

# Gas chromatography methodology for the measurement of Greenhouse Gases

COSTA RICA / HONDURAS / NICARAGUA / PANAMA



 Webstory



## The technological solution

In livestock, the main sources of emissions correspond to enteric methane and nitrous oxide derived from nitrogen fertilization of pastures and forage crops. It is necessary to develop and validate protocols adapted to the livestock systems of the region to determine the amount of these gases emitted.



## Description

A protocol was developed for the estimation of nitrous oxide and methane using gas chromatography adapted to the INTA laboratory in Costa Rica. This laboratory serves as a reference for the region.



## Results

- A model for estimating Greenhouse Gases (GHG) according to the 2006 IPCC.
- Quantified GHG emissions in the different livestock production systems of the region with different degrees of intensification.
- Communication, outreach and advocacy mechanisms have been developed to promote the use of competitive livestock systems with low GHG emissions.

**400**

Farms benefited

**74**

Trained technicians

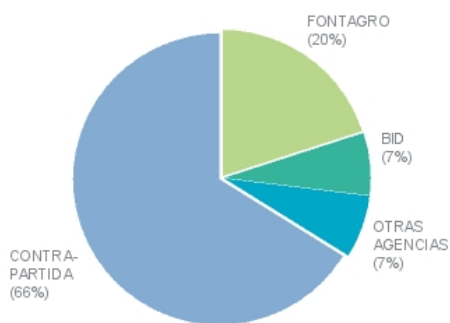
**4**

Thesis

## ABOUT FONTAGRO

FONTAGRO is a unique cooperation mechanism for agricultural innovation in Latin America and the Caribbean (ALC) and Spain, that works through regional platforms. It is composed of 15 countries that have contributed capital exceeding 100 million dollars and the Inter-American Development Bank (IDB), which is its legal representative.

### ORIGIN OF RESOURCES



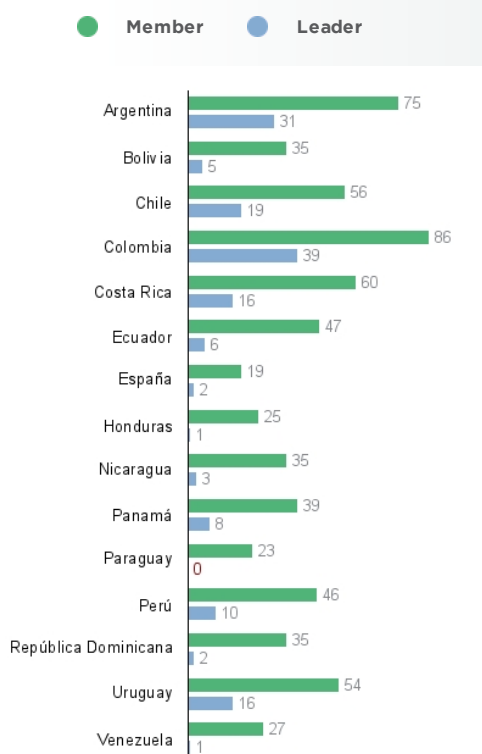
● **Counterpart contribution**  
93.177.555

● **FONTAGRO**  
28.989.468

● **IDB**  
9.922.700

● **Other agencies**  
9.809.078

### PARTICIPATION AND ROLE IN CONSORTIUMS SINCE 1998



### FONTAGRO IN NUMBERS

**193** Number of projects approved

**141.9** Approved total amount US\$  
MILLONES

**9.8** Contribution from other agencies  
MILLONES

**32** Benefited countries

**63** Generated technologies

**15** New technologies for ALC

**8** Technology of global relevance

### MEMBER COUNTRIES

