

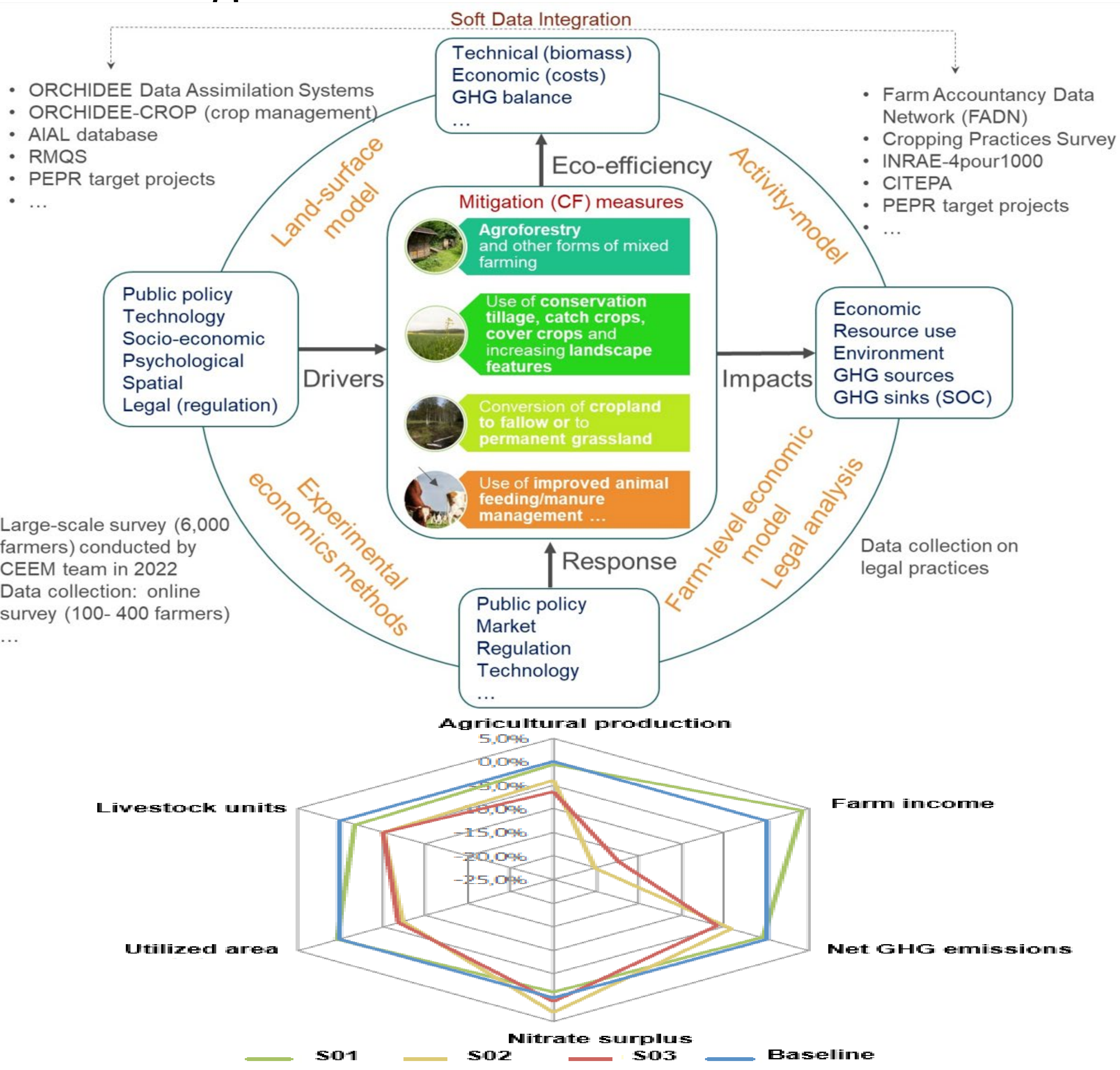
CLIM-FAS

Climate Change Mitigation Potential of French Agriculture in Relation with Public Policies

CLIM-FAS

Objectives:

- Estimate **GHG sources and sinks** in French agriculture under **current and future climate**, considering soil and climatic conditions, farm heterogeneity and diversity in farming practices
- Provide evidence on the **cost-effectiveness** of selected **GHG mitigation measures** - focus on **carbon farming** -
- Investigate psychological, socio-economic and legal **levers and barriers** for the uptake of mitigation measures
- Assess **mitigation potential** of French agriculture and estimate heterogeneous **marginal abatement costs**
- Draw up a critical - economic and legal – assessment of selected existing **legal, policy and economic incentives** targeting GHG sources and sinks and propose improvement and **alternatives**
- Provide policymakers with **evidence-based insights** and data-driven **recommendations** on mitigation strategies



Coordinator: **INRAE**

5 partners – (3 institutes & 2 universities)

8 Research units

+ 25 researchers (+ 50% young researchers)

5 years – (2024-2029)

3.4 M euros – (overall budget)

1.25 M euros – (FairCarboN program)

Research questions:

- Which **mitigation measures (MMs)** are **effective**, under what conditions, and at **what cost**?
- What prevents farmers from adopting effective MMs ?
- Which **policy**, combinations of policies or **economic incentives** could best promote MMs adoption?
- What is the **potential for GHG abatement** in the French agricultural sector with optimal MMs in place?
- Which **regions and farm-types** would have the highest potential for net GHG emissions reduction?

Project strengths:

- **Net GHG emission** (both GHG sources and sinks)
- **Technical and economic mitigation potential**
- **Economic and legal aspects of MMs**
- **Ex-ante and ex-post policy analysis**
- **Account for regional differences, farm structure heterogeneity, cropping practice diversity, ...**
- **Arable and livestock farming systems**
- **Multidisciplinary research** (agronomy, soil sciences, social psychology, economics and law)
- **Variety of methods and tools** (land-surface model, farm-level economic model, activity model, structural equation model, experimental economics methods ...)
- **Multi-scale analysis** (field, farm, regional and national levels – bottom-up approach)

