalize landscape sustainability and the design-in-science paradigm. *Landsc. Ecol.* 26: 1-5.
- Muscat, A., E.M. de Olde, R. Ripoll-Bosch, H.H.E. Van Zanten, T.A.P. Metz, C.J.A.M. Termeer, M.K. van Ittersum, and I.J.M. de Boer. 2021. Principles, drivers and opportunities of a circular bioeconomy. *Nature Food* 2: 561-566.
- Opdam, P. 2010. Learning science from practice. *Landscape Ecology* 25:821-823.
- Opdam, P. 2018. Exploring the role of science in sustainable landscape management. An introduction to the special issue. *Sustainability* 10: 331.
- Qin, D. (2016). Positionality. *The Wiley Blackwell encyclopedia of gender and sexuality studies*, 1-2.
- Raworth, K. 2017. Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist.
- Termeer, C.J.A.M., and A. Dewulf. 2019. A small wins framework to overcome the evaluation paradox of governing wicked problems. *Policy and Society* 38: 298-314.
- Van Buren, M. 2022. Ontwerpend landschapsonderzoek (OLO) voor Nederland in 2120. Een duiding van aard, achtergronden, meerwaarde en aanpak. Wageningen Environmental Research, Wageningen, rapport 3211.
- Van Rooij, S., R. Vogdij and V. Grond. In negen rondes water en bodem sturend maken in de planvorming. *RO magazine* 42: 36- 41.

- 
- Wittmayer et al., J.M., Y.S. Huang, K. Bogner, E. Boyle, K. Hölscher, T. von Wirth, T. Boumans, J. Garst, Y. H. Hendlin, M. Lavanga, D. Loorbach, N. Mungekar, M. Tshangela, P. Vandekerckhove, A. Vasques. 2024. Neither right nor wrong? Ethics of collaboration in transformative research for sustainable futures. *Humanities & Social Sciences Communications* 11: 677.
- Zwartkruis, J. V., van Klaveren, E. S., de Boer, I. J. M., van Rooij, S. A. M., Wortel, A. L., Bonekamp, G., & de Vlieger, A. G. (2024). Met de donut op weg naar een duurzame toekomst: Een gebiedsproces in de geest van Kate Raworth. *ROM Magazine*, 42, 38-41.



To explore  
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