

## Tropentag, September 20-22, 2023, hybrid conference

"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

## A conceptual framework of living labs for people: Fostering innovations for low-emissions food systems and social equity

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## Abstract

This paper provides the conceptual basis for what we call living labs for people (LL4P). We define LL4P as an inclusive and diverse space for people to envision, co-design, test, demonstrate and advance their socio-technical innovations and associated modes of governance within a facilitated organisational structure. Our specific aim with LL4P is to facilitate locally developed innovations for low-emission food systems that address social equity in four target countries: China, Colombia, Kenya and Vietnam. This conceptual paper outlines a framework to guide activities in each of those four countries. The LL4P draws on the living lab literature but tailors existing approaches for food systems in developing countries. Four country teams, made up of CGIAR researchers and national partners, adapt LL4P to the specific socio-ecological and cultural context and in line with each country's mitigation policy such as the nationally determined contribution (NDC). Therefore, while this conceptual paper provides a rationale, framework and a set of guidelines, it will also incorporate distinct approaches and learnings from each of the four target countries. The key components included within the LL4P concept are scenarios, governance, facilitation, and a learning alliance to plan, enable, and enact innovation agenda setting for transformative change. Each of the institutional components combine to address the following principles: 1) gender and social inclusion; 2) the co-production of knowledge and technology; 3) institutional stability; participatory governance; 4) common benefits for participants and; 5) co-benefits contributing to the sustainable development goals. The practical experience from applying this framework in the four case studies will generate learnings about alternative pathways for other LL4P focused on low-emission food system development and social equity. We understand that socio-ecological transitions, rooted in the food system, need to be based on building alliances between development organisations, governments and local stakeholders. By extension, innovations should not be top-down interventions from a select few, but rather, the result of transdisciplinary and multi-sectoral collaboration agendas. The LL4P concept is based on the process and platforms to achieve this common understanding and joint work.

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**Keywords:** Climate change, equity, food systems, innovation, living labs, mitigation