

GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Şeyda Özkan, Pam Rüter, Nick Wheelhouse, John Tauzel



Health approaches for lowering livestock
emissions (Halow)

Situation/Issue

The problem

- Livestock disease reduces production efficiency and increases emissions intensity
- Quantification approaches fragmented
- Animal health is still largely absent from climate mitigation policy

Why a GRA Flagship

- A global collaborative route can produce comparable results
- Country-led case studies can strengthen inventory-ready data
- Shared policy guidance can support NDC, MRV and climate-finance pathways
- Enhanced capacities (technical & institutional) can strengthen the evidence base, align policies, and access to climate finance

Halow supports all countries

Developing countries to introduce NDC targets focusing on EI reductions, in addition to or regardless of the targets for absolute emission reductions (e.g. Uruguay's NDC); and

Developed countries to align climate and trade policies in relation to improved animal health (e.g. the recent methane action plan published by the UK Government focusing on Bovine Viral Diarrhoea (BVD)).

Flagship Project Goal(s)

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Create a practical route for countries to quantify and use animal health as a livestock climate solution

1. Quantification framework

Structured systems-based map, not a model

Compatible with models and LCAs

Makes assumptions and boundaries transparent

2. Policy guidelines

Eight mutually reinforcing entry points

Connects animal health, data, MRV and governance

Works without perfect methodology or data

3. Country application

Tailored to country priorities

Case studies and capacity building

Improved investment readiness

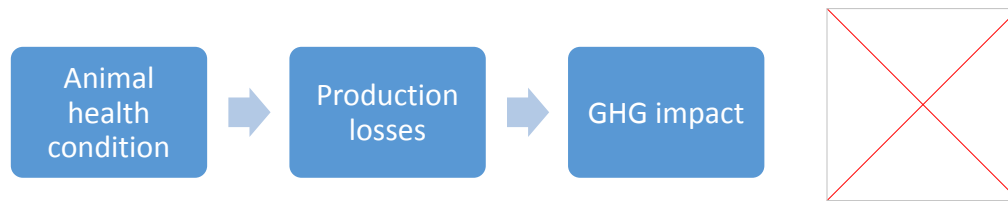
Timeline



Activities/Results To Date

The flagship is built around two implementation products and a set of country-facing use cases.

Scientific framework



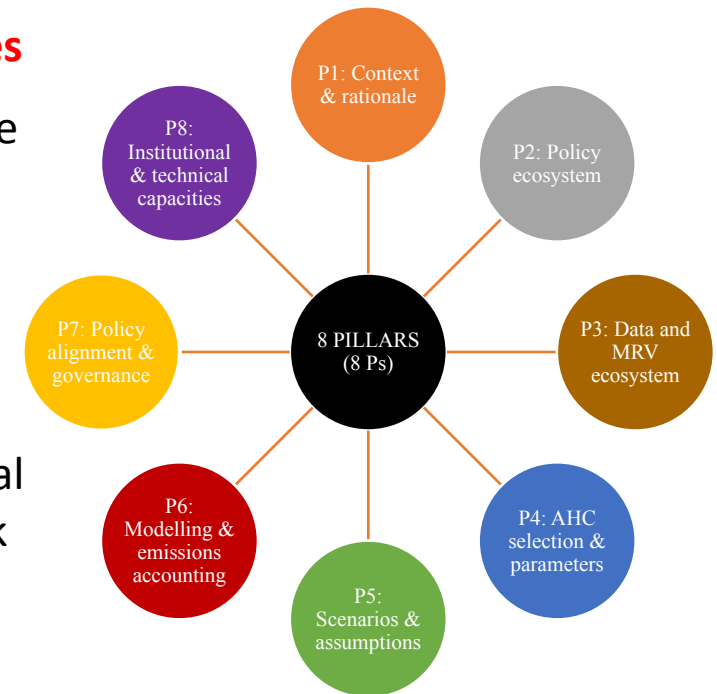
Quantification approaches have captured a subset of impacts, modified a subset of parameters, relied on simplified assumptions

No explicit representation of feedback mechanisms & how effects propagate through wider system-level interactions



Policy guidelines

Aims to facilitate countries in incorporating animal health into their NDCs and policies related to animal health, livestock development, and climate change



Scientific framework and policy guidelines tailored to country needs and objectives

Example: Same disease, different assumptions, different results

Foot-and-mouth disease outbreak->
Reduced milk production/growth

- Scenario A: Losses absorbed
- > Herd size unchanged
- > Production losses accepted
- > No compensation elsewhere



- Lower product output
- Lower feed demand
- Lower emissions

OUTCOME

- Scenario B: Losses compensated
- > Herd expansion or replacement production
- > Production target maintained
- > Market compensation (domestic, international)



- Supply maintained
- Additional feed demand
- Emissions increased/shifted

Anticipated Flagship Outcomes/Impacts

Expected impact: stronger evidence, stronger policy alignment, stronger investment cases for animal health as mitigation

Technical outcomes

- Consistent quantification of animal health impacts on emissions intensity, absolute emissions and avoided emissions.
- Better representation of feed intake, productivity, co-morbidity and herd dynamics.
- Possibility to identify trade-offs and co-benefits, and avoid unintended consequences
- Transparent assumptions for inventories, models and LCAs.

Policy and finance outcomes

- Quantified results on the impact of animal health on GHG emissions – animal health as a mitigation measure.
- Incorporating evidence into NDCs, livestock policy and MRV systems.
- Improved technical and institutional capacity, including ECR development through country-led implementation.
- Policies and objectives aligned
- Investment readiness that can unlock climate finance.

What countries gain

- *Accelerator funding for selected LMICs;*
- *Funding acquisition support for other countries;*
- *Stronger animal-health climate evidence for national priorities.*

Flagship Project Partners

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

HALow is designed as a GRA member-state initiative, led through the Animal Health Network and open to wider participation.

Council champions

Ireland

Kenya

New Zealand

Norway

Samoa

Countries with support letters

Cameroon

Uruguay

Organizations with support letters

FAO

GMH

Countries under engagement

Nigeria

The
Netherlands

Türkiye

United Kingdom

Any GRA member state can be involved through the voting process

Partners and advisory board(s)

Advisory board, GRA Animal Health Network, Environmental Defense Fund, Global Methane Hub, FAO, ILRI, GBADs, GIZ, GRA Inventories and MRV network and country partners.

Opportunities to get involved

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

The flagship is an opportunity to align country priorities, data systems and animal-health interventions with climate policy and finance.

Champion or endorse

Support the Council approval process and help bring additional GRA member states into the initiative.

Contribute case studies

Identify priority animal health conditions and intervention pathways for country-led implementation.

Strengthen data and MRV

Map livestock, health, emissions and policy data; test assumptions and minimum evidence requirements.

Build capacity

Support early-career researchers, technical training and funding acquisition for implementation countries.

Contact

Şeyda Özkan — ozkanseyda@outlook.com | Pam Ruiter — pruiter@edf.org