

Role of living labs in policymaking

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Abstract:

Addressing complex societal challenges such as water management and sustainable land use requires evidence-based policymaking supported by interdisciplinary collaboration across science, policy, and society. In this context, living labs are increasingly recognized as valuable platforms for generating evidence by engaging diverse stakeholders and fostering citizen engagement. However, there is a limited understanding of how living labs are positioned with different policy stages, and how they can support policymaking meaningfully. Thus, this study aims to address this gap by investigating how living labs contribute to agenda-setting, policy formulation, adoption, implementation, and evaluation. Additionally, this study also aims to identify how these labs can be assessed effectively using robust M&E tools to better identify their impacts. The study will analyze five living labs operating in policy contexts, aiming to identify their positioning within policy stages and strategies adopted by them to strengthen their link to policy outcomes.

Problem:

The management of natural landscapes, such as soil-health, water, and land use, is becoming continuously complex due to changing climate as well as shifts in human-induced practices (Haddeland et al., 2014). Addressing these complex societal challenges through public policy increasingly requires a holistic perspective integrating sectoral and interdisciplinary knowledge in the science, policy, and society interface (Eberle et al., 2021). In this context, living labs, which traditionally emerged as open innovation environments in private firms and industrial contexts, have evolved into a policy tool (Nesti, 2017), a research infrastructure and a governance mechanism (Schliwa & McCormick, 2016). However, despite their growing presence in policy landscape, there is a lack of understanding of strategically and intentionally aligning living labs within policymaking. While these labs are often used as evidence-generation mechanisms, their role across different stages of the policy cycle remains underexplored, limiting their ability to contribute effectively to policymaking. To maximize their impact, living labs must be systematically evaluated. Without robust evaluation mechanisms, their effectiveness in informing and shaping policies remains uncertain, weakening their potential as transformative tools in governance.

Current understanding:

Living labs are aptly positioned to be applied as policy experiments to generate evidence for policymaking. They can foster transparent decision-making and citizen engagement by engaging with the quadruple helix stakeholder network. As a result, policymakers increasingly seek refuge in experimentation through living labs and other similar approaches to develop and test policy solutions for complex policy problems. However, evidence-based policymaking often emphasizes procedural competence rather than substantive outcomes (Marston & Watts, 2003). Similarly, much of the existing research on living labs remains process-focused rather than outcome-focused, i.e., living labs focus more on their intentions, design, methods, and activities

and less on their results, outcomes, and impacts (Cuomo, 2022). In this sense, co-creation and co-production are often considered a 'virtue in itself' (Dekker et al., 2021). However, to support policymaking meaningfully, it is important to link living lab inputs and innovative outcomes to their activities (Veeckman et al., 2013). Thus, to generate credible, demonstrable evidence, living lab projects must establish clear connections between their design, inputs, and processes with their output, expected outcomes, and impact. This requires robust monitoring and evaluation mechanisms that validate their contributions to policymaking (Eden & Wagstaff, 2021).

Research question:

Research questions for this research are:

- How are existing living labs in policy context positioned within different stages of policy cycle?
- This question examines how existing living labs align with different policy cycle stages agenda setting, policy formulation, adoption, implementation, and evaluation.
- 2. How can living labs be effectively assessed to enhance their integration into policymaking?
- This question explores methods for evaluating the performance of living labs in generating reliable evidence for policymaking. It also seeks to explore which policy evaluation tools (such as the theory of change (TOC), learning framework, key performance indicators (KPI), impact evaluation, and so on) are most suitable for assessing the role of living labs in informing, assisting, and strengthening evidence-based policymaking. Consequently, this research aims to explore how living labs can effectively be positioned as a 'knowledge and innovation' tool to support evidence-based policymaking.

Research design:

Findings (expected):

The research will first explore how living labs are currently integrated into policymaking and examine how they can be more effectively positioned within different stages of the policy cycle. In this regard, the research will:

- Identify the ways living labs have contributed to different policy stages.
- Highlight gaps and challenges in using living labs for policy innovation.
- Offer insights on how living labs can be systematically embedded within policy processes through suitable M&E tools.

Contribution:

In this research, a key issue is the gap between the *potential* of living labs as policy tools, policy experiments, or evidence-generating mechanisms, and their *actual strategic use* in policymaking. Even when living labs are employed to generate evidence, it remains uncertain whether this evidence effectively influences policy decisions.

This research will address these challenges by offering insights into:

- Better positioning, leveraging, and assessing living labs as impactful governance and policy tools.
- Strengthening the link between living labs' experimental outputs and policymaking needs.
- Enhancing the credibility and uptake of living lab-generated evidence in decision-making (through M&E tools).

Practical implications:

This research will provide insights for academics, policymakers, and practitioners:

- by advancing understanding of living labs in policy contexts.
- by providing guidance on strategically embedding living labs as a structured, long-term component of policymaking.
- by identifying effective monitoring and evaluation tools to assess living labs' impact on policy innovation.

Participation Mode:

I intend to be present "in-person". But I am open to "virtual" participation as well.

Feedback:

- What are your thoughts on the strategic use of living labs in policymaking?
- Have you encountered or worked with a living lab that contributed to policymaking? If so, what was your experience?
- Have you applied any M&E tools or frameworks in living labs? If yes, which ones? If not, what M&E tools do you think best-fit living lab assessments?

Reference:

- Cuomo, F. (2022). Urban living lab: an experimental co-production tool to foster the circular economy. *Social Sciences*, *11*(6), 260.
- Dekker, R., Geuijen, K., & Oliver, C. (2021). Tensions of evaluating innovation in a living lab: Moving beyond actionable knowledge production. *Evaluation*, *27*(3), 347-363.
- Eberle, J., Stegmann, K., Barrat, A., Fischer, F., & Lund, K. (2021). Initiating scientific collaborations across career levels and disciplines—a network analysis on behavioral data. *International Journal of Computer-Supported Collaborative Learning*, 16(2), 151-184.
- Eden, L., & Wagstaff, M. F. (2021). Evidence-based policymaking and the wicked problem of SDG 5 Gender Equality. *Journal of International Business Policy*, 4(1), 28-57.
- Haddeland, I., Heinke, J., Biemans, H., Eisner, S., Flörke, M., Hanasaki, N., Konzmann, M., Ludwig, F., Masaki, Y., Schewe, J., Stacke, T., Tessler, Z. D., Wada, Y., & Wisser, D. (2014). Global water resources affected by human interventions and climate change. *Proceedings of the National Academy of Sciences*, 111(9), 3251-3256. https://doi.org/doi:10.1073/pnas.1222475110
- Marston, G., & Watts, R. (2003). Tampering with the evidence: a critical appraisal of evidence-based policy-making. *The drawing board: An Australian review of public affairs*, 3(3), 143-163.

- Nesti, G. (2017). Living Labs: A new tool for co-production? In *Smart and Sustainable Planning for Cities and Regions* (pp. 267-281). Springer International Publishing. https://doi.org/10.1007/978-3-319-44899-2 16
- Schliwa, G., & McCormick, K. (2016). Living labs: Users, citizens and transitions. In *The Experimental City* (pp. 163-178). Taylor and Francis. https://doi.org/10.4324/9781315719825-12
- Veeckman, C., Schuurman, D., Leminen, S., & Westerlund, M. (2013). Linking living lab characteristics and their outcomes: Towards a conceptual framework. *Technology Innovation Management Review*, 3(12 december), 6-15.

