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GRA Council meeting, Madrid, Spain

24-25 April 2023



**Research Group  
Co-Chairs' Report**



# GLOBAL RESEARCH ALLIANCE

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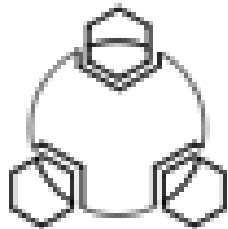
# Integrative Research Group Report

Jean-François Soussana, Pamela Joosse and Rowena Nankivell

## CO-CHAIRS:

*Jean-Francois Soussana, INRAE, France;*

- *Pamela Joosse, AAFC, Canada;*
- *Rowena Nankivell, DAFF, Australia*



## Aim of Integrative Research Group:

*To foster collaboration across all Research Groups to reduce greenhouse gas emissions intensity while improving the overall production efficiency within agricultural systems*

# INTEGRATIVE RESEARCH GROUP

## RECENT ACTIVITIES

- **Annual meetings of the CRG and IRG were held jointly on 17-18 January 2023**



- Meeting theme: 'Towards Carbon Neutral Cropping Systems'
  - Keynote presentations on [Carbon sequestration in croplands in tropical and subtropical regions](#) and [Climate Neutral Farms](#)
  - Networks and individual countries contributed to the discussion on carbon neutral cropping systems
- **Proposal for joint CRG and IRG paper on carbon neutral carbon farming systems**

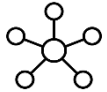


- Joint review paper to work through the opportunities and challenges of reaching carbon neutrality in farming systems
- Scope of paper to be refined and outline shared
- Networks each have a piece they could contribute

# INTEGRATIVE RESEARCH GROUP

## RECENT ACTIVITIES

- Progress towards establishing new [Indigenous Research Network \(IRN\)](#)



- New Zealand and Samoa are establishing the IRN to strengthen the participation of indigenous scientists and research relating to reducing agricultural greenhouse gases
- Support for proposed network to be included within IRG

- **Communication Plans**



- We will continue to organise webinars in 2023 and beyond – there is opportunity to publicise these to GRA members more broadly
- We will aim to include some future support from GRA CLIFF-GRADS

## FOUR RESEARCH NETWORKS

### SOIL CARBON SEQUESTRATION

- Jean-François Soussana (INRAE)
- Peter Smith (University of Aberdeen)

### FARM to REGIONAL SCALE INTEGRATION

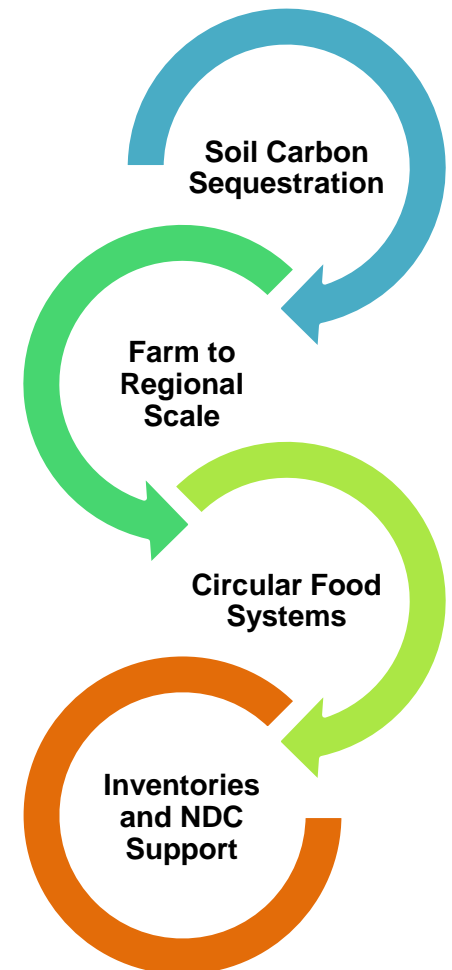
- Claus Deblitz, Yelto Zimmer and Nina Grassnick (Thunen Institute of Farm Economics/ *agri benchmark*)

### CIRCULAR FOOD SYSTEMS

- Flavia Casu and Camila Bonilla Cedrez (Wageningen University & Research)

### INVENTORIES & NDC SUPPORT

- Andrea Pickering (AGGRC, New Zealand)
- Ngonidzashe Chirinda (Mohammed VI Polytechnic University)
- Natalie Doran-Browne (the Mullion Group, Australia)
- Mai Van Trinh (Institute for Agricultural Environment, Vietnam)



# INTEGRATIVE RESEARCH GROUP

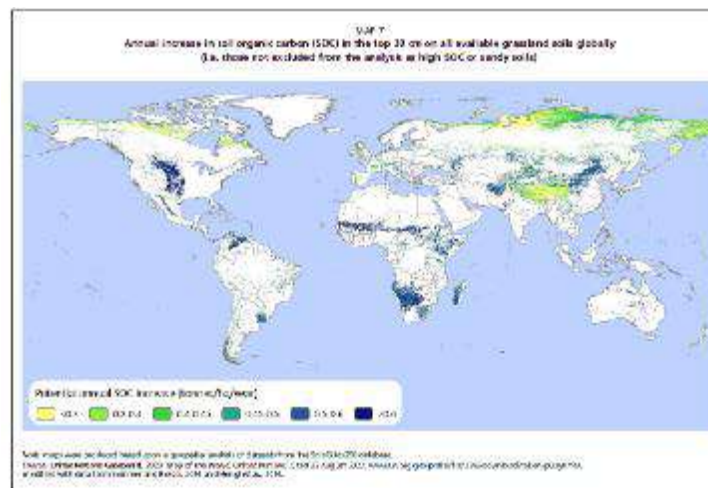
## Soil Carbon Network

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### Recent achievements

Collaboration with LEAP FAO,  
first global map of soil C  
sequestration in grasslands.



Global assessment of  
soil carbon in grasslands

For the first time, this assessment  
provides a global picture of  
soil carbon in grasslands



### International Research Consortium on soil carbon

To be launched before end of the year, side by side with a Soil Mission EU conference  
Supported by a second EU funded project (ORCASA)

# INTEGRATIVE RESEARCH GROUP

## Soil Carbon Network

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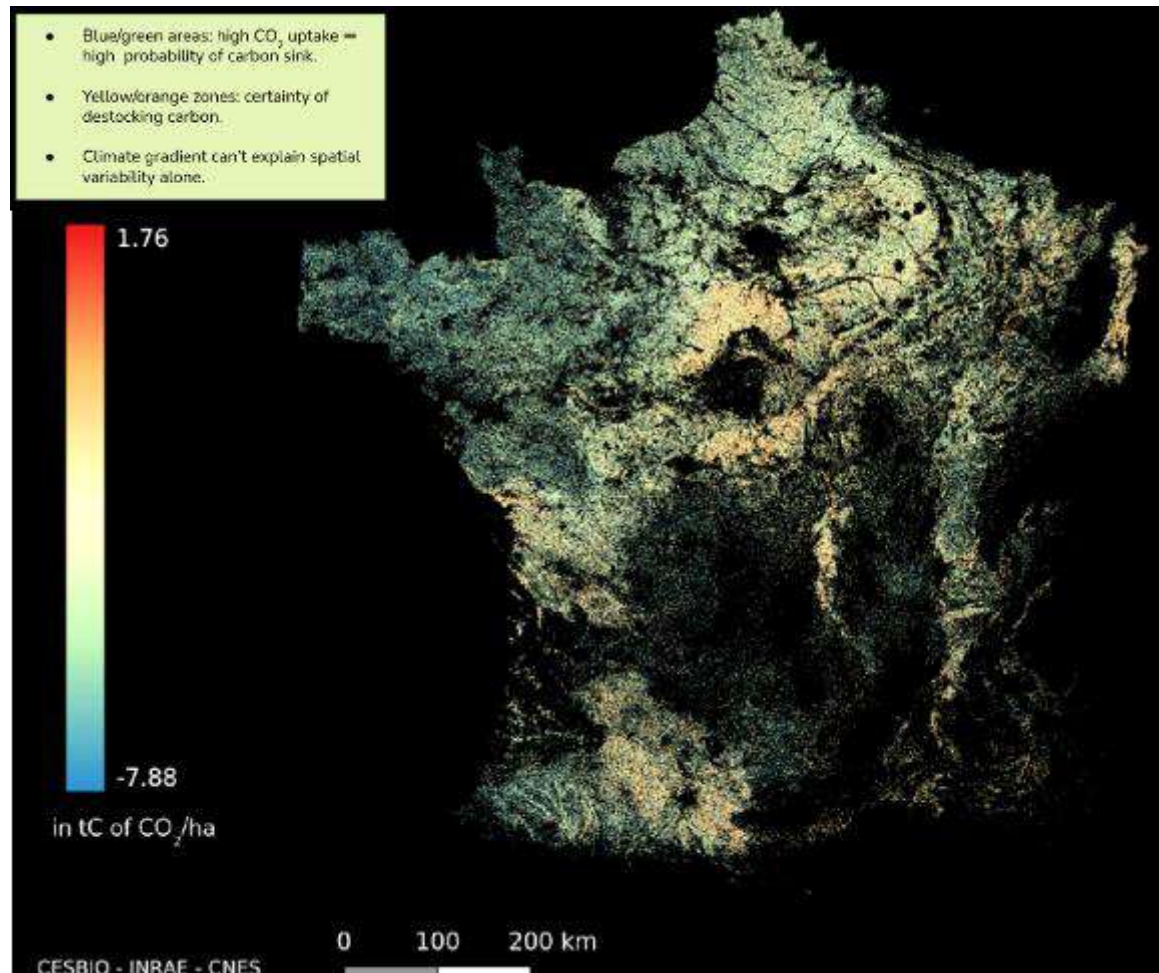
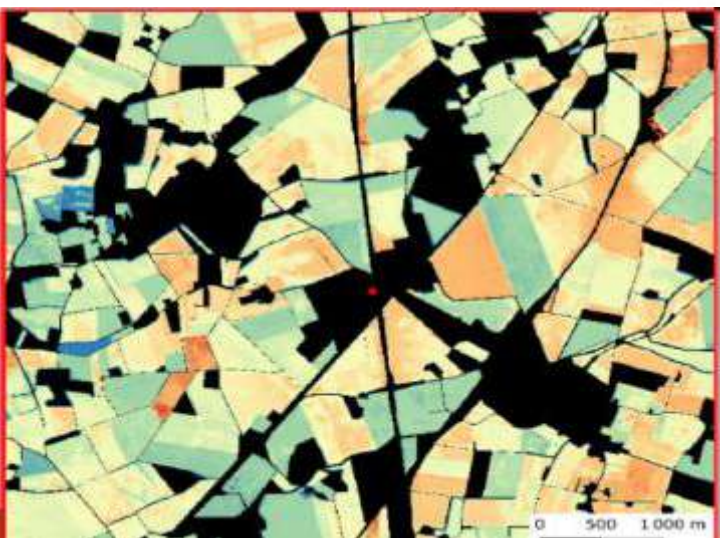
**MRV: soil carbon stock change estimated across EU at country to field scale with remote sensing and soil data**

EU funded NIVA project.  
CESBIO, INRAE, CNES

Annual CO<sub>2</sub> fixation



Annual CO<sub>2</sub> losses





# INTEGRATIVE RESEARCH GROUP

## Farm to Regional Scale Integration

### Recent achievements

- Online Survey conducted in April 2022 on GHG accounting tools at farm level (led by Daniel Bretscher, Agroscope, Switzerland)
- [Annual Meeting of FRS Network](#) during the IRG-CRG Meeting in Spain, January 2023 (hybrid format)
- [Webinar](#) held in February 2023: “Rethinking Tools to Assess Impacts from Dairy Farms Beyond Greenhouse Gas Emissions”
- Recently submitted an Organised Session proposal for this year’s [European Association of Agricultural Economists \(EAAE\) Conference](#) (29th August - September 1st 2023) with the title “Economic Impacts Of GHG Mitigation Options At Farm-Level”

### Future direction

- Publish results of the Online Survey “GHG accounting tools at farm level” as a journal paper
- Host two CLIFF-GRADS students from Round 5 to support [EMiFa project](#) (March-August 2023)
- Broaden EMiFa Project to dual purpose (dairy/cow-calf) cattle and inclusion of further countries

# INTEGRATIVE RESEARCH GROUP

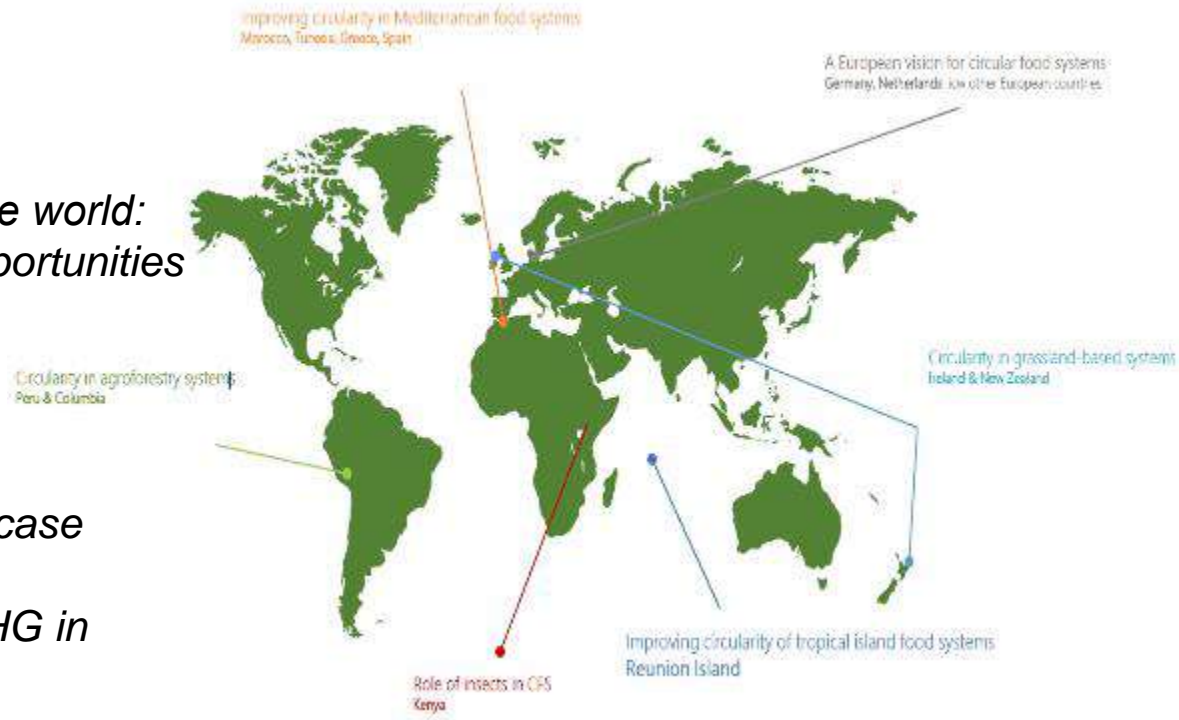
## Circular Food Systems

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### Recent achievements

- Funded 6 case studies  
*See website for reports*
- White paper  
*'Circular Food Systems around the world: exploring concepts, ideas and opportunities'*
- Other network activities
  - *Dedicated session at the Circular@WUR conference*
  - *Webinars*
    - knowledge exchange case studies*
    - data on monitoring GHG in circular systems*



### Future direction

- Funding & start of new in-depth research projects with a focus on indicators for circularity (2023-2024)
- New webinars for knowledge dissemination
- Opportunities to initiate new research projects from the network

# INTEGRATIVE RESEARCH GROUP

## Inventories & NDC Network

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### Recent achievements

- 3 webinars were held:
  - Policy relevance of National inventories for agriculture,
  - National agriculture inventory data collection and management, and
  - Commissioning and managing agriculture inventory research projects.
- Eighth Network newsletter disseminated
- Agricultural Inventory Capability Building workshop held in New Zealand for Fiji and Samoa, resulted in Fiji joining the GRA.

### Future direction

- Work with Animal Health Network by holding a series of joint workshops and webinars.
- Capability building in data collection
- Implement discussions on:
  - MRV for different systems and share experiences using satellite imagery
  - Estimating carbon sequestration for Agro-forestry
- Develop approved methodologies for incorporating mitigation technologies into GHG Inventories.
- Agriculture Sector Compilers workshop

# INTEGRATIVE RESEARCH GROUP 2023-24 PLANS

## ▶▶ | Next steps

- **Engaging with IRG members to identify topics/research questions of interest to policy members**
  - Helping to focus the work of the IRG and articulate priorities to inform the Networks' research interests
- **Linking research to knowledge transfer and making policy connections**
- **Progressing the Indigenous Research Network**  
First annual meeting end of May 2023.
- **Continuing to work with the other Research Groups – appreciated joint meeting with the CRG, identify ongoing collaboration opportunities**





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# Croplands Research Group Co-Chairs' Report

María Rosa Mosquera-Losada, Ladislau Martin-Neto and Hero Gollany

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# **CROPLANDS RESEARCH GROUP**

## **RECENT ACTIVITIES: Joint activity**

- ❖ **Newsletters: April, August, October & December**
- ❖ **Webinar 2022. Predicting soil organic carbon dynamics in long term agricultural experiments using the CQESTR Model**
- ❖ **Hybrid annual meetings of the CRG and IRG were held jointly on 17-18 January, 2023**
  - \* **Networks**
  - \* **Country developments**
  - \* **New collaborations**
    - IRG: Carbon farming**
    - CRG: Soil carbon**
    - Special issue**
    - Agroecology & Agroforestry Flagship**



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# CROPLANDS RESEARCH GROUP

## RECENT ACTIVITIES: Networks

### ➤ **Agroforestry Network**

- Projects, networking, papers, special issue



### ➤ **Conservation Agriculture and Nutrient management**

- The **meta-analysis** manuscript on the role of conservation agriculture in mitigating N<sub>2</sub>O emissions was submitted November 2022.

### ➤ **Landscape Management of Agriculture Systems Network**

- A new module to calculate off-farm GHG emissions and improved NH<sub>3</sub> volatilization mechanisms were added to CNMM-DNDC model.

### ➤ **Peatland Management Network**

- Improving nutrient management, Biochar, Water table management

### ➤ **Integrated Crop-Livestock systems Network**

- Mitigation, adaptation, carbon credits, special issue

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# CROPLANDS RESEARCH GROUP

## RECENT ACTIVITIES: Journal Special Issues

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- **2022:** María Rosa Mosquera-Losada is editor of the Research Topic of "Can the Trees Save the Crops? Predicting the Services Provided by Traditional and Novel Agroforests in Changing Mediterranean Landscapes"? In *Frontiers in Ecology and evolution*
- **2023:** Ladislau Martin-Neto is editor of Research Topic: "Soil Carbon Sequestration in Tropical and Subtropical Regions: A Paradigm Change" in *Frontiers in Soil Science*. On-going

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# Publications

## Reviews

Berta Gonçalves, Maria Cristina Morais, Sandra Pereira, María Rosa Mosquera-Losada, Mário Gabriel Santiago Santos (2022) **Tree-crop ecological and physiological interactions** within climate change contexts: a mini-review. *Frontiers in Ecology and Evolution*, section Models in Ecology and Evolution. <https://doi.org/10.3389/fevo.2021.661978>

Santos M, Cajaiba RL, Bastos R, Gonzalez D, Petrescu Bakış A-L, Ferreira D, Leote P, Barreto da Silva W, Cabral JA, Gonçalves B and Mosquera-Losada MR (2022) Why Do **Agroforestry Systems Enhance Biodiversity?** Evidence From Habitat Amount Hypothesis Predictions. *Front. Ecol. Evol.* 9:630151. doi: 10.3389/fevo.2021.630151

Damianidis, C., Santiago-Freijanes, J.J., den Herder, M. et al. Agroforestry as a sustainable land use option to reduce **wildfires risk** in European Mediterranean areas. *Agroforest Syst* 95, 919–929 (2022). <https://doi.org.ezbusc.usc.gal/10.1007/s10457-020-00482-w>

Rolo V, Rocés-Diaz V, Torralba M, Kay S, Fagerholme B, Aviron F, Burgess O, Crous-Duran J, Ferreira-Dominguez N, Graves A, Hartel T, Mantzanas K, Mosquera-Losada MR, Palma J, Sidiropouloul A, Szerencsits E, Viaudm V, Herzog F, Plieninger T, Moreno G 2022. **Mixtures of forest and agroforestry alleviate trade-offs between ecosystem services** in European rural landscapes. *Ecosystem Service* 50, 101318.

# Publications

## Land management

Alvarez-Lopez V, Lado-Liñares M, Lamas A, Vázquez B and Mosquera-Losada R. (2022) **Circularity and biofertilizers use in Agroforestry systems: impact on soil health**. Applied soil ecology (accepted)

Ferreiro-Domínguez N, Rigueiro-Rodríguez A, Mosquera-Losada MR (2022) **Modelling Pinus radiata D. Don growth and pasture production under different land uses and climate scenarios**. Frontiers in Ecology and Evolution (Accepted)

## Soil carbon stocks

N. Ferreiro-Domínguez, J.H.N. Palma, J.A. Paulo, A. Rigueiro-Rodríguez, M.R. Mosquera-Losada (2022) **Assessment of soil carbon storage in three land use types of a semi-arid ecosystem in South Portugal**, CATENA, 213, ISSN 0341-8162, <https://doi.org/10.1016/j.catena.2022.106196>.

Ferreiro-Domínguez, Nuria, Francisco Javier Rodríguez-Rigueiro, Antonio Rigueiro-Rodríguez, María Pilar González-Hernández, and María Rosa Mosquera-Losada (2022) **Climate Change and Silvopasture: The Potential of the Tree and Weather to Modify Soil Carbon Balance**. Sustainability 14, no. 7: 4270. <https://doi.org/10.3390/su14074270>

Chowdhury, Sangita, José Manjón-Cabeza, Mercedes Ibáñez, Christian Mestre, Maria José Broncano, María Rosa Mosquera-Losada, Josefina Plaixats, and M.-Teresa Sebastià (2022) Responses in Soil Carbon and Nitrogen Fractionation after **Prescribed Burning in the Montseny Biosphere Reserve** (NE Iberian Peninsula) *Sustainability* 14, no. 7: 4232. <https://doi.org/10.3390/su14074232>

# Publications

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## Policies

María Rosa Mosquera-Losada, Francico Javier Rodríguez-Rigueiro, José Javier Santiago-Freijanes, Antonio Rigueiro-Rodríguez, Pablo Silva-Losada, Anastasia Pantera, Juan Luis Fernández-Lorenzo, María Pilar González-Hernández, Rosa Romero-Franco, José Antonio Aldrey-Vázquez, Nuria Ferreiro-Domínguez (2022) **European agroforestry policy promotion in arable Mediterranean areas**, Land Use Policy, Volume 120, 106274, ISSN 0264-8377, <https://doi.org/10.1016/j.landusepol.2022.106274>

Santiago-Freijanes, JJ, Mosquera-Losada MR, Rois-Díaz M et al. Global and European **policies** to foster **agricultural sustainability: agroforestry**. Agroforest Syst 95, 775–790 (2021). <https://doi-org.ezbusc.usc.gal/10.1007/s10457-018-0215-9>

Rodríguez-Rigueiro FJ, Santiago-Freijanes JJ, Mosquera-Losada MR, Castro M, Silva-Losada P, Pisanelli A, et al. (2021) **Silvopasture policy promotion** in European Mediterranean areas. PLoS ONE 16(1): e0245846. <https://doi.org/10.1371/journal.pone.0245846>

Mosquera-Losada\*, Santos M, Gonçalves B, Ferreiro-Domínguez N, Castro M, Rigueiro-Rodríguez A, González-Hernández MP, Fernández-Lorenzo JL, Romero-Franco R, Aldrey-Vázquez JA, Cabaleiro Sobrino C, García-Berrios JJ, Santiago-Freijanes JJ 2022 **Policy challenges for agroforestry implementation in Europe** “Frontiers in Forests and Global Change-Forest Management”. In press.



# Publications

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## **Business environment and carbon farming:**

Orozco, R.; Mosquera-Losada, M.R.; Rodriguez, J.; Adamseged, M.E.; Grundmann, P. 2021 **Supportive Business Environments to Develop Grass Bioeconomy in Europe**. 2021 Sustainability 2021, 13, 12629. <https://doi.org/10.3390/su132212629>

## **Participative research**

Feo, E., Spanoghe, P., Berckmoes, E., Pascal E., Mosquera-Losada, R., Opdebeeck, A., Burssens, S. (2022) The **multi-actor approach** in thematic networks for agriculture and forestry innovation. Agric Econ 10, 3 (2022).

## **Bioeconomy**

A.M. Freitas, V. D. Nair, W. G. Harris, M. R. Mosquera-Losada, N. Ferreiro-Domínguez (2022) **Pyrolysis-induced phosphorus transformations** for biosolids from diverse sources. Journal of Environmental Quality (Accepted)

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# CROPLANDS RESEARCH GROUP

## RECENT ACTIVITIES: Events participation

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- ❖ **German Brazilian Panel debate on carbon farming & Carbon markets perspectives for temperate and tropical climates, June 2022**



- ❖ **María Rosa Mosquera facilitated the working group on “Agroecology, agroforestry and multipurpose forests”, 15 June 2022, Final event of ROSEWOOD 4.0, Barcelona, European Forest Institute (EFI).**
- ❖ **USDA Agriculture Innovation Mission for Climate (AIM for Climate) Summit (8-10 May 2023 in Washington DC)**

**61° IALB|11° EUFRAS|8° SEASN CONGRESO INTERNACIONAL 2022 GALICIA** El camino de la transferencia del conocimiento e innovación a través de la extensión hacia el desarrollo rural sostenible. EL CONGRESO INTERNACIONAL DE LA EXTENSIÓN RURAL EUROPEA 21-25/06/2022 LUGO (Galicia)

**-EU Greenweek. Bioeconomy and policies**

- eip-agri Porto EU CAP Network Seminar ‘Smart circular farming to address high energy and fertiliser prices’ Porto, Portugal | Tuesday 6 - Wednesday 7 December 2022

<https://ec.europa.eu/eip/agriculture/en/event/eu-cap-network-seminar-%E2%80%98smart-circular-farming%27>

- **FORESTVALUE.** Madrid 28-29 September 2022

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# CROPLANDS RESEARCH GROUP

## RECENT ACTIVITIES: on-going projects : ON AGRICULTURAL GREENHOUSE GASES

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- ❖ **EMBRAPA-Brasil:** 30 on-going projects on mitigation, adaptation and forecasting CC impacts in agriculture.
- ❖ **EJP Projects:** several in Norway: CarboSeq, SOMMIT, INSURE and TRUESOIL
- ❖ **Living Labs” platform** for and by producers and researchers in on-farm trials is entering a second phase - Agriculture Climate Solutions; 13 projects in Canadá.
- ❖ **Reducing carbon footprint through bioeconomy:** AE4EU, AF4EU, GO-GRASS, UNDERTREES
- ❖ **Restoring agroforest systems from and combining with medicinal plant, cereals, crops and livestock:** VAIA, COMPAS, AGFCLIMA-DEMO, SILFORE, PYRICLABS, GOFORREST
- ❖ **Reducing biocides use in croplands:** Oper8, GOOD

# CROPLANDS RESEARCH GROUP

## RECENT ACTIVITIES: Networking

**Asia:** possibility to collaborate with [AFACI](#), [KAFACI](#), [KoLFACI](#) and [KOPIA](#) on activities related to climate change mitigation in agriculture, organized by sub-korea

**North-America:** The USDA - NRCS [Climate Hubs](#) provided financial assistance to 155,000 producers, managers and forest landowners. // NIFA has set up a new grant program “[Regional Innovation and Demonstration of Climate-smart Agriculture for Future Farms \(CAFF\)](#)”.

**Europe-ASIA:** FOREST4EU (waiting for approval)

**Europe:** EFI, SCAR-AKIS, SCAR-Agroecology

**Europe-South-AMERICA:** FONTAGRO (waiting for approval)

**International:** FAO (Global agroforestry capacity needs assessment), Circular Bioeconomy Alliance, GACSA, UNDERTREES, UNFCCC NWP (Nairobi Work programme)

# CROPLANDS RESEARCH GROUP

## RECENT ACTIVITIES: Networks

## CBA LIVING LABS: The circular economy alliance

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- ❖ **FUTURE ACTIVITIES**

- Keep with joint activities: newsletter, webinars, joint papers
  - Joint review paper “Towards carbon neutral carbon farming systems? with the IRG”
  - Paper “Soil organic carbon estimations”
- Foster collaborations with the previous networks through available funding
- Agroecology & Agroforestry flagship




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**Thank you for your kind attention!**



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([hero.gollany@usda.gov](mailto:hero.gollany@usda.gov))



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**Paddy Rice Research Group  
Report**

Yasukazu Hosen, Álvaro Roel and Omar Ndaw Faye

# PADDY RICE RESEARCH GROUP

## RECENT ACHIEVEMENTS

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### Steady implementation of ongoing projects



present

✓ MIRSA: “GHG Mitigation in Irrigated Rice Systems in Asia”

Multilateral Collaborative Research

✓ MIRSA-3: 

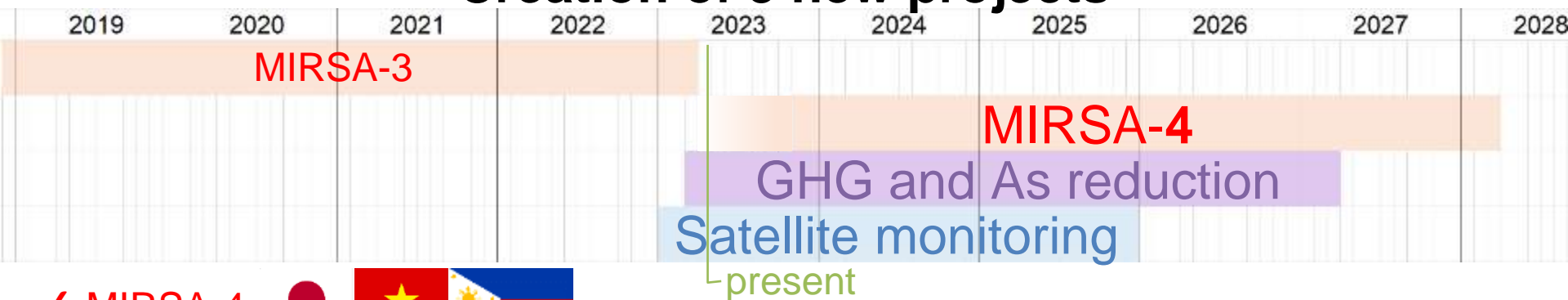
✓ Funded by the Japanese Government



# PADDY RICE RESEARCH GROUP

## RECENT ACHIEVEMENTS

### Creation of 3 new projects






✓ MIRSA-4:   

- ✓ Funded by the Japanese Government
- ✓ AWD x cultivars/lines  60% GHG reduction
- ✓ Livestock waste  biogas (fuel) production  reduction of C cont. in digestate  use as fertilizer for rice  20% GHG reduction

✓ GHG and As reduction:   

- ✓ Funded by the Japanese and U.S. Governments
- ✓ AWD  GHG and Arsenic reduction
- community structure and functional genes of the microbe involved

✓ Satellite monitoring of methane from rice:  **FONTAGRO**  Global Methane Hub   

- ✓ Funded by Global Methane Hub and other institutions  **FLAR**  **CIAT** 

# PADDY RICE RESEARCH GROUP RECENT ACHIEVEMENTS

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## Americas Sub-Group Meeting, Jonesboro, USA, July 2022

- A project proposal



# PADDY RICE RESEARCH GROUP

## MAIN AMBITIONS

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- ✓ Publication of results
  - ✓ **MIRSA-3** results
    - ✓ GHG emission and rice yield results of field experiments
      - ✓ In Vietnam (Hue City)
      - ✓ In Indonesia (Jakenan in Central Java)
      - ✓ Meta-analysis for IR64 and IR72
    - ✓ Soil C sequestration
    - ✓ DNDC-Rice Model validation
- ✓ Steady implementation of ongoing projects
  - ✓ **MIRSA-4**
  - ✓ GHG and Arsenic reduction
  - ✓ Satellite monitoring
- ✓ New activities in Africa: Omar Ndaw Faye new co-lead, Kofi Boateng former CLIFF-GRADS.
  - First annual meeting planned for end of 2023.





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## Livestock Research Group Report

Sinéad Waters, Richard Dewhurst and Jon Tanner

# LIVESTOCK RESEARCH GROUP

## Irish co-Chair of the Livestock Research Group



University College Dublin  
An Coláiste Ollscoile, Baile Átha Cliath



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine

- Prof. Tommy Boland
- Assoc. Dean of Research, Innovation and Impact, School of Agriculture and Food Science, UCD.
- Member EU Agri methane emissions expert group
- Secretary Livestock Farming Systems Commission, EAAP
- President Agricultural Science Association
- Research: Enteric methane mitigation, nitrogen excretion, grazing systems including MSS. Dairy, beef and sheep
- GRA: FNN participant, contributor to global CH4 databases
- Participation supported by Department of Agriculture Food and the Marine

# LIVESTOCK RESEARCH GROUP

## RECENT ACHIEVEMENTS

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ON AGRICULTURAL GREENHOUSE GASES

### **14<sup>th</sup> Annual Livestock Research Group annual meeting** (Virtual)

18-20 October 2022

#### **Full report available:**

<https://globalresearchalliance.org/library/livestock-research-group-annual-meeting-october-2022/>

#### **Co-Chairs:**

Sinéad Waters (Ireland),  
Richard Dewhurst (United Kingdom)  
and Jon Tanner (New Zealand)

#### **Participants:**

106 participants, from 43 member countries and 4 partner organisations.

#### **LRG network coordinators:**

Provided updates

#### **Main themes:**

Methane metrics and data systems.

Challenges facing global organisations in responding to the challenges of climate change.

#### **Some discussion points:**

- Livestock complex and underpin livelihoods.
- Private industry can play a role in GRA.
- Need to support LMICs and conscious of language barriers.
- Networks are the engine-room of the LRG – collaboration critical to find solutions.

# LIVESTOCK RESEARCH GROUP RECENT ACHIEVEMENTS

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## Delivery from Networks

### Animal Selection Genetics and Genomics Network

Meeting at WCGALP in Rotterdam (summer 2022). Workshops occurred linked to work on methane proxies.

Global effort in the areas of methane proxies and breeding for low emitters.

### Rumen Microbial Genomics Network

Funded collaborative projects – **MASTER** and **HoloRuminant**.

Building GRA Flagship ‘culturomics’ project – funding from Global Methane hub and Schmidt Futures.

RMG workshop: Rowett/INRAE gut microbiology meeting in Aberdeen (June 2023) - Seeking a deputy lead.

### Animal Health Network

- Co-leads met INDC Network co-leads
- Plan to hold joint workshops (in series) on challenges around data, types of models, policy integration of aspects related to animal health and climate change.
- Co-leads met with representatives of ILRI and the Mazingira Centre (Kenya) to promote the network in East Africa and discuss ongoing work in the region.
- Organizing an interdisciplinary workshop to draft a COST proposal.
- Selected AHN members reviewed the FAO report “The role of animal health in national climate commitments”.
- Report was led by the AHN co-lead Şeyda Özkan.



# LIVESTOCK RESEARCH GROUP

## RECENT ACHIEVEMENTS

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## Delivery from Networks

### Feed and Nutrition Network

'Feed additives' flagship project held two on line workshops (November 2022) to scope out 'technical guidelines for developing feed additives' led by David Yanez Ruiz (CSIC, Spain) and Andre Bannink (Wageningen, Netherlands).

Paper published: 'Prediction of enteric methane emissions by sheep using an intercontinental database' in Journal of Cleaner Production.

Refined intercontinental database included 2,135 individual animal data from 13 countries.

### Manure Management Network

Seeking new chair

Survey to gauge future research priorities and exploring the possibilities of a GRA Flagship in the area of feed quality/manure management/GHG emissions.

Considering a possible broadening of the scope to cover all value from manure (anaerobic digestion; new processes?). This will be discussed with the new lead.

Linking many other projects around the globe – refining inventories; investigating mitigation technologies; improving nutrient efficiency and informing policy.



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## RECENT ACHIEVEMENTS

### **Global Dairy Platform P2DNZ: Pathways to Dairy Net Zero project:**

- Led by large dairy processing companies around the world.
- GRA team working with FAO to define dairy typologies, model GHG emissions and mitigation pathways spatially.
- New work: examining barriers to uptake of mitigations in different countries and systems, as well as modelling warming effect of different mixes of GHG and mitigations.

### **Funding: *Successful IRE-NZ funding call***

- In May 2022, the Irish Ministry for Agriculture (DAFM) and NZ Ministry for Primary Industries launched the 2022 Joint Call for Research Proposals
- Theme: 'Strategies, technologies and novel systems to reduce and account for greenhouse gas emissions from agriculture ruminant production systems'.
- €3.6M was awarded to fund 4 collaborative projects.

# LIVESTOCK RESEARCH GROUP

## MAIN AMBITIONS

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### Continued Support of networks

Significant support to help networks – especially those without major core projects.

### Links with policy

Building on a recent successful meeting with NZ Minister of Agriculture.

### Refreshing leadership

New leadership/deputy leadership brings new ideas in MMN and RMG.

### Funding

Build on success of the 2022 NZ-IE call. Global Methane Hub – help align to flagships and networks.

### Network Activity

Facilitate **dialogue among scientists** from different GRA member nations to increase membership and involvement in networks, especially from Africa, Asia and South America... planning a meeting in Africa later in 2023.





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GRA Council meeting, Madrid, Spain

24-25 April 2023



**Joint Research Group  
Recommendations**



# Research Group Recommendations to Council

## **Recommendations from GRA Survey:**

- RGs support the creation of the Science-Policy Special Interest Group. Need more clarity around a practice change discussion.
- RGs support the establishment of regional groups - to take advantage of regional funders
- Research calls aligned with Flagships (ex. Ireland - NZ call; ERA-GAS)
- Open research calls to low and middle income countries.

## **Flagships in development:**

- Develop a Flagship on Low Carbon agriculture (Hero)
- Soil carbon Flagship (ORCASA) - J.F Soussana
- Manure Management - April Leytem
- Paddy Rice (remote sensing)

## **Question to the Council:**

- What can the Council do to support the Research Groups?