

INTEGRITY: Integrated crop-ruminant livestock systems as a strategy to increase nutrient circularity and promote sustainability in the context of climate change

General objective

- Increase **nutrient circularity** and **promote sustainability** through **improving** crop-ruminant livestock production systems **integration**

Specific objectives

- Characterize **representative agricultural systems**
- Evaluate alternative **management options**
- Address use of **by-products**
- Develop a **decision support tool**
- Assess nutrient circularity with an **integrative approach, participatory co-innovation**
- Technology **adoption assessment**
- Provide local **technical recommendation and training**



Consortium

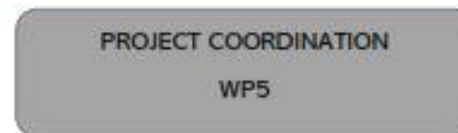
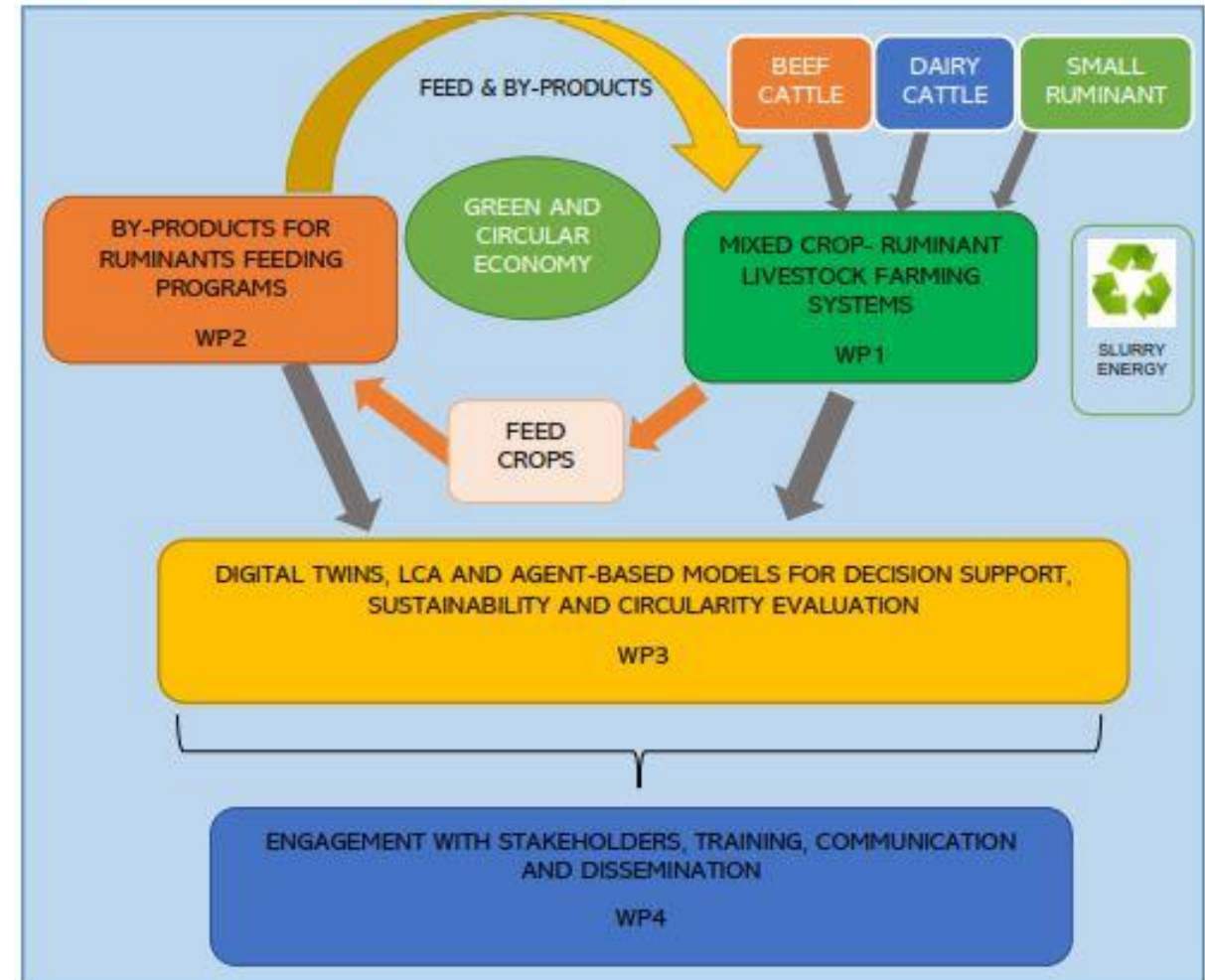
AgResearch (NZ), INTA (ARG), UNLAM (PER), INIA (URU), INRAe (FRA), CSIC (SPA), Luke (FIN), Agri-food, QUB (UK), Teagasc (IRE)

Working packages

1. **Review:** production systems & alternative management
2. **Observe:** impacts of integration
3. **Model:** strategies, trade-offs
4. **Co-innovate:** with stakeholders
5. **Co-coordination:** ARG and FRA

Expected outcomes/impacts

- 'less linear and more circular' crop-livestock systems
- GHG mitigation, improved efficiency, and resiliency
- Reduction of waste
- Increased protein autonomy
- Enhanced cross-institutional and cross-disciplinary cooperation



Acknowledgment:

