

Newsletter #3 December 2025

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■ WELCOME BACK!

Nau mai, haere mai, Herzlich Willkommen!

This issue brings you insights into 2025's cutting-edge events on agricultural greenhouse gas mitigation, food loss and waste reduction, and soil carbon sequestration. There's been a lot of activity since our last newsletter, and we hope you enjoy reading about some of the highlights here, as well as having a sneak peek at what's in store for the first half of 2026.

We also take the opportunity to wish you a very Merry Christmas and a Happy New Year!







Nina Grassnick

The Agri-DENZ project management unit









29-30 MAY 2025

REGIONAL SCIENCE-POLICY DIALOGUE ON AGRICULTURAL GREENHOUSE GAS RESEARCH PRIORITIES IN SOUTH AFRICA

Held on 29–30 May 2025 in Pretoria, the Dialogue brought together over 60 experts, including farmers, policymakers, researchers, civil society representatives, international organisations, and the private sector.

Researchers highlighted three priorities for climateresilient agriculture: demand-driven research, efficiency-focused solutions, and locally tailored approaches. More than just a convening, this Dialogue acted as a catalyst for coordinated research efforts that effectively bridge science, policy, and practice.

Co-convened by the QINISA Initiative, the AgriDENZ project, and the University of Pretoria, in collaboration with Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) and the Global Research Alliance on Agricultural Greenhouse Gases (GRA), the Dialogue marked a critical step in shaping a unified, demand-driven research agenda for low-emission, climate-resilient agriculture in the region.

This important initiative was supported by the New Zealand Ministry for Primary Industries (MPI) and the Thünen-Institute, with funding from the German Federal Ministry of Agriculture, Food and Regional Identity (BMLEH).

Key issues highlighted during the Dialogue include:

- Demand-driven research that responds to the real-world challenges faced by African farmers and policymakers.
- Efficiency-focused solutions that reduce emissions per unit of agricultural output—without compromising productivity or livelihoods.
- Tailored local approaches to ensure sustainability, ownership, and practical impact.

A huge thank you to Ackim Mwape (Ag Emissions Center) and Craig Chibanda (Thünen-Institute), our AgriDENZ third country leads for Africa, for their efforts in making this event a success.

Further resources:

- Dialogue Report that highlights agricultural greenhouse gas research priorities in Southern Africa: HERE
- Video recording of the webinar discussing the Dialogue Report and next steps: <u>HERE</u>



Attendees at the QINISA-AgriDENZ Regional Science-Policy Dialogue. Photo: Craig Chibanda









AUGUST 2025

ACTIVITIES RELATED TO FARM-LEVEL GHG ACCOUNTING

In August, we had an interesting and fruitful session at the XVIII EAAE Congress in Bonn, jointly co-organised by Elin Martinsson, Claudia Heidecke and the HumusKlimaNetz team, where we discussed farm-level GHG accounting approaches, their potential for policymaking, and carbon pricing. One main takeaway we bring with us from this session and the subsequent discussion is that there is a high variety in approaches and paths taken to account for farm-level GHG emissions in different countries, but at the same time, a large potential and need to learn from each other in terms of how to construct comparable and robust farm-level GHG accounting approaches.

Thank you to our panel Victoria Koch (OECD), Darran Austin (New Zealand Ministry for Primary Industries), Alexander Gocht (Thünen Institute), Jakob Vesterlund Olsen (University of Copenhagen), and Stephane De Cara (INRAE). And thank you to all who participated in the lively discussion.

Following the EAAE congress in Bonn, **Darran Austin** visited the **Thünen institute** in Braunschweig. During his visit, Darran had time for both progressing the work in the work package on farm-level GHG accounting, meeting with the German side of the AgriDENZ team to discuss future AgriDENZ output, as well as learning more about



(L-R) Stefanie Beith, Craig Chibanda, Nina Grassnick, Felix Seidel, Darran Austin, Elin Martinsson, Claudia Heidecke: Darran Austin visiting the Thünen-Institute and the DEU AgriDENZ team. Photo: Elin Martinsson

the work at Thünen, including a meeting with Stefan Lange, the research coordinator at Thünen, and guided tour in the laboratory for climate smart agriculture.

In the work package "GHG accounting tools", led by Dr Elin Martinsson and Darran Austin, we are working on a framework to compare farm-level methods based on national GHG inventories. Through this work, we want to foster a mutual understanding of on-farm emissions calculations in different contexts and contribute to decreasing fragmentation. In October, the AgriDENZ team was invited by the OECD to present parts of this ongoing work on farm-level GHG accounting.

09 SEPTEMBER 2025

TROPENTAG 2025 PRE-CONFERENCE WORKSHOP IN GERMANY

On 9 September, the AgriDENZ project, Uruguayan-German Dialogue on Agriculture (DAUA), and the African German Centre for Sustainable and Resilient Food Systems and Applied Agricultural and Food Data Science (UKUDLA) successfully co-organized a Pre-Conference workshop at the Tropentag Conference 2025 in Bonn, Germany.

The workshop, "Lessons learnt and opportunities for international cooperation in sustainable and climate-resilient agriculture," was an excellent opportunity for these three initiatives, that are co-financed by BMLEH, to share experiences and explore new opportunities for advancing sustainable and climate-resilient agriculture through international cooperation.

The event was a great success, with a very stimulating exchange on strengthening collaboration across borders. We appreciate the crucial role played by our AgriDENZ team members, Nina Grassnick, Craig Chibanda, and Onyinye Joy Agoziem (Thünen Institute), in organizing the workshop and ensuring its success.

Stay tuned for the forthcoming report, which will summarize the main outcomes of the workshop and will be published on the AgriDENZ website: HERE



Attendees at the AgriDENZ project / DAUA / UKUDLA preconference workshop at Tropentag 2025. Photo: Nina Grassnick









SEPTEMBER 2025

THE AGRIDENZ WEBINAR SERIES **GETS UNDERWAY**

As mentioned in our last newsletter, the AgriDENZ Webinar Series is now up and running. The webinars are a key mechanism for knowledge sharing and strengthening scientific exchange, which is one of the three underlying pillars of the project. They provide an excellent opportunity to connect researchers from Germany, New Zealand, and throughout the world.

The first Webinar, held in early September, focused on GHG emissions in dairy production systems and strategies to mitigate these. The three presenters (Dr Cecile DeKlein, Senior Research Scientist, New Zealand Bioeconomy Science Institute; Andy Millar, former GM On-Farm Excellence (Environment) at Fonterra, New Zealand, and Anna Raschel, M. Sc., Thünen Institute of Farm Economics, Germany) provided some excellent perspectives from research and industry in Germany and New Zealand to a global audience of approximately 90 people.

This was followed through September and October by the series "Soil & Climate Online Workshops". This series explored innovative research focussing on improved agricultural land management towards healthier soils, approaches to increase carbon sequestration in soils, and a more sustainable land

management, bringing together experts from around the world to share knowledge and practical insights.

The four online workshops in the series covered carbon sequestration potential in agricultural soils, advances in analytical approaches for measuring soil organic carbon quality, the role of agroforestry in boosting soil carbon accrual, and the important role of peatlands regarding GHG emissions. All the online workshops were well attended, generated interesting discussions and several follow-up actions. A big thanks to the organizers, the AgriDENZ soil carbon topic leads Felix Seidel (Thünen Institute) and Mark Lieffering (Ag Emissions Centre, NZL).

Finally, a webinar on "Charting the course for agricultural greenhouse gas research in Southern Africa" was held in early November. This was co-organized by the AgriDENZ project and the Qinisa Initiative and convened stakeholders from the 2025 Regional Science-Policy Dialogue (mentioned earlier in this newsletter) to discuss key findings from the dialogue.

A sincere thanks to all our organizers and participants for contributing to an engaging and insightful series of webinars, workshops, and discussions on advancing agricultural greenhouse gas research. Look out for more AgriDENZ webinars in 2026!

Please find the video recordings and presentation slides of the AgriDENZ webinar series: HERE

05 OCTOBER 2025

AGRIDENZ SIDE EVENT AT **GGAA CONFERENCE IN KENYA**

On 5 October, the AgriDENZ project hosted a side event during the 9th International Greenhouse Gas and Animal Agriculture (GGAA2025) Conference in Nairobi, Kenya.

Entitled "Mitigation of Greenhouse Gas Emissions in Ruminant Production Pasture Systems in Europe, South America, New Zealand, ASEAN, and Africa" the event provided a platform for experts, researchers, and practitioners to share and compare the latest insights on greenhouse gas (GHG) emissions and mitigation strategies in pasture-based livestock systems across regions.

Participants explored synergies and identified potential avenues for future collaboration within the framework of the AgriDENZ project. The side event forms part of

AgriDENZ's broader efforts to foster dialogue, knowledge exchange, and partnerships on climate-resilient and low-emission agriculture.

A summary report capturing the key discussions and outcomes will be available soon.











OCTOBER/NOVEMBER 2025

ACTIVITIES RELATED TO FOOD LOSS AND WASTE (FLW)

In each of our previous two newsletters we have shared summaries of workshops on preventing or reducing FLW, which have been supported through the AgriDENZ project.

Advancing FLW in Sub-Saharan Africa

The ninth Regional Food Loss and Waste (FLW) Workshop, part of the Collaboration Initiative on Food Loss & Waste (launched at the 2015 MACS-G20 meeting in Izmir, Türkiye), took place from 22–24 October 2025 at the Future Africa campus in Pretoria, South Africa. The event was supported by BMLEH and MPI through the AgriDENZ project.

WHAT MADE THIS WORKSHOP STAND OUT?

- 150 participants from 17 countries: Researchers, entrepreneurs, students, businesses, government agencies, NGOs, and international organizations.
- Dynamic discussions and real-world examples:
 Showcased progress in reducing FLW and highlighted success stories from previous workshops, including the 2024 Kenya preparatory event.
- Stronger networks: Evidence of improved collaboration and reduced duplication of efforts among stakeholders.
- Cross-project learning: Insights from initiatives such as Qinisa, SoIFOOD, GLEAM-X, Green Futures, and Transforming City Region Food Systems enriched the dialogue.

WHO MADE IT HAPPEN?

The workshop was co-organized with an impressive network of partners, including the National Department of Agriculture (South Africa), FANRPAN, ARC, CSIR, the Qinisa Initiative, the African Union, the University of Nairobi, GRA, UN SDSN, Ag Emissions Centre, UNEP, and the Thünen Institute.

A special thanks to **Felicitas Schneider (Thünen Institute)** and Chanjief Chandrakumar (GRA), AgriDENZ FLW topic leads, for their leadership and perseverance in overcoming logistical challenges to make this event a success.

WANT TO DIVE DEEPER?

Explore detailed outcomes and resources on the Collaboration Initiative FLW HERE.

In November, AgriDENZ topic lead for food loss and waste, Felicitas Schneider, contributed in person to the OECD Food Chain Analysis Network meeting in Paris. The meeting focused on the crucial topic of evaluating Food Loss and Waste reduction strategies, including what and how to measure, as well as options for engaging stakeholders. For Felicitas it was a great opportunity to reconnect to AgriDENZ cooperation partners such as Gustavo Porpino (Embrapa Brazil), Priscila Bocchi (Brazilian Ministry of Social Development), Clementine O'Connor and Lily Laugharn from UNEP, Rachel Collie and Kotone Yamamoto from SDSN.



- Participants at the opening of the Regional Workshop on Food Loss and Waste in Sub-Saharan Africa on 27 October 2025. The workshop
 was funded by the AgriDENZ project and took place at the Future Africa campus in Pretoria, South Africa.
- 2. VIPs from the opening ceremony of the Regional FLW workshop: In the centre (5th from the left), Deputy Director General Ms Kwena Komape (Convenor of the G20 Agricultural Sherpa for Food Security, South Africa), Philip Hewitt (Ambassador, New Zealand High
- Commission) and Maximilian Berger (Agricultural Counsellor, German Embassy Pretoria). Photo:

 National Department of Agriculture

 Lephana Carolina Bergaria (WWF Brazil), Luiza Soares (WWF Brazil), Felicitas Schneider (AgriDENZ), Gustavo Porpino (EMBRAPA, Brazil), Priscila Bocchi (Ministry of Social Development, Brazil) at the OCED Food Chain Analysis Network Meeting. Photo: Felicitas Schneider









OCTOBER 2025

POLICY DIALOGUE ON PEATLANDS

In our previous newsletter we reported on a series of policy dialogues on farm-level GHG accounting tools, which have led to a range of other activities within the project. Inspired by the success of this series, we have now commenced a series of policy dialogues on peatlands. The first of these was held online on the 29th of October and included two presentations: one from Dr Bärbel Tiemeyer (Thünen Institute) who gave an overview of peatlands and their uses in Germany and research into assessing GHG emissions associated with them and potential for these emissions to be mitigated.

Lisa Neumann from BMLEH then provided insights into policy and legislative work, both in Germany and more widely across the EU, looking to facilitate re-wetting and restoration of peatlands and exploring the use of paludiculture (i.e., agriculture in a wet peatland environment). The talks were followed by an interesting and enthusiastic discussion with all participants agreeing that a follow-up dialogue would be of great value. This is planned for February 2026 and will mainly focus on a New Zealand perspective of similar issues discussed in this first dialogue.

SCIENCE EXCHANGES

Scientific exchanges between research institutions were again an important activity for the project, with five exchanges taking place to deliver against this pillar.

In June, the Thünen-Institute had the pleasure of hosting **Dr. Stefan Muetzel**, Senior Scientist at AgResearch in New Zealand. During his visit, Dr. Muetzel met with Thünen colleagues to exchange insights on ongoing research related to methane measurement.

In July, the Thünen Institute was pleased to welcome **Prof. Sheila Skeaff** from the University of Otago during her business trip through Europe. It was a pleasure to learn more about Sheila's and the Food Waste Innovation team's activities related to FLW, as well as food literacy, at Thünen's research colloquium. The discussions once again highlighted that the complex food system requires increased multinational cooperation and joint efforts to understand the interactions behind specific nutritional and food loss and waste-related behaviours and framework conditions.

In September, **Dr Vincent Desaulniers Brousseau**, a life cycle assessment (LCA) Scientist in the Agresearch Group of the NZ Bioeconomy Sciences Institute (BSI), undertook a short-term scientific exchange with the Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB) in Potsdam, Germany. The purpose of this visit was for Vincent to deliver a guest lecture on his research in LCA of waste-to-fertiliser pathways, circularity between the New Zealand beef and dairy sectors, and emerging mitigation options such as biochar, as well as to develop

collaborative opportunities between BSI (New Zealand) and Leibniz ATB. While in Germany, Vincent was able to meet with Dr Elin Martinsson and other researchers to explore linkages with the AgriDENZ project and other potential research collaboration opportunities.

Also in September, **Mark Lieffering** (Ag Emissions Center) who is the New Zealand AgriDENZ topic lead for Soil Organic Carbon visited the Thünen-Institute and discussed with Thünen colleagues from the working group "Soil Organic Matter" potential future collaboration opportunities.

Most recently, during November, Dr Elin Martinsson from the Thünen Institute, who leads the "Farm-level GHG accounting tools" topic on behalf of the German project team, visited New Zealand. Elin's visit included meeting members of the BSI: AgResearch Ethical Agriculture team at the Ruakura Campus in Hamilton, staff from the BSI: AgResearch LCA and sustainability teams in the Tuhiraki Building in Lincoln (near Ōtautahi Christchurch), the Ag Emissions Centre, BSI: AgResearch, and BSI: Plant & Food Research in Palmerston North, as well as MPI in Wellington.

Please see the following page for the photo gallery.









SCIENCE EXCHANGES



- 1. (L-R) Craig Chibanda and Stefan Mützel at the Thünen-Institute.
- 2. (L-R) Felix Seidel, Mark Lieffering, Nina Grassnick and Elin Martinsson at the Thünen-Institute.
- 3. Prof. Sheila Skeaff (3rd from the left), AgriDENZ FLW topic lead Felicitas Schneider (4th from left) and other Thünen colleagues participating in the presentation of Prof. Skeaff at the Thünen research colloquium.
- 4. (L-R) Marta Alfaro, Elin Martinsson, Keren Ding, and Marianne Hull Cantillo at the lysimeters at Ruakura on a beautiful Waikato day.

 Photo Matthew Barnett









■ MEET THE TEAM!

Hello. I'm Dr. Elin Martinsson, the AgriDENZ Work package leader for the "Farm-level GHG accounting" topic area.

I'm based at the Thünen Institute in Germany.



I recently earned my doctorate in agricultural economics with my thesis entitled "Smart Farming Technology and the Environmental and Social Efficiency of European Agriculture". During my doctoral studies, I assessed farm-level eco-efficiency, particularly emphasising farm-level GHG emissions, and how farms' environmental performance is affected by the adoption of novel (smart farming) technology. Particularly, I studied the effects of using Automatic Milking Systems on Norwegian farms.

I am interested in policies and novel technology with the potential to mitigate farms' environmental impact while enhancing social sustainability, both on farm- and on a societal level. Furthermore, I am interested in learning more about the role of dietary changes and new farming systems as a mean to mitigate emissions from food production.

In my current role, I am leading the work on the German side on farm-level GHG accounting in AgriDENZ and I am curious to identify more areas where Germany and New Zealand can learn from each other in terms of climate change mitigation and accounting for GHG emissions and other environmental effects from agriculture.

UPCOMING ACTIVITIES

AND WHAT TO EXPECT IN ISSUE FOUR

- CARBON SEQUESTRATION RESEARCH and management options in German and New Zealand agriculture
- MORE PROGRESS ON comparing on-farm GHG accounting tools
- PEATLAND POLICY DIALOGUES
- ANOTHER INSTALMENT OF the AgriDENZ Webinar Series

ONLINE

For more information, please visit the project website (<u>www.agri-denz.com</u>) or join us on LinkedIn (<u>AgriDENZ project: Overview | LinkedIn</u>).

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