

Business case analysis of low-carbon livestock production in Costa Rica

By [Jacinto Coello](#) April 29, 2020

Costa Rica has adopted a very ambitious national decarbonisation plan with an aspiration of becoming carbon neutral by 2021. The decarbonisation of the economy requires the widespread adoption of climate-smart practices and technologies in the agriculture and livestock sectors. With support from the Government of Luxembourg UNEP and partners in Costa Rica explored the business and financial case for the adoption of a subset of climate-smart livestock practices.

Livestock is one of the main economic activities in the rural sector of Costa Rica. The sector employs or provides income generation opportunities for more than 35,000 farmers in the country, mostly small and medium sized land holders, but remains relatively unproductive. The importance of the sector can also be seen in its geographical coverage as pastures for livestock cover almost 20% of the national territory. To support the decarbonisation of the sector, the country has adopted two policy instruments that support a sectoral transformation towards higher productivity and sustainability: The National Low-Carbon Livestock Strategy and the a Nationally appropriate mitigation action (NAMA) focused on the sector. These instruments promote a set of technologies and practices that can deliver productivity gains and enhance the climate performance of the sector.

UNEP and local partners developed a tool to model the financial and climate performance of a subset of these technologies - rational grazing, hedgerows, improved pastures, and set asides for increasing forest cover on 4 different farms with varying levels of productivity and stages of the transition to sustainability. The main findings are:

- The climate-smart practices can deliver improved financial and environmental benefits for medium-sized cattle ranchers. Their overall impact is highly sensitive to current farm practices.
- Given the relatively low margins and profitability of many cattle farms, the availability of adequate financing (size, tenor, rates) and technical assistance is critical for ensuring that producers can adopt climate smart practices with relatively high-upfront costs and lengthy repayment periods.

UNEP and partners will continue using the model to support decision making at for producers and financial institutions in the country. A summary report will be available in June.