

# ReLive



## Back to the Future: Reintegrating Land and Livestock for Greenhouse Gas Mitigation and Circularity

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- **Partners:**

Ireland, France, Netherlands, Germany, Spain, Finland, Poland, Estonia and New Zealand & Chile (GRA support).

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### Objectives

Take a holistic systems-based approach to the sustainable reintegration of livestock and cropping systems to mitigate GHGs whilst reducing environmental footprints.

Particular attention at:

- Livestock type and management to avoid negativity of reintegration of livestock.
- Appropriate use and storage of manures.
- Crop and soil management choices, including afforestation/agroforestry.
- Integration into decision support tools for identifying best practices.
- Monitor and validate any management options and the economic consequences.
- Effective dissemination and communication to end users.

# Deliverables

- D1:** Farming databases (pilot farms, ESA Copernicus, NDVI, Remote Sensing, smart farming and modeling).
- D2:** Opinion paper on potential changes in the farm GHG (CH<sub>4</sub>) balance through livestock management, report on the benefits, synergies and trade-offs, and the impact of (re)integration of livestock and circularity.
- D3:** Paper on land use and system changes (i.e. livestock diet) on manure management with/without biogas generation, and amendment usage including biochar.
- D4:** Concise handbook on the use of CSA practices for livestock farms, mitigation potential, and the impact of non-CO<sub>2</sub> GHGs on carbon neutrality in Climate Smart Livestock farm.

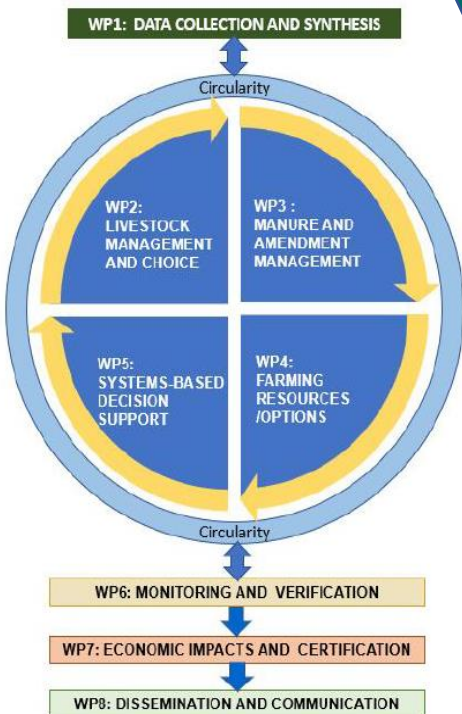


Fig. 1. Schematic diagram of ReLive project with iterative research interlinkages and the circularity

# Deliverables

**D5:** Papers & modified Holos model and CFT, decision-tree for recommendations of alternative land use & management choices for climate-resilient farming.

**D6:** Advisory report on the optimal validation tools, modelled results evaluation, digital module & methodologies, and small-scale alternative farming.

**D7:** A public Gold Standard methodology, practical guidance on pilot farms, development of data visualization, food products and farm profitability.

**D8:** Minutes, website, social media, conferences/workshops/seminars proceedings, 15 peer-review papers, annual & final reports and recommendations.

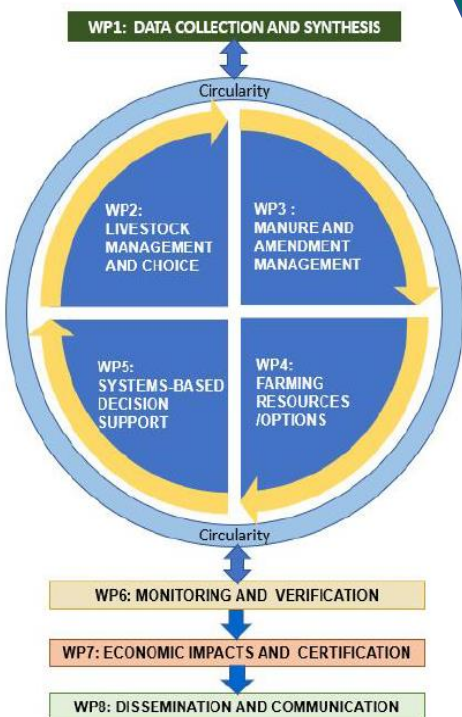


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**THANK YOU**