



Food and Agriculture Organization  
of the United Nations

# Stakeholder consultation on national climate action in livestock production systems in the Kingdom of Bhutan

FVC/GLO/195/MUL on: “Scaling-up livestock  
climate action to enhance nationally determined  
contributions (NDCs) - Phase II”

Paro, Bhutan  
06–08 November 2024

*Concept note and agenda*



## Concept note

### BACKGROUND

The Paris Agreement is a legally binding international treaty on climate change and was adopted by 196 Parties on 12th December 2015 during the 21st Conference of Parties (COP 21) and entered into force in November 2016. Its goal is to limit the global temperature increase to below 2 °C compared to pre-industrial levels and preferably to 1.5 °C. Parties committed to reducing greenhouse gas (GHG) emissions from all sectors of their economies and increasing climate resilience without threatening food security in line with Article 2 of the UNFCCC. Subsequently, each party is required to set and submit its GHG emission-reduction and adaptation targets, known as Nationally Determined Contributions (NDCs), and these are used to measure and report the country's progress towards the attainment of the Paris Agreement goal of limiting global warming. Parties also communicate in their NDCs specific actions they will take to reduce their GHG emissions and to adapt and build resilience to the impacts of climate change.

Sustainable livestock production systems can be a significant player in the fight against climate change, poverty and food insecurity. However, with the rapid growth of the livestock sector, fueled by rising demand for animal products, the associated greenhouse gas (GHG) emissions, particularly enteric methane, are on the rise. Yet, the livelihoods of millions of people depending on livestock are highly vulnerable to climate change. Livestock offers numerous opportunities to reduce GHG emissions and support rural livelihood resilience. Countries can build more sustainable, climate-resilient, low-emission agrifood systems by addressing climate change in the livestock sector while contributing to achieving the Paris Agreement's goal. Countries have made significant commitments in their Nationally Determined Contributions (NDC) to reduce global anthropogenic GHG emissions. However, these commitments are insufficient globally to reach the Paris Agreement's goal. The main challenge for countries is demonstrating the socio-economic and environmental benefits of mitigation and adaptation measures in the livestock sector.

The kingdom of Bhutan committed to remain carbon neutral 'for all times' in 2009 at the 15th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) at Copenhagen. In 2015, this commitment was reiterated and communicated to the UNFCCC in line with the requirements of the Paris Agreement, as part of Bhutan's Intended Nationally Determined Contribution (INDC) which was ratified as Bhutan's first NDC in 2017. With national emissions on the rise with economic growth (NEC 2020), the goal to remain carbon neutral will require concerted low-emission development strategies across sectors. The GHG Inventory of the Third National Communication (TNC) indicates that the Agriculture, Forestry and Other Land Use (AFOLU) sector is the highest contributor to national emissions with 2,183.25 ktCO<sub>2</sub> eq in 2015 (57.2% of national emissions). Within the AFOLU sector, the agriculture sector (agriculture and livestock) emitted 552.9 ktCO<sub>2</sub> eq in 2015, accounting for 14.5% of total national emissions. Of this, 63% are livestock related emissions from enteric fermentation; 18.6% are direct and 1.2% indirect N<sub>2</sub>O emissions from soils; 9.6% from rice cultivation; 7.4% from manure management; and 0.2% from urea application (NEC 2020). The agriculture and livestock

sectors and their connection to land use are therefore key to the achievement of future national plans in terms of remaining carbon neutral and achieving food security. Economic growth within the agriculture and livestock sector needs to be pursued within a framework of low-carbon emissions while also ensuring alignment with post COVID-19 pandemic recovery plans. There is renewed focus and attention to enhance food production, and improve efficiencies across storage, distribution, and consumption chains. It is therefore inevitable that agriculture and livestock related GHG emissions will rise if concrete strategies are not envisioned and planned for implementation to decouple growth in food production with GHG emissions.

This stakeholder workshop will be organized in the context of the Flexible Voluntary Contribution (FVC) subprogramme “Scaling-up livestock climate actions to enhance nationally determined contributions (FVC/GLO/195/MUL)”. The subprogramme aims to contribute towards enhanced mitigation and adaptation programmes in the livestock sector to support climate resilience, food security, livelihoods and to achieve the Paris Agreement. The subprogramme mobilizes livestock stakeholders at the national level, bringing together actors from environmental, agricultural and other domains. Through multi-stakeholder collaboration, it supports countries to enhance synergies between livestock and climate programmes, policies and development objectives to identify the best mitigation and adaptation measures for livestock (including methane reduction options). It will strengthen the capacities of livestock stakeholders to mainstream climate change in policy processes and implementation plans. Finally, the subprogramme will help countries to identify opportunities to enhance national climate actions, to integrate livestock-specific measures and targets in the NDCs and long-term strategies.

### **WORKSHOP OBJECTIVES AND OUTCOMES**

The national stakeholder consultation workshop aims to bring together multiple stakeholders from livestock and climate domains. The workshop will support inter-institutional exchange and collaboration for climate action in the livestock sector, identify options to reduce GHG emissions from livestock production systems, and stock take existing policies, strategies, action plans and initiatives that support livestock climate action.

The specific objectives of this workshop are to:

- raise awareness among multiple stakeholders on the role of livestock in climate change
- enhance knowledge to take climate action in the livestock sector, including understanding the importance of institutional arrangements, policies, and data availability
- identify challenges and opportunities of implementing livestock mitigation and adaptation measures
- identify capacity development needs and climate finance opportunities

The outcomes of this workshop will directly contribute to a country report on livestock climate action of the project Flexible Voluntary Contribution (FVC) subprogramme “Scaling-up livestock climate action to enhance nationally determined contributions (NDC) (FVC/GLO/195/MUL)”

---

## **PARTICIPANTS**

The workshop will convene about forty (40) stakeholders from public and private sectors, such as research and academia, ministries, departments and agencies, development partners, financial institutions, farmer, yak federation and producer organizations and civil society organizations (CSOs). Female participation will be strongly encouraged.

## **TIME AND VENUE**

The three-day workshop will take place from 06 - 08 November 2024 in Paro at the Metta Resort.

## **LOGISTICS**

Participants will receive Daily Subsistence Allowances (DSA) and transport costs upon certification of attendance as per the government entitlement.

## **CONTACT INFORMATION**

For any communications and questions regarding this workshop please contact Sonam Yangchen ([sonamyangchen@moal.gov.bt](mailto:sonamyangchen@moal.gov.bt)) Department of Livestock and Dr. Vijay Raika Monger ([Vijay.Monger@fao.org](mailto:Vijay.Monger@fao.org)) and Wangchuk Lhamo ([Wangchuk.Lhamo@fao.org](mailto:Wangchuk.Lhamo@fao.org)) from FAO Country Office, Bhutan.

---

## Stakeholder consultation on national climate action in livestock systems in Bhutan

| Paro, Bhutan | 6-8 November 2024

DAY 1 Wednesday 6 November 2024		
Time	Topics	Speakers
08:30 – 09:00	<b>Registration</b>	
	<b>Session 0: Welcome and introduction</b>	<i>Moderation: Department of Livestock (DoL) and FAO</i>
09:00 – 09:30	<b>Introduction of participants and housekeeping</b>	<i>all</i>
09:30 – 10:00	<b>Opening remarks:</b> <ul style="list-style-type: none"> <li>• Director, Department of Livestock</li> <li>• Assistant FAOR Country Office</li> </ul>	<i>Mr Chadho Tenzin</i> <i>Ms Tashi Yangzome Dorji</i>
10:00 – 10:20	<b>Background and context for livestock climate actions and workshop objectives</b>	<i>Ms Saskia Reppin (FAO)</i>
10:20 – 10:30	Q&A and plenary reflection	<i>all</i>
10:30 – 11:00	Coffee break and group photo	<i>all</i>
	<b>Session 1: Livestock production and climate change in the Kingdom of Bhutan</b>	<i>Moderation: Department of Livestock (DoL) and FAO</i>
11:00 – 11:20	<b>Climate change governance, policies and strategies and nationally determined contributions (NDCs)</b>	<i>Mr Rinchen Penjor, Department of Environment and Climate Change (MoENR)</i>
11:20 – 11:40	<b>Climate change in agricultural system in Kingdom of Bhutan: Policies and strategies</b>	<i>Mr Leki Choda, Planning and Policy Division (MoAL)</i>
11:40 – 12:00	<b>Climate change in livestock systems in Bhutan: Sector development trends, climate change impact and vulnerabilities</b>	<i>Mr. Sonam Norbu, Department of Livestock (MoAL)</i>
12:00 – 13:00	Q&A and plenary reflection	<i>all</i>
13:00 – 14:00	Lunch	<i>all</i>
	<b>Session 2: Addressing climate change in livestock</b>	<i>Moderation: FAO</i>
14:00 – 14:20	<b>Opportunities for climate finance in livestock sector</b>	<i>Mr. Dhendup Tshering, Ministry of Finance</i>
14:20 – 14:40	<b>Climate-smart livestock practices: adaptation and mitigation strategies</b>	<i>Mr Sonevilay Nampanya (FAO)</i>
	<b>Session 3: Greenhouse gases from livestock systems</b>	
14:40 – 15:00	<b>Why enteric methane? Pathways to reduce emissions in livestock</b>	<i>Ms Saskia Reppin (FAO)</i>
15:00 – 15:30	<b>National GHG inventory and measuring, reporting and verification (MRV) of GHG emissions in Bhutan</b>	<i>Mr. Gyembo Tsheten, Department of Livestock, MoAL</i>
15:30 – 16:00	Coffee break	<i>all</i>
16:00 – 17:00	Q&A and plenary reflections and discussion about livestock production system classification in Bhutan	<i>all</i>
17:00	<b>End day 1</b>	

DAY 2 Thursday 7 November 2024		
Time	Topics	Speakers
08:30 – 09:00	<b>Registration</b>	<i>Moderation: Department of Livestock (DoL) and FAO</i>
09:00 – 09:10	<b>Welcome and summary day 1</b>	<i>FAO</i>
	<b>Breakout group discussions:</b>	
09:10 – 10:00	<ul style="list-style-type: none"> <li>- What are <b>best practices and key interventions</b> in Bhutan to reduce GHG emissions and enhance adaptation in the livestock sector?</li> <li>- What are the <b>main challenges to implement</b> climate actions (technical, institutional and policy perspective) in the livestock sector?</li> <li>- How and what are the <b>needs to address these challenges?</b></li> </ul>	<i>all</i>
10:00 – 11:00	<b>Plenary reporting and reflections</b> One rapporteur from each group will report back to plenary	<i>all</i>
11:00 – 11:30	Coffee break	<i>all</i>
	<b>Session 4: Livestock climate actions in Bhutan</b>	<i>Moderation: FAO and Department of Livestock (DoL)</i>
11:30 – 11:50	<b>Climate resilient livestock initiative and innovations in Bhutan</b>	<i>Ms Sonam Yangchen (DoL)</i>
11:50 – 12:10	<b>Policy environment for livestock climate action: Preliminary findings of the policy analysis</b>	<i>Mr Chuckey Wangchuck (National consultant)</i>
	<b>Plenary reflection and discussion and reflection</b>	
12:10 – 12:40	<ul style="list-style-type: none"> <li>- Do existing policies and strategies support the implementation of climate actions in the livestock sector?</li> </ul>	<i>all</i>
12:40 – 13:00	<b>Introduction to the field visit</b>	<i>Department of Livestock</i>
13:00 – 14:00	Lunch	<i>all</i>
	<b>Session 5: Field visit</b>	
14.00 - 17.00	<b>Field visit</b>	<i>all</i>
17:00	End of day 2	

## Stakeholder consultation on national climate action in livestock systems in Bhutan

| Paro, Bhutan | 6-8 November 2024

DAY 3 Friday 8 November 2024		
Time	Topics	Speakers
08:30 – 09:00	<b>Registration</b>	
	<b>Plenary reflection from the field visit</b>	
09:00 – 09:40	<ul style="list-style-type: none"> <li>- Identification of climate-smart practices</li> <li>- Discussion about challenges at farm level</li> </ul>	<i>all</i>
09:40 – 10:00	<b>NDC enhancement – livestock activity data needs for Tier 2 GHG emission assessment</b>	<i>Ms Saskia Reppin (FAO)</i>
10:00 – 10:30	Q&A plenary reflection and discussion on livestock data	<i>all</i>
10:30 – 11:00	Coffee	<i>all</i>
	<b>Session 6: Stakeholder engagement on livestock climate actions</b>	
11:00 – 11:30	<b>Plenary session:</b> <ul style="list-style-type: none"> <li>- Sharing views from all stakeholders on livestock climate actions and their roles and responsibilities</li> </ul>	<i>all</i>
	<b>Session 6: Call to Action - Integrating livestock in national climate actions and aligning with development objectives</b>	<i>Moderation: FAO and Department of Livestock (DoL)</i>
11:30 – 12:30	<b>Breakout group discussion:</b> <ul style="list-style-type: none"> <li>- Discuss the <b>synergies and trade-offs</b> between livestock development objectives and climate action.</li> <li>- What policies and technical interventions are needed to achieve <b>climate action at farm level</b>?</li> </ul>	<i>all</i>
12:30 – 13:00	<b>Final plenary reflections</b> <ul style="list-style-type: none"> <li>- <b>Formulation of key messages and recommendations</b></li> <li>- Way forward: Steps towards development of a roadmap for livestock climate actions?</li> </ul>	<i>all</i>
13:00 - 14:00	Lunch	<i>all</i>
14:00 – 14:45	<b>Feedback and evaluation of the workshop</b>	<i>all</i>
14:45 – 15:30	<b>Closing remarks:</b> <ul style="list-style-type: none"> <li>- FAO</li> <li>- Department of Livestock</li> </ul>	
15:30	Coffee and end of workshop	

