

Facilitating Innovations for Resilient Livestock Farming Systems

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re-livestock.eu

Objective

Re-Livestock is a European research project whose overall objective is to increase the resilience of the livestock sector in a climate change context.

The project will evaluate and mobilise the adoption of innovative practices and strategies to reduce greenhouse gas emissions from cattle and swine farming systems and increase their capacity to deal with climate change impacts.



Project concept

Re-Livestock proposes a holistic approach based on the “Re-Concept” by Re-framing climate change action in livestock production systems through:

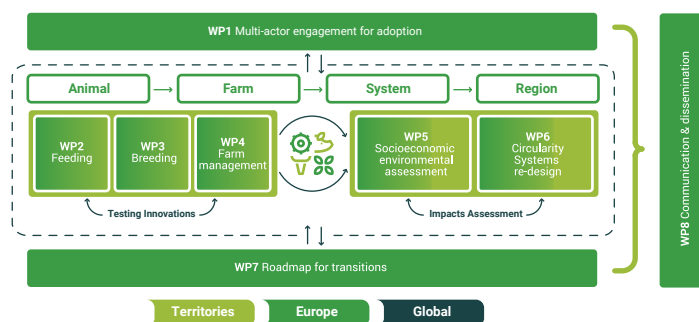
- Re-Evaluating feeding inputs and nutrient cycling
- Re-Exploring animals’ adaptive capacity to integrate mitigation and adaptation
- Re-Designing livestock systems

Re-Livestock integrates animal, herd, farm, sector and region scales to comprehensively examine the factors determining livestock production resilience and the strategies to improve it, collaborating with industry stakeholders to identify, co-design and validate innovations ensuring their relevance and maximising their adoption.

Project structure

Re-Livestock is composed of 7 interconnected Work Packages (WPs) responding to the Re-Concept, plus one WP to ensure communication and outreach to society.

- WP1 - Re-understanding and mobilising adoption by stakeholders** - thirteen field case studies and discussion forums.
- WP2 - Re-feeding** - low carbon footprint feeds and diets, feed supplements to suppress enteric methane, grazing and grasslands for a low carbon livestock production.
- WP3 - Re-breeding** - genetic basis of methane and CO₂ emissions, novel phenotypes and genotypes for adaptation to heat tolerance - new genetic evaluation models and breeding strategies.
- WP4 - Re-managing farms** - evaluating husbandry practices to reduce greenhouse gas emissions: housing and equipment design, manure management, precision livestock techniques, and grassland and agroforestry management.
- WP5 - Re-assessment of livestock farm systems** - improving life cycle analysis methods (carbon sequestration, greenhouse gases emissions, animal welfare) and integrating economic and climate scenarios to assess mitigation and adaptation measures.
- WP6 - Re-design of circular systems** - exploring how European livestock systems can be redesigned for climate change mitigation and adaptation, circularity and natural resource conservation.
- WP7 - Re-mapping for transition** - future developments and innovation adoption of the European livestock sector, to propose pathways towards resilience according to the European Green Deal and the Farm to Fork Strategy.
- WP8 - Communication, dissemination and capacity building** - will help to increase awareness on the project challenges, activities and results, and to promote the uptake by stakeholders of the tools and solutions proposed by Re-Livestock.



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