

Non-CO₂ emissions from livestock production in Uruguay
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Beef and sheep cattle are very important for Uruguay's development. GHG emissions from these activities are responsible for more than 80% of total national emissions. Emissions per unit product are relatively large, due to the fact that almost 100% of the production occurs in grazing conditions, mostly in extensive systems. These emissions do not include decreases in carbon stocks, since there is no deforestation in Uruguay, and all grazing occurs on sites where grassland is the native ecosystem.

Worldwide, there are few cost-effective practices for reducing GHG emissions from cattle (IPCC AR4, Ch. 8). Intensification of production through improved diet quality and better animal reproduction indicators is highly effective in reducing emissions per unit product. However, emissions per head and emissions per hectare would increase due to a higher total production. Intensification combined with a reduction in the land base used for livestock production may be an effective strategy. However, this may impair development, and is very difficult to implement, since intensification of livestock production systems is generally seen as a desirable practice to increase production, not to decrease GHG emissions.

Historically, several attempts to intensify livestock systems have failed due to a number of barriers. Even with the current positive signal from meat markets, the degree of pasture improvement in the country is very reduced. A possible climate change mitigation strategy being considered is a reduction in the carbon intensity of the beef production systems (i.e., reduction in GHG emissions per unit product) through intensification. Carbon finance (based on both C sequestration in soils by improved pastures, and reduced carbon intensity of production) may be effective for lifting some of the historical barriers for intensification in Uruguay.