Livestock greenhouse gases reduction in the Andean Region

PERU / BOLIVIA / COLOMBIA / ECUADOR

The technological solution

Livestock feeding improvements (reduction of non-structural carbohydrates and/or increase in protein) resulted in mitigation of GHG.

Results

Livestock feeding improvements such as non-structural carbohydrates reductions and/or higher dietary protein resulted in greater milk yield per day and lesser CH4 emissions per liter of milk.

- Improved systems had greater milk yield per lactation (2,369 vs. 1,990 kg/lactation) and lower cost of production (0.29 vs. 0.21 $/kg) compared to the traditional ones.
- CH4 emission per liter of milk was lower in improved systems than in traditional systems (29 vs. 44 g CH4/kg of milk).
- Feed with lower structural carbohydrates and greater crude protein contents helped to reduce enteric fermentation and enhance milk production.

Description

The project, based on feeding management, aimed to strengthen technical capabilities to measure and mitigate dual purpose dairy production greenhouse gas emissions (GHG).

- 1 new facility for quantification of methane (Corpoica, Colombia)
- 1 new facility for quantification of methane and nitrous oxide (UNALM, Peru)
- 51 professionals trained
- 6 graduate level theses
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

- **Number of projects approved**: 193
- **Approved total amount US$**: 141,9 MILLONES
- **Contribution from other agencies**: 9.8 MILLONES
- **Benefited countries**: 32
- **Generated technologies**: 63
- **New technologies for ALC**: 15
- **Technology of global relevance**: 8

MEMBER COUNTRIES

- Argentina
- Bolivia
- Chile
- Colombia
- Costa Rica
- Dominican Republic
- Ecuador
- Honduras
- Nicaragua
- Panama
- Paraguay
- Peru
- Spain
- Uruguay
- Venezuela