## GLOBAL RESEARCH ALLIANCE

**ON AGRICULTURAL GREENHOUSE GASES** 

## Defining and resourcing our ambition – Flagships and Joint Programming

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#### GRA Strategic Plan – key priority actions

- GLOBAL RESEARCH ALLIANCE ON AGRICULTURAL GREENHOUSE GASES
- GRA Council adopted its first Strategic Plan 2016-2020, which included as two of its priority actions:
  - Identify possible GRA Flagship Research Projects for presentation to and review by the Council for potential adoption on an annual basis.
  - to undertake GRA joint programming (GRA-JP) on an annual basis, beginning no later than August 2017, to support collaborative research, including GRA Flagships.
- GRA Council has formed a working group to advance the development of joint programming to identify suite of different mechanisms that could be utilised by GRA to align and mobilise resources.
- Intention is to have more deliberate and well planned coordination within the GRA and between the GRA and its partners.
- Specific outputs/activities identified by Flagship Task Forces and GRA Research Groups that require resourcing will be used as the basis for calls, Fellowships, and other mechanisms to be developed through GRA joint programming.

#### **GRA Flagship Projects - defining our ambition**

• GRA Council endorsed development of four GRA Flagships. Flagships are thematic areas that will be advanced through specific actions and can include research, capacity building, guidance and transfer.

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- GRA Flagships will be developed in the following themes:
  - Enteric Fermentation
  - Agricultural GHG Inventories
  - Soil Carbon Sequestration
  - Water Management in Rice Production

...and Nitrous Oxide to be developed.

- Task Forces comprising lead authors, contributing authors and review authors, have been established.
- Task Forces are preparing draft Flagship proposals by end of April 2017. Proposals will outline work to be done (i.e. series of activities/outputs that collectively form the Flagship), the resources available, and the resources needed.

#### Flagship Projects – fundamental principles

 Unique GRA added value – utilise knowledge & expertise of 47 member countries and partners

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- Inclusive must give opportunities for all members to be engaged in some way, availability of funding should not be a barrier to participation
- Relevant all Members need to have benefit from some or all of the Flagship, i.e. something in it for everyone
- Solution focussed clear link to the development and implementation of mitigation practices/technologies
- Multifaceted address emissions along with co-benefits and synergies for livelihoods & adaptation; supportive of policy needs
- Increase capacity/capability of member countries
- Supplement and support existing efforts by Member countries and Partners

#### Flagship Projects – characteristics of projects

- Utilise existing data no individual country may have enough data but collectively we may.
- Build on existing databases and/or develop databases collation and examination of existing and new data.
- Build on existing projects projects already exist in all of the priority areas. How can we extend these to add value to GRA Members and Partners?

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- Strong need to be realistic prioritise projects that can deliver tangible benefits in the short & medium term.
- Projects need to demonstrate concrete 'products' that are beneficial to Members.
- Development of a 'long list' of priority projects under each component with a 'short list' for immediate action i.e. those that can commence in the 2017 calendar year. Minimum of one project under each component.
- Leadership is critical prioritised projects need to have a committed leader(s) who is resourced.
- Development of resourcing mechanisms so far we have tended to expound the benefits of collaboration but not always put in place mechanisms that facilitate collaboration in practice. Any project on the 'short list' needs to have a resourcing plan.

## Components of soil carbon sequestration flagship



Online collaborative knowledge hub		
Developing solutions	Monitoring solutions	Adopting solutions
<ul> <li>Decision support toolbox</li> <li>Maps of SCS potential (e.g. to reach the 4 per 1000 aspirational target)</li> <li>Maps of crop and pasture practices suited to reach SCS targets</li> <li>Implications of SCS practices for - yields, - drought tolerance and climate change adaptation - N2O and CH4 emissions, energy use</li> </ul>	Enabling methods to certify SCS <ul> <li>Tiered methodologies for monitoring, reporting and verifying (MRV) soil organic carbon (SOC) stocks in crop and pasture systems</li> <li>Handbooks and guidelines for project scale MRV adapted to regional contexts and agricultural systems</li> </ul>	<ul> <li>Enabling environment</li> <li>Regional stakeholders workshops on SCS</li> <li>Criteria for sustainable SCS projects supporting livelihoods</li> <li>Assessment of barriers to the adoption of SCS practices</li> <li>Value chains, business models and policy options</li> </ul>
Costs and benefits of transitioning to SCS practices	<ul> <li>Modelling of SOC stock change in crop and pasture systems</li> </ul>	<ul> <li>Research funding strategy and international research cooperation</li> </ul>
Capacity building and training		

#### **Components of inventory flagship**

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### Enhancing inventory structure

Regional and sourcespecific guidance for the development of advanced inventories

Tier 2 inventory development – utilise expertise and experience of GRA Members

Guidance for development and adoption of modelling approaches (i.e. Tier 3) for specific sources within inventories.

#### Building capability

Analyses of current methodologies for estimating GHG emissions adopted in national GHG inventories by source, barriers to adoption of advanced methods and experiences of countries in adopting advanced methods (networks and reports from international workshops, technical and summary papers)

Identification of training needs; country-specific guidance and training needs developed jointly with countries.

Delivery of targeted technical training to improve emission factors and design inventories that work with existing national and regional data sources.

#### Acquisition and administration of data

Incorporation of improved emission estimates in emissions databases (e.g. IPCC-EFDB, GRAMP, SAMPLES, MAGGnet) and activity databases.

National and regional research projects that validate existing measurements and identify and validate approaches (measurements and modelling methodologies) to reduce the emissions intensity of food production and ensuring that those gains can be captured in inventories.

Dissemination of improved estimates of GHG emissions developed from regional and national projects to inform the development and verification of methodologies by the IPCC and other inventory support mechanisms

#### Demonstrating mitigation in NDCs

Provide targeted support for countries for designing agricultural monitoring, reporting and verification (MRV) within NAMAs or Low Emissions Development pathways based on improved inventories



# More information on enteric fermentation to follow...