Overview of Livestock Climate Action Roadmap for the livestock sub-sector in Kenya

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Introduction

- The livestock sub-sector is critical to achieving Kenya's development objectives, including the Big Four Agenda and the Agriculture Sector Growth and Transformation Strategy (ASGTS, 2019-2029);
- The prioritization exercise that informed the ASGTS highlighted dairy, beef, sheep/goat, poultry and camel as being among Kenya's 13 value chains with high potential for agricultural transformation and are central to achieving the objectives of the three ASGTS anchors
- Apart from the dairy industry where some progress has been made, implementation of the Climate actions in different livestock industries (e.g., beef, sheep/goats, poultry) is in its early stages

Livestock and Climate actions in Kenya

Livestock is the largest source of GHG emissions in the agricultural sector—Currently 33% of national emissions and over 60% of methane emissions.

The Second National Communication (SNC, 2015) estimated that of the agricultural sector's 29.6 Mt CO2e emissions in 2010, more than 50% were enteric fermentation and manure management emissions from livestock

The data presented in the SNC showed 3.34% annual average growth in enteric fermentation emissions from 2000 to 2010, and the BAU scenario assumed 1% annual average growth from 2010 to 2030

Kenya's GHG emission trends and projection to 2030

- Nationally emissions expected to increase by 79 % to 143 Mt CO2 eq compared to 2015
- Agriculture sector is leads other sectors in GHG emissions

Sector	Baseline GHG Emission (MtCO₂e)									
	1995	2000	2005	2010	2015	2020	2025	2030		
Forestry (LULUCF)	10	21	18	21	26	25	23	22		
Electricity Generation	0	1	1	1	1	12	24	41		
Energy Demand	4	5	5	6	7	8	9	10		
Transportation	4	4	4	7	9	12	16	21		
Agriculture	24	23	26	30	32	34	36	39		
Industrial Processes	1	1	1	2	3	4	5	6		
Waste	1	1	2	2	2	3	3	4		
Total	44	55	57	70	80	96	115	143		

Agricultural sector emissions

• Agric emissions are expected to increase by 23 % by 2030 compared to 2015 mainly driven by livestock enteric emissions

Agriculture Source	Agriculture Baseline GHG Emissions (MtCO₂e)								
Agriculture Source	2000	2005	2010	2015	2020	2025	2030		
Livestock Enteric									
Fermentation	10.8	12.7	14.5	15.5	16.5	17.7	18.8		
Agricultural Soils	9.0	10.6	11.9	12.8	13.9	15.0	16.2		
Savannah Burning	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Livestock Manure									
Management	0.6	0.7	0.8	0.8	0.9	1.0	1.1		
Rice Cultivation	0.2	0.2	0.3	0.3	0.3	0.4	0.4		
Burning Crop Residues	0.1	0.1	0.1	0.1	0.2	0.2	0.2		
Total	22.6	26.3	29.6	31.4	33.6	35.9	38.5		

Alignment of livestock climate action targets with national policies

• Livestock sub-sector actions in the NDC, NAP and NCCAP, are implemented using KCSAS/ KCSAIF/ M&E Framework/Tool

• The updated NDC 2020 considered, among others, the NAP 2015, the NCCAP 2018-2022 and the National Inventory Reports

• The NAP and NDC are aligned with the Constitution of Kenya, Kenya Vision 2030 (Kenya's Long-Term National Development Plan, KV2030), and Climate Change Act of 2016 (amended 2023).

What the policy frameworks are saying about livestock

- There is consensus in Policy frameworks on importance of livestock in climate actions (National; County; Local)
- Climate Change Act, 2016 Emphasizes the importance of institutions and governance structures (National, Sectoral and County) for climate action
- NAP (2015 2030) Resilience and adaptation in livestock sub-sector
- NDC (updated in 2020 enhanced ambition 32 % reduction of BAU (143 MTCO₂ eq by 2030) mainly from agriculture with mitigation from livestock sub-sector
- KCSAS (2017-2026)/KCSAIF (2018-2027) provides broad strategy for agriculture sector climate actions climate smart agriculture (livestock)

Challenges to Livestock sub-sector climate actions

- Most policies at sub-national levels are "climate blind" and lack clear livestock climate actions with targets
 - Climate actions not adequately integrated in National and County Plans and strategies
- Inadequate link between Science Policy Practice
- Lack of coherence in moving towards Net Zero target of 2050 for the Livestock Sub-Sector

Where the journey of the Roadmap began

- NZ Government through GRA supported scoping study and analysis in 2020 (Before updating of NDC)
- https://hdl.handle.net/10568/110439



The Livestock Sub-sector in Kenya's NDC: a scoping of gaps and priorities







What the Scoping identified about Kenya's Livestock Climate Action - Justification for the Roadmap

- Inadequate coordination in the livestock sub-sector that would deliver resource mobilization for enhanced climate action
- Inadequate in-depth assessment and identification of livestock-based adaptation and mitigation options
- Weak monitoring and evaluation of livestock sub-sector climate actions
- Non-existence of a Measurement, Reporting and Verification (MRV) system to support tracking of GHG emissions, progress of adaptation actions, and support received for livestock climate actions

Where the Roadmap grounded

- National and Sectoral policies, strategies and plans CCA(2016); NDC (updated 2020); KCSAS/KCSAIF
- Session paper No. 3 of 2020 on National Livestock Policy
 - "Section 3.14: The National Government will; i. Facilitate the implementation of legislation and action plans relating to climate change; ii. Develop capacities and technologies to enhance adaptation and mitigation to effects of climate change. iii. Support programs to improve resilience of livestock keepers to effects of climate change"
 - Kenya has developed a SNAP through CCAC funding livestock critical in mitigation of Methane with a target of 20% reduction by 2050

Scope of the Roadmap

- The roadmap will describe the strategic options and milestones for livestock climate actions, that will inform the updated NDC and the LTS of Kenya with specific livestock mitigation and adaptation targets and interventions (especially methane) across all livestock systems in Kenya.
- The Roadmap will harmonize livestock climate action reporting on adaptation, mitigation, and emissions, both at the county level and national level
- The M&E requirements (e.g., procedures, formats, resources) of this Roadmap will be guided by Kenya's Climate Change Act № 11 of 2016, UNFCCC's ETF and National MRV system

Expected Outcomes of the Roadmap

- Improve institutional capacity to manage the GHG inventory compilation process and to establish a sustainable system for producing regular national GHG inventories
- Improve the national capacity on data collection and documentation of the inventory process;
- Improve capacity to identify and assess the impact of specific mitigation actions; and
- Increase capacity to develop bankable proposals to access funds
- Develop reporting tools that will harmonize and streamline reporting
- Present evidence of non-implementation if implementation is not evident, and provide options for effective implementation

What was done to support the roadmap development process?

- Stakeholder engagement National workshop in December 2022 Consultation on national climate actions in livestock systems in Kenya
- Training of stakeholders on livestock actions June 2023
- National policies Stock take exercise Identify grounding of livestock climate actions in national policy framework July 2023
- Compiling of roadmap by a consultant August to November 2023
- Technical validation (Core Team)—December 2024



Some outputs

Publication of Dairy Tier 2 GHG Inventory

2020

Publication of Tier 2 GHG Inventory for Livestock in Kenya

2024



Livestock GHG SOP Guidelines Development

Update of Dairy Tier 2 Inventory

Tier 2 Inventory structure for Non-Dairy Ruminants (Non-dairy cattle; sheep; and goats)

Improvement of Tier 1 inventory structure for Camels

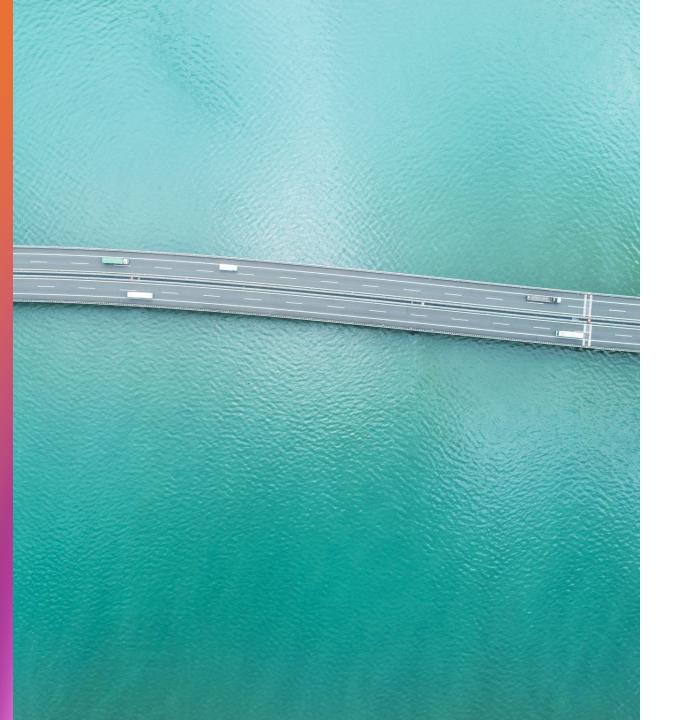
African Climate Action Partnership





Status and forward processes

- Draft roadmap is in place
- CCAC is supporting the next phase = USD 700,000
 - Stakeholder validation
 - Development of livestock MRV system aligned to national reporting requirements
 - Awareness creation at producer level (cooperatives)



Thank you

Asante Sana

Obrigado

Merci

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