

Farm and forestry as carbon sinks.

Towards a framework for evaluation of technical, management and policy measures, using Living Labs.

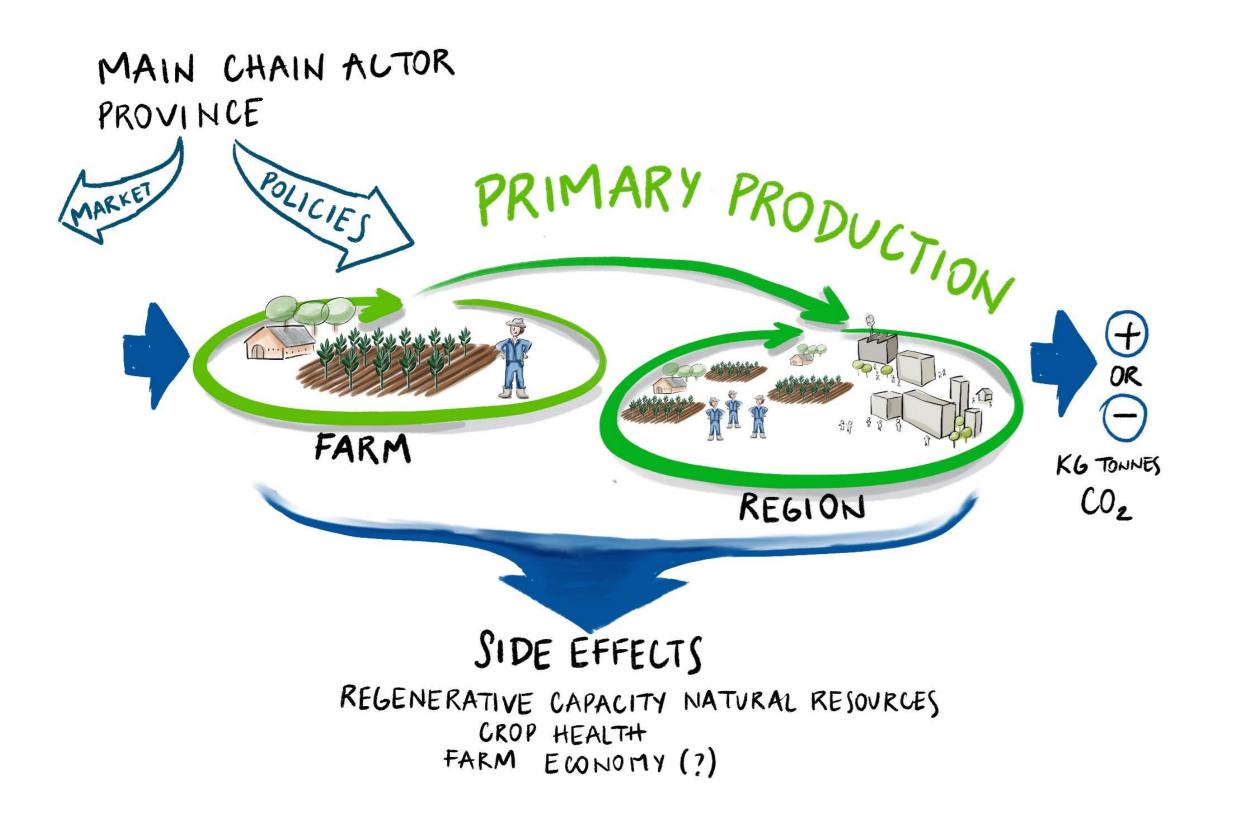
Project KB34-2D-2, 2019-2022

Project Team: Carmen Aalbers (WENR) Edo Gies, Judith Westerink, Sabine van Rooij (WENR), Janjo de Haan, Pella Brinkman, Isabella Selin Noren, Marleen Riemens (WPR), Geert Woltjer, Jolanda van den Berg, Rolf Michels (WECR)

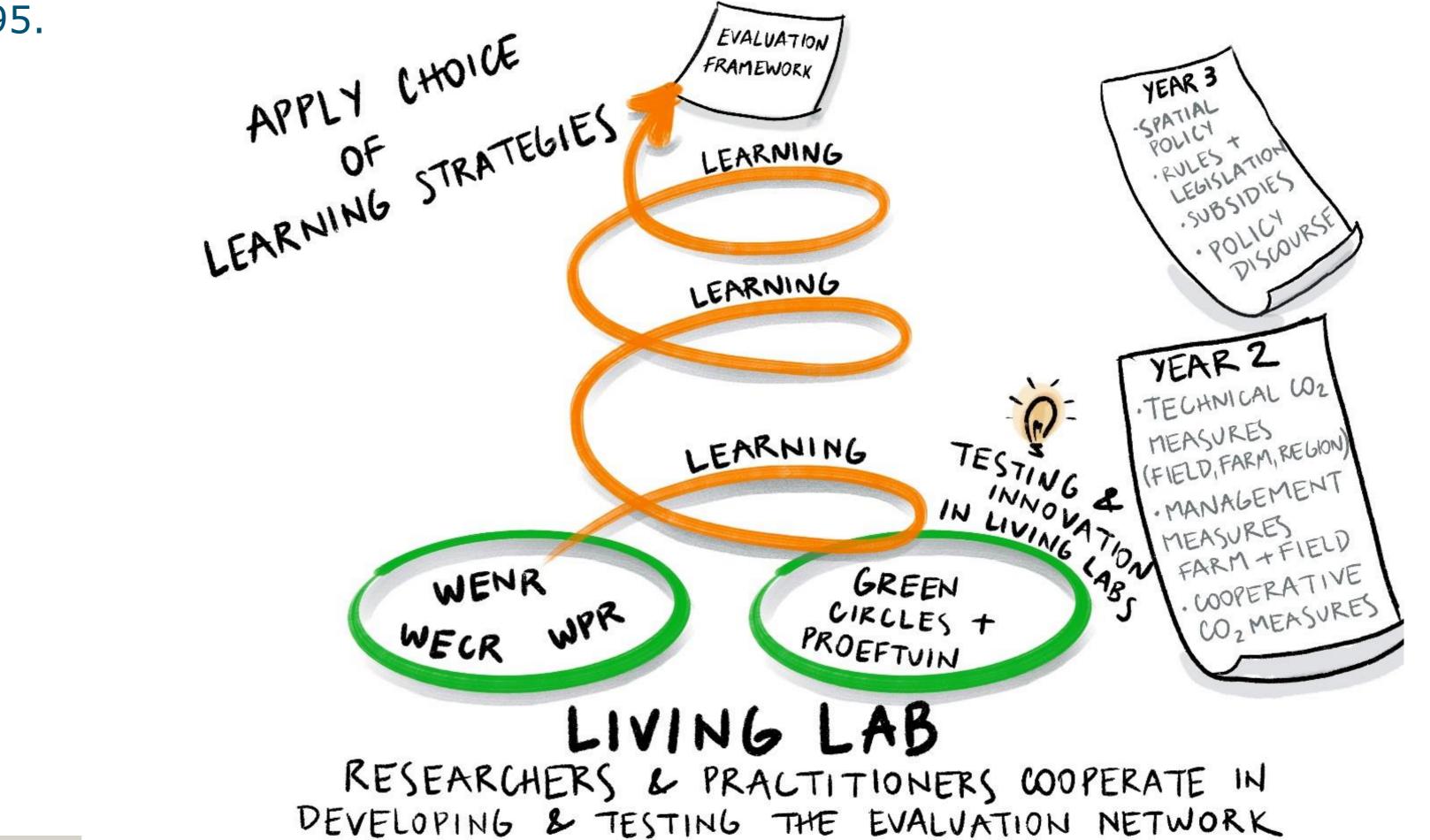
Background

Objective

In 2050, close to 10 billion people will inhabit the earth, and the need for healthy food, produced in a sustainable way will be higher than ever. Human kind asks more from nature and the natural resources than it can deliver. To sustain our planet, we need to change from a linear to a "circular, climate positive" society". Indicators suitable for monitoring and evaluating the effect of climate positive and circular measures need to be identified and developed. The project must also be considered in the light of COP 2015 and Dutch Klimaatakkoord targets for CO2 emissions: in 2030 (-49%) and 2050 (-95%) compared to 1995.



The project develops and tests an evaluation framework for primary production measures and governance. The framework optimizes for fixation or reduction of CO₂-emission while secondly assessing impacts (positive or negative) of such optimization on the regenerative capacity of natural resources and on crop health. It does so for local regions, in Living Labs which will act as learning networks. In these labs, stakeholders (e.g. farmers, provinces, chain actors) and researchers meet, develop and test the evaluation framework.



Project activities 2019

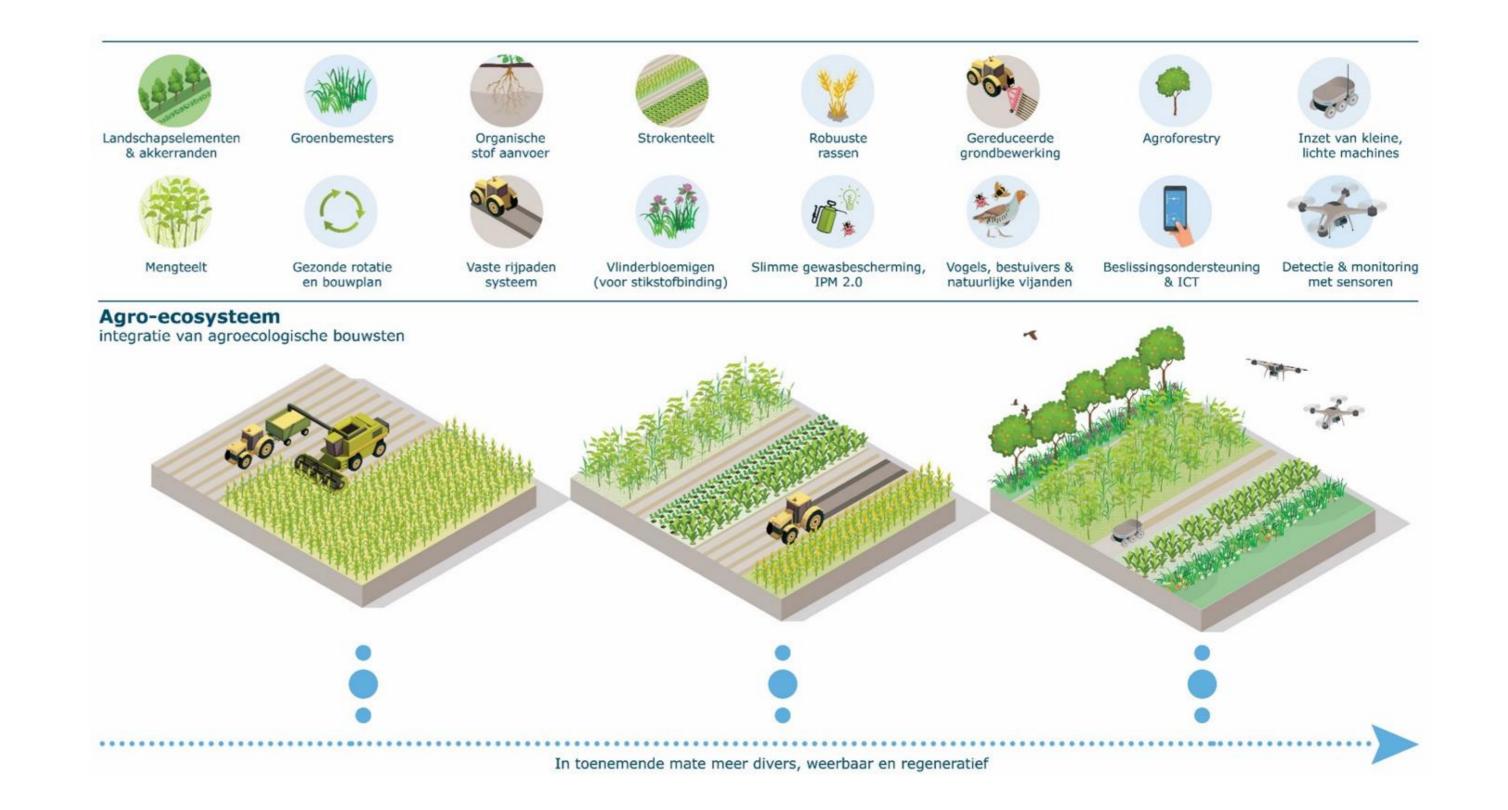
- Describe and organize stakeholder meetings with living labs
- Inventorize barriers and indicators from the labs, KB34-1A&1C
- Describe first draft evaluation framework
- Study upscaling possibilities to other relevant target groups

Results 2019

- Descriptions Living Labs "Kaas en Bodemdaling", "Farmfrites", "Proeftuin Agro-ecologie"; reconnaissance urban Living Labs
- First meetings with stakeholders
- Methodological selection first indicators sets for crop health and protection, soil, water, biodiversity and farm economy
- Methodological selection learning strategies to employ
- Shared understanding of the approach among the multidisciplinary project team, with delimitation of research objects and targeted users of the evaluation framework.

Value creation together with stakeholders

- A tested framework to evaluate measures, that can be upscaled
- Insight in gaps and deficiencies and their indicators in practice
- Understanding of practical barriers for adaptation of measures
- Combined socio-economic and technical approaches
- Knowledge dissemination across multi-stakeholder networks
- European and national projects (topsectorproject Kaas en Bodemdaling) on EU "Bioeconomy"



Project plan 2020

- Targeted Living Lab consultations on indicator sets,
- Testing application indicator sets
- Drivers and barriers on farm, regional and management measures
- Cooperation KB34-1D Governance in transition
- Policy measures provinces and major chain actors

Wageningen University & Research P.O. Box 123, 6700 AB Wageningen Contact: carmen.Aalbers@wur.nl T + 31 (0)317 485044 M +31 (0)6 51566973 www.wur.nl/nl/Onderzoek-Resultaten/Onderzoeksprojecten-LNV/Expertisegebieden/kennisonline/Living-Labs.htm