Program for climate-smart livestock systems


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Context

The livestock sector is a major contributor to food security in sub-Saharan Africa. It is a vital source of income to most of the rural poor as it is the largest employment sector in the region. Livestock also provide nutritional benefits through animal source foods that are protein dense and contain key micronutrients not found in plant-based foods.

However, livestock production is especially vulnerable to climate change because it relies heavily on precipitation and stable temperatures. In drylands, livestock systems are often challenged by scarce water and vegetation and suffer from droughts that are becoming more frequent and intense with ongoing climate change. Vulnerabilities caused by climate change underscore the importance of pursuing adaptation strategies in livestock systems.

Livestock production is not only affected by climate change, but also contributes to it. In many countries in the region, the agricultural sector is the largest source of greenhouse gas (GHG) emissions, a large proportion of which comes from livestock production. Such emissions are released during the digestive process of ruminants, storage and application of manure and production of fodder. These high GHG emissions are mainly due to poor animal health and low-quality feed, which lead to low productivity.

The concept of climate-smart agriculture has been widely adopted in the agriculture development community to contribute to food security by increasing agricultural productivity, adapt agricultural systems to future climate change and recognize possibilities to mitigate GHG emissions by closing nutrient cycles in agriculture.

Program focus

The program for climate-smart livestock systems (PCSL) will support interventions to increase the contribution of livestock production to the three key pillars of climate-smart agriculture: increased productivity, mitigation of GHG emissions and adaptation to climate change.

The program will be implemented across major livestock productions systems in three focus countries—Kenya, Ethiopia and Uganda—and will run from 2018–22.

Objective

The program works to direct the practices, sector strategies, policies and investments of livestock stakeholders towards climate-smart livestock systems.

PCSL will support governments, the private sector and local stakeholders in realizing their development objectives, while also fulfilling their commitments to achieve climate change adaptation and mitigation goals.

The program will support countries to improve the reporting of their nationally determined contributions (NDCs) in the livestock sector within the frameworks of the Paris and Katowice agreements.

Approach

The program is implemented by the International Livestock Research Institute (ILRI) in partnership with the World Bank. Activities focus on combining scientific data collection with solution-led field research on climate-smart livestock production. By doing this, PCSL will contribute to the creation of new insights, knowledge and evidence related to climate-smart livestock development.

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It will focus on enabling key stakeholders in the livestock sector in the three focus countries to apply these new insights, knowledge and evidence.

The program takes an integrated three-pronged approach that aims to improve the capacity of different stakeholders to implement interventions that support climate-smart livestock development.

1. At the local level, ILRI will work with livestock keepers to identify and field test practices that are technically possible but need additional support to become socially and economically feasible—e.g. improving the quality of livestock feed. ILRI will provide materials and conduct training of trainers that will enable livestock farmers to act as multipliers; and government and private extension services to propagate the integration of the program's innovations within local organisations.
2. On the district and national stage, ILRI will support staff from livestock ministries, the private sector and civil society organisations to develop appropriate environments that enable the implementation of climate-smart livestock development. ILRI will also provide decision making support through participatory development and use of plausible future scenarios, taking into account uncertainties about the future and differing objectives of key decision makers within the context of climate change.
3. ILRI will develop monitoring, reporting and verification (MRV) tools, as well as baseline GHG emission data to address the mitigation agenda. In addition, adaptation tracking protocols will be developed to support countries in reporting on progress towards their climate change adaptation targets. Tools will be developed in line with modalities, procedures and guidelines of the Enhanced Transparency Framework of the Paris and Katowice agreements.

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