

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

France

Summary of relevant activities, future priorities and capability needs.

Input to 2025 Livestock Research Group Meeting
Nairobi, Kenya

Relevant activities¹

- *Livestock emissions decreased 2%/year in the last two years (~0.9 Mt CO₂ eq/y)*
 - *This decrease is mainly due to the reduction in the size of the cattle herd (decapitalization) resulting from difficult socioeconomic conditions, aggravated by climate hazards and not from an structured effort*
- *The resilience of agriculture to climate change has been largely overlooked in public policy in 2024, and decarbonization has not been prioritized, even though this sector is the second largest source of territorial emissions.*
- *Overall decrease trajectories in agricultural emissions do not align with a net-zero target in 2050 set by the national low-carbon strategy (SNBC3)*
- **Activities conducted by Citepa** (organisation in charge of producing the GHG and pollutants inventory for the French Ministry of environment) :
 - *Continuous improvement of the inventory to better reflect reality. Example : work in progress to update the N excretion rate for dairy cows to align with the 2025 method to estimate enteric CH₄ emissions.*

¹2025 Annual Report, High Council on Climate <https://www.hautconseilclimat.fr/en>

Future priorities

- Recommendations from the High Council on Climate
 - ***Strengthen teaching, development, and research to guide stakeholders toward resilience to climate change and agroecological transition***
 - ***Identify farms exposed to high climate risks and define risk prevention measures***
 - ***Reducing the dependence on carbon-intensive inputs (fossil fuels, mineral fertilizers, animal feed)***
- **Ongoing activities INRAE:**
 - *Genetic selection of animals with low methane emissions*
 - *METHANE 2030 program, led by Apis-Gene, to structure applicable reduction solutions for all cattle breeders.*
 - *NatAdGES project - Reducing N₂O emissions from soils, by managing the function that reduces N₂O to N₂*
 - *2RI FORWARD - Ecological transition and forestry systems*
- **Ongoing activities Citepa:**
 - *Improve the estimates for emissions sources with important uncertainty such as N₂O from agricultural soils*
 - *Integrating the application of mitigation strategies into estimations to reflect actual changes made in agriculture. For example, antimethanogenic additives could be used to provide updated estimates.*

Capability needs

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- **INRAE :**
 - *Dedicated projects in agroecological transition, towards Zero Net Carbon livestock systems*
- **Citepa :** *two main capability needs identified*
 - *Collection of new activity data (feeding, additives, other strategies) and implementation of the associated statistics system*
 - *Definition of relevant reduction factor/emission factor, involving dedicated research projects.*