

From readiness to scale: Financing climate-resilient livestock systems in Africa

Fernando Florez¹, Stefan Burkart¹, Ciniro Costa Jr.¹, An Notenbaert¹, Julia Doldt², David Awolala³, George Wamukoya³, Telvin Denje³, Birthe Paul²

¹International Center for Tropical Agriculture (CIAT)

²Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

³African Group of Negotiators Expert Support (AGNES)

Contact: s.burkart@cgiar.org

Introduction

- Climate finance refers to financial resources mobilized from public, private, or blended sources to support climate change mitigation and adaptation. **Climate finance is growing, but livestock remains marginal** within Agriculture, Forestry and Other Land Use (AFOLU) finance.
- In livestock systems, it finances technologies, infrastructure, management practices, and enabling conditions that improve productivity, resilience, and environmental performance.
- In Africa, livestock populations have more than doubled since 1960, while productivity per animal has remained largely stagnant.
- Sustainable intensification offers an opportunity to increase productivity and resilience without proportional growth in herd size.

Objectives

To **develop** an investment-readiness pathway for scaling climate finance in African livestock systems by identifying suitable financial instruments, key actors, barriers, enabling conditions, and lessons from African case studies.

Methodology

- Document review:** 25 key sources underpinning the final synthesis, including scientific and research literature, climate-finance reports, standards and registry documentation, policy sources, and project evidence.
- African case studies:** Kenya, Nigeria, Zambia
- Comparative synthesis:** Instruments, players, barriers and enables

Results

Climate finance pathway

- No single financial instrument can support the entire transition (Table 1 and Figure 1). Public and concessional finance are needed to build readiness and absorb early-stage risks, while private debt and equity can scale commercially viable business models.
- Carbon markets and green bonds become feasible only when governance, monitoring, reporting and verification (MRV) systems, aggregation mechanisms, and reliable revenue streams are in place.

Table 1. Financial instruments and their role in livestock transformation.

Instrument	Relevance for livestock
Grants and concessional loans	Research, technical assistance, piloting, project preparation, and early-stage risk reduction.
Voluntary Carbon Markets VCM	Complementary revenue from verified emission reductions or removals. Requires robust baselines, MRV, governance, and benefit-sharing arrangements.
Green and Climate Bonds	Mobilize capital for large, aggregated portfolios involving infrastructure, sustainable intensification, and climate-smart value chains.

Acknowledgments

This study was financed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) within the framework of the LiveSys project (Catalysing Transformation Towards Sustainable Livestock Systems). Additional support was provided by the Low-Methane Forages project, funded by the Bezos Earth Fund and the Gates Foundation, as well as by the CGIAR Science Programs on Sustainable Animal and Aquatic Foods (SAAF) and Climate Action (CA).

This poster is licensed for use under the Creative Commons Attribution 4.0 International license (CC BY 4.0) 2026-09. Design: A.Yedra/CIAT.

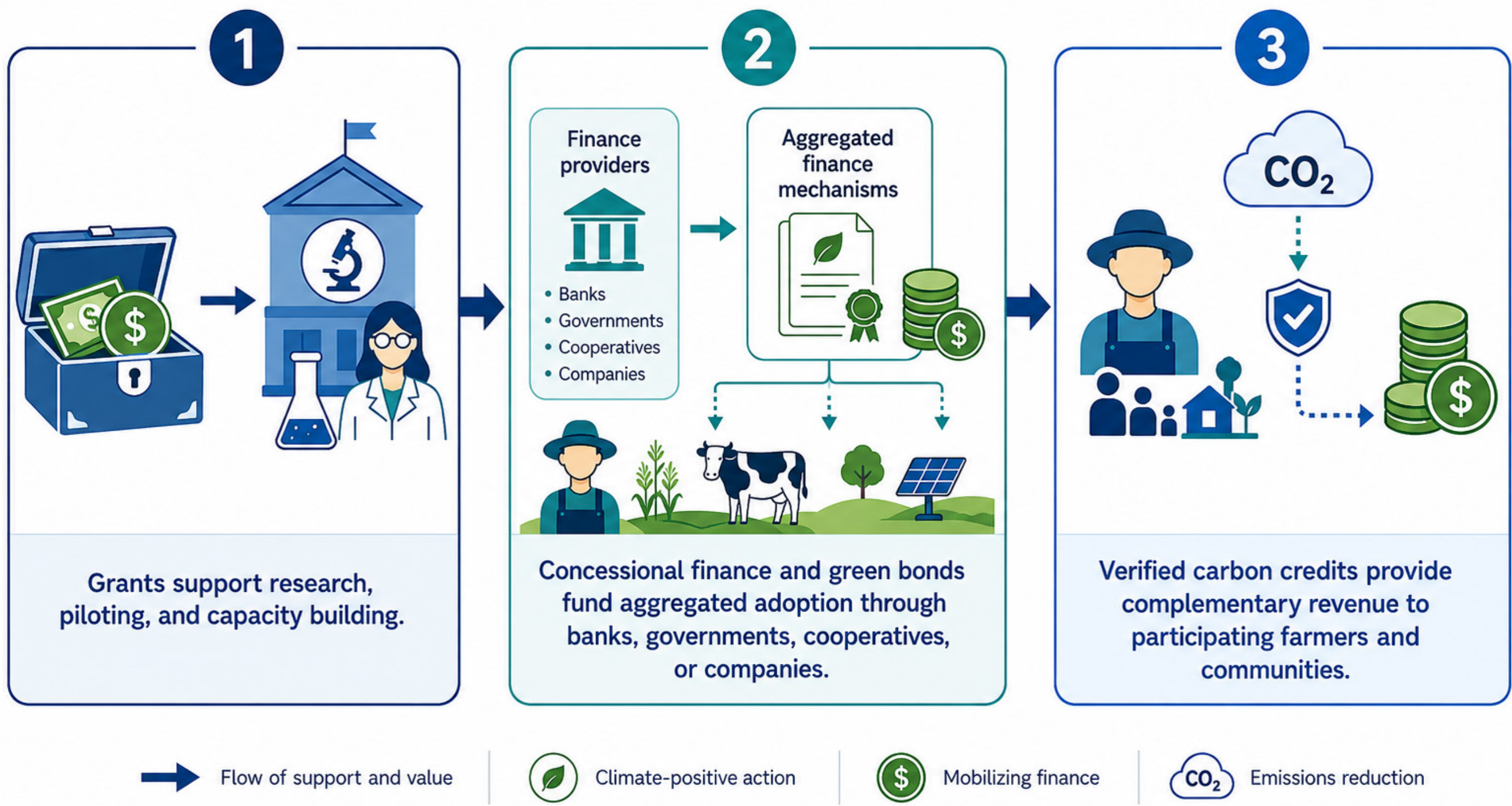


Figure 1. Combination of different instruments.

Barriers to investment readiness

- Across the reviewed evidence and African cases, recurring constraints include methodological gaps, high MRV and transaction costs, weak visibility of livestock in national climate strategies, and limited technical and data capacity. Addressing these constraints requires targeted institutional and technical enablers (Table 2).

Players in climate finance

- Collaboration across these players is essential to mobilize and scale finance for productive, equitable, and climate-resilient livestock systems in Africa (Figure 2).

Table 2. Barriers and enablers.

Barrier	Enabler
Lack of livestock-specific methodologies.	Strategic alliance between key actors and farmers
High MRV and transaction costs.	Simplified verification protocols.
Low visibility in national climate strategies.	Donor-supported pipeline development.
Capacity and data gaps.	Inclusion in green finance taxonomies.



Figure 2. Providers and key actors driving investment for low-emission, climate-resilient livestock systems.

Conclusion

Africa can follow a phased pathway to scale climate finance for sustainable livestock systems: plan, pilot, and scale. This begins by integrating livestock into national climate and investment strategies, validating technologies, costs, and social safeguards through pilot initiatives, and establishing robust governance, MRV systems, and institutional arrangements. As these foundations mature, concessional finance can be combined with private investment and market-based instruments. When governance, reliable data, and finance converge, livestock can become an investable pathway toward low-carbon, climate-resilient, and multifunctional rural landscapes.

Related work

Florez et al. (2026). Mobilizing climate finance for livestock transformation in the Global South: Pathways for investment readiness. Alliance of Bioversity International and CIAT. hdl.handle.net/10568/183290
Florez, F.; Costa Junior, C.; Notenbaert, A.; Burkart, S. (2026) Unlocking climate finance for livestock adaptation and mitigation in Africa: Instrument-specific requirements. 3 p. hdl.handle.net/10568/183211

Poster prepared for :



Tropentag 2026
September 16 – 18, 2026
Göttingen (Germany)