



Technical report 17th December 2025

Land use dynamics and farmer-herder conflicts: A spatial analysis of case studies from Sudan and Nigeria

This report aims to identify practical strategies for reducing farmer-herder conflicts in Sudan and Nigeria by analysing land use dynamics.

Publisher SPARC

By { "@context": "https://schema.org", "author": { "@context": "https://schema.org", "@type": "Person", "name": "Hussein M. Sulieman", "url": "https://www.sparc-knowledge.org/about-us/contributors/authors/hussein-m-sulieman" } } [Hussein M. Sulieman](https://www.sparc-knowledge.org/about-us/contributors/authors/hussein-m-sulieman) { "@context": "https://schema.org", "author": { "@context": "https://schema.org", "@type": "Person", "name": "Saleh Momale", "url": "https://www.sparc-knowledge.org/about-us/contributors/authors/saleh-momale" } } [Saleh Momale](https://www.sparc-knowledge.org/about-us/contributors/authors/saleh-momale)
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Farmer-herder conflicts (FHCs) in Sudan and Nigeria are among the most persistent and destabilising forms of resource-based violence in sub-Saharan Africa. They are shaped by longstanding political, historical, socio-economic, and environmental processes that have altered the balance between farming and pastoralism. In Sudan, decades of state policies that prioritise mechanised agriculture and land privatisation have marginalised pastoralists and eroded customary land tenure. In Nigeria, demographic pressure, expansion of croplands into grazing reserves, and weak implementation of the Land Use Act have led to intensified competition between herders and settled farmers.

At the same time, climate change, droughts, conflict-driven displacement, and environmental degradation continue to reduce the availability of fertile land and water. These pressures are compounded by governance failures, land grabs, and tenure insecurity, all of which heighten the likelihood of disputes turning violent.

Using two focal sites - Azaza Sogora in Gadarif, Sudan, and Awe Local Government Area in Nasarawa, Nigeria - this report aims to inform policymakers, donors, civil society organisations, and local communities about how to better align land management with peacebuilding. To this end, we identify practical strategies for reducing farmer-herder conflicts in Sudan and Nigeria by analysing land use dynamics.

Specifically, we:

- Document spatial and temporal patterns of changes to land use and cover in pastoral and agricultural areas.
- Identify and analyse conflict hotspots where changes in land use overlap with reported disputes.
- Explore governance and institutional factors that exacerbate or mitigate conflicts.

- Assess gendered dimensions of land access and participation in conflict and peacebuilding; and,
- Provide evidence-based recommendations for land use planning, governance reforms, and conflict mitigation.

Findings:

Five multiple, interlinked dynamics were observed:

- In both areas, cropland expanded at the expense of grazing and undisturbed nature. Agricultural expansion often occurred at the expense of traditional livestock corridors, forest reserves, and riparian grazing, intensifying competition over land and water.
- Landscapes have fragmented into a patchwork of fields, settlements, and grazing. Herders increasingly pass through cultivated fields, sparking disputes over crop damage. Informal arrangements, such as sharing fallow land, are breaking down under growing land scarcity.
- State actions have undermined rights to land. In Sudan, state-led land allocation privileges mechanised farming over pastoralism. In Nigeria, weak enforcement of the Land Use Act and inconsistent local decisions have encouraged opportunistic land grabs. Traditional leaders' authority to mediate disputes is being eroded by formal state actions.
- Women bear heavier livelihood burdens — collecting firewood, water, farming distant fields, and making charcoal — than men; yet women are often excluded from decision-making and formal mediation despite playing crucial informal roles in peacebuilding and maintaining inter-community networks.
- In Sudan, the war that began in April 2023 has displaced many people into rural areas of Gadarif. With limited options, internally displaced people have cleared forests for small farms and charcoal making, intensifying resource competition with pastoralists.

Policy implications:

Farmer-herder conflicts are deeply rooted in structural inequalities and governance failures, but are also exacerbated by rapid land use changes, displacement, and environmental degradation. Reducing tensions requires multi-layered strategies that integrate spatial planning, inclusive governance, and gender-sensitive approaches. These include measures to:

- Legally delineate livestock corridors, grazing reserves, and seasonal water points through participatory mapping.
- Recognise and protect customary tenure rights alongside statutory systems.
- Build the capacity of traditional leaders and community institutions to mediate disputes.
- Establish community-based early warning of conflict to prevent escalation, and
- Ensure women's representation in land governance and peacebuilding.

By addressing both the immediate triggers of conflict and the structural drivers of land competition, policymakers and practitioners can strengthen rural resilience, support peaceful coexistence, and foster sustainable livelihoods in fragile dryland regions of Sudan, Nigeria, and beyond.



A farmer in Sudan ploughs the land in preparation for harvest - Image by Ahmed Harmonican - CC BY-SA 4.0 - Wikicommons images

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