

## Grazing management innovation to improve animal production and reduce GHG emissions

**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:** This innovation is based on the optimization of dry matter intake by cattle and improving nutrient consumption per unit eating time. At certain grass heights (20 cm) the cows consumed larger bites and of better quality. The result was more propionate (precursor of milk) and less methane emissions. Delivering the farmer an instruction as simple as controlling grass height may impact improving milk productivity and reducing emissions. This innovation was awarded as outstanding PhD thesis.

**New Innovation:** No

**Stage of innovation:** Stage 1: discovery/proof of concept (PC - end of research phase)

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

**Geographic Scope:** Regional

**Region:**

- Latin America & the Caribbean

**Description of Stage reached:** The concept was proved that bites of 20cm of kikuyo grass improved milk productivity and reduced CH<sub>4</sub> emissions compared to other grass heights. The next step will be piloting in farmers' field with representation of other grass species used for milk production in Colombia.

**Name of lead organization/entity to take innovation to this stage:** <Not Defined>

**Names of top five contributing organizations/entities to this stage:**

- CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)
- UFRGS - Universidade Federal do Rio Grande do Sul
- UNAL - Universidad Nacional de Colombia

**Milestones:**

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

**Sub-IDs:**

- 30 - Reduced net greenhouse gas emissions from agriculture, forests and other forms of land-use (More sustainably managed agro-ecosystems)

**Contributing Centers/PPA partners:**

- CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)

**Evidence link:** <https://blog.ciat.cgiar.org/grass-height-in-cow-nutrition-size-does-matter/>

**Deliverables associated:** <Not Defined>

**Contributing CRPs/Platforms:** <Not Defined>