



Food and Agriculture Organization
of the United Nations



Regional Conference on
**Sustainable Livestock
Transformation**
for Latin America and the Caribbean
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Role of LEAP Guidelines and GHG Inventories to Support Evidence-Based Action to Improve the Environmental Sustainability of the Livestock Sector

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FAO Livestock Environmental Assessment and Performance (LEAP) Partnership

- Multi-Stakeholder Initiative (2012)
- to improve the environmental sustainability of the livestock sector through harmonised methods, metrics, and data
- Support to FAO Sustainable Livestock Transformation
- Collaboration between:
 - FAO Member Nations
 - Private Sector
 - NGOs and CSOs





FAO LEAP in Numbers

- The number of **FAO LEAP participants** has grown from **35 to 127** from 2014 to 2024
- **21 countries + the European Union** involved at the Steering Committee level
- **10 Private sector groups + 9 NGOs**
- **450 international scientists and experts**



FAO LEAP Products - LEAP Guidelines & Technical Reports

- Science-based and globally agreed
- Valid across all livestock production systems

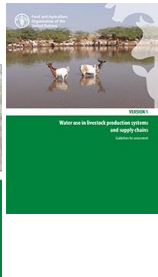
Soil carbon stocks



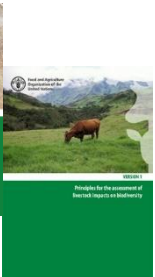
Nutrient flows



Water use



Feed & additives



Biodiversity



GHG



Ecosystem services assessment in livestock agroecosystems (2025)
The role of livestock in circular bioeconomy systems (2025)

The Global Research Alliance on Agricultural Greenhouse Gases - brings countries together to find ways to grow more food without growing greenhouse gas emissions.

GLOBAL RESEARCH ALLIANCE
ON AGRICULTURAL GREENHOUSE GASES

AT A GLANCE

68 member countries

30 partner organisations

Over **3000** scientists involved in activities of the GRA

6 GRA Flagship Projects and a further...

152 international collaborative projects supporting the GRA, and...

278 fellowships awarded to recipients from **49** countries

4 Research Groups

- Paddy Rice Research Group
- Livestock Research Group
- Croplands Research Group
- Integrative Research Group

18 Science Networks

53 technical training workshops held

80 technical guidelines, resource materials and databases produced



Research and Capability development programmes

Latin America and the Caribbean

GRA research programme

- Aims to advance knowledge on agricultural greenhouse gas emissions and leads an international effort to develop best mitigation practices, technologies, and tools
- Aligns with both New Zealand and international priorities
- Supports New Zealand and developing country scientists to collaborate in multi-national research projects

GRA capability development programme

- Aims to support developing countries to be able to improve their knowledge and ability to measure, and mitigate greenhouse gas emissions from agriculture
- Includes Knowledge Extension and Exchange Programme (KEEP): Scholarships and Fellowships (CLIFF GRADs/NZGRADs) and Global Research Alliance on Agricultural Inventory Training (GRAIT) Programme



What are GHG Inventories

An estimation of a countries greenhouse gas (GHG) emission and removals that have resulted from anthropogenic (human induced) activities.

- Reporting under the UNFCCC convention and Paris agreement
- Domestic and Nationally Determined Contribution (NDC) Targets
- Provide information for use in carbon markets

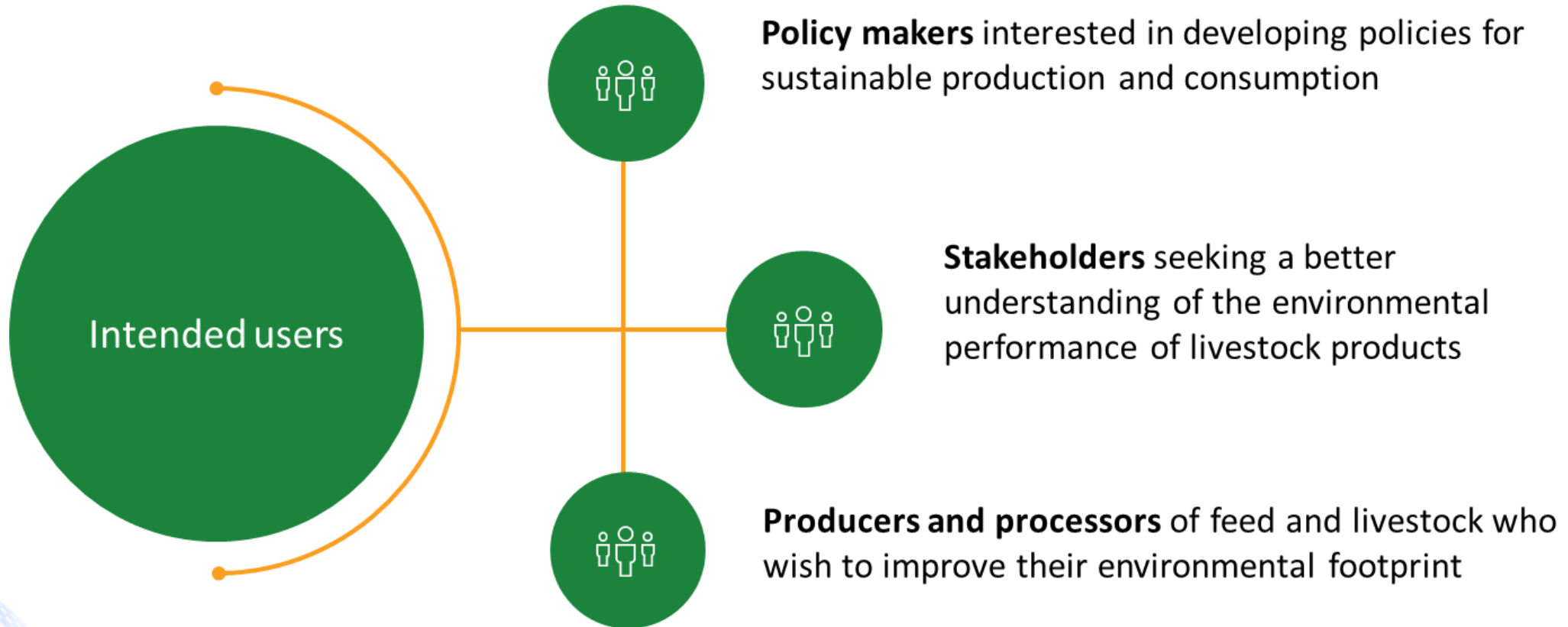
Benefits of Higher Tier Inventories (Tier 2/ 3 v Tier 1)

- More accurate record of GHG emissions/ region and country specific
- Measurement of improvements and trends over time
- Forecasting and management
- Farmer response to Policies/economic drivers
- Help inform business decisions
- Disease reporting and control





Who are the intended users of these sources of information?





What is the value of the LEAP guidelines and higher level GHG Inventories?

- Harmonisation of measurement approaches
 - lead to greater understanding, transparent application and communication of metrics
 - real and measurable improvement in performance.
- Policy advice (to Government and industry)
- Consumer acceptability
- Environmentally conscious industries
- Access to international funding





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Thank you

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