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for managing natural resources and a better life for all”

A systematic literature review on the relationships between land tenure, cattle farming, and climate change

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Abstract

Climate change is a pressing global issue with profound environmental, economic, and social ramifications. Our research delves into the intricate relationship between land tenure, exemplified by agrarian reforms, and traditional cattle farming practices, with a focus on mitigating climate change impacts through sustainable production practices and technologies, such as silvopastoral systems. Through a systematic literature review drawing on empirical evidence from six countries in the Global South, namely Brazil, Mexico, Colombia, Kenya, Nigeria, and South Africa, we shed light on the complex interplay of factors driving climate change in these regions. Our findings underscore that while agrarian reforms have been instrumental in certain aspects, such as land redistribution, they have also contributed to deforestation without yielding desired outcomes such as improved access to credit for adopting sustainable practices. Additionally, the implementation of silvopastoral systems, aimed at mitigating impacts from traditional cattle farming, faces common challenges including a lack of technical support and financial resources. These challenges impede progress in mitigating the adverse effects of traditional cattle farming, notably deforestation and greenhouse gas emissions. By adopting a historical perspective, we gain insights into the political responsibilities shared across the Global South in addressing climate change. While acknowledging ongoing efforts to enhance sustainability, our study underscores the imperative of addressing systemic challenges, such as inadequate state control in certain territories and mismanagement of public resources, to effectively combat climate change. This recognition is crucial for devising comprehensive strategies that can drive meaningful change and foster sustainable development in the face of climate change pressures.

Keywords: Agrarian reforms, global warming, land tenure security, silvopastoral systems, sustainable intensification