CCAFS-validated animal nutrition model for methane emissions in Colombia: a tool to develop low-emission livestock options and strategy

**Project Title:** P1599 - Catalyzing farmer innovations and the adoption of promising management and technological options to facilitate the development of low-carbon cattle value chains in Latin America

**Description of the innovation:** CIAT-CCAFS adapted an existing animal nutrition model (RUMINANT) for the types of livestock, feed and nutritional qualities of feed under Colombian conditions to support Colombian policymakers to develop low emissions forage options

**New Innovation:** No

**Stage of innovation:** Stage 4: uptake by next user (USE)

**Innovation type:** Production systems and Management practices

**Geographic Scope:** National

**Number of individual improved lines/varieties:** <Not Applicable>

**Country(ies):**
- Colombia

**Outcome Impact Case Report:** <Not Defined>

**Description of Stage reached:** Stage 4: The Government of Colombia used the adapted RUMINANT model to develop low-emission feed options for livestock in Colombia for their Nationally Appropriate Mitigation Action. The national livestock producer organization also used the model results to inform their national strategy.

**Name of lead organization/entity to take innovation to this stage:** CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)

**Names of top five contributing organizations/entities to this stage:**
- FEDEGAN - Fondo Nacional del Ganado
- MADR - Ministerio de Agricultura y Desarrollo Rural (Colombia)

**Milestones:**
- Technical and policy guidance to focus countries, supply chains and donors for LED priorities, with emphasis on livestock systems

**Sub-IDOs:**
- 31 - Reduced net greenhouse gas emissions from agriculture, forests and other forms of land-use (Mitigation and adaptation achieved)
- 41 - Conducive agricultural policy environment

**Contributing Centers/PPA partners:**
- CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)
Evidence link:

Deliverables associated:
  ● D19179 - Effects of long-term mixed diet supplementation in rumen dynamics and CH4 emissions (https://tinyurl.com/y4hqh6uk)
  ● D19562 - Methane emissions of cattle fed with forages of contrasting nutritional value (https://tinyurl.com/y5tcqmpy)
  ● D19561 - Productive and environmental performance of forage-based silvopastoral systems (https://tinyurl.com/yykpjl2x)
  ● D19345 - Mitigation actions through silvopastoral systems in LAC (https://tinyurl.com/y2yg9sfh)

Contributing CRPs/Platforms:
  ● CCAFS - Climate Change, Agriculture and Food Security
  ● Livestock - Livestock