



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

ANNUAL MEETING:
Farm To Regional Scale Integration Network

16th January 2023, Online

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

Meeting Agenda

1. Welcome - 5'
2. Overview of network activities since the last annual meeting - 15'
3. Any other business - 5 - 25 minutes
4. Two parallel Breakout-Sessions - 40 - 60 minutes
 1. Barriers and opportunities to mitigate GHG emissions and sequester soil organic carbon in cropping systems
 2. Brainstorming on topics related to livestock production systems
5. Closing - 5'

- *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/>

Flagship-Project: Economics of GHG mitigation at farm level in global cattle production systems (EMiFa)

Project coordination (Thuenen-Institute)

- Claus Deblitz, Katrin Agethen and Nina Grassnick

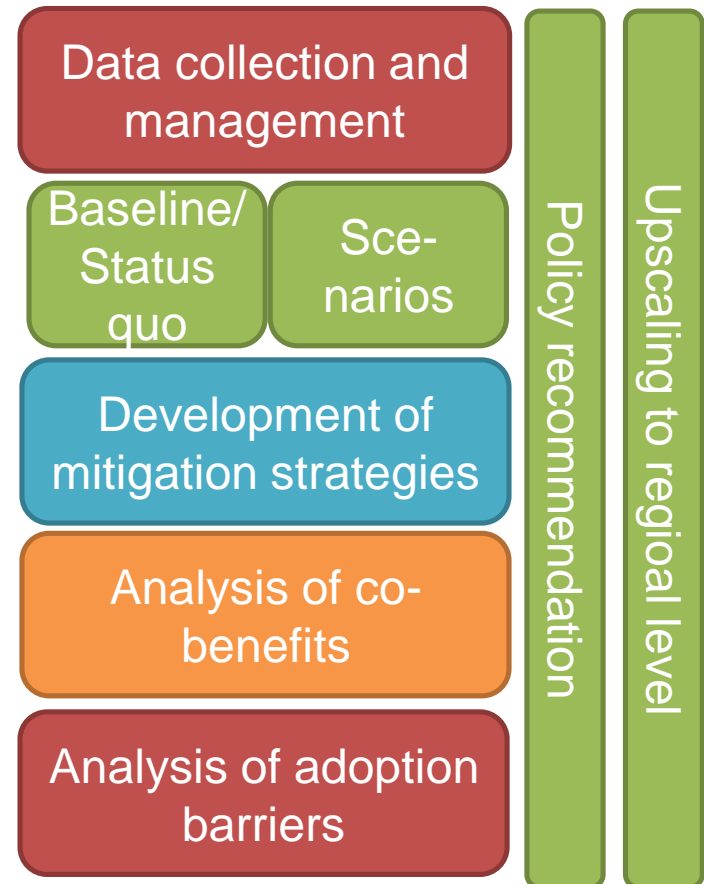
Project goals

- Identification of the most cost-effective management and technology options in different global cattle production systems and regions
- Evidence-based policy recommendations on GHG mitigation strategies at the farm level

Countries

- Australia, Argentina, Columbia, Germany, Peru, Portugal
- Future: Belgium, Canada, Ghana, South Africa, New Zealand and United Kingdom

Work packages



Online Survey on GHG accounting tools at farm level - Overview

Involved persons

- Daniel Bretscher (Agroscope), Nina Grassnick (Thünen-Institute)

Aim of survey

- Identify challenges and opportunities for the use of GHG accounting tools at farm level in different world regions.
- Develop a work programme to close the identified data gaps and to develop the tools further.

Countries

- Australia, Belgium, Canada, France, Germany, Ireland, Kenya, New Zealand, Netherland, Switzerland, USA, United Kingdom, Zimbabwe

Online Survey on GHG accounting tools at farm level – Preliminary results

Next steps to promote the use of farm-level GHG accounting tools:

- Linkage to the national policy framework (to also facilitate monitoring processes)
- Linkage to a rewarding mechanism
- Facilitate access to tools and provide training to farmers/consultants
- Integrate existing data sources

GHG farm-level accounting tools may broaden their focus in future:

- Consider co-benefits such as adaptation, biodiversity, water use, etc.
- Link results of GHG accounting to mitigation measures
- Expand system boundary (e.g. cradle to retailer / to fork)
- Assess possible emission leakages, uncertainties in overall GHG emissions, pre-chain emissions
- Include economics to provide information on cost-effective mitigation measures

Planned activities

EMiFa Project

- Collect data from further countries and calculate baselines/scenarios
- Kick-off working packages “mitigation strategies”, “trade-offs and benefits” and “adoption barriers”
- Host two CLIFF-GRADS students from Round 5 to support project (March-August 2023)

Online Survey “GHG accounting tools at farm level”

- Organize workshop to discuss results and develop work program
- Publish results as a journal paper

Webinars

- Calculating GHG emissions on dairy farms: Challenges and potential solutions
- Are the current policy targets to achieve net zero/carbon neutral agricultural production too ambitious?

Barriers and opportunities to mitigate GHG emissions and sequester soil organic carbon in cropping systems

- What options to reduce GHG emissions are of most interest to you?
- Are policymakers in your home country developing concrete measures to incentivize growers to reduce their GHG emission?
- How do you account for transaction cost to realize GHG savings?
- How do you account for and avoid/minimize potential leakage effects?
- Relevance of policy measures that (can) generate a co-benefit in GHG mitigation?
- What are the roadblocks/opportunities/threats?

Brainstorming on topics related to livestock production systems

- How to upscale farm level to regional; land use policy visions?
- Identify and analyze trade-offs: food security and GHG mitigation
- What motivates producers to change? What are adoption barriers?
- Adaptation to climate change, how does it impact GHG emissions?
- Search for win-win options for producers