#### **Inventories and Nationally Determined Contributions Network**

#### GLOBAL RESEARCH ALLIANCE

**ON AGRICULTURAL GREENHOUSE GASES** 

Prof. Richard Eckard, University of Melbourne Dr. Ngonidzashe Chirinda, Mohammed VI Polytechnic University Hazelle Tomlin, NZ Ministry for Primary Industries





## AT A GLANCE















23 technical guidelines, resource materials and databases produced







September 2020

### member countries







globalresearchalliance.org



**2** international collaborative projects supporting the GRA fellowships awarded to recipients from 45 countries





**@GRA GHG** 







#### **GRA** Partners

Ministry for Primary Industries Manatū Ahu Matua





ON AGRICULTURAL GREENHOUSE GASES































Solutions for environment and development Soluciones para el ambiente y desarrollo





Inter-American **Development Bank** 

#### **GRA Council and Research Groups**





#### **GRA** Networks

GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASES

Livestock	Cropland	Paddy Rice	Integrative
Animal Health and GHG emissions intensity	Conservation on agriculture	Americas subgroup	Soil carbon sequestration
Animal selection, genetics and genomics	Peatland management	Asia subgroup	Farm to regional scale integration
- Feed and nutrition	Agroforestry systems	Africa subgroup	- Inventories and NDC
Rumen microbial genomics	Landscape management		Circular food systems
Manure management	Integrated crop-livestock systems		
	Nutrient management		

#### GRA Key Strategies 2021 - 2025

Further Research Collaboration <i>Strategic Objectives</i>	Foster Outreach, Knowledge Sharing and Information Exchange Strategic Objectives	Build Effective Partnerships <i>Strategic Objectives</i>	Leverage Financial and Other Resources Strategic Objectives
<ul> <li>broad global participation</li> <li>building global expertise, and</li> <li>supporting early career scientists</li> </ul>	<ul> <li>meaningful communication to governments, farmers, industry groups and other stakeholders</li> </ul>	<ul> <li>remain well connected with other initiatives and groups,</li> <li>develop partnerships and collaborations to close research gaps</li> </ul>	<ul> <li>connection with pre-existing initiatives to strengthen research outcomes</li> <li>strengthened by voluntary support by members and partners</li> </ul>



- Aims to **improve the evidence base** and to **better connect governments and relevant expertise** to subsequently **improve the quality of agricultural NDC's** and the way their **achievements are reflected by national GHG inventories**
- Work together to accelerate capture of mitigation technologies, increases in agricultural productivity and efficiency in national inventories, which underpin policy and mitigation decisions and NDC targets
- Our network comprises ~300 people:
  - national agriculture **inventory compilers**
  - **decision makers** whose work is related to agricultural mitigation strategies, and
  - **policy actors** working in the agricultural NDC space



- Increasing access to methods to improve the collection of activity data for emission estimates, as well as inform the collection of GHGe data where it has not previously been collected
- Providing technical support and training, for capacity building and knowledge transfer
- Building upon existing shared databases and developing new platforms where necessary
- Activities include building in-country capability and avoiding the need for outsourcing

#### **I&NDC** Alignment

- Greenhouse Gas Management Institute (GHGMI)
- US Environmental Protection Agency (US EPA)
- Australian Centre for International Agricultural Research (ACIAR)
- New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC)
- FAO Enhanced Transparency Framework (FAO-ETF) Network
- Low Carbon Livestock Research Network (LCL-RN) Inventory Development Sub Group





Food and Agriculture Organization of the United Nations



NEW ZEALAND AGRICULTURAL GREENHOUSE GAS

Research Centre

AGEN



GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASE

#### **I&NDC** Communications

GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASES

# Who's counting?

May 2020, August 2020, December 2020, March 2021

#### Subscribe Now!

#### **Best Practices**

#### Towards a UK Smart Greenhouse Gas Inventory for Agriculture, Dave Chadwick, Tom Misselbrook and Bob Rees

Since 2010, the UK Government and the Devolved administrations of Northern Ireland, Scotland and Wales has undertaken a programme of research to deliver new country specific emission factors for nitrous oxide and the associated activity data to generate a smarter greenhouse gas inventory that better reflected the soils, climate, nutrient management and ruminant systems of the UK.

As a result of the UK greenhouse gas platform projects, the UK now has an inventory for greenhouse gases that better reflects the UK farming systems, soils and climate. The new nitrous oxide emission factors have resulted in a reduced contribution of this gas to the total carbon dioxide equivalent emissions from UK agriculture.



#### **I&NDC** Plans



- Agriculture Sector National Inventory Compilers Workshop date TBC, watch this space
- GRA Coordinating Summary resource of 2019 IPCC Refinement to 2006
   IPCC Guidelines for National Greenhouse Gas Inventories
- Who's Counting updates: Please contact us with any scientific, inventory improvements or NDC Progress you wish to communicate to the Network



ON AGRICULTURAL GREENHOUSE GASES

# Inank you

#### WEB: https://globalresearchalliance.org/ EMAIL: <u>secretariat@globalresearchalliance.org</u> TWITTER: @GRA\_GHG