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"Towards multi-functional agro-ecosystems
promoting climate resilient futures"

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

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Abstract

Livestock play a critical role in food security, rural livelihoods, and climate resilience across Africa, yet they remain sidelined within global climate agendas. Despite supporting more than one billion people worldwide and offering substantial potential for both climate adaptation and methane mitigation, less than 1 % of global climate finance is directed to the sector. At the same time, growing evidence demonstrates that sustainable intensification, e.g., through improved forages, grazing and manure management, and herd optimisation, can simultaneously reduce emission intensity, increase productivity, and enhance farm incomes and resilience. The key challenge is therefore not only technical, but financial and institutional, raising the question on how livestock interventions can be translated into bankable, scalable, and verifiable investment opportunities. This study develops an investment-readiness framework to mobilise climate finance for livestock transformation in Africa. It synthesizes key financial instruments, including grants and concessional loans, blended finance, voluntary carbon markets, and green or climate bonds, and identifies conditions required for their effective deployment. We propose a four-stage pathway for livestock finance readiness: (1) policy alignment, (2) piloting and cost validation, (3) scaling through robust investment logic, and (4) long-term expansion supported by monitoring, reporting, and verification (MRV) systems and diversified financing mechanisms. Drawing on emerging experiences, such as climate-smart dairy initiatives and livestock-related carbon projects, we illustrate how tailored financing approaches can deliver gains in productivity, mitigation, and resilience simultaneously. Results indicate that grants and concessional finance are essential in early stages to reduce risk and build institutional capacity and markets, while carbon finance can provide performance-based revenues, provided that MRV systems are robust and upfront financing needs are met. Green and climate bonds, in turn, are better suited for larger, aggregated livestock investments with stable and predictable cash flows. However, significant barriers persist, including limited project preparation capacity, weak prioritisation of livestock in national climate strategies, underdeveloped MRV systems, high transaction costs, uncertainty, and low smallholder bankability. We conclude that livestock can become a viable and investable pathway toward climate-resilient and multifunctional rural landscapes in Africa – provided that financial mechanisms are sequenced with policy reform, institutional coordination, and credible data systems.

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