



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

**INTEGRATIVE RESEARCH GROUP:
Farm To Regional Scale Integration Network**



**Leader: Dr. Claus Deblitz, Dr. Yelto
Zimmer and Dr. Nina Grassnick**

**Membership: 40-50 members from 30
Countries**

Activities/Accomplishment since last meeting I

Webinars

- *Economic analysis of Climate Change – marginal abatement costs (Oct 2021):*
<https://globalresearchalliance.org/library/farm-to-regional-scale-integration-network-webinar-oct-2021/>
- *Carbon farming with no-till and straw incorporation – A reality check (Nov 2021):*
<https://globalresearchalliance.org/library/farm-to-regional-scale-integration-network-webinar-nov-2021/>
- *Flagship Project Webinar Series – Session 1 (Oct 2022):*
<https://globalresearchalliance.org/library/flagship-project-webinars-2022-1/>

Meetings

- *Kick-off Meeting: Flagship project Economics of Cattle GHG mitigation (EMiFa) (March 2022)*
- *Presentation of preliminary results of EMiFa project at agri benchmark beef and sheep conference (June 2022)*

Activities/Accomplishment since last meeting II

Research activities

- Online Survey “Farm-Level-Greenhouse gas Accounting Tools”: in collaboration with Daniel Bretscher (Agroscope); members from 13 countries participated; currently evaluation of results → workshop and publication planned for 2023
- Flagship project “Economics of GHG mitigation at farm level in global cattle production systems (EMiFa)”: first project phase completed; baseline results from 6 countries have been calculated → working packages “mitigation strategies”, “trade-offs and benefits” and “adoption barriers” to start in 2023

Further network developments

- Two CLIFF-GRADS alumni (Titus Apdini and Taiwo Ayinde) are supporting network co-leads
- LinkedIn Group: <https://www.linkedin.com/groups/12544692/>

Future Research and Capability Opportunities

- Research Opportunities
 1. How to address GHG leakage in agricultural science and in agriculture policy design?
 2. Is it feasible to aim for net zero/carbon neutral agricultural production?
- Capability Opportunities:
 1. *agri benchmark* Conferences (Crop, Beef&Sheep) in June 2023 may be used to present research projects and PhD thesis on GHG mitigation strategies.

Barriers / Opportunities to achieving C neutrality in cropping systems

■ Barriers:

1. Lack of political agreements and scientific rules to avoid carbon leakage and overcome/avoid national perspectives.

■ Opportunities:

1. Synergies from political measures to reduce nutrient losses (mainly nitrogen) in order to protect water systems for GHG mitigation.
2. Some national policies (e.g. at EU-level: farm to fork, ban of crop protection products) prompt growers to revisit their cropping systems anyhow.
3. Food industry and banking sector are increasingly asking growers to monitor and improve their GHG balances.