



Livestock policies in sub-Saharan Africa: trade-offs and implications for pastoralists livelihoods

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Abstract

The livestock revolution offers significant opportunities to enhance the livelihoods of smallholder farmers in Africa while improving nutrition and food security. In Sub-Saharan Africa, pastoralists play a crucial role in driving this transformation. However, current policies often fail to adequately support pastoralist livelihoods. This paper aims to analyze livestock policies in selected Anglophone and Francophone countries in Africa, examining the extent to which they integrate rangeland management and the interests of pastoralists. The study employs content analysis of livestock policies from 23 countries in Sub-Saharan Africa. Using a set of indicators from the Sustainable Assessment of Food and Agriculture (SAFA) framework of the FAO, the paper analyzes current policy objectives and strategies, and their social, environmental, and economic trade-offs, particularly with respect to pastoralists, rangelands and pastoral livelihoods. The data indicates that while pastoralists and rangeland management are recognized in livestock policies, policies may not always be conducive to pastoral livelihoods. Furthermore, policies that overlook environmental trade-offs could jeopardize pastoralist livelihoods, which heavily depend on natural resources such as water and pastures. Current policies need adjustments to accommodate the needs of pastoralists while fostering livestock growth and development.

Introduction

The livestock sector plays a crucial role in economic growth and development in sub-Saharan Africa. It serves as a source of livelihood for millions of people and fulfils multiple functions within the agricultural landscape (Banda & Tanganyika, 2021; Molina-Flores et al., 2020; Rayne & Aula, 2020). In an effort to harness the benefits of the livestock sector, many countries across the continent have introduced a range of policies. These policies aim to enhance productivity, improve food security, and support the livelihoods of communities dependent on livestock. While these policies hold promise, they often come with trade-offs or unintended consequences, particularly when key dimensions of sustainability are overlooked. Such policies risk being counterproductive if they marginalize certain groups, such as pastoralist communities, or if they exacerbate environmental degradation.

Recognizing these challenges, this study seeks to examine the coherence of livestock development policies with broader sustainability objectives. Specifically, it evaluates how these policies align with the unique needs of pastoralism and pastoralist communities, whose livelihoods depend on sustainable rangeland management and

mobility. By identifying gaps and opportunities, this research aims to contribute to more inclusive and sustainable livestock development strategies that support pastoralism as a vital component of agricultural and rural systems.

Methods

The livestock policies were identified using various search engines, including Google, in November 2022. The following search strings were applied: (Country) AND livestock policy; national livestock policy AND (country name); agricultural policy AND (country) OR livestock policy. FAOLEX database, as well as the websites of the respective countries ministries, were explored for supplementary data. Only livestock and agricultural policies were considered for further analysis. Other documents, including bills, acts, and plans were excluded from the analysis. Overall, 23 policy documents were identified (Table 1). For the purpose of this study, only the most recent policies were included. Policies written in French were translated using the Deepl translator.

Table 1: Summary of livestock policy documents in Africa

Livestock policy document	Country	Percentage (n=23)
Countries with stand-alone livestock policy documents	Burkina Faso, Mali, Senegal, Ghana, Mauritania, Liberia, Niger, Tanzania, Malawi, Somalia, Kenya, Zambia, South Sudan, Swaziland, Cameroon, Chad	16 (69%)
Countries with livestock policies integrated in overall agricultural policy documents	Benin, The Gambia, Namibia, Nigeria, Rwanda, Uganda, Zimbabwe,	7 (31%)
Total number of countries	23	23 (100%)

From the SAFA (Sustainability Assessment of Food and Agriculture), three main categories of indicators were selected for analysis: environmental indicators (including soil health, water pollution, and animal welfare), governance indicators (including land tenure security, conflict management, and human-livestock-wildlife interactions), and socio-economic indicators (including price stability). These indicators were chosen for their critical importance in assessing the sustainability of rangeland systems. They reflect key dimensions of ecological integrity, social equity, and economic viability, providing a comprehensive framework for evaluating the interplay between resource management, livestock production, and community well-being.

Results

The analysis of livestock policies from a governance perspective highlights key areas of focus and gaps. Land tenure emerges as a prominent priority, with 74% of the 23 policies reviewed addressing it as a critical issue. Conflict and insecurity management also receive considerable attention, featuring in 61% of the policies. However, a significant gap exists in addressing human-livestock-wildlife interactions—an essential element of sustainable rangeland management—appearing in only 9% of the documents.

From an environmental perspective, the findings reveal a stronger emphasis on soil health, with 78% of policies incorporating measures aimed at reducing soil degradation. Yet, other environmental concerns, such as water pollution management and animal welfare, are less frequently addressed. Only 26% and 35% of the policies, respectively, include these major aspects.

The economic dimension, particularly price stability, is also moderately reflected in the policies, with 56% addressing this issue. This suggests a moderate commitment to maintaining stable market conditions for livestock products, which is essential for supporting the sector’s sustainability.

Despite the recognition of key sustainability issues, many policies lack clarity regarding their implementation. While 78% of the policies acknowledge soil degradation as a pressing concern, only 56% provide concrete measures to prevent or rehabilitate degraded soils. This inconsistency between policy objectives and actionable steps underscores a broader challenge in translating policy intentions into practical outcomes, especially in the environmental dimension.

Discussion

With 74% of policies prioritizing land tenure, there is a positive implication for pastoralists, as secure land rights are essential for sustaining grazing activities (Basupi et al., 2017). Land tenure security can enhance pastoralists' ability to manage resources, access credit, and invest in their livelihoods. However, without clear implementation strategies, policies may fail to translate into tangible benefits for pastoralists, particularly in areas with complex land ownership systems or competing land uses.

The fact that 61% of policies address conflict and insecurity management is crucial for pastoralist communities, who are often vulnerable to land disputes, resource conflicts, and insecurity in their grazing areas. Effective conflict resolution mechanisms can reduce disruptions to pastoral mobility, enhance community stability, and improve access to grazing lands (Chelang'a & Chesire, 2020). However, the success of these policies hinges on effective implementation and coordination at local levels, which may not always be guaranteed.

The underrepresentation of human-livestock-wildlife interactions (only 9% of policies) is a critical gap, particularly for pastoralists in areas where wildlife conservation and livestock grazing overlap. The absence of policies addressing these interactions can lead to conflicts, such as competition for water and grazing resources, and increased risks of zoonotic diseases (Vicente et al., 2021). As such, the lack of attention to this issue could undermine the sustainability of pastoral systems and negatively impact pastoralist livelihoods. These findings highlight a notable imbalance in policy priorities, suggesting that while governance frameworks largely emphasize land tenure and conflict resolution, they often overlook the complex dynamics between humans, livestock, and wildlife. This gap underscores the need for more integrative policy approaches that account for the ecological and social challenges associated with rangeland ecosystems.

The findings also reveal a disparity in the environmental priorities of livestock policies. While 78% of policies emphasize soil health and aim to reduce soil degradation, there is a mismatch between policy recognition of soil degradation as a major issue and the limited concrete measures provided (only 56% of policies include actionable steps). This discrepancy could lead to insufficient support for pastoralists who rely on healthy rangelands. Moreover, the lack of focus on water pollution management and animal welfare (addressed in only 26% and 35% of policies, respectively) poses additional risks to pastoralists, whose livelihoods depend on clean water sources and humane livestock practices. This uneven focus suggests a need for more comprehensive environmental strategies that balance soil conservation with broader sustainability goals, ensuring the long-term health of rangeland ecosystems and the welfare of livestock.

The moderate attention to price stability in 56% of policies suggests some recognition of the need for stable livestock markets, which are essential for pastoralists to secure fair prices for their products. However, the limited scope of these policies may leave pastoralists vulnerable to market fluctuations and unpredictable prices, affecting their income stability and long-term economic well-being.

Overall, the findings suggest that while livestock policies address several important issues, there is a need for greater coherence and specificity, particularly in the areas of human-livestock-wildlife interactions, environmental management, and practical implementation strategies.

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