



# ACCELERATING LOW EMISSIONS DEVELOPMENT FOR RUMINANT LIVESTOCK PRODUCTION

Ruminant production provides a pathway out of poverty for an estimated 800 million farmers. However, despite its role on food security and livelihoods, ruminant production is also a large contributor to greenhouse gas emissions, especially methane. The emissions intensity of enteric methane (the level of enteric methane emissions per unit of product) varies across regions, as well as between and within production systems. Emissions intensity for ruminant products in developing countries is usually higher due to the low productivity of the animals. Productivity is low and largely variable mainly because of poor and limited feed resources, diseases and poor management. Growing levels of demand for livestock products in developing countries means improving the productivity and efficiency of livestock production is high on the agenda. This project complemented existing efforts to mitigate ruminant methane emissions, including innovative and collaborative solutions among researchers, farmers and practitioners, to evaluate the mitigation potential and cost-effectiveness of technical and management practices that can generate benefits for farmers. The project provided evidence that can support ruminant production systems in developing countries to address methane mitigation through productivity gains with the use of low-cost mitigation options, while providing direct economic and social benefits to farmers.



## WHAT DID THE PROJECT DO?

By engaging governments and stakeholders in 13 countries, awareness on the potential role of methane in climate change and food security and national capacities to assess methane mitigation were raised. In-country ownership of mitigation strategies was reinforced, and opportunities for reducing emission intensity through low-cost mitigation options were identified. Teams of national experts identified cost-effective productivity enhancing technologies and approaches, established a dataset on methane emissions and established a successful process to leverage additional resources. Governments and stakeholders developed a policy, planning and decision-making framework, as well as recommendations on mechanisms to incentivize productivity enhancing technologies and practices. For example, Phase 1 results were used in Kenya for the design of the nationally appropriate mitigation action (NAMA) for the dairy sector “Low-carbon and Climate Resilient Dairy Development in Kenya”, which was submitted to the Green Climate Fund for funding.

## KEY FACTS

### Contribution

USD 756 354

### Duration

November 2015 – December 2017

### Resource Partner

United Nations Environment  
Programme (UNEP)

### Beneficiaries

Governments of beneficiary  
countries; Livestock farmers

# IMPACT

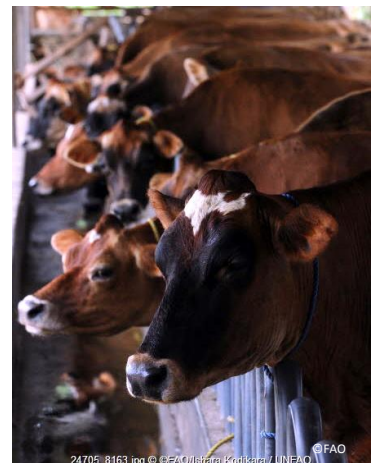
Government commitments to assess, as well as address, methane emissions from ruminant production were strengthened, and a growing, useful knowledge base was created that can be used to help other countries advocate for methane mitigation. A situation characterized by low awareness and knowledge of the role of methane and livestock production to climate change and food security was transformed into a broad-based and coordinated effort, which will further contribute to developing, planning and implementing methane mitigation efforts. Local capacity and know-how on strategic, sustainable and cost-effective enteric methane mitigation and access to climate finance were enhanced. Engaging a wide base of stakeholders and ministries helped to reconcile differing priorities and interests and align national development and climate change policies. Gains in productivity will translate into improved food security, incomes and better livelihoods for farmers.



SUSTAINABLE DEVELOPMENT GOALS

# ACTIVITIES

- Identified ruminant production systems in 13 countries for detailed GHG emission assessments.
- Analysed and prioritized country and system-specific opportunities to improve animal productivity and reduce enteric methane emission intensity.
- Developed packages of appropriate cost-effective technologies and recommended policy options to reduce emission intensity.
- Identified demonstration sites and partners for next phase of work (Phase 2) on farm testing of the technical packages.
- Developed and disseminated communication and outreach materials.



### Project Code

FAO: EP/GLO/652/UEP  
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### Project Title

Component to Reduce Methane Emissions from Enteric Fermentation, Phase 1

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