SEARCH FOR COMMON GROUND

Pastoralism and Conflict

in the Sudano-Sahel: A Review of the Literature

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The views expressed in this report are those of the authors alone and do not represent the institutional position of Search for Common Ground.

Contents

Key Findings

This report is a cross-sectoral review of research intended to synthesize the principal debates and trends on conflicts relating to pastoralism across Sudano-Sahelian West and Central Africa. The findings below represent overarching takeaways from this review, which manifest differently across the various contexts included in this study.

- Conflicts involving pastoralist populations are intimately linked to macro-economic and environmental shifts in the Sudano-Sahel. However, **there is not sufficient evidence to suggest that the scarcity of resources or climate pressures are the primary cause of these conflicts.** These pressures are important, but they are unfolding in the background of socioeconomic and political issues that are generally seen to be at the heart of conflicts involving pastoralists.

- In many contexts, **the relationships between mobile pastoralists and sedentary rural communities, who have historically shared landscapes and resources, are degrading** in ways that create conditions for violent conflict**.** In part, these relations are stressed as individuals and communities adapt to new economic realities by diversifying their livelihoods, settling down, or increasing private ownership of land. However, this deterioration can also be seen as the result of a lack of credible actors or institutions to mediate and manage increasing competition over resources.

- Across the Sudano-Sahel, social relations and especially group membership determine one's access to resources, and **rural development policies that are seen to privilege or disadvantage one group over others have become flashpoints for conflict**. As governments take steps to control movement or land use, many pastoralists and farmers may fear being dispossessed, and that fear can incite conflict.

- **Existing localized systems of dispute resolution and resource management have proven effective in helping to manage conflict, but they are not necessarily a panacea.** The efficacy of local institutions and authorities (customary or statutory) can be undermined by many of the endemic challenges that affect rural governance across the region broadly (corruption, impunity, politicization, legal pluralism). Further, many of the existing systems that are rooted in longstanding customary practices may not be sufficiently suited to deal with the current scale of violence and criminality.

- **Pastoral livelihoods are often closely linked with culture and identity, and ethnic and religious divisions between pastoralist groups and others are sometimes used to justify exclusionary politics and escalate intercommunal conflicts.** However, the drivers of conflict should not be essentialized as solely motivated by identity, as tensions between identity groups are shaped by material considerations as well.

- Mobile pastoralists **often exist in positions of political or economic vulnerability** – whether due to historic neglect, the need to move through insecure spaces, or the need to access resources through secondary rights – **and that vulnerability has been frequently exploited by both corrupt or abusive authorities and non-state armed groups.** These experiences may incentivize participation in criminal and insurgent activity or pressure pastoralists to protect themselves in ways that can contribute to conflict (e.g., forming self-protection groups or shifting movements to new areas).

Introduction

Across the African continent, 268 million people practice pastoralism, both as a way of life and a livelihood strategy, contributing between 10 to 44 percent of the GDP of African countries.[1] In recent years, this adaptive animal production system has faced growing external threats due to issues such as climate change, political instability, agricultural expansion, and rural banditry that have transformed the rangelands in which they operate. From Mali to South Sudan, governments, regional bodies, peacebuilders, development agencies, environmentalists, economists, and security forces are actively attempting to address the sources of violence and instability that affect both pastoral communities and the rural societies with whom they share resources and landscapes.

These interventions are often shaped by differing assumptions about the source and nature of these conflicts, despite the availability of extensive research and analysis. Though the local dynamics of conflict vary across different contexts, a number of trends and debates appear throughout the literature on pastoralism and conflict. This review draws on several hundred sources to synthesize the major points of consensus and divergence in the existing literature and identify relevant research gaps. This analysis presents data from across Sudano-Sahelian West and Central Africa, to link comparable findings that are often presented in isolation.

Although conflicts over land and water resources in the Sudano-Sahel have long been a political concern and were a major point of contention in the colonial and post-independence eras, they have gained prominence in recent years due to the ongoing spread of violence, instability, and displacement across the region.[2] Latent tensions over resource access and control, which historically only occasionally led to violence, have now erupted in some cases into cycles of mass killings and reprisals. In Nigeria, escalating rural banditry and reprisal violence between farmers and pastoralists has left thousands dead and many more displaced. In central Mali, the escalation of these conflicts culminated in the massacre of 160 members of the Fulani ethno-linguistic and traditionally pastoralist group in Ogossagou in March of 2019, as well as ensuing reprisal violence. And, across Sudan, South Sudan, and the Central African Republic (CAR), conflicts relating to livestock migration and cattle theft have played a critical and destabilizing role in internal insurgencies and cross-border conflict. For these reasons and more, conflict dynamics relating to pastoralism and pastoral communities have become a shared policy priority throughout the region.

1 *Policy Framework For Pastoralism In Africa Securing, Protecting And Improving The Lives, Livelihoods And Rights Of Pastoralist Communities*, (African Union Department of Rural Economy and Agriculture: Addis Ababa, 2013).
2 J. L. Webb, *Desert frontier: Ecological and Economic Change along the Western Sahel: 1600-1850* (Madison: University of Wisconsin Press, 1995). cited in Karim Hussein, James Sumberg, and David Seddon, "Increasing violent conflict between herders and farmers in Africa: claims and evidence," *Development policy review* 17, no. 4 (1999), 397-418.

OUTLINE

This review covers the following key trends and debates from existing literature:

- **Resource Competition and Adaptation** – This Section reviews arguments that analyze pastoralism-related conflicts through the lens of competition over resources. The materials cover the major economic and environmental shifts that have reshaped pastoral livestock production in the Sudano-Sahel and how these shifts are changing relationships between pastoralists and farmers.

- **Governance, Law, and Dispute Resolution** – This Section highlights trends on how control over resources have become a conflict flashpoint that existing institutions and authorities often struggle to mediate. Specifically, the Section breaks down key debates on the policies governing land use and pastoral mobility and how these policies may reinforce or mitigate conflict and the efficacy of local authorities and systems in managing resource disputes.

- **"New Fringe Pastoralism"** – This Section explores the intersection between pastoralist populations and illicit activities or insurgent violence. This Section speaks to an ongoing debate in existing scholarship, policy discourse, and public perception about whether or not some pastoral populations should be seen as vectors of violence or criminality. It explores how pastoralist populations have been targeted for recruitment from insurgent movements and how they have been affected by rising banditry and criminality.

- **Areas for Further Research** – This Section identifies topics that were identified as potentially significant in this review, but that have not been the subject of sufficient study.

METHODOLOGY AND SCOPE

The analysis is based on a review of more than 300 sources in English and French, consisting of scholarly research and analysis produced by credible practitioner and policy organizations. This review is intended **to provide a snapshot of overarching debates and trends and to identify examples from existing research of how these issues manifest in the region.**

Thematic Focus

This review specifically focuses on **facets of pastoral livestock production that are linked to conflicts between users of shared resources and landscapes, with an emphasis on ongoing or recent (over the past 5-10 years) research and conflicts**. This scope includes disputes or confrontations involving individuals or distinct stakeholder groups over time, ranging from isolated incidents to multi-year struggles.[3] It focuses exclusively on conflict between sedentary farmers and mobile pastoralists or between different pastoral groups, and does not attempt to reflect the research on issues affecting sedentary livestock production, farming, or other resource users in rural communities.[4] Primarily, though not exclusively, most sources focus on the production of cattle. A full analysis of all the local conflict dynamics relevant to pastoral communities in each country or region is beyond the scope of this review. Additionally, **while this review touches on contentious policy issues, it is not intended to provide policy recommendations or a summation of broader debates on rural governance in Africa.**

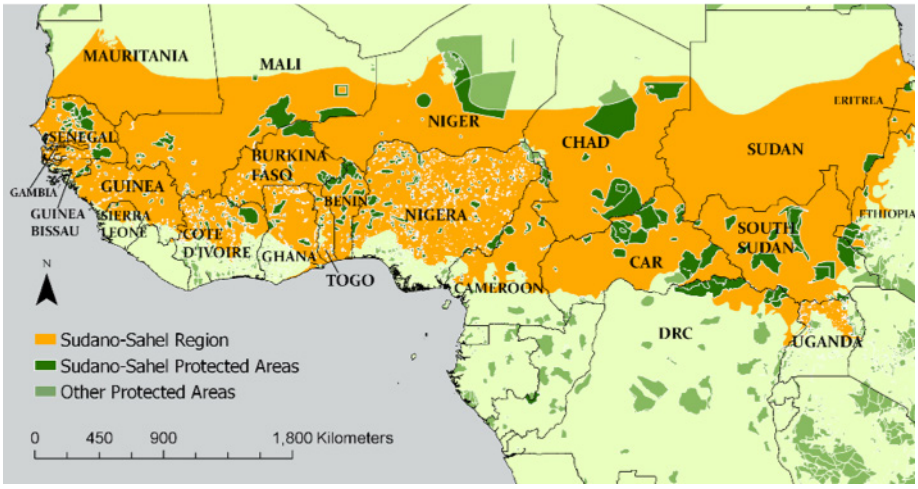
3 Blake D. Ratner et al., "Addressing conflict through collective action in natural resource management," *International Journal of the Commons* 11, no. 2 (2017), 877–906. Unlike Ratner, our primary focus is on violent conflicts that typically but do not necessarily lead to fatalities as these have the most deleterious effects on inter-group social and political relations.

4 While an extensive body of analysis has focused on conflicts between pastoralists and farmers, similar conflict dynamics are also impacting the relationships with pastoralists and other rural actors. Pastoralists in the CAR, for example, express concern about the incursion of artisanal mining into grazing areas (which can damage the grazing resources and present a danger of cattle falling into pits). Mark Freudenberger and Zephirin Mobga, "The Capture of the Commons: Militarized Pastoralism and Struggles for Control of Surface and Sub-Surface Resources in Southwest Central African Republic," (presented at Land Governance in an Interconnected World: Annual World Bank Conference on Land and Poverty, Washington, DC, 2018).

Geographic Focus

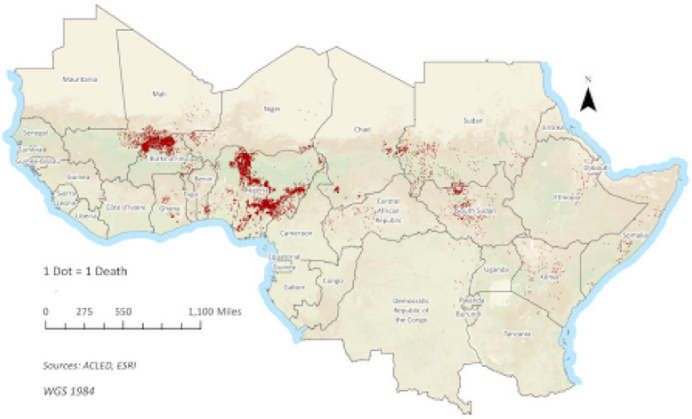
The Sudano-Sahel is an ecological zone in which pastoral livestock production and the associated value chain plays a central role (Figure 1). This study focuses on four geographical areas or "conflict geographies" where natural resource conflicts relating to pastoralism are most acute and that have been the subject of much of the existing literature on pastoralism and conflict – (i) the Liptako-Gourma triangle at the intersection of Mali, Niger, and Burkina Faso; (ii) Nigeria; (iii) the Central African Republic and surrounding border regions; and (iv) Sudan and South Sudan. Since pastoral livestock production in the Sudano-Sahel relies substantially on seasonal movements into sub-humid areas, it also includes research conducted in neighboring countries such as Benin, Togo, Ghana, and the Ivory Coast. Each of these regions has experienced significant levels of violence associated with pastoralism over the last five years (Figure 2).

FIGURE 1. SUDANO-SAHEL REGION



MAP COURTESY OF MATTHEW LUIZZA/USFWS

FIGURE 2. DEATHS FROM CONFLICT EVENTS IN THE SUDANO-SAHEL IN WHICH ONE OR MORE PARTIES ARE IDENTIFIED AS "PASTORALISTS" (2016-2020)[5]



MAP COURTESY OF ANDY SMITH

5 Editorial Note: This map reflects data from the Armed Conflict Location and Event Data Project (ACLED), which has been disaggregated for events in which one or more of the parties involved is identified as "pastoralist." This may not fully represent all conflict events relevant to the scope of this analysis, including violence against marginalized populations, which may be underreported in news sources and therefore not reflected in ACLED's data.

A NOTE ON TERMINOLOGY

For the sake of brevity, this review uses some umbrella terms in order to discuss trends in the literature at a regional level, recognizing that these terms can be used to describe a broad range of practices and peoples.

- **Pastoralism** – Pastoralism is defined as livestock production that relies on spatial and temporal mobility to access land and water resources.[6] This may include consistent nomadic movement of livestock over long distances or the practice of moving livestock over short distances or only on a seasonal basis. Pastoralism is an adaptive practice, and the timing and the extent of pastoral mobility can vary across different ecological zones. **Transhumance** refers specifically to regular seasonal livestock movements that typically correspond to the region's rainy and dry seasons.[7]

- **Pastoralists** – This term broadly refers to the individuals and populations who practice some form of pastoral livestock production as their only or primary livelihood. This encompasses a diverse population, and the differences among pastoralists can change how they relate to the conflict dynamics outlined in this review. Though a majority of that population in the Sahel is poor, for example, there are also wealthy elites who own large herds and send those herds on transhumance.[8] Similarly, some pastoralists are entirely nomadic while others are sedentary (and may rely on contracted herders to move their livestock).

PASTORALIST ETHNIC GROUPS

This review makes reference to various ethnic groups across the Sudano-Sahel that are often described as "pastoralist," in the sense that pastoralism is a principle livelihood practice among these groups and plays an influential role in their cultural identity. Examples of these groups include: the Berbers, Moors, and Saharawi in the Saharan regions; the Toubous in Chad, Sudan, Libya, and Niger; the Baggara in the Sudanese regions of Darfur and Kordofan; and the Fulani who are spread from Senegal through Nigeria and the Sahel and into Central Africa.[9] The Fulani – a large ethnic population numbering in the tens of millions with hundreds of sub-clans[10] – feature particularly in the literature in this review.

While much has been written about the role of the Fulani in conflict, particularly in their capacity as nomadic or semi-nomadic pastoralists, any summary of this literature can risk essentializing a large and heterogenous population. The Fulani practice many livelihoods outside of pastoralism, and many who raise livestock are sedentary rather than nomadic. Higazi notes, for example, the significance of distinguishing between nomadic and settled Fulani populations in Nigeria, as each may practice distinct livelihoods, speak different languages/dialects, and follow different cultural norms.[11] Some settled Fulani communities may be more closely intertwined with other neighboring ethnic groups than with nomadic Fulani.

6 Roy H Behnke et al., "Pastoral migration. Mobile systems of livestock husbandry," in *Animal Migration–A Synthesis*, ed. EJ Milner-Gulland, J. Fryxell, and A. Sinclair (Oxford: Oxford University Press, 2011); Robin S Reid, María E Fernández-Giménez, and Kathleen A Galvin, "Dynamics and resilience of rangelands and pastoral peoples around the globe," *Annual Review of Environment and Resources* 39 (2014), 217-242.
7 Matthew D Turner and Eva Schlecht, "Livestock mobility in sub-Saharan Africa: A critical review," *Pastoralism* 9, no. 1 (2019).
8 Cees De Haan, Etienne Dubern, Bernard Garancher, and Catalina Quintero, *Pastoralism Development in the Sahel: A Road to Stability?* (Washington, D.C.: World Bank, 2016).
9 Michele Nori, *Herding through Uncertainties - Regional Perspectives. Exploring the interfaces between pastoralists and uncertainty. Results from a literature review.*, (Badia Fiesolana: European University Institute, 2019).
10 Ayodele O Majekodunmi et al., "Pastoral livelihoods of the Fulani on the Jos Plateau of Nigeria," *Pastoralism* 4, no. 1 (2014).
11 Adam Higazi and Zahbia Yousuf, *From cooperation to contention… Political unsettlement and farmer-pastoralist conflicts in Nigeria,* (London: Conciliation Resources, 2017).

SECTION I

Resource Competition and Adaptation

Landscapes across the Sudano-Sahel have dramatically changed over the past half century in ways that substantially impact the practice of nomadic and semi-nomadic pastoralism. Pastoralists who may have been able to operate independently on vast stretches of open rangelands increasingly have to compete with others for access to land and water resources, as exponential population growth leads to expanding urbanization and agricultural cultivation.[12] In some cases, this competition has resulted in disputes and conflicts between pastoral herders and farmers due to livestock migration into new territory as well as agricultural encroachment into areas that historically served as grazing areas or corridors for livestock migration.[13] At the same time, growing urban populations have been driving substantial increases in demand for meat, outpacing the production capacity of some countries and fueling a need to expand livestock production generally.[14]

This phenomenon is sometimes portrayed as a manifestation of population-induced scarcity, **which leads some to identify the source of the conflict as people fighting over fewer natural resources.**[15] This Section explores findings from the literature on the role of competition over natural resources in conflicts between pastoralists and other resource-users. In particular, this Section focuses on:

- Are either resource scarcity or climate change the fundamental cause of these conflicts?
- How have rural livelihoods evolved in recent decades and how do those adaptations affect competition and conflict over resources?

12 A Ickowicz et al., "Crop–livestock production systems in the Sahel–increasing resilience for adaptation to climate change and preserving food security" (paper presented at the Building resilience for adaptation to climate change in the agriculture sector. Proceedings of a Joint FAO/OECD Workshop, Rome, Italy, 23-24 April 2012., 2012).

13 Suzanne E. Cotillon and G. Gray Tappan, *Landscapes of West Africa: A Window on a Changing World,* (Garretson, SD: United States Geological Survey Earth Resources Observation and Science (EROS) Center, 2016). Mark Moritz, "Pastoral intensification in West Africa: implications for sustainability," *The Journal of the Royal Anthropological Institute* 18, no. 2 (2012).

14 SNV, "Meating West Afric"s Mega Cities," *SNV*, January 2018. https://snv.org/update/meating-west-africasmega-cities; Mulumba J.B. Kamuanga, Jacques Somda, Yacouba Sanon, and Hamade Kagone, *Livestock and regional market in the Sahel and West Africa: Potentials and Challenges,* (Issy-les-Moulineaux: Sahel and West Africa Club/OECD, 2008). https://www.oecd.org/swac/publications/41848366.pdf; Dolapo Enahoro, Nelly Njiru, Philip Thornton, Steven Staal, *A review of projections of demand and supply of livestock-derived foods and the implications for livestock sector management in LSIL focus countries. Mid-Project Research Report of the Feed the Future Innovation Lab for Livestock Systems (LSIL) Futures Foresight Component, Module I (Quantitative Scenario Modelling),* (Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). https://reliefweb.int/sites/reliefweb.int/files/resources/WP262_final.pdf

15 Malcolm Potts, Courtney Henderson, and Martha Campbell, "The Sahel: A Malthusian Challenge?," *Environmental and Resource Economics* 55, no. 4 (2013), 501–512.

SCARCITY

The theory that resource scarcity drives conflict in the region is controversial and has generated a substantial literature of critical responses.[16] The foremost critical response is that farmer-herder conflicts can occur in places of relative *abundance* of resources, which suggests scarcity is not an essential causal mechanism.[17] In Sudan, some scholars note that resource *abundance* may be a driver of conflict as governments create large-scale farms on land that once served as communal rangelands.[18] At the same time, many parts of the Sudano-Sahel have experienced acute resource competition among smallholders yet do not experience high levels of violence. It should also be noted that changing patterns of livestock movement – which can create friction with other resource users – are not inherently a response to scarcity. Herders move their livestock to access markets and while they may venture south where pasture is more abundant this does not necessarily indicate that they are being *pushed* by resource scarcity in the areas they left behind.[19] It may be opportunistic movement to take advantage of attractive grazing areas or expanding urban markets rather than necessity.

A broad agreement does exist among scholars that resource access and control are important underlying sources of conflict between different user groups, especially farmers and pastoralists.[20] Yet **analysts and scholars do not agree on whether the ultimate source of that conflict is the competition over resource access or the power relations that shape it**. As discussed in Section II, policies that attempt to control resource use and thereby mitigate the impact of scarcity can worsen conflict or even trigger new conflicts by exacerbating the root political causes of the original tension. This remains a critical point of concern as resource competition and the prevention of conflict are increasingly used to justify measures that restrict or roll back pastoral resource access in countries like Benin and Nigeria – such as the hardening of borders or prohibitions against grazing.[21] It will be important to observe closely whether and how these recent policy changes may exacerbate current tensions or even create new forms of resource-based conflict in the region.

16 M.D. Turner, "Political ecology and the moral dimensions of "resource conflicts": the case of farmer–herder conflicts in the Sahel." *Ethics in Political Ecology* 23, 7 (2004): 863-889.
17 Emmanuel Terkimbi Akov, "The resource-conflict debate revisited: Untangling the case of farmer–herdsman clashes in the North Central region of Nigeria," *African Security Review* 26, no. 3 (2017); CT Akujobi, Stanley Ebitari, and HO Amuzie, "Arable Land Resource Conflict in Nigeria," *Journal of Applied Science and Development* 72, no. 1 (2016); Mark Moritz, "Changing Contexts and Dynamics of Farmer-Herder Conflicts across West Africa." *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, 1 (2006): iv-40; Al-Chukwuma Okoli and GA Atelhe, "Nomads against natives: A political ecology of herder/farmer conflicts in Nasarawa state, Nigeria," *American International Journal of Contemporary Research* 4, no. 2 (2014); Quentin Gausset, "Agro-pastoral Conflicts in theTikar Plain (Adamawa, Cameroon)," in *Beyond territory and scarcity: Exploring conflicts over natural resource management,* ed. Quentin Gausset, Michael Anthony Whyte, and Torben Birch-Thomsen (2005).
18 Musa Abdul-Jalil and Jon D. Unruh, "Land Rights under Stress in Darfur: A Volatile Dynamic of the Conflict," *War & Society* 32, no. 2 (2013); Jan Selby and Clemens Hoffmann, "Beyond scarcity: rethinking water, climate change and conflict in the Sudans," *Global Environmental Change* 29 (2014); Hussein M Sulieman, "Grabbing of communal rangelands in Sudan: The case of large-scale mechanized rain-fed agriculture," *Land Use Policy* 47 (2015); Hussein M. Sulieman, "Exploring the spatio-temporal processes of communal rangeland grabbing in Sudan," *Pastoralism* 8, no. 1 (2018).
19 H. K. Adriansen, "Continuity and change in pastoral livelihoods of Senegalese Fulani," *Agriculture and Human Values* 23, (2006): 215-229.
20 In Nigeria, see Anna L. Okello et al., "Identifying motivators for state-pastoralist dialogue: Exploring the relationships between livestock services, self-organisation and conflict in Nigeria's pastoralist Fulani," *Pastoralism* 4, no. 1 (2014); Al Chukwuma Okoli, "The trajectories and dynamics of herdsmen militancy in Central Nigeria," *Journal of Humanities and Social Policies* 2, no. 1 (2016); Shuichi Oyama, "Farmer-herder conflict, land rehabilitation, and conflict prevention in the Sahel region of West Africa," *African Study Monographs,* 50 (2014): 103-122; in Mali, see Matthew D. Turner, "The Micropolitics of Common Property Management on the Maasina Floodplains of Central Mali," *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, no. 1 (2006): 41-75.
21 M. Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region*, (Abuja: International Organization for Migration, 2017). Patience Adzande, "Migration of Pastoralists in Africa: Reflections on Practical and Policy Implications," *African Human Mobility Review* (2019).

CLIMATE CHANGE AND SHIFTING MOVEMENTS

Pastoralism-related resource conflicts are often associated with broad regional environmental trends, including climate change.[22] The notion that climate change is linked to conflict is pervasive,[23] yet even analyses that support an empirical relationship between climate change and violent armed conflict in Africa[24] acknowledge a lack of clarity on the specific mechanisms that trigger violence and their directionality.[25] The relationship between climate change and the conflicts spreading across the Sudano-Sahel remains a controversial topic among analysts, but this **review finds that there are no claims in the scholarly literature that climate has an *inherently causal* relationship to pastoral conflict**. In other words, while environmental changes are an important contextual factor, **socioeconomic and political dynamics are widely cited among scholars as being at the heart of resource conflicts**.[26] Nonetheless, climate change can influence pastoralism-related conflict dynamics by affecting the distribution of water and grazing resources. Despite the resilience of pastoralism to environmental variability, these changes can act as a medium to long-term factor in conflict as some strategies that pastoralists adopt to diversify their livelihoods can increase competition with other resource users.[27]

Shifting patterns of movement are noted by some as a key part of the explanation for the increase in pastoralism-related conflicts, as it is observed that pastoralists are now going "where they have never travelled before" and thereby driving their livestock into farming lands.[28] As demonstrated by various studies included in this review, pastoral movement patterns have

22 Alisha Graves et al., "Avert catastrophe now in Africa's Sahel," *Nature* 575 (2019); *Stopping Nigeria's Spiraling Farmer-Herder Violence,* (Brussels: International Crisis Group, 2018).

23 Christopher K. Butler and Scott Gates, "African range wars: Climate, conflict, and property rights," *Journal of Peace Research* 49, no. 1 (2012); Alexander De Juan, "Long-term environmental change and geographical patterns of violence in Darfur, 2003–2005," *Political Geography* 45 (2015); Stefan Döring, "Come rain, or come wells: How access to groundwater affects communal violence," *Political Geography* 76 (2020); Jeffrey Mazo, *Climate conflict: how global warming threatens security and what to do about it.* (New York: Routledge, 2012); *Transhumance transfrontalière et conflits liés à l'utilisation des ressources naturelles en Afrique de l'Ouest* (Dakar: CORAF/WECARD, 2015); Callie Stinson, "International Military Cooperation and Water Security in the Sahel: A New Approach to Old Problems," *SAIS Review of International Affairs* 35, no. 1 (2015).

24 Marshall B. Burke, Edward Miguel, Shanker Satyanath, John A Dykema, and David B Lobell, "Climate robustly linked to African civil war," *Proceedings of the National Academy of Sciences* 107, 51 (2010): E185-E185; Joshua Busby, "Taking stock: the field of climate and security." *Current Climate Change Reports* 4, 4 (2018): 338-346; Hanne Fjelde, and Nina von Uexkull, "Climate triggers: Rainfall anomalies, vulnerability and communal conflict in sub-Saharan Africa," *Political Geography* 31, 7 (2012): 444-453; Hanne Seter, Ole Magnus Theisen, and Janpeter Schilling, "All about water and land? Resource-related conflicts in East and West Africa revisited," *GeoJournal* 83, no. 1 (2018); Stijn van Weezel, "Local warming and violent armed conflict in Africa," *World Development* 126 (2020);Frank DW Witmer et al., "Subnational violent conflict forecasts for sub-Saharan Africa, 2015–65, using climate-sensitive models," *Journal of Peace Research* 54, no. 2 (2017).

25 Solomon M Hsiang and Marshall Burke, "Climate, conflict, and social stability: what does the evidence say?" *Climatic Change* 123 (2014): 33-59; Eleonora Nillesen and Erwin Bulte, "Natural resources and violent conflict," *Annual Review of Resource Economics* 6, no. 1 (2014); Hanne Seter, "Connecting climate variability and conflict: Implications for empirical testing," *Political Geography* 53 (2016); Ole Magnus Theisen, "Climate change and violence: insights from political science," *Current Climate Change Reports* 3, no. 4 (2017).

26 Akov, "The resource-conflict debate revisited: Untangling the case of farmer–herdsman clashes in the North Central region of Nigeria;" Tor A. Benjaminsen, "Does Supply-Induced Scarcity Drive Violent Conflicts in the African Sahel? The Case of the Tuareg Rebellion in Northern Mali," *Journal of Peace Research* 45, no. 6 (2008); Tor A. Benjaminsen et al., "Does climate change drive land-use conflicts in the Sahel?," *Journal of Peace Research* 49, no. 1 (2012) ; Leif Brottem, "Environmental change and farmer-herder conflict in agro-pastoral West Africa," *Human ecology* 44, no. 5 (2016); Charlène Cabot, *Climate Change, Security Risks, and Conflict Reduction in Africa* (Springer, 2017); MU Dimelu et al., "Challenges of herdsmen-farmers conflict in livestock production in Nigeria: Experience of pastoralists in Kogi State, Nigeria," *African Journal of Agricultural Research* 12, no. 8 (2017); Mabel Ukamaka Dimelu, Edward Danjuma Salifu, and Edwin M Igbokwe, "Resource use conflict in agrarian communities, management and challenges: A case of farmer-herdsmen conflict in Kogi State, Nigeria," *Journal of Rural Studies* 46 (2016); Bruno Hellendorff, "Changement climatique et conflits agro-pastoraux au Sahel," *Note d'Analyse du GRIP* 2 (2012); M. D. Turner, "Political ecology and the moral dimensions of "resource conflicts": the case of farmer–herder conflicts in the Sahel," *Ethics in Political Ecology* 23, 7 (2004): 863-889.

27 Cécile Marie Godde et al., «Global rangeland production systems and livelihoods at threat under climate change and variability,» *Environmental Research Letters* (2020); M Herrero et al., «Climate change and pastoralism: impacts, consequences and adaptation,» *Rev Sci Tech* 35 (2016); Habtamu Taddele Menghistu et al., «Determinant factors of climate change adaptation by pastoral/agro-pastoral communities and smallholder farmers in sub-Saharan Africa,» *International Journal of Climate Change Strategies and Management* (2020); Nouhoun Zampaligré, Luc Hippolyte Dossa, and Eva Schlecht, «Climate change and variability: perception and adaptation strategies of pastoralists and agro-pastoralists across different zones of Burkina Faso,» *Regional Environmental Change* 14, no. 2 (2014);.

28 Andrew McGregor, "The Fulani Crisis: Communal Violence and Radicalization in the Sahel," *CTS Sentinel* 10, no. 2 (2017).

significantly changed in recent decades both geographically and in terms of timing.[29] Drought – which is affected by regional climate change[30] – has been shown to cause changes in livestock movements that can lead to local-level conflict.[31] Other environmental events and patterns have also been associated with shifting movements, as well. In South Sudan, flooding has also played a significant role in shifting the movement of pastoralist populations; as has been observed in 2019 with the internal displacement of cattle camps into Equatoria.[32] In the CAR, the expansion of pastoralism livestock production has continued to the country's southern border with the DRC, driven in part by insecurity in the north but also by the attractive of abundant grazing resources.[33]

Shifting pastoral movements can cause friction and sometimes conflict but it should be noted that these shifts are not always a sudden response to climate shocks, and may be related to longer-term adaptations, as pastoralism is an inherently adaptive practice.[34] Transhumance movements and livestock production more generally can shift southward as pastoral groups seek new grazing opportunities in sub-humid areas or new markets, and through livelihood diversification into trading and agriculture.[35] In places like Cote d'Ivoire, Nigeria, and the CAR, the introduction of pastoral livestock into sub-humid frontier areas dates back several decades and was driven by market demand and government policy to promote domestic livestock production.[36]

In other areas, including Mali, Guinea, and the Gambia, the southward shift is associated with the mid-1980s and, specifically, the Sahelian drought of 1984.[37] Although the 1984 drought greatly damaged pastoral livelihoods and contributed substantially to this shift, there is evidence that this is not as much a sudden shift as it is a much longer and incremental process of adaptation by pastoralists.[38] In Sudan, as in the western Sahel, the 1984 drought triggered a mass migration of Zaghawa pastoralists

29 Serge Aubague and Patrice Grimaud, "Réflexion Sur L'évolution De La Mobilité Des Pasteurs Nomades Au Tchad: Sédentarisation Ou Transhumance?," *Nomadic Peoples* 17, no. 1 (2013); Kaderi Noagah Bukari, Shaibu Bukari, Papa Sow, and Jürgen Scheffran, "Diversity and Multiple Drivers of Pastoral Fulani Migration to Ghana," *Nomadic Peoples* 24, 1 (2020): 4-31; Aime-Landry Dongmo et al., "Herding territories in Northern Cameroon and Western Burkina Faso: Spatial arrangements and herd management," *Pastoralism: Research, Policy and Practice* 2, no. 1 (2012).
30 M. Boko, I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo, and P. Yanda, "Africa. Climate Change," in *Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,* edited by M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden and C. E. Hanson, (Cambridge: Cambridge University Press, 2007), 433-467.
31 Augustine A. Ayantunde et al., "Transhumant pastoralism, sustainable management of natural resources and endemic ruminant livestock in the sub-humid zone of West Africa," *Environment, Development and Sustainability* 16, no. 5 (2014); Brottem, "Environmental change and farmer-herder conflict in agro-pastoral West Africa."
32 Nhial Tiitmamer, "Resolving climate change-induced migration and conflict in South Sudan," in *Climate Change and Migration in Africa,* (Africa Portal, 2020/05/24), https://www.africaportal.org/features/resolving-climate-change-induced-migration-and-conflict-south-sudan/; Yacob Aklilu Gebreyes et al., *The Impact of Conflict on the Livestock Sector in South Sudan*, (Food and Agriculture Organization of the United Nations, 2016), https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/assessments/the_impact_of_conflict_on_the_livestock_sector_in_south_sudan.pdf.
33 Guy-Florent Ankogui-Mpoko et al., "Insécurité, mobilité et migration des éleveurs dans les savanes d'Afrique centrale" (paper presented at the Savanes africaines en développement: innover pour durer, Garoua, Cameroon, 2009).
34 Jean-Charles Clanet and Andrew Ogilvie, "Farmer–herder conflicts and water governance in a semi-arid region of Africa," *Water International* 34, no. 1 (2009).
35 Thomas J. Bassett and Matthew D. Turner, "Sudden Shift or Migratory Drift? FulBe Herd Movements to the Sudano-Guinean Region of West Africa," *Human Ecology* 35, no. 1 (2007); Karen Greenough, "Mobility, Market Exchange And Livelihood Transition: Fulbe Flexibility In Tanout, Niger," *Nomadic Peoples* 16, no. 2 (2012); L. Kossoumna, P. Dugué, and E. Torquebiau, "Change of practices by settling transhumant Mbororo farmers in Northern Cameroon," *Cahiers Agricultures* 19, 1 (2010): 60-67; Ayodele O. Majekodunmi et al., "Shifting livelihood strategies in northern Nigeria - extensified production and livelihood diversification amongst Fulani pastoralists," *Pastoralism* 7, no. 1 (2017).
36 Thomas J. Bassett, "The Political Ecology of Peasant-Herder Conflicts in the Northern Ivory Coast," *Annals of the Association of American Geographers* 78, no. 3 (1988); Bernard Bonnet et al., *Contribution à la relance du dialogue local à Berbérati* (Paris: IRAM, 2017); Jean Boutrais, "Pour une nouvelle cartographie des Peuls (Remapping the Fulani)," *Cahiers d'Études Africaines* 34, no. 133/135 (1994); Ann Waters-Bayer and Wolfgang Bayer, "Coming to Terms: Interactions between Immigrant Fulani Cattle-Keepers and Indigenous Farmers in Nigeria's Subhumid Zone (Relations entre éleveurs immigrants peuls et paysans autochtones dans la zone subhumide du Nigeria)," *Cahiers d'Études Africaines* 34, no. 133/135 (1994).
37 Ayantunde et al., "Transhumant pastoralism, sustainable management of natural resources and endemic ruminant livestock in the sub-humid zone of West Africa;" Brottem, "Environmental change and farmer-herder conflict in agro-pastoral West Africa."
38 Bassett and Turner, "Sudden Shift or Migratory Drift? FulBe Herd Movements to the Sudano-Guinean Region of West Africa." For a contemporary example from Benin, see Sandrine O. Houessou et al., "Change and continuity in traditional cattle farming systems of West African Coast countries: A case study from Benin," *Agricultural Systems* 168 (2019).

from northern to southern Darfur, where they ultimately came into conflict with the areas' sedentary tribes over land rights and political power.[39] The case of Darfur also demonstrates the limited power of environmental shocks as a *push* factor that triggers conflict – other pastoralist groups, the Zayadia and Meidob, stayed and adapted to new conditions in their home region while the Zaghawa migrated *en masse*.[40]

ADAPTATION AND EROSION OF FARMER-HERDER SYMBIOSIS

A frequently cited cause of resource conflict across the Sudano-Sahel is the erosion of the social and economic fabric that binds together farmers and pastoralists (see examples from Nigeria,[41] South Sudan,[42] and Chad).[43] Individuals and communities that self-identify as farmers or pastoralists typically maintain everyday social relations, frequently live in close proximity, and depend on one another economically. Farming and herding complement each another in productive terms through monetary transactions for grain, animal products (milk, cheese, etc.) or trade goods, animal power, crop residue as animal feed, and the use of manure for soil fertility.[44]

NEED FOR MORE RESEARCH ON WOMEN IN RURAL VALUE CHAINS

Any discussion of the economic intersection between agriculture and livestock production should note that while pastoralist women often play very distinctive roles in producing and selling animal products, there has been very little analysis conducted on their economic role in the context of conflict. The disruption of trade and marketing caused by conflict between farmers and pastoralists disproportionately affects women from pastoral and farming communities due to their direct role in buying and selling farm products.[45] Women play a key role in household economic production so they are directly impacted by damaged fields and especially the disruption of market activities. The loss of dairy product marketing (milk and cheese) among pastoralist women has been of particular concern given the limited options their households possess to ensure their food security in times of crisis and displacement.[46] Despite the recognition of the impact of conflict, little has still been written about the distinctive economic role of women in the relationship between pastoralists and farmers.

39 Yousif Takana, Afaf Rahim, and A. Hafiz E. Mohamed Adam, *Darfur Pastoralists Groups: New Opportunities for Change and Peace Building* (Tufts University Feinstein International Center, 2012), https://fic.tufts.edu/assets/Darfur-Pastoralist-Groups.pdf; Jérôme Tubiana, «Le Darfour, un conflit identitaire?,» *Afrique contemporaine*, no. 2 (2005).
40 Takana, Rahim, and Mohamed Adam, *Darfur Pastoralists Groups: New Opportunities for Change and Peace Building.*
41 Higazi and Yousuf, *From cooperation to contention_Political unsettlement and farmer-pastoralist conficts in Nigeria.*
42 Musa Adam Abdul-Jalil, "Nomad-Sedentary Relations in the Context of Dynamic Land Rights in Darfur: From Complementarity to Conflict," in *Disrupting Territories: Land, Commodification and Conflict in Sudan*, ed. Jorg Gertel, Richard Rottenburg, and Sandra Calkins, (Boydell and Brewer, 2014).
43 Dangbet Zakinet, "Des pasteurs transhumants entre alliances et conflits au Tchad. Les Arabes Salamat Sifera et les Arabes Djaatné au Batha," [Transhumant Arab Tribes Move between Alliances and Conflicts in Central Chad.] *Afrique contemporaine* 255, no. 3 (2015): 127-143.
44 Marie J Ducrotoy et al., «Patterns of passage into protected areas: Drivers and outcomes of Fulani immigration, settlement and integration into the Kachia Grazing Reserve, northwest Nigeria,» *Pastoralism* 8, no. 1 (2018); Patrick Dugué et al., «Évolution des relations entre l'agriculture et l'élevage dans les savanes d'Afrique de l'Ouest et du Centre: un nouveau cadre d'analyse pour améliorer les modes d'intervention et favoriser les processus d'innovation,» *Oléagineux Corps gras Lipides* 11, no. 4-5 (2004); Guillaume Duteurtre and A Atteyeh, «Le lait à Moundou, témoin de l'intégration marchande des systèmes pastoraux au sud du Tchad,» *Revue d'élevage et de médecine vétérinaire des pays tropicaux* 53, no. 3 (2000).
45 Patti Kristjanson, Ann Waters-Bayer, Nancy Johnson, Annita Tipilda, Jemimah Njuki, Isabelle Baltenweck, Delia Grace, and Susan MacMillan, *Livestock and women's livelihoods: A review of the recent evidence,* (Nairobi: International Livestock Research Institute, 2014).
46 Nikola Rass, *Policies and strategies to address the vulnerability of pastoralists in sub-Saharan Africa,* (Rome: Food and Agriculture Organization, 2006). (in Central Africa, see: Ankogui-Mpoko et al., «Insécurité, mobilité et migration des éleveurs dans les savanes d'Afrique centrale.»)

However, the relationship between sedentary farmers and pastoralist herders has long been characterized by both complementarity and conflict.[47] Farmers, for example, occasionally put their fields (sometimes intentionally) in established livestock corridors, leaving herders feeling marginalized.[48] Furthermore, uncompensated crop damage by livestock creates grievances among farmers, who tend to perceive pastoralists as wealthier than they are.[49] These situations can result in acute violence, but can also be characterized by a high degree of *latent* conflict involving long standing struggles over the inadequate systems of resource tenure – wherein farmers often hold direct control over land resources and many pastoralists have to access resources through *secondary* rights.[50] While these longstanding tensions over resources remain, substantial shifts in the way rural livelihoods are practiced have also changed the dynamic between resource users.

At its core, pastoralism is a dynamic and adaptive livelihood strategy, and the practice continues to evolve to respond to new pressures and market opportunities. Various studies[51] have highlighted the ways in which pastoralism is evolving and may no longer look the same as it has in the past – see cases ranging from Nigeria[52] to Burkina Faso[53] to Benin.[54] In some cases, these adaptations have radically reshaped the interplay between crop and livestock production, and the relationships between pastoralists and farmers. In terms of conflict dynamics, two of the most significant adaptation strategies have been **sedentarization** – the transition from a mobile to a settled lifestyle – and **diversification** – the adoption of new livelihood practices. These strategies can increase competition for control of land and degrade the traditional symbiosis between farmers and pastoralists who shared resources.

Growing cities and the need to be closer to urban markets affect decisions around crop and livestock production, and this need has driven some pastoralists to settle down to augment their livestock husbandry with crop production and commerce.[55] This process of sedentarization can enmesh pastoralists into new commercial and political networks that defy the way they have con-

47 Mustafa Babiker, "Resource Competition and Conflict_Herder/Farmer or Pastoralism/Agriculture?," in *African Pastoralism,* ed. M. A. Mohamed Salih, Ton Dietz, and Abdel Ghaffar Mohamed Ahmed, Conflict, Institutions and Government (Pluto Press, 2001); M. Breusers, S. Nederlof, and T. van Rheenen, "Conflict or Symbiosis? Disentangling Farmer-Herdsman Relations: The Mossi and Fulbe of the Central Plateau, Burkina Faso," *The Journal of Modern African Studies* 36, 3 1998: 357-380; C. Raynaut, *Societies and nature in the Sahel,* (New York: Routledge, 1997); C. Toulmin, "Herders and farmers or farmer-herders and herder-farmers?" in *The Design and Management of Pastoral Development.* (London: Overseas Development Institute, 1983).

48 Tor A. Benjaminsen and Boubacar Ba, "Farmer-Herder Conflicts, Pastoral Marginalisation and Corruption: A Case Study from the Inland Niger Delta of Mali," *The Geographical Journal* 175, no. 1 (2009); Brottem, "Environmental change and farmer-herder conflict in agro-pastoral West Africa;" S. Traoré, "Straying Fields: Tenure Problems for Pastoralists in the Ferlo, Senegal," in *The Dynamics of Resource Tenure in West Africa,* edited by C. Toulmin, P. Lavigne Delville and S. Traoré (London: James Currey, 2002); *La transhumance transfrontalière en Afrique de l'Ouest: Proposition de plan d'action,* (Food and Agriculture Organization, 2012).

49 The perceived difference in wealth can be a complicated dynamic. Even smallholder pastoralists may hold more wealth than farmers, but that wealth may consist of livestock which is a long-term investment that they may be reluctant to liquidate to compensate for crop damage. L. Brottem and B. Brooks, "Crops and livestock under the sun: Obstacles to rural livelihood adaptations to hotter 21st century temperatures in eastern Senegal," *Land Degradation & Development* 29, 1 (2018): 118-126; Majekodunmi et al., "Pastoral livelihoods of the Fulani on the Jos Plateau of Nigeria." See also: Hanne Fjelde and Gudrun Østby, "Socioeconomic inequality and communal conflict: A disaggregated analysis of sub-Saharan Africa, 1990–2008," *International Interactions* 40, no. 5 (2014).no. 5 (2014)

50 Sara S Berry, "Who owns the land? Social relations and conflict over resources in Africa," (GLOCON Working Paper, 2018); Alexis Gonin and Denis Gautier, "Herders' territorialities and social differentiation in Western Burkina Faso," *Nomadic Peoples* 20, 1 (2016): 62-87; Pierre-Yves Le Meur and Peter Hochet, "Property relations by other means: conflict over dryland resources in Benin and Mali," *European Journal of Development Research* 22, no. 5 (2010): 83; Oussouby Touré, «Sécurisation du foncier pastoral en Afrique de l'Ouest,» IIED, 2018.

51 H. de Jode, *Modern and mobile: the future of livestock production in Africa's drylands* (London: IIED, 2010); Helen Young, *Pastoralism in Practice: Monitoring Livestock Mobility,* (UNEP/Tufts Feinstein Center, 2013), https://fic.tufts.edu/publication-item/pastoralism-in-practice/.

52 André Kiema, Ghislain Tontibomma, and Nouhoun Zampaligré, «Transhumance et gestion des ressources naturelles au Sahel: contraintes et perspectives face aux mutations des systèmes de productions pastorales,» *[VertigO] La revue électronique en sciences de l'environnement* 14, no. 3 (2014); Oumar Marega, Catherine Mering, and Emmanuelle Maisonnave, «Sahelian agro-pastoralists in the face of social and environmental changes: New issues, new risks, new transhumance axe,» *L'Espace géographique* 47, no. 3 (2018).

53 Alexis Gonin, Geoffroy Filoche, and Philippe Lavigne Delville, "Dynamics of Access to Pastoral Resources in a Farming Area (Western Burkina Faso): Unveiling Rights in Open Access Regimes," *International Journal of the Commons* 13, no. 2 (2019).

54 Houessou et al., "Change and continuity in traditional cattle farming systems of West African Coast countries: A case study from Benin."

55 Dugué et al., "Évolution des relations entre l'agriculture et l'élevage dans les savanes d'Afrique de l'Ouest et du Centre: un nouveau cadre d'analyse pour améliorer les modes d'intervention et favoriser les processus d'innovation;" L. Kossoumna, P. Dugué, and E. Torquebiau, "Change of practices by settling transhumant Mbororo farmers in Northern Cameroon," *Cahiers Agricultures* 19, 1 (2010): 60-67.

ventionally been described.[56] While in some cases, settlement can involve the transition from pastoralism to less mobile livestock production systems (like ranching), that is not always the case. Even settled pastoralists may continue to send their animals on transhumance, which can increase the need to hire herders and complicate resource access in distant areas; all of which can contribute to conflicts, including with other pastoralists.[57]

As some pastoralist households settle permanently, the need to ensure access to grazing resources can also lead to increasingly exclusive arrangements for managing and even purchasing land, which may contravene customary tenure relations.[58] **This trend is one part of a larger, continent-wide pattern of privatization that has been described as exacerbating tensions over the control of land resources.**[59] The increasing private acquisition and development of rangelands can further restrict the available space for pastoralists to migrate and graze their herds. Some analysts particularly highlight the adverse impact of the privatization of wetlands, which are a critical grazing resource for livestock during dry seasons and times of drought. This trend has been observed in Sudan[60] and throughout the Sahel.[61]

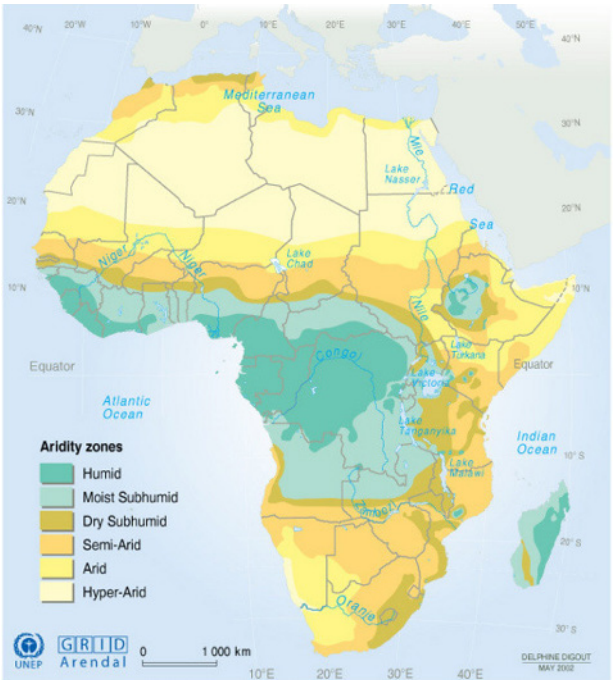
Relatedly, market demands, climate change, and other forces have driven pastoralists and farmers alike to diversify their livelihoods, including by practicing a mix of both crop and livestock production. **It has been credibly argued by some that livelihood *convergence* – farmers raising livestock and pastoralists settling to cultivate farmland – increases the risk of local conflict as each group increases its demands for the same land resources.**[62] In Burkina Faso, for example, some pastoralist groups have contributed to agricultural expansion when settling down to cultivate, which has incited conflict with sedentary groups. Furthermore, they tend to settle in pastoral corridors, which block their use by other pastoralists and create another source of conflict.[63]

One of the direct and oft-cited examples of how livelihood convergence leads to conflict is the loss of the manure contract – the understanding that pastoralists' livestock would fertilize farmers' harvested fields in exchange for the rights to graze remaining crop residue. Since at least the 1980s, farmers began excluding pastoralists from their fields as they acquired their own livestock.[64] One study supported by the Forum on Farmer-Herder Relations in Nigeria in 2019, for example, highlights how some farmers in Adamawa state have been burning their post-harvest crop residue to discourage herders from grazing on their lands.[65]

56 M. Pelican, *Masks and Staffs: Identity Politics in the Cameroon Grassfields,* (New York: Berghahn Books, 2017).
57 Majekodunmi et al., "Pastoral livelihoods of the Fulani on the Jos Plateau of Nigeria;" M. D. Turner, "Capital on the move: The changing relation between livestock and labor in Mali, West Africa," *Themed Issue: Land, Labor, Livestock and (Neo)Liberalism: Understanding the Geographies of Pastoralism and Ranching; Themed Issue: Organisational Geographies of Power* 40, no. 5 (2009).
58 Elias Danyi Kuusaana and Kaderi Noagah Bukari, "Land conflicts between smallholders and Fulani pastoralists in Ghana: Evidence from the Asante Akim North District (AAND)," *Journal of Rural Studies* 42 (2015): 52-62.
59 Berry, *Who owns the land? Social relations and conflict over resources in Africa.*
60 Mustafa Babiker, "Resource Competition and Conflict_Herder/Farmer or Pastoralism/Agriculture?"
61 Thomas Hertzog et al., "Ostrich-Like Strategies in Sahelian Sands? Land and Water Grabbing in the Office du Niger, Mali," *Water Alternatives* 5 no. 2 (2012): 304-321.
62 M. D. Turner, A. Ayantunde, K. P. Patterson, and E. D. Patterson, "Livelihood Transitions and the Changing Nature of Farmer-Herder Conflict in Sahelian West Africa," *Journal of Development Studies* 47, 2 (2011): 183-206.
63 Sanfo Abroulaye et al., "Climate change: a driver of crop farmers-agro pastoralists conflicts in Burkina Faso," *International Journal of Applied Science and Technology* 5, no. 3 (2015).
64 Antje Van Driel, "The end of the herding contract: decreasing complementary linkages between Fulbe pastoralists and Dendi agriculturalists in northern Benin," *Pastoralists under pressure* (1999); Leo De Haan, Anne van Driel, and Annette Kruithof, "From symbiosis to polarization?: Peasants and pastoralists in northern Benin," *Indian Geographical Journal* 65, no. 1 (1990); Claude Raynaut and Philippe Lavigne Delville, "A shared land: complementary and competing uses," in *Societies and nature in the Sahel* (Routledge, 2002).
65 Bala Abdu Bello, "Socio-Economic Effects of Postharvest Crop Residues Burning on Farmers-Herders Relations and the Level of Farmers Awareness in Demsa LG, Adamawa State," (unpublished article, 2020).

Although this change has clearly strained farmer-herder relations in certain localities, this type of interdependence is not universal across the Sudano-Sahel. Manure contracts are largely limited to semi-arid zones with sandy soils and therefore cannot explain pastoral conflicts in the sub-humid zones, where such contracts have never existed on a large scale (see Figure 3). Livelihood convergence may not be sparking a shift from symbiosis to competition in such cases. In sub-humid areas south of the Sudano-Sahel, including the coastal countries of West Africa, certain studies attribute conflict to the very absence of such productive complementarity and accompanying social relations (as well as the relatively recent arrival of Fulani herders).[66]

FIGURE 3. ARIDITY ZONES IN AFRICA



MAP COURTESY OF CARTOGRAFARE IL PRESENTE/ NIEVES IZQUIERDO

Analysts have also noted social stressors that adversely impact the interconnection between nomadic and host communities. The lack of local hosts for transhumant pastoralists in coastal countries or a common language to address minor disputes between pastoralists and farmers have been cited as causes for the escalation of conflicts.[67] Similarly, in northern Ghana, Tonah describes how village elites, especially chiefs and land owners, tend to maintain good relations with herders while less powerful community members, including youth and non-stock owning farmers, are hostile to their presence.[68] However, these examples are not indicative of a universal breakdown in host-nomad relationships across the Sudano-Sahel. Research in Mali, for example, has found that even young herders with few obvious social ties along their migration routes will make friends, seek hosts, and find clients where they hope to sojourn or otherwise graze their cattle.[69]

66 Mark Davidheiser and Aniuska Luna, "Cooperation and Conflict: A socio-historical view of farmer-Fulbe relations," *African Journal on Conflict Resolution* 8, no. 1 (2008); Youssouf Diallo, "Dimensions sociales et politiques de l'expansion pastorale en zone semi-humide ivoirienne," in *Pastoralism under Pressure,* ed. V. Azarya (Leiden: Brill, 1999). McGregor, "The Fulani Crisis: Communal Violence and Radicalization in the Sahel."
67 Michel Ange, Bekpa Kinhou, and Sinsin Brice, "Transhumance and conflicts management on Agonlin plateau in Zou department (Benin)," *Journal of Biodiversity and Environmental Sciences (JBES)* 4, no. 5 (2014).
68 Steve Tonah, "Migration and Farmer-Herder Conflicts in Ghana's Volta Basin," *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, no. 1 (2006).
69 Leif Brottem, "Hosts, strangers and the tenure politics of livestock corridors in Mali," *Africa* 84, no. 4 (2014).

The absence of social and economic interdependence may also be a factor in conflict between pastoral communities themselves. This has been the underlying logic for some peacebuilding interventions in the contested Abyei Administrative Area, where there have been ongoing struggles between the Ngok Dinka and Misseriya over the sharing of grazing land, water, and market access.[70] While these communities were intentionally separated by a line of disengagement by peacekeeping forces in 2013, various initiatives were supported to create regular economic interaction, including the establishment of the Amiet "peace market" in 2016.

The success of peace markets and other interventions to support economic integration, though, is still a point of contention within scholarship. A 2020 assessment conducted by Search for Common Ground found that while respondents in Abyei felt that violence in the region writ large was trending upward, they believed that migration-related resource conflicts specifically were being handled more peacefully than the previous years.[71] Critics, however, have noted that the kinds of interactions happening in markets like Amiet are only possible because of security guarantees negotiated by political actors and thus may be an effect rather than a cause of stability.[72]

Overall, further research is needed to examine whether increasing economic integration would decrease pastoralism-related conflict. There is, though, some evidence that integrated systems may be more resilient to conflict than strict separation between communities. In one 2006 comparison study, Dafinger and Pelican argue that Burkina Faso's vision of shared, integrated landscapes has caused "permanent but low-level" conflict, while in Cameroon, a legal system of strict territorial separation between herding and farming has led to more violent conflict between the two groups.[73]

ERODING SOCIAL RELATIONS

Across the Sudano-Sahel, social relations and especially group membership determine one's access to resources, which translate into situations in which exclusionary identity politics play a prominent role in conflict dynamics.[74] **The practice of portraying mobile pastoralists as cohesive groups of *strangers* has long been and continues to be an important basis for their exclusion and expulsion during periods of conflict escalation**.[75] Mobility-based livelihoods practiced by many pastoralists create social and political distance from sedentary host communities.[76] Avoiding village politics – except to maintain good relations with hosts – has historically been advantageous for pastoralists who depended on flexible and seasonal resource access rather than territorial control.[77] However, under conditions of increasing resource competition, this

70 Ali Jammaa Abdalla, "People to people diplomacy in a pastoral system: A case from Sudan and South Sudan," *Pastoralism: Research, Policy and Practice* 3, no. 1 (2013).
71 *Amiet Market - Abyei Sudan: Baseline Study: Minatinaa Fi Tamasokona Strengthening Nonviolence as a Strategy for Peacebuilding and Promoting Social Cohesion in the Abyei Area,* (Search for Common Ground, 2020).
72 Øystein H Rolandsen, «Trade, peace-building and hybrid governance in the Sudan-South Sudan borderlands,» *Conflict, Security & Development* 19, no. 1 (2019).
73 Andreas Dafinger and Michaela Pelican, "Sharing or Dividing the Land? Land Rights and Farmer-Herder Relations in Burkina Faso and Northwest Cameroon," *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, no. 1 (2006); Kristine Eck, "The law of the land: Communal conflict and legal authority," *Journal of Peace Research* 51, no. 4 (2014); Amy Hart, "Peace in the Land of Upright People: Religion and Violence in Burkina Faso," *Journal for the Study of Religion* 27, no. 2 (2014).
74 Berry, *Who owns the land? Social relations and conflict over resources in Africa.*
75 Isah Mohammed Abbass, "No retreat no surrender: Conflict for survival between Fulani pastoralists and farmers in northern Nigeria," *European Scientific Journal* 8, no. 1 (2012); Jeremiah O Arowosegbe, "Citizenship and resource competition in Nigeria," *Anthropological Forum* 26, no. 1 (2016); A. Olaniyan, "The cattle are 'Ghanaians' but the herders are strangers: farmer-herder conflicts, expulsion policy and pastoralist question in Agogo, Ghana," *African studies quarterly* 15, 2 (2014): 53.
76 Yaa Pa Oppong, *Moving through and passing on: Fulani mobility, survival and identity in Ghana:* (Routledge, 2017); *Analyse Des Conflits Liés aux Ressources Naturelles dans la Région Du Liptako-Gourma: Résultats des Trois Analyses de Conflits Réalisées au Burkina Faso, au Mali et au Niger,* (Rome: Food and Agricultural Organization, 2020).
77 M. D. Turner, "The role of social networks, indefinite boundaries and political bargaining in maintaining the ecological and economic resilience of the transhumance systems of Sudano-Sahelian West Africa," in *Managing Mobility in African Rangelands: The Legitimization of Transhumance,* edited by M. Niamir-Fuller (London: Intermediate Technologies Publications Ltd,1999), 97-123.

social and political distance can shift towards mutual intimidation, and, in times of crisis, become a more hostile "foreigner", ethnicized discourse.[78]

This dynamic is not universal across the region but appears particularly in contexts in which there is a seasonal influx of livestock from outside the country. Sources in this review highlight this discourse not only in conflict-affected countries such as the CAR[79] and Nigeria[80] but also in comparatively stable countries such as Ghana.[81] In the CAR, for example, this exclusionary discourse has been applied to pastoralists who come from or are connected to Arabic herding communities in Chad or Sudan.[82] As both a sender and receiver of "foreign" livestock herds, this is also a particular point of tension in Nigeria. Transhumant pastoralists in Nigeria originating from Sahelian countries, including Burkina Faso, Mali, and Niger, have been implicated in violent altercations. But Nigerian herds also increasingly cross into coastal countries, including Benin and Togo, where they are involved in conflicts and whose residents readily deploy the "foreign invasion" discourse.[83] Ironically, Benin and Togo attract Nigerian herders because they are safer, particularly from cattle rustlers, than in Nigeria.[84]

Even in lands where pastoralist ethnic populations have long been settled, they can still be treated in both policy and public discourse as "foreign" and subject to exclusion or violence. Amadou highlights how the Mbororo[85] in the CAR who had maintained a presence in the country for decades were intentionally targeted in violent or criminal acts beginning in the 1990s.[86] In Nigeria, this dynamic can be substantially shaped by accordance of certain rights and privileges based on indigeneity – whether or not someone belongs to a community by birth or ancestry. Indigeneity laws can result in situations in which ethnic Fulani herders face legal barriers to resource access because they are frequently not considered to be *indigenes.*[87]

78 Rita Yembilah and Miriam Grant, "The political ecology of territoriality: territorialities in farmer–herder relationships in Northern Ghana," *GeoJournal* 79, no. 3 (2014).
79 Adamou Amadou, "Bonee and Fitina: Mbororo Nomads Facing and Adapting to Conflict in Central Africa," *Conflict and Society* 4 (2018); Lotje de Vries, "Navigating violence and exclusion: The Mbororo's claim to the Central African Republic's margins," *Geoforum* (2018).
80 Surulola Eke, "'Nomad savage' and herder–farmer conflicts in Nigeria: the (un)making of an ancient myth," *Third World Quarterly* (2019).1702459; Cletus Famous Nwankwo, "Essentialising critical geopolitics of the farmers–pastoralists conflicts in West Africa," *GeoJournal* (2019).
81 Oppong, *Moving through and passing on: Fulani mobility, survival and identity in Ghana.*
82 *Central African Republic: A Conflict Mapping* (Antwerp: International Peace Information Service and Danish Institute for International Studies, 2018), https://ipisresearch.be/publication/central-african-republic-conflict-mapping/; Laura McGrew, *Conflict Analysis: Central African Republic,* (Baltimore: Catholic Relief Services, 2016); *The Security Challenges of Pastoralism in Central Africa,* (Brussels: International Crisis Group, 2014).
83 ; Ange, Kinhou, and Brice, "Transhumance and conflicts management on Agonlin plateau in Zou department (Benin);" John Kennedy Tersoo Ikyase and Ibrahim Umara, "Involvement of Fulani Herdsmen in Trans-border Crimes and Its Implication on Nigeria's Security," *Socialscientia: Journal of Social Sciences and Humanities* 1, no. 1 (2016); *Stopping Nigeria's Spiralling Farmer-Herder Violence.*
84 Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region.*
85 The Mbororo are a predominately pastoralist ethnic group related to the Fulani, who primarily reside in Cameroon, CAR, Chad, and DRC.
86 Amadou, "Bonee and Fitina: Mbororo Nomads Facing and Adapting to Conflict in Central Africa."
87 Chris Kwaja and Bukola Ademola-Adelehin, *The Implications of the Open Grazing Prohibition & Ranches Establishment Law on Farmer-Herder Relations in the Middle Belt of Nigeria,* (Washington, DC: Search for Common Ground, 2017), https://www.sfcg.org/wp-content/uploads/2018/02/Open-Grazing-Prohibition-Law-in-Benue-State-December-2017.pdf; Aaron Sayne, *Rethinking Nigeria's indigene-settler conflicts,* (Washington, D.C.: U.S. Institute of Peace, 2012), https://www.usip.org/sites/default/files/resources/SR311.pdf.

SECTION II

Governance, Law, and Dispute Resolution

Across the sources in this review, the governance of rural communities is widely and frequently associated with conflict involving pastoralists. Some have noted that conflicts may escalate in frequency or severity due to limitations in local capacity to address resource disputes or crime. However, various analysts have also argued that resource conflicts have been exacerbated by rural development policies that privilege or marginalize one community or another. Specifically, there is a pervasive contention that **pastoralist communities have long been marginalized by institutions and policies that do not serve their interests or support their livelihoods, and this marginalization is the epicenter of these conflicts.**[88]

This Section focuses on:

- How have policies governing livestock mobility, land tenure, and resource access affected conflict dynamics among rural communities?
- What are the key sources of tension between pastoralists and state authorities or governing institutions?
- Why are conflicts not being addressed through existing customary or statutory mechanisms?

Any discussion on the role of state institutions and policies should acknowledge that there are fundamental tensions over the role of the state in controlling the rural periphery. As Moritz describes, constructively addressing the governance of pastoralism means reconsidering "the dichotomy between what Meir has labeled the centripetal forces of the state and the centrifugal forces of nomadic pastoralists (Meir, 1988), in which 'states' seek the encapsulation of nomadic pastoralists, while the latter seek to maintain their autonomy."[89] In other words, we should not assume that the issue at question is solely whether or not state institutions have the necessary capacity or the most equitable policies for resolving resource conflicts or administering the rangelands in which pastoralists operate.

Policy-oriented analyses often frame resource conflicts as amenable to more *inclusive* governance that state actors could provide as long as they reform their policies and enhance their capacity.[90] However, interventions that work through public institutions in places where certain groups have been marginalized or have low levels of trust in the institutions can risk reinforcing the same drivers of conflict that these interventions are trying to transform. In terms of both security and rural development, scholars have argued that foreign assistance may be worsening the crisis by enabling governments to avoid meaningful reforms[91] or to continue perpetuating predatory policies.[92] This argument has been made regarding elite politics in Mali,[93] sub-national administration in the Central African Republic,[94] and the micropolitics of everyday law enforcement in Cameroon.[95]

88 Michele Nori, Michael Taylor, and Alessandra Sensi, *Droits pastoraux, modes de vie et adaptation au changement climatique,* (IIED, 2008); K. Homewood, *Ecology of African Pastoralist Societies* (James Currey, 2008); *Pastoralism in Africa's drylands: Reducing risks, addressing vulnerability and enhancing resilience,* (Rome: Food and Agriculture Organization 2018).
89 Mark Moritz, "Understanding Herder-Farmer Conflicts in West Africa: Outline of a Processual Approach," *Human Organization* 69, no. 2 (2010), 84.
90 Natasja Rupesinghe and Morten Bøås, *Local Drivers of Violent Extremism in Central Mali,* Norwegian (Oslo: Institute for International Affairs, 2019); *The Central Sahel: A Perfect Sandstorm,* (Brussels: International Crisis Group, 2016); *USAID Strategy on Democracy, Human Rights, and Governance,* USAID, (Washington DC, 2013).
91 Bruno Charbonneau, "Introduction au dossier 'Mali: les défis de la résolution des conflits,'" *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, no. 3 (2019). Marc-Antoine Pérouse de Montclos, *Une guerre perdue: la France au Sahel* (Paris: JC Lattès, 2020).
92 Benjaminsen, Tor A., and Boubacar Ba. 2019. "Why do pastoralists in Mali join jihadist groups? A political ecological explanation." *The Journal of Peasant Studies* 46 (1):1-20; Moritz, M. 2010. "Understanding Herder-Farmer Conflicts in West Africa: Outline of a Processual Approach." *Human Organization* 69 (2):138-148.
93 Isaline Bergamaschi, "The fall of a donor darling: the role of aid in Mali's crisis," *The Journal of Modern African Studies* 52, no. 3 (2014); Morten Bøås and Liv Elin Torheim, "The Trouble in Mali—corruption, collusion, resistance," *Third World Quarterly* 34, no. 7 (2013).
94 Emmanuel Chauvin, «
95 Mark Moritz, "FulBe Pastoralists and the Neo-Patrimonial State in the Chad Basin," in *The Ecology of Pastoralism*, ed. P. Nick Kardulias (University Press of Colorado, 2015).

REVIEW OF REGIONAL AND NATIONAL POLICIES

Historically, as non-sedentary populations and the dominant pre-colonial political power in many places, pastoral groups of the Sudano-Sahel fell under the suspicion of colonial administrators seeking to establish control over territory and political subjects.[96] Colonial-era laws and policies that were inimical to pastoral livelihoods, such as land tenure regimes that excluded them, ensured that many pastoral communities and individuals operated on the margins of the law.[97] This trend continued through the 1970s and 1980s, as various economic, political, and ecological crises perpetuated the marginalization of pastoral communities and the hinterland regions they tended to inhabit.[98]

Around the turn of the 21st century, a growing number of national governments and regional institutions began to express support for the legitimacy of pastoral mobility as a dryland production system and livelihood, and established laws and policies aiming to protect pastoral mobility and resource access.[99] These measures typically include some mix of the following provisions: corridors to promote livestock mobility, regulations for the movement of cattle across borders, land use planning, and some pastoralism-oriented legal reforms. Taken together, these various laws and strategies represent greater consideration of the needs of pastoral communities than in decades past. At a multilateral level this trend has culminated in documents like the African Union's 2010 Policy Framework for Pastoralism in Africa, and the Declarations of N'Djamena (2013) and Nouakchott (2013) that are intended to promote a shared commitment to supporting pastoral livelihoods. However, **the existing approaches are geographically uneven**, as each country and region relies on different policies and practices, despite the fact that **livestock movement frequently crosses borders and has been cited as a key driver of regional economic and political integration**.[100]

At a regional level, West African countries have enacted the most wide-reaching laws and policies concerning pastoralism and transhumance, beginning with the 1998 *Transhumance Protocol* developed by the Economic Community of West African States (ECOWAS) that called for the formal management of transboundary livestock movements between member states.[101] Each of the countries in Sudano-Sahelian West Africa has ratified laws that provide some recognition of pastoral mobility and resource rights, which represents an important break from older policies that imposed strong state control over land tenure and

96 V. Azarya et al., *Pastoralists under pressure?: Fulbe societies confronting change in West Africa* (Leiden: Brill, 1999); Maryam Niamir-Fuller, "Managing mobility in African rangelands," in *Property rights, risk and livestock development in Africa*, edited by Maryam Niamir-Fuller (London: Intermediate Technology Publications Ltd., 1999), 102-31.

97 Jonathan Davies et al., *Crossing Boundaries: Legal and Policy Arrangements for Cross-Border Pastoralism* (2018); Boureima Maïga, «L'accès aux pâturages dans le delta intérieur du Niger,» in *Le droit en Afrique: expériences locales et droit étatique au Mali,* ed. G. Hesseling and M. Djiré (Paris: Karthala, 2005); Issa Saïbou, *Les coupeurs de route: histoire du banditisme rural et transfrontalier dans le bassin du lac Tchad* (Paris: Karthala Editions, 2010); Ulrike Schmid, «Legal Pluralism as a Source of Conflict in Multi-Ethnic Societies,» *The Journal of Legal Pluralism and Unofficial Law* 33, 46 (2001): 1-47.

98 Janet Roitman, *Fiscal disobedience: An anthropology of economic regulation in Central Africa* (Princeton University Press, 2005).

99 A. Catley, *Livestock and livelihoods in South Sudan,* (Birmingham: Knowledge for Development (K4D), University of Birmingham, 2018); Ced Hesse and Brigitte Thébaud, *Will pastoral legislation disempower pastoralists in the Sahel?,* (Research Network for Environment and Development (ReNED): Copenhagen, 2006), http://agris.fao.org/agris-search/search.do?recordID=GB2013202569; Maryam Niamir-Fuller, "Managing mobility in African rangelands;" *Policy Framework For Pastoralism In Africa.*

100 Mirjam Bruijn et al., "Mobile pastoralists in West and Central Africa, between conflict, mobile telephony and (im)mobility," *Revue scientifique et technique (International Office of Epizootics)* 35 (2016); Michele Nori, *Herding through Uncertainties - Principles and Practices. Exploring the Interfaces of Pastoralists and Uncertainty,* (Robert Schuman Centre for Advanced Studies, 2019), https://cadmus.eui.eu/bitstream/handle/1814/64228/RSCAS%202019_69revised.pdf?sequence=4&isAllowed=y;Robert Schuman Centre for Advanced Studies (2019 Michele Nori and Edoardo Baldaro, "Games without frontier: development, crisis and conflict in the African agro-pastoral belt," in *Crisis and conflict in agriculture,* ed. Rachel Bahn, Eckart Woertz, and Rami Zurayk (Boston: CABI, 2018).

101 Salihou Mamadou Alidou, "Couloirs de transhumance transfrontalière en l'Afrique de l'Ouest," (Swiss Agency for Development Cooperation, 2016). For a more in-depth review of West African policies, see Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region.*

mobility.[102] In Central Africa, cross-border transhumance is regulated by a less-formalized system through the Central African Economic and Monetary Community, though there has been some interest in developing a protocol comparable to ECOWAS.[103] In East Africa, a regional framework on transhumance has been drafted for the members of the Intergovernmental Agency on Development (IGAD), but has not been officially ratified or reflected in national level legislation.[104]

Regional and bilateral agreements have been a growing conflict management priority as borderlands – including the Liptako-Gourma region (Burkina-Niger-Mali), Lake Chad, and the disputed areas between Sudan and South Sudan – are key sites of this nexus between armed insurgency, criminality, and pastoralism.[105] **Borders become an important vector of pastoral resource conflict because seasonal migrations frequently cross borders, especially as pastoralists increasingly rely on sub-humid destinations**.[106] Crossing borders can make pastoralists vulnerable to extortion and scapegoating, as it changes their political status and rights.[107] The establishment of the border between Sudan and South Sudan, for example, cut through existing livestock migration routes, separating pastoralists living north of the border from favored dry season pastures south of the border, which has become a potential source of tension during each migration season.[108]

While regional and bilateral agreements represent steps toward resolving tensions over cross-border movement, the implementation of any such regional framework largely falls on individual states. Across the region, national legislation around pastoralism remains varied. Some states explicitly outline protection for resource rights for pastoralists, including recognizing mobility as a right. Other states maintain legislation that is hostile or unsupportive of pastoral mobility or the customary rights that pastoralists have relied on. And still others maintain policies that vary at the state or local level. The textbox below briefly summarizes some of the distinct elements of different national legislation.

102 Bernard Bonnet, and Dominique Hérault, "Governance of pastoral tenure and climate change in the Sahel. Reinforce capacities of actors to secure mobility and fair access to pastoral resources." *Land Tenure Journal* 2 (2011); Jonathan Davies et al., "Extensive livestock production in transition," in *Livestock in a changing landscape: volume one* (Island Press, 2013); *La transhumance transfrontalière en Afrique de l'Ouest: Proposition de plan d'action.*
103 Nat Dyer, *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility Review of the legislative and institutional environment governing livestock mobility in East and West Africa,* International Institute for Environment and Development (London, 2008); UNOCA staff, interview by author, March 10, 2020.
104 As of July 2020.
105 Lawrence E. Cline, "War on the Hoof: regional security in Africa and livestock conflicts," *Small Wars & Insurgencies* 31, no. 1 (2020/01/02); Julie Flint, *The other war: Inter-Arab conflict in Darfur,* Small Arms Survey (Geneva, 2010), http://www.smallarmssurveysudan.org/fileadmin/docs/working-papers/HSBA-WP-22-The-Other-War-Inter-Arab-Conflict-in-Darfur.pdf; Boniface Ganota et al., "Législation des migrations humaines et animales en Afrique centrale: cas du Cameroun, de la République centrafricaine et du Tchad" (paper presented at the Savanes africaines en développement: innover pour durer, 2009); Ikyase and Umara, "Involvement of Fulani Herdsmen in Trans-border Crimes and Its Implication on Nigeria's Security;" Tanguy Quidelleur, *The Local Roots of Violence in Eastern Burkina Faso: competition over resources, weapons and the State,* (Noria Research Network, 2020).
106 Alidou, "Couloirs de transhumance transfrontalière en l'Afrique de l'Ouest."
107 Davies et al., *Crossing Boundaries: Legal and Policy Arrangements for Cross-Border Pastoralism.*
108 Alidou, "Couloirs de transhumance transfrontalière en l'Afrique de l'Ouest;" Zoe Cormack and Helen Young, "Pastoralism in the New Borderlands: Cross-border Migrations, Conflict and Peace-building," (2012); Joshua Craze, *Dividing Lines: Grazing and Conflict along the Sudan-South Sudan Border* (Geneva: Small Arms Survey, Graduate Institute of International Development Studies, 2013); Jorg Gertel, Sandra Calkins, and Richard Rottenburg, "Disrupting Territories: Commodification and its Consequences," in *Disrupting Territories: Land, Commodification and Conflict in Sudan,* ed. Jorg Gertel, Sandra Calkins, and Richard Rottenburg, (Boydell and Brewer, 2014).

NATIONAL PASTORAL LEGISLATION

Legislation from Past Eras – As noted above, many laws and policies were initially developed during colonial and post-independence eras and were not designed to support pastoral livelihoods. In some cases, these laws have persisted to the present without being replaced by new legislation, despite the emergence of various regional frameworks and statements that reflect a new set of norms about pastoralism. In **Chad**, no national legislation dealing with pastoralism has been approved since the post-independence period; a Pastoral Code was passed by Parliament in 2014 but was blocked by the government.[109]

Mobility as a Right – Some states have established pastoral mobility as a fundamental right, which may ensure more formal legal protection for customary rights and practices. **Niger's** 2010 pastoral code, for example, explicitly recognizes mobility as a fundamental right, building on the Rural Code of 1993 that supported pastoral tenure rights by elevating customary systems to the same legal status as statutory land property, which substantially strengthened pastoralists' control of resources in their home areas (*zone d'attache*).[110] **Mali** adopted a rights-based approach in its own 2001 pastoral charter, though implementation through local governments has been uneven and dependent on customary land tenure relations.[111] In **Sudan**, the protection of livestock corridors and cross-border mobility is specifically referenced in the Darfur Peace Agreement (2006) and the Comprehensive Peace Agreement (2005), but these agreements have not necessarily provided a clear and robust framework to support these protections in practice.[112]

Additional Forms of Support – In addition to outlining rights for mobility or land use, some laws and policies outline specific provisions for investing in pastoral livelihoods and infrastructure. **Burkina Faso**, for example, adopted a more technocratic approach compared to its Sahelian neighbors, focusing on integrated land use planning that includes novel provisions for the establishment of pastoral grazing reserves.[113]

Sub-National Regulation – Although **Nigeria** is a party to the ECOWAS transhumance protocol, its legal approach to pastoralism has differed from its Francophone neighbors. There is no national law or framework for implementing the ECOWAS protocol – though a provision in its national constitution of 1999 that recognizes the free movement of people – and many of the key conditions are often not enforced in practice.[114] Land rights, however, are controlled at the state or local council level, and at least four states (Ekiti, Edo, Benue and Taraba) have enacted laws restricting open-grazing in 2016 and 2017.[115] In 2019, the federal government launched a ten-year National Livestock Transformation Plan, which focuses on modernization and intensification rather than supporting pastoral production systems.

*More in-depth summaries of national legislation and cross-border agreements on transhumance have already been compiled by other authors.[116]

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109 Saverio Kratli et al., *Pastoral Systems in Dar Sila, Chad: A Background Paper for Concern Worldwide,* (Boston: Tufts University Feinstein International Center, 2018), https://reliefweb.int/report/chad/pastoralist-systems-dar-sila-chad-background-paper-forconcern-worldwide.
110 Cees De Haan et al., *Pastoralism Development in the Sahel: A Road to Stability?* (Washington, DC: World Bank, 2016), http://documents.worldbank.org/curated/en/586291468193771160/Pastoralism-development-in-the-Sahel-a-road-to-stability.
111 Brottem, "Hosts, strangers and the tenure politics of livestock corridors in Mali."
112 Young, *Pastoralism in Practice: Monitoring Livestock Mobility.* Craze, *Dividing lines: Grazing and conflict along the Sudan-South Sudan border.*
113 Dyer, *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility Review of the legislative and institutional environment governing livestock mobility in East and West Africa.* Elodie Robert, "Les zones pastorales comme solution aux conflits agriculteurs/pasteurs au Burkina Faso: l'exemple de la zone pastorale de la Doubégué," *Les Cahiers d'Outre-Mer. Revue de géographie de Bordeaux* 63, no. 249 (2010).
114 Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region.*
115 Kwaja and Ademola-Adelehin, *The Implications of the Open Grazing Prohibition & Ranches Establishment Law on Farmer-Herder Relations in the Middle Belt of Nigeria.*
116 Davies et al., *Crossing Boundaries: Legal and Policy Arrangements for Cross-Border Pastoralism;* Jonathon Davies et al., *Improving Governance of Pastoral Lands: Implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security,* 6 (Rome: Food and Agriculture Organization of the United Nations, 2016); Dyer, *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility Review of the legislative and institutional environment governing livestock mobility in East and West Africa;* Omer Egemi, *Pastoralist Peoples, Their Institutions and Related Policies,* (Medford: Feinstein International Center, Medford, 2012). Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region.*

Even where policies have been designed based on sound economic and agronomic rationales, they have not always been supported by the necessary investments or political will to work as intended.[117] Though local governments have taken active measures to protect pastoral mobility through the establishment of transhumance corridors in Mali, these corridors require but rarely include local grazing reserves.[118] In Burkina Faso, despite the successful establishment of pastoral areas, Sanou et. al. describes the need for grazing reserves to be equipped with adequate and continuous water supply.[119] These are just a few small examples of a more pervasive gap in rural governance across the Sudano-Sahel. Studies from countries such as Mali,[120] the CAR,[121] and South Sudan[122] reveal that states across the region arguably appear to *perform* their functions more than actually execute them, often masking lack of capacity, legitimacy, and accountability.

FLEXIBILITY AND TERRITORIAL CONTROL

The design of pastoral legislation reflects a long-standing tension between the need to provide flexibility for mobile herds seeking resources that are variable in space and time and the need to regulate herd movements and access to territory.[123] A frequent criticism of many existing policies is that they have been overly focused on controlling herd movements rather than promoting their flexibility.[124] Promoting flexibility, generally speaking, would focus on reciprocal resource access and eschew strict territorial management.[125] One example of this approach is Niger's statutory recognition of home zones – lands where livestock spend the dry season after returning from periods of transhumance.[126]

Flexibility, it should be noted, is more of an environmental necessity in some regions than in others.[127] Semi-arid rangelands are subject to more ecological variability and may therefore require a more flexible approach than sub-humid areas that are more stable and where a large number of pastoral livestock spend the majority of the year.[128] In these more stable sub-humid areas, it may be more appropriate to adopt regulations that are somewhat less variable, such as the territorial protection of grazing resources or the regulation of pastoral movements through livestock migration corridors, grazing zones, and entry/exit calendars.

The debate over flexibility and regulation is significant for this review as policies to control territory and movement are sometimes framed as tools to prevent conflict by establishing clear boundaries between competing resource users. This idea, though, has been the subject of criticism, as various studies have noted the ways in which corridors and delimited pastoral zones can

117 De Haan et al., *Pastoralism Development in the Sahel: A Road to Stability?*
118 Brottem, "Hosts, strangers and the tenure politics of livestock corridors in Mali;" Alexis Gonin, "Le foncier pastoral au Sahel, des mobilités fragilisées," *Bulletin de l'association de géographes français. Géographies* 95, 95-2 (2018): 175-186; Erin Kitchell, Matthew D Turner, and John G McPeak, "Mapping of pastoral corridors: practices and politics in eastern Senegal," *Pastoralism* 4, no. 1 (2014).
119 Charles L Sanou et al., "Climate Variability Adaptation Strategies: Challenges to Livestock Mobility in South-Eastern Burkina Faso," *Open Access Library Journal* 5, no. 2 (2018). See also Sidonie Ouoba-Ima, "Caractéristiques socio-démographiques et dynamique de la transhumance des bouviers peuls de la Nouhao au Burkina Faso," *VertigO: la revue électronique en sciences de l'environnement* 18, no. 2 (2018). For another example, see Robert, "Les zones pastorales comme solution aux conflits agriculteurs/pasteurs au Burkina Faso: l'exemple de la zone pastorale de la Doubégué."
120 Catriona Craven-Matthews and Pierre Englebert, "A Potemkin state in the Sahel? The empirical and the fictional in Malian state reconstruction," *African Security* 11, no. 1 (2018).
121 Louisa Lombard, *State of rebellion: violence and intervention in the Central African Republic* (Zed Books Ltd., 2016).
122 Alex De Waal, "When kleptocracy becomes insolvent: Brute causes of the civil war in South Sudan," *African Affairs* 113, no. 452 (2014).
123 Maryam Niamir-Fuller, "Managing mobility in African rangelands;" Matthew D Turner et al., "Reconciling Flexibility and Tenure Security for Pastoral Resources: the Geography of Transhumance Networks in Eastern Senegal," *Human Ecology* 44, no. 2 (2016).
124 Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region.*
125 Roy Behnke, "Open access and the sovereign commons: A political ecology of pastoral land tenure," *Land Use Policy* 76 (2018).
126 Dyer, *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility Review of the legislative and institutional environment governing livestock mobility in East and West Africa.*
127 Jonathan Davies and Michele Nori, "Managing and mitigating climate change through pastoralism," (2008); *The Central Sahel: Scene of New Climate Wars?*, (International Crisis Group, 2020), https://www.crisisgroup.org/africa/sahel/b154-le-sahel-central-theatre-des-nouvelles-guerres-climatiques.
128 Behnke, "Open access and the sovereign commons: A political ecology of pastoral land tenure;" Brottem, "Hosts, strangers and the tenure politics of livestock corridors in Mali."

have unforeseen or negative impacts on the relationships that govern access to shared resource access.[129] **This can be a particular concern when the establishment of these systems is disconnected from the interests or concerns of affected communities.**[130]

- In Sudan, Egemi argues that because livestock corridors are seen as a way to reduce the risk of conflict through territorial separation, rather than as a way to facilitate resource access for pastoralists, corridors may be established without addressing the fundamental concerns of affected populations.[131]
- Burkina Faso's pastoral laws, which call for a territorial approach, were designed in a top-down process that could undermine local control and erode the governance of resources it seeks to protect.
- In Nigeria, state legislation to establish "cattle colonies" and limit the open grazing of livestock was justified as a step to reduce farmer-herder conflict, but was met with strong resistance from farming communities.[132] Although grazing reserves have been part of Nigerian livestock management since 1965, their establishment in the current political climate has been fraught because they are perceived by sedentary farming communities to be land giveaways to Fulani pastoralists who sometimes have connections with urban elites.[133]

This is not to say that grazing reserves, livestock corridors, or other forms of territorial control are fundamentally anathema to the prevention of conflict. Further research is needed to assess whether and how these approaches to rural development may have positive effects on conflict dynamics, particularly when they are implemented as part of a holistic strategy with strong local buy-in. As just one example, SOS Sahel Sudan describes how the demarcation of corridors has contributed to the reduction of violent conflict in Sudan's North and South Kordofan in part because those corridors were established and maintained by the local farming and herding communities themselves and complemented by efforts to mediate resource conflicts that occurred as a secondary effect of those corridors.[134]

LOCAL CONFLICT MANAGEMENT

When conflicts do erupt between pastoralists and other resource users, the systems for dealing with these conflicts are usually highly localized. Local traditional leaders (e.g., pastoralist leaders or "*ardos*") are often the first responders to everyday resource disputes and can play a key role in both mediating conflicts and preventing their escalation.[135] Tribal leaders in Sudan operating within the official Native Administration, for example, have played a major role in regulating the timing or scale of pastoral movements to ensure that herds did not overwhelm local resources.[136] These kinds of flexible and adaptive practices can be

129 Gonin, Filoche, and Delville, "Dynamics of Access to Pastoral Resources in a Farming Area (Western Burkina Faso): Unveiling Rights in Open Access Regimes;" Peter Hochet and Luigi Arnaldi di Balme, "La dialectique de l'étranger. La construction des relations contradictoires à l'étranger à la croisée des institutions coutumières et des politiques publiques dans l'Ouest du Burkina Faso,» [Dialectics of the Foreigner in Western Burkina Faso: Construction of Conflicting Relationships with Foreigners Where Traditional Institutions and Public Policies Intersect.] *Autrepart* 64, no. 1 (2013); Elhadji Maman Moutari and Frédéric Giraut, «Le corridor de transhumance au Sahel un archétype de territoire multisitué?,» *L'Espace géographique* 42, no. 4 (2013).

130 Fonteh Athanasius Amungwa, «The evolution of conflicts related to natural resource management in Cameroon,» *Journal of Human Ecology* 35, no. 1 (2011); Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region.*

131 Egemi, *Pastoralist Peoples, Their Institutions and Related Policies.*

132 Kwaja and Ademola-Adelehin, *The Implications of the Open Grazing Prohibition & Ranches Establishment Law on Farmer-Herder Relations in the Middle Belt of Nigeria.*

133 Ducrotoy et al., "Patterns of passage into protected areas: Drivers and outcomes of Fulani immigration, settlement and integration into the Kachia Grazing Reserve, northwest Nigeria."

134 "Best Practice on Natural Resources Management, Lessons learnt from SOS Sahel Sudan on livestock corridor management" (unpublished manuscript: SOS Sudan Sahel).

135 Rasheed Oyewole Olaniyi, "Bororo Fulani Pastoralists and Yoruba Farmers' Conflicts in the Upper Ogun River, Oyo State Nigeria, 1986–2004," *Journal of Asian and African studies* 50, no. 2 (2015).

136 Helen Young et al., *Risk, Resilience, and Pastoralist Mobility* (Feinstein International Center, 2016), https://fic.tufts.edu/publication-item/risk-resilience-and-pastoralist-mobility/.

particularly useful in dealing with pastoralism, which is a fundamentally dynamic practice. There are numerous examples from across the region of how the trajectory of conflicts involving pastoralist communities is differently shaped by the specific local mechanisms in place:

- In north-central Nigeria, Vinson observes that inter-communal violence can be avoided when local religious authorities agree to power sharing at the local level.[137] Vinson argues that informal power-sharing measures at the level of local government, in which political positions are divided or rotated between cultural groups, can explain why some communities face recurrent outbursts of violence while others do not.
- In an analysis of local responses to conflict in Lakes region in South Sudan, Ryle and Amoum describe the divergent trajectories of conflict between Eastern and Western Lakes States partly in terms of different responses by community leaders.[138] While both states experienced similar sources of conflict relating to cattle theft, the constructive response of community leaders in Eastern Lakes state allowed for a greater level of peace than in neighboring Western Lakes state.

As the comparison between Eastern and Western Lakes States illustrates, the efficacy of local systems can vary depending on the behavior, attitude, and capacity of local authorities. Local authorities can help prevent conflicts from escalating by eschewing exclusionary practices or language that cast conflicts explicitly in terms of religion, ethnicity, or foreignness.[139] However, **analysts have also noted that the efficacy of local leaders in mediating conflict can also be diminished when they engage in blatant partisanship or self-serving behavior** such as private land sales to community outsiders, which has been reported throughout the region.[140] As rural economies evolve and demand for land or animal products increases (see Section I), there are new opportunities for enrichment that may break down traditional institutions. A 2020 analysis by the UN Food and Agriculture Organization of the Liptako-Gourma region highlighted land sales and property speculation as a principal reason why traditional conflict resolution mechanisms have broken down in the area.[141]

GENDER DIMENSIONS OF GOVERNANCE

The reliance on traditional leaders or local systems can also present an acute risk to groups with less political power, including rural women. Under customary laws, women's rights to manage land may be weak or nonexistent and they may have few opportunities for representation within existing resource management or conflict resolution institutions.[142] Studies on the role of pastoralist women highlight that many still lack decision-making authority even within their own households.[143] Women can face disadvantages in both customary and statutory judicial systems, as Kircher argues in the case of South Sudan.[144]

137 Laura Thaut Vinson, *Religion, violence, and local power-sharing in Nigeria* (Cambridge University Press, 2017).
138 J. Ryle and Machot Amoum, *Peace is the Name of Our Cattle-Camp_Local responses to conflict in Eastern Lakes State, South Sudan,* (Nairobi: Rift Valley Institute, 2018).
139 Makodi Biereenu-Nnabugwu, "Leadership Influence on Ethno-Religious Conflicts in the Middle belt Region of Nigeria," *Journal of Policy and Development Studies* 289, no. 2379 (2015).
140 Akov, "The resource-conflict debate revisited: Untangling the case of farmer–herdsman clashes in the North Central region of Nigeria;" Ibrahim Baidoo, "Farmer-herder conflicts: A case study of Fulani herdsmen and farmers in the Agogo traditional area of the Ashanti Region," (University of Ghana, 2014); Roger Blench et al., *The role of traditional rulers in conflict prevention and mediation in Nigeria,* UK Department for International Development (DFID) (London, 2006); Kuusaana and Bukari, "Land conflicts between smallholders and Fulani pastoralists in Ghana: Evidence from the Asante Akim North District (AAND);" Quidelleur, *The Local Roots of Violence in Eastern Burkina Faso: competition over resources, weapons and the State;* Tonah, "Fulani Pastoralists, Indigenous Farmers and the Contest for Land in Northern Ghana."
141 *Analyse Des Conflits Liés aux Ressources Naturelles dans la Région Du Liptako-Gourma: Résultats des Trois Analyses de Conflits Réalisées au Burkina Faso, au Mali et au Niger.*
142 *Literature Review Of Land Tenure In Niger, Burkina Faso, And Mali_Context And Opportunities,* (Baltimore: Catholic Relief Services, 2014); *Pastoralism and Security in West Africa and the Sahel: Towards Peaceful Coexistence,* (Dakar: United Nations Office for West Africa and the Sahel (UNOWAS), 2018), https://searchlibrary.ohchr.org/record/27062?ln=en.
143 *Women, Livestock Ownership and Markets: Bridging the gender gap in Eastern and Southern Africa,* ed. Jemimah Njuki and Pascal Sangiga (London: Routledge, 2013).
144 Ingrid Kircher, *Challenges to security, livelihoods, and gender justice in South Sudan: The situation of Dinka agro-pastoralist communities in Lakes and Warrap States* (London: Oxfam, 2013).

In one study on responses to gender-based violence in the DRC, for example, Search found that only 39% of respondents thought that formal and customary judicial systems treat the male and female victims of violence equally.[145]

Despite these inequities, women do still play social and economic roles in leadership. In a review on the role of women in pastoral societies, Flintan cites examples from across the Sahel for how pastoralist women have power within their households and rights within their communities that they use effectively to meet their households needs.[146] Badejo describes how self-help groups led to positive empowerment changes for pastoralist women in Nigeria and Ibrahim argues that pastoralist women in Chad play dynamic, empowered roles in redefining Mbororo cultural identity.[147] Women in pastoralist communities do in some cases form and participate in economic associations or cooperatives (as has been noted in Guinea[148] and East Africa[149]). To a minor degree, women pastoralists have even begun organizing at an international level – best exemplified by the 2010 Mera Declaration of the Global Gathering of Women Pastoralists, which included participants from Burkina Faso, Cameroon, Mali, and Niger among others.

Local responses to conflict have also been critically shaped by the tension between customary and statutory systems. **Since the colonial era, the authority of traditional leaders and institutions has been weakened or transformed in many parts of the Sudano-Sahel as states adopt land use policies that supersede customary practice or establish new governing authorities or institutions in rural areas.** That expansion of state authority, though, does not mean that in practice individuals are turning to state officials to deal with conflicts. Studies from Niger and Cameroon have found that rural populations often prefer to work through interpersonal dispute resolution, rather than turning to officials.[150] In the case of Chad, a longstanding system rooted in tribal law has remained an active channel for addressing pastoral conflicts because it acts as a buffer against the weakness and instability of national authorities.[151] Despite the fact that this system in Chad has long been subject to local criticism, the official justice system may still be disregarded as inept or corrupt.[152]

The line between state and traditional law is not always clearly distinct. Many pastoral and farming communities operate within *legally plural* administrative systems, in which multiple sources of authority (including state and traditional authorities) exercise political power.[153] At times, these authorities may even be merged, as some traditional leaders maintain officially recognized roles in local governance. In South Sudan, Ryle and Amoum describe how local chiefs were integrated into formal governance roles in both the colonial system and through later postcolonial governments, though their authority may be diminished.[154] In Burkina Faso, though the Agrarian and Land Reform Act of 1984 officially superseded existing pastoral customary laws, later decentralization policies delegated authority over land management to local bodies, which may include traditional leaders.[155]

145 Sedera Arnaud Rajoelison, *Gender and Conflict Analysis: Tushinde Ujeuri,* (USAID - IMA World Health), https://www.sfcg.org/wp-content/uploads/2018/08/Gender-and-Conflict-Analysis_C-GBV.pdf.
146 Fiona Flintan, *Women's Empowerment in Pastoral Societies* (World Initiative for Sustainable Pastoralism et al., 2008), https://www.iucn.org/sites/dev/files/import/downloads/gender_format.pdf.
147 Adedamola F Badejo et al., "The impact of self-help groups on pastoral women's empowerment and agency: A study in Nigeria," *Pastoralism* 7, no. 1 (2017); Hindou Ibrahim, "Le Rôle des Femmes Dans la Viabilité Economique Et Sociale Des Sociétés Pastorales: Le Cas de la Société Mbororo Au Tchad" (La Contribution De L'elevage Pastoral A La Securite Et Au Developpement Des Espaces Saharo-Saheliens, N'djamena, Association des Femmes Peuls Autochtones du Tchad (AFPAT), 2013).
148 *Pastoralism and Security in West Africa and the Sahel: Towards Peaceful Coexistence.*
149 Flintan, *Women's Empowerment in Pastoral Societies.*
150 Natali Kossoumna Liba'a, «Sédentarisation des éleveurs transhumants dans le Nord du Cameroun: évolution des conflits rurauxet de leurs modes de résolutions,» *African Population Studies* 26, no. 1 (2012); M. D. Turner et al., "Conflict Management, Decentralization and Agropastoralism in Dryland West Africa," *World Development* 40, no. 4 (2012).
151 Ulrich Braukämper, "Management Of Conflicts Over Pastures And Fields Among The Baggara Arabs Of The Sudan Belt," *Nomadic Peoples* 4, no. 1 (2000).
152 Group, *The Security Challenges of Pastoralism in Central Africa.*
153 R. S. Meinzen-Dick, and R. Pradhan, Legal pluralism and dynamic property rights," in *IFPRI CAPRI working papers,* (Washington DC: IFPRI, 2002).
154 Ryle and Amoum, *Peace is the Name of Our Cattle-Camp Local responses to conflict in Eastern Lakes State, South Sudan.*
155 Dyer, *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility Review of the legislative and institutional environment governing livestock mobility in East and West Africa; Pastoralism and Security in West Africa and the Sahel: Towards Peaceful Coexistence.*

Statutory policies in several states – including Mali, Niger, and South Sudan – even officially legitimize customary rights and institutions.[156]

In the best case, legal pluralism allows governance systems to be more context-sensitive and fosters constructive synergy between state and traditional authorities.[157] Traditional authorities may serve as a credible first line of defense to mediate disputes or help to regulate community usage of resources, before turning to state authorities when enforcement is beyond their capacity.[158] Functionally, customary institutions may be more accessible to citizens, particularly in peripheral rural areas. At the same time, there are inherent limitations to any traditional system. Among the western Dinka in South Sudan, for example, Pendle argues that traditional compensation mechanisms for acts of theft or homicide have broken down as elites have accumulated such large herds that the usual cattle payments no longer have the same impact.[159] **It has also been argued that customary modes of conflict resolution may immediately quell short-term risks for conflicts to escalate without providing for deeper reconciliation, which may allow long-standing intercommunal grievances to fester.**[160]

The existence of legally plural systems, however, also creates risks for conflict. Legal pluralism may give rise to political splintering and "forum shopping," in which parties to conflict seek favor through competing centers of authority (e.g., a traditional chief and a mayor). This can be a particular risk for conflict when local authorities choose to manipulate or exploit conflict resolution mechanisms for their own gain.[161] Forum shopping can reinforce the cycle of everyday corruption and conflict escalation that erodes local legitimacy.[162] In Nigeria, contradictory laws on pastoral mobility and grazing has arguably worsened farmer-herder conflicts by giving each group a different legal basis for their grievances and actions.

Though some have hoped that tensions between competing legal systems could be resolved by devolving power from the center to the local level, various scholars have argued that decentralization can have secondary affects that contribute to conflict. In Sudan, Siddig et. al. makes the case that devolution of authority has contributed to resource conflicts by undermining customary land tenure institutions.[163] In Mali, Benjaminsen and Ba argue that democratic decentralization has created a power vacuum that worsened the problem of agricultural encroachment into areas historically used for pastoralism.[164] During the 1990s, traditional, unelected Fulani elites in central Mali co-opted the country's process of democratic decentralization to retain their positions of power, which contributed to the rise of the current militia-base rebellion as marginalized groups were shut out of a reform process that ostensibly should have included them.[165] Dowd and Tranchant similarly argue that political devolution increases the probability of militia-based violence in Mali and Nigeria.[166]

156 See the Niger's Rural Land Code (1993), Mali's Pastoral Charter (2001), and the South Sudan's Land Act (2009).
157 G Fokou and B Bonfoh, "Institutional development: from legal pluralism to institutional bricolage in West African pastoralism," *Rev. Sci. Tech. Off. Int. Epiz* 35, no. 2 (2016).
158 International Crisis Group, *Herders against Farmers: Nigeria's Expanding Deadly Conflict,* International Crisis Group (Brussels, 2017).
159 N. Pendle, "'The dead are just to drink from': recycling ideas of revenge among the western Dinka, South Sudan," *Africa* 88, 1 (2018): 99-121.
160 Ladiba Gondeu, *Valeurs républicaines et vivre-ensemble au Tchad: Appartenances religieuses* (L'Harmattan, 2020).
161 Albert K. Drent, "Forum Shopping as Retaliation in Disguise_How Nomadic Fulbe Condemn Retaliation and Forum Shopping, But Practise Them Anyway," in *On Retaliation: Towards an Interdisciplinary Understanding of a Basic Human Condition,* ed. Bertram Turner and Günther Schlee, (Berghahn Books, 2019).
162 Moritz, "Understanding Herder-Farmer Conflicts in West Africa: Outline of a Processual Approach."
163 El Fatih Ali Siddig, Khalid El-Harizi, and Bettina Prato, *Managing Conflict Over Natural Resources in Greater Kordofan, Sudan: Some Recurrent Patterns and Governance Implications,* (Washington, DC: International Food Research Institute, 2007).
164 Benjaminsen and Ba, "Farmer-Herder Conflicts, Pastoral Marginalisation and Corruption: A Case Study from the Inland Niger Delta of Mali."
165 Cédric Jourde, Marie Brossier, and Modibo Ghaly Cissé, "Prédation et violence au Mali: élites statutaires peules et logiques de domination dans la région de Mopti," *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, no. 3 (2019/09/02 2019).
166 Caitriona Dowd and Jean-Pierre Tranchant, *Decentralisation, Devolution, and Dynamics of Violence in Africa* (IDS, 2018).

PREDATORY PRACTICES AND MARGINALIZATION

Control over resources and resource access can also be manipulated by actors in positions of authority, fueling anti-state grievances and aggravating resource competition. There is an important distinction herein between institutions that seek to govern inclusively but lack the resources to do so and state actors that consistently target rural resource users to extract financial or political gain, the latter of which is the focus of this sub-section. This issue is significant beyond its impact on individual pastoralists, as the participation of pastoralists in insurgent groups may in some cases be a direct result of their experience of past marginalization and the everyday predatory behavior of state agents, as Benjaminsen and Ba argue in the case of Mali (see also Section III).[167] It is worth reiterating that pastoralists are not a homogenous population, and pastoralist elites – including those livestock owners who are sedentary and hire others to take their livestock on transhumance – may have a different experience of predation.

Examples of predatory practices that specifically target pastoralist communities or resource management abound across the region. These behaviors range from border posts where fees are collected to excessive fines or punishment to physical violence in response to real or fabricated acts of resource law violations, including illegal grazing and tree branch cutting.[168] Past studies on Mali[169] and Cameroon[170] even show that local and district authorities often profit financially from their role in conflict mediation (e.g., through bribery), which can transform everyday disputes into examples of state-sanctioned injustice. An act of crop damage can take on much greater significance in the way it is handled.

Failure to adequately and impartially administer justice can fuel cycles of violence. Between 2017 and 2018 in Nigeria, pastoralist associations claimed that officials failed to make arrests in response to the killings of 1,000 pastoralists and theft of 2 million cattle.[171] In one such case in Adamawa state, the failure of a state investigative panel to respond to an attack by local Bachama youth militias resulted in a series of reprisal attacks against Bachama villages.[172] The absence of accountability in cases of cattle theft in South Sudan has similarly been cited as a source of reprisal violence, as individuals take justice into their own hands.[173] Such injustice can become a recurrent, structural element of local politics with the potential to cause sudden outbreaks of violent conflict, as noted by some scholars in the case of Ghana.[174] Similarly, as the military and other security agencies have become more active in addressing conflicts involving pastoralists in Nigeria, human rights advocates have noted with concern the prevalent use of abusive tactics.[175] The heavily militarized response in some parts of Nigeria has been criticized for potentially undermining community trust in the state system, further increasing the risks that conflicts will escalate.[176]

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167 Tor A. Benjaminsen and Boubacar Ba, "Why do pastoralists in Mali join jihadist groups? A political ecological explanation," *The Journal of Peasant Studies* 46, no. 1 (2019).

168 Benjaminsen and Ba, "Why do pastoralists in Mali join jihadist groups? A political ecological explanation;" Denis Gautier, Amélie Bonnerat, and Aboubakar Njoya, "The Relationship between Herders and Trees in Space and Time in Northern Cameroon," *The Geographical Journal* 171, 4 (2005): 324-339; Leonhardt, *Regional Policies and Response to Manage Pastoral Movements within the ECOWAS Region;* Simon N Tomety, "Analyse de la dimension transfrontalière des conflits ruraux dans l'Est de la République Centrafricaine," (Bangui: *European Commission,* 2009); Quidelleur, *The Local Roots of Violence in Eastern Burkina Faso: competition over resources, weapons and the State.*

169 Benjaminsen and Ba, "Farmer-Herder Conflicts, Pastoral Marginalisation and Corruption: A Case Study from the Inland Niger Delta of Mali."

170 Moritz, "Changing Contexts and Dynamics of Farmer-Herder Conflicts across West Africa."

171 International Crisis Group, *Stopping Nigeria's Spiralling Farmer-Herder Violence.*

172 Ibid.

173 Ryle and Amoum, *Peace is the Name of Our Cattle-Camp Local responses to conflict in Eastern Lakes State, South Sudan.*

174 Tonah, "Fulani Pastoralists, Indigenous Farmers and the Contest for Land in Northern Ghana.". For an example from Ghana, see Azeez Olaniyan, Michael Francis, and Ufo Okeke-Uzodike, "The Cattle are "Ghanaians" but the Herders are Strangers: Farmer-Herder Conflicts, Expulsion Policy, and Pastoralist Question in Agogo, Ghana," *African Studies Quarterly* 15, no. 2 (2015).

175 *Leave Everything to God: Accountability for Intercommunal Violence in Plateau and Kaduna States, Nigeria,* (United States: Human Rights Watch, 2013), https://www.hrw.org/report/2013/12/12/leave-everything-god/accountability-inter-communal-violence-plateau-and-kaduna.

176 Chris Kwaja and Bukola Ademola-Adelehin, *Seeking Security and Stability: An Analysis of Security Responses to Farmer-Herder Conflict in the Middle Belt Region of Nigeria,* (Washington, DC: Search for Common Ground, 2018), https://www.sfcg.org/wp-content/uploads/2018/11/Seeking-Security-and-Stability_Nigeria_-Search-for-Common-Ground.pdf.

In addition to more direct forms of corruption, other governance practices may be perceived as exploitative and reinforce grievances against authorities. The legitimacy of local governments in the eyes of pastoralists can be undermined when officials are seen to capture rents from passing livestock through taxation – legal or otherwise – without necessarily investing in pastoral infrastructure or resource management.[177] Similarly, real or perceived complicity between political elites and the state agents who prey on pastoralists aggravates these tensions and the likelihood that young pastoralists will side with non-state armed groups that attempt to legitimize their actions through calls for justice and equality.[178] In the face of these trends, pastoralists have often lacked the political power needed to ensure the protection of pastoral resources through the enforcement of existing laws or other means.[179] While various civil society groups have emerged across the region to advocate for the collective interest of pastoralist communities, these groups do not always possess the necessary technical capacity or may have been co-opted by elites.[180]

SECTION III
"New Fringe Pastoralism"

The intersection between pastoralist populations and organized violence has been an essential source of debate within existing literature and policy discourse. As expressed by the UN Economic Commission for Africa, this debate generally centers around the "small number of pastoralists who have become increasingly involved in… illegal international migration, human trafficking and trading in arms, drugs and contraband… [and] insurgencies and transnational religious extremism or indirectly facilitate the activities of these groups."[181] The major point of contention is the extent to which this phenomenon – which UNECA labels "new fringe pastoralism"[182] – should inform policies toward pastoralism and pastoralist ethnic groups broadly.

The real or perceived involvement of pastoralists in illicit activity or insurgency has a critical impact on exclusionary identity politics. In the CAR and northern DRC, pastoralists' participation in or support for armed groups has been noted as source of tension between host communities and pastoralist ethnic groups, and serves as part of the justification for militia violence against the Mbororo.[183] In the Sahel, framing state responses to conflict in a counter-terrorism lens (which may be seen as a tactic to invalidate political grievances) has been argued to further deepen pastoralist distrust of the state.[184] Concerns that pastoralists will serve as vectors of violence or criminal activity have contributed to the hardening of borders and thus further marginalization of pastoralists.

One challenge in analyzing this phenomenon is that "new fringe pastoralism" encompasses both ideologically-motivated violence and criminal activity, as the lines between the two can often been obscured. Groups and individuals operate in both

177 Bonnet and Hérault, "Governance of pastoral tenure and climate change in the Sahel. Reinforce capacities of actors to secure mobility and fair access to pastoral resources."
178 Lorenzo Cotula and Salmana Cissé, "Changes in 'customary' resource tenure systems in the inner Niger delta, Mali," *The Journal of Legal Pluralism and Unofficial Law* 38, no. 52 (2006); De Haan et al., *Pastoralism Development in the Sahel: A Road to Stability?;* Rupesinghe and Bøås, *Local Drivers of Violent Extremism in Central Mali.*
179 Hesse and Thébaud, *Will pastoral legislation disempower pastoralists in the Sahel?,* Egemi, *Pastoralist Peoples, Their Institutions and Related Policies.*
180 Sara Pavanello, *Pastoralists' Vulnerability in the Horn of Africa: Exploring Political Marginalization, Donors' Policies, and Cross-Border Issues,* Overseas Development Institute (London, 2009)*; Pastoralism in Africa's drylands: Reducing risks, addressing vulnerability and enhancing resilience.*
181 *New Fringe Pastoralism: Conflict and Insecurity and Development in the Horn of Africa and the Sahel,* (Addis Ababa: UN Economic Commission for Africa (UNECA), 2017), https://www.uneca.org/publications/new-fringe-pastoralism-confict-and-insecurity-and-development-horn-africa-and-sahel.
182 This term is intended to distinguish this small number of "fringe" actors from the majority of pastoralists and situate their practices as a "new" way of practicing pastoralism that diverges from tradition.
183 *The Security Challenges of Pastoralism in Central Africa.*
184 Benjaminsen and Ba, "Why do pastoralists in Mali join jihadist groups? A political ecological explanation;» Bruno Charbonneau, «Faire la paix au Mali: les limites de l'acharnement contre-terroriste,» *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, 3 (2019): 447-462; Adam Sandor and Aurélie Campana, «Les groupes djihadistes au Mali, entre violence, recherche de légitimité et politiques locales,» *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, no. 3 (2019).

spheres, either simultaneously or concurrently, as exemplified in Nigeria,[185] the CAR,[186] and Mali.[187] The reasons for participation in "new fringe pastoralism" are often equally blurred between political grievances, criminal opportunism, and self-protection, as will be explored in this Section.

This Section focuses on three key points:

- What is the link between pastoralism and ideologically-motivated insurgent movements?
- How have insurgent groups and organized criminal networks affected the behavior of pastoralists writ large, and their relationship with host communities?

GENDER-BASED VIOLENCE

Across the region, there have been some reports that pastoralism-related conflicts are intimately linked to gender-based violence (GBV).[188] In South Sudan, for example, Kircher argues that GBV is inherently linked to systems of polygamous marriage and bridewealth that is paid in livestock and which has been an incentivizing factor in cattle raiding, though she notes the dearth of research on the subject.[189] Similarly, a 2018 study from Search in Adamawa, Gombe, and Plateau states in Nigeria identified reported cases in which women were victims of GBV specifically in the context of cycles of retaliatory violence between pastoralist and farming communities.[190] A separate study by Search in northern CAR also found local reports of sexual assault committed by pastoralists.[191] These studies, however, rely on anecdotal evidence, and further research is needed to verify and understand the possible links between GBV and pastoralism-related conflicts.

EXTREMISM AND INSURGENCY

Scholarly and policy narratives on the role of pastoralists in insurgencies are often split between one narrative that represents pastoralists, especially ethnic Fulani, as religiously-motivated terrorists and another that portrays these insurgencies as an outcome of pastoralist marginalization from mainstream politics.[192] Section II of this review outlines some of the reasons that are often cited for why pastoralist populations may maintain political grievances, but to what extent have pastoralists become involved in extremism or insurgent activity? While individual pastoralists may join one or another insurgent group for a variety of personal motivations, this sub-section focuses on the perceived systemic link between the ethno-religious identity of some pastoralist groups and insurgent violence.

185 Olivier J Walther and William F. S. Miles, *African Border Disorders: Addressing Transnational Extremist Organizations,* (New York: Routledge, 2017).
186 Kasper Agger, *Warlord Business: CAR's Violent Armed Groups and their Criminal Operations for Profit and Power,* (Washington, DC: The Enough Project, 2015); Amadou, "Bonee and Fitina: Mbororo Nomads Facing and Adapting to Conflict in Central Africa."
187 Stephen A Harmon, *Terror and insurgency in the Sahara-Sahel region: corruption, contraband, jihad and the Mali war of 2012-2013* (New York: Routledge, 2016); Wolfram Lacher, *Organized crime and conflict in the Sahel-Sahara region,* vol. 1 (Washington, D.C.: Carnegie Endowment for International Peace, 2012).
188 Virginie Le Masson et al., "How violence against women and girls undermines resilience to climate risks in Chad," *Disasters* 43 (2019).
189 Kircher, *Challenges to security, livelihoods, and gender justice in South Sudan: The situation of Dinka agro-pastoralist communities in Lakes and Warrap States.*
190 Ademola-Adelehin et al., *The Impact of Farmer-Herder Conflict on Women in Adamawa, Gombe, and Plateau States of Nigeria.*
191 *A Conflict Assessment in Bamingui-Bangoran Region: Rapid Response Project in CAR - Final Report,* (Search for Common Ground, 2019).
192 Dougoukolo Alpha Oumar Ba-Konaré, *En Afrique, le fantasme d'une "communauté peule" radicalisée,* (The Conversation, 2018/09/04), https://theconversation.com/en-afrique-le-fantasme-dune-communaute-peule-radicalisee-102276

Various insurgent movements have built support by appealing to pastoralist grievances or ethno-religious identity, from the Katiba Maacina in central Mali to the Islamic State in the Greater Sahara in the Liptako Gourma region[193] to the Unité pour la paix en Centrafrique (UPC) in the CAR.[194] The ideology of the Katiba Maacina, for example, is deeply rooted in Fulani grievances concerning the erosion of pastoral resource access in the inland delta region and the marginalization of pastoral communities from national political power and administration.[195] A principal part of the group's platform is free access to the rich grazing resources of the inland Niger Delta, which had become subject to extortionary fees in recent years.[196] These appeals have resonated among Fulani pastoralists, who make up a significant portion of the group's membership.

Despite the importance of ethnic identity or specific livelihood grievances among certain insurgent movements, some sources have raised concerns that this link has been overinflated or misconstrued. One prominent example is the oft-cited statistic that "Fulani militants" were the fourth deadliest terrorist organization in the world in 2014, according to the Global Terrorism Index.[197] Though widely cited in media,[198] this claim has been criticized for lumping together data from attacks that were not verifiably connected to a unified group or agenda.[199] This is one piece of a broader trend in framing a range of violence involving Fulani communities as part of an organized movement, even where that may not be the case.

The participation of Fulani communities in both organized insurgencies and intercommunal violence in West Africa is portrayed in some public and policy discourse as a step toward "Fulanization" or "Islamicization," rather than a function of resource competition or socio-political grievances.[200] While pastoralist ethnic groups are generally a demographic minority on a national scale, some populations – notably the Fulani – constitute an influential demographic power in certain regions. In northern Nigeria, Hausa-Fulani elites associated with pastoralism have historically held dominant socio-political positions over sedentary farming groups.[201] These power dynamics have historic roots in the political legacy of Islamic conquests of the Sahel and northern Nigeria in the 19th century that inform current conflict dynamics.[202] In Mali, for example, the tensions between traditional Fulani ruling elites and subordinate groups have been identified by various scholars as an important root cause of the insurgency in the central part of the country.[203]

193 Pauline le Roux, *Exploiting Borders in the Sahel: The Islamic State in the Greater Sahara,* (Africa Center for Strategic Studies, 2019/076/10), https://africacenter.org/spotlight/exploiting-borders-sahel-islamic-state-in-the-greater-sahara-isgs/

194 *Central African Republic: A Conflict Mapping.*

195 Bronwen Manby, "Nationality, migration and statelessness in West Africa: a study for UNHCR and IOM," (The UN Refugee Agency and International Organization for Migration, 2015); C. Raleigh, "Political Marginalization, Climate Change, and Conflict in African Sahel States," *International Studies Review* 12 (2010); Sara Randall, "Where have all the nomads gone? Fifty years of statistical and demographic invisibilities of African mobile pastoralists," *Pastoralism* 5, no. 1 (2015); *Speaking with the bad guys: toward dialogue with Central Mali's jihadists,* (Brussels: International Crisis Group, 2019).

196 Cotula and Cissé, "Changes in 'customary'resource tenure systems in the inner Niger delta, Mali."

197 *Global Terrorism Index 2015_Measuring And Understanding The Impact Of Terrorism,* (Institute for Economics & Peace, 2015), http://economicsandpeace.org/wp-content/uploads/2015/11/Global-Terrorism-Index-2015.pdf

198 Rose Troup Buchanan, "Global Terrorism Index: Nigerian Fulani militants named as fourth deadliest terror group in world," *Independent,* (2015/11/18), https://www.independent.co.uk/news/world/africa/global-terrorism-index-nigerian-fulani-militants-named-as-fourth-deadliest-terror-group-in-world-a6739851.html. Adam Taylor, "It's not just the Islamic State. Other terror groups surge in West Africa.," Washington Post, (2015/11/20), https://www.washingtonpost.com/news/worldviews/wp/2015/11/19/the-danger-in-overlooking-boko-harams-nigerian-terror/

199 Lauren Ploch Blanchard and Tomas F. Husted, *Nigeria: Current Issues and U.S. Policy,* (Washington, DC: Congressional Research Service, 2019/02/01), https://fas.org/sgp/crs/row/RL33964.pdf.

200 Kodili Henry Chukwuma, "Constructing the Herder–Farmer Conflict as (in)Security in Nigeria," *African Security* 13, no. 1 (2020); McGregor, "The Fulani Crisis: Communal Violence and Radicalization in the Sahel."

201 Ducrotoy et al., "Patterns of passage into protected areas: Drivers and outcomes of Fulani immigration, settlement and integration into the Kachia Grazing Reserve, northwest Nigeria.".

202 Catheirne Coquery-Vidrovitch, *L'Afrique et les Africains au XIXe siècle: mutations, révolutions, crises* (Paris: Armand Colin, 1999); J. Gallais, *Hommes du Sahel: Espaces-Temps et Pouvoirs: Le Delta intérieur du Niger 1960-1980, Collection Géographes* (Paris: Flammarion, 1984); D. Robinson, *The Holy War of Umar Tal: the Western Sudan in the mid-nineteenth century* (Gloucestershire: Clarendon, 1985); Yalla Sangaré and Jason J McSparren, "Acknowledging Conflict across Mali's Centre: Drivers and History," *African Solutions Journal* 3 (2018).

203 Benjaminsen and Ba, "Farmer-Herder Conflicts, Pastoral Marginalisation and Corruption: A Case Study from the Inland Niger Delta of Mali;" Mirjam de Bruijn and Lotte Pelckmans, "Facing Dilemmas: Former Fulbe Slaves in Modern Mali," *Canadian Journal of African Studies / Revue canadienne des études africaines* 39, no. 1 (2005). (see also Alex Thurston, *Mali's tragic but persistent status quo,* (Luxemburg: Rose Luxemburg Foundation, 2018); Bakary Sangaré, *Le Centre du Mali: épicentre du djihadisme ?*, (Brussels: Groupe de Recherche et d'Information sur la Paix et la Securite, 2016).

As argued by Chukwuma, the narrative of "Fulanization" de-links pastoralism-related conflicts from other causal factors (such as those outlined in Sections I and II), and creates a public perception of Fulani pastoralists as an objective security threat.[204] This perception has led to an increase in anti-Fulani sentiment in some corners, and may, in turn, bolster Fulani ethnic solidarity, which can be instrumentalized in discourses on conflict.[205] In the CAR, de Vries highlights how self-defense militias that were originally organized to protect against bandit groups (who included Chadian and Central African Mbororo members), began more widely targeting Muslim and Mbororo populations who were seen to be guilty by association.[206] As a result, a greater number of pastoralists may be drawn into militia-based violence out of the need for self-protection or intercommunal retribution.[207]

RELIGIOUS MOTIVATIONS IN NIGERIA?

In Nigeria, conflicts between pastoralists and farmers frequently manifest across religious lines (between Muslim pastoralists and Christian farmers) leading some to identify religious motivations as a causal factor. Among policymakers and public observers, there has been some debate as to whether violence between pastoralists and farmers is one part of a persecution of Christians or "Islamization," particularly in the Middle Belt.[208] Across the sources in this review, there is broad consensus that while religious divisions are a contributing source of conflict between pastoralist and non-pastoralist ethnic groups, they are not the sole or primary cause.[209] Research conducted by Mercy Corps in Plateau state from 2014-2016, for example, found that most religion was not identified by respondents to be a primary cause of conflict, but that ethnic and religious divisions were seen to contribute to a general environment of conflict.[210] Similarly, an evaluation of Search for Common Ground programming in the Middle Belt rated the relationship between Muslims and Christians more positively than the relationship between farmers and pastoralists, suggesting that conflict between these groups was not necessarily synonymous with interreligious conflict.[211]

SELF-PROTECTION

While some "new fringe pastoralist" activity is a response to ideological motivations, some sources highlight that the participation of pastoralists in illicit and insurgent activity is also driven by the need for protection and security. This may include protection from intercommunal violence but also from theft or exploitation of pastoralist livelihoods. **As livestock are a major source**

204 Chukwuma, "Constructing the Herder–Farmer Conflict as (in)Security in Nigeria."
205 *The Security Challenges of Pastoralism in Central Africa;* Biereenu-Nnabugwu, "Leadership Influence on Ethno-Religious Conflicts in the Middle belt Region of Nigeria;" *Stopping Nigeria's Spiralling Farmer-Herder Violence.*
206 de Vries, "Navigating violence and exclusion: The Mbororo's claim to the Central African Republic's margins."
207 Wale Adebanwi, "Terror, territoriality and the struggle for indigeneity and citizenship in northern Nigeria," *Citizenship Studies* 13, no. 4 (2009); Adam Higazi, "Social Mobilization and Collective Violence: Vigilantes and Militias in the Lowlands of Plateau State, Central Nigeria," *Africa: Journal of the International African Institute* 78, no. 1 (2008); Adam Higazi and Jimam Lar, "Articulations of belonging: The Politics of ethnic and religious pluralism in Bauchi and Gombe states, north-east Nigeria," *Africa* 85, no. 1 (2015); Aaron Sayne, *Rethinking Nigeria's indigene-settler conflicts* (2012).
208 Chukwuma, "Constructing the Herder–Farmer Conflict as (in)Security in Nigeria;" *Nigeria: Unfolding Genocide? An Inquiry by the UK All-Party Parliamentary Group for International Freedom of Religion or Belief,* (All-Party Parliamentary Group for International Freedom of Religion or Belief, 2020), https://appg freedom of religion or belief.org/media/200615-Nigeria-Unfolding-Genocide-Report-of-the-APPG-for-FoRB.pdf
209 Chukwuma, "Constructing the Herder–Farmer Conflict as (in)Security in Nigeria;" *Stopping Nigeria's Spiralling Farmer-Herder Violence;* Adam Higazi, "Farmer-pastoralist conflicts on the Jos Plateau, central Nigeria: security responses of local vigilantes and the Nigerian state," *Conflict, Security & Development* 16, no. 4 (2016).
210 *Role of Religion and Religious Leaders in Farmer-Pastoralist Conflict in Plateau State,* (Mercy Corps, 2016), https://www.mercycorps.org/research-resources/role-religion-and-religious-leaders-farmer-pastoralist-conflict-plateau-state.
211 Ernest Ogbozor, Don John Omale, and Mallam Mairiga, *Building Bridges between Herders and Farmers in Plateau, Nasarawa, and Kaduna States* (Search for Common Ground, 2018), https://www.sfcg.org/wp-content/uploads/2019/02/Final-Evaluation-Building-Bridges-Between-Herders-and-Farmers-in-Plateau-Nasarawa-and-Kaduna-States-August-2018.pdf

of wealth in rural areas,[212] cattle theft is an ever-present risk and is perpetuated by actors ranging from young pastoralists looking for quick cash to highly-organized criminal operations and armed groups.[213] While cattle theft is not an inherently new phenomenon, cattle raiding practices in some regions have increased in frequency or intensity as it is a lucrative source of income for non-state armed groups:

- In the CAR, livestock markets have been a prime target for armed groups, particularly in the border regions near Chad and Sudan that have suffered from endemic violence.[214] The International Peace Information Service (IPIS) estimated that ex-Seleka rebel groups earn 3.6 million euros per year through extra-legal and extortionary taxation on flows of livestock.[215]
- In Mali, fighting has been reported between the Katiba Maacina and members of the Islamic State of Greater Sahara (ISGS) over control of resources and the right to impose the traditional Islamic tax, the *zakat,* on livestock herds in the area.[216] Pastoralists in certain regions have historically paid tribute to local traditional authorities via the zakat in exchange for protection, resource access, and conflict mediation. It has been reported that armed groups have also tried to co-opt zakat payments in the CAR (where it was replaced by a payment called the *sofal*).[217]
- In northern Nigeria, the massive growth of cattle rustling within the last decade has become a major threat to pastoralist livelihoods and has been reported as a lucrative source of funding for Boko Haram and criminal groups.[218]

Pastoralists can be particularly vulnerable to exploitation as transhumance routes frequently cross dryland borders where state presence has diminished with the rise of various insurgent groups.[219] Insecurity along the Chad-CAR border, for example, has impacted pastoral mobility by making long-distance transhumance dangerous and expensive.[220] Due to the need to move safely through these spaces, pastoralists sometimes **avoid the legally-recognized migration corridors that are surveilled by armed groups and adopt other routes, which has reportedly led to an increased frequency of crop damage**.[221]

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212 Catley, *Livestock and livelihoods in South Sudan;* Guillaume Duteurtre and Bernard Faye, *L'élevage, richesse des pauvres (Versailles (France): Quæ,* 2009); The Economic Costs of Conflict and the Benefits of Peace: Effects of Farmer-Pastoralist Conflict in Nigeria's Middle Belt on Households, (Portland: Mercy Corps, 2015).

213 Saifullahi Sani Ibrahim et al., "Building of a community cattle ranch and radio frequency identification (RFID) technology as alternative methods of curtailing cattle rustling in Katsina State," *Pastoralism* 6, no. 1 (2016); Saleh B Momale, "Changing methods of animal husbandry, cattle rustling and rural banditry in Nigeria," in *Rural banditry and conflicts in Northern Nigeria.,* ed. Mohammed Kuna and Jibrin Ibrahima, (Abuja: Centre for Democracy and Development, 2015); Azeez Olaniyan, "Foliage and violence: Interrogating forests as a security threat in Nigeria," *African Security Review* 27, no. 1 (2018).

214 Jennifer Giroux, David Lanz, and Damiano Sguaitamatti, *The tormented triangle: The regionalisation of conflict in Sudan, Chad, and the Central African Republic,* (London: Crisis States Research Centre at the London School of Economics and Political Science, 2009).

215 Peer Schouten and Soleil-Perfect Kalessopo, *Politics of Pillage: the political economy of roadblocks in the Central African Republic,* (International Peace Information Service (IPIS), 2019).

216 International Crisis Group, *Speaking with the bad guys: toward dialogue with Central Mali's jihadists.* Rupesinghe and Bøås, *Local Drivers of Violent Extremism in Central Mali;* Thiam, "Centre du Mali: enjeux et dangers d'une crise négligée."

217 *Letter dated 14 December 2018 from the Panel of Experts on the Central African Republic established pursuant to resolution 2399 (2018) addressed to the President of the Security Council,* United Nations Security Council, United Nations (New York, 2018)..

218 Al Chukwuma Okoli, "Cows, Cash and Terror: How Cattle Rustling Proceeds Fuel Boko Haram Insurgency in Nigeria," *Africa Development / Afrique et Développement* 44, no. 2 (2019); Azeez Olaniyan and Aliyu Yahaya, "Cows, Bandits, and Violent Conflicts: Understanding Cattle Rustling in Northern Nigeria," Africa Spectrum 51, 3 (2016): 93-105.

219 Charline Rangé, *Boko Haram, révélateur des insécurités foncières au lac Tchad (Cameroun)?,* (Paris: Institut de Recherche pour le Développement, 2018); Walther and Miles, *African Border Disorders: Addressing Transnational Extremist Organizations.*

220 Tomety, "Analyse de la dimension transfrontalière des conflits ruraux dans l'Est de la République Centrafricaine."

221 Catley, *Livestock and livelihoods in South Sudan;* Iffat Idris, *Livestock and Conflict in South Sudan* (Brighton, UK: Institute of Development Studies, 2018), https://assets.publishing.service.gov.uk/media/5c6abdec40f0b61a22792fd5/484__Livestock_and_Conflict_in_South_Sudan.pdf.; Ibrahim Tidjani, *Impacte de la Crise Politico-Mlitaire de 2013-14 sur le Pastoralisme et la Transhumence en Republique Centrafricaine,* (Bangui: Catholic Relief Services, 2015).

MOVEMENT THROUGH PROTECTED LAND

The Chad-Central African border also implicates land designated for conservation in pastoral conflict as both sites of contested resource access and as "ungoverned spaces" where state authority is weak or non-existent.[222] In the border regions connecting the CAR, DRC, and South Sudan, resource pressure and security threats increasingly force herders to rely on resources found within protected areas.[223] Whether or not a herder camping inside a protected forest is engaged in a crime or not, he is assumed by many to be doing so simply based on where he resides. The movement of pastoralists into protected land is often seen in a particularly negative light by conservation actors because the influx of livestock herds has been cited as a cause of ecological degradation and adverse impacts on endangered wildlife populations.[224] The movement of pastoralists in protected land has been cited as a source of conflict in studies on Nigeria,[225] Cameroon,[226] and Central Africa.[227]

Additionally, the need for protection informs pastoralists' relationships with insurgent and criminal groups. In the CAR, groups like the Unité pour la paix en Centrafrique (UPC) and Retour, Reclamation et Réhabilitation (3R) have sought to build support from Mbororo pastoralists by promising to protect their cattle from theft.[228] And even if these offers of help are unsolicited, they can reinforce perceived ties between pastoralists and armed groups. There have been limited reports of pastoralist collaboration with Boko Haram in exchange for protection or access to pasture in parts of the Western Sahel, though pastoralists' interactions with the group are often hostile.[229]

In Sudan and South Sudan, cattle raiding and defensive militias have been key drivers of intercommunal conflict amidst the broader context of civil war. Over time, cattle raiding practices have become more professionalized,[230] and various militia forces backed by political elites have exacerbated cyclical intercommunal conflicts among pastoralist populations and between pastoralists and farmers.[231] Jok et. al. describes the process by which militia groups of 'cattle guards' in South Sudan gained prominence since the 1980s to protect the livelihoods of herding communities against theft and destruction, sometimes with devastating secondary impacts on the communities in which they operated.[232]

The threat from non-state armed groups has also radically transformed long-distance herding practices in ways that contribute to the perception of pastoralists as a security threat. Even pastoralists who are not affiliated with armed groups may carry

222 John Sunday Ojo, "Governing "Ungoverned Spaces" in the Foliage of Conspiracy: Toward (Re)ordering Terrorism, from Boko Haram Insurgency, Fulani Militancy to Banditry in Northern Nigeria," *African Security* (2020); B. Toutain, Marie-Noel De Visscher, and D. Dulieu, "Pastoralism and Protected Areas: Lessons Learned from Western Africa," *Human Dimensions of Wildlife* 9 (2004): 287-298.

223 Matthew Luizza, *Transhumant Pastoralism in Central Africa: Emerging Impacts on Conservation and Security,* (Washington, DC: United States Fish and Wildlife Service Division of International Conservation, Africa Branch, 2017).

224 Thierry Aebischer et al., "Apex predators decline after an influx of pastoralists in former Central African Republic hunting zones," *Biological Conservation* (2019).

225 Ducrotoy et al., "Patterns of passage into protected areas: Drivers and outcomes of Fulani immigration, settlement and integration into the Kachia Grazing Reserve, northwest Nigeria." Olaniyan, "Foliage and violence: Interrogating forests as a security threat in Nigeria."

226 Fabian C Ntangti et al., "Land Cover Changes, Protected Areas And Agro-Pastoral Conflicts In Menchum, North West Cameroon," *American Journal of Humanities and Social Sciences Research* 3, no. 9 (2019).

227 Luizza, *Transhumant Pastoralism in Central Africa: Emerging Impacts on Conservation and Security.*

228 de Vries, "Navigating violence and exclusion: The Mbororo's claim to the Central African Republic's margins."

229 *Pastoralism and Security in West Africa and the Sahel: Towards Peaceful Coexistence.*

230 Yacob Aklilu Gebreyes et al., *The Impact of Conflict on the Livestock Sector in South Sudan* (Food and Agriculture Organization of the United Nations, 2016), https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/assessments/the_impact_of_conflict_on_the_livestock_sector_in_south_sudan.pdf: Idris, *Livestock and Conflict in South Sudan.* Craze, *Dividing Lines: Grazing and Conflict along the Sudan-South Sudan Border;* Hannah Wild, Jok Madut Jok, and Ronak Patel, "The Militarization of Cattle Raiding in South Sudan: How a Traditional Practice Became a Tool for Political Violence," *Journal of International Humanitarian Action* 3, no. 2 (2018).

231 Catley, *Livestock and livelihoods in South Sudan.* Idris, *Livestock and Conflict in South Sudan.*

232 Madut Jok Jok et al., *Informal armies: Community defence groups in South Sudan's civil war,* Saferworld (2017).

weapons for protection, which can blur the perceived distinction between legitimate herders and armed assailants.[233] The risk has also led to a greater reliance on armed escorts, a costly need that may only be feasible for elites who own large herds and can afford to contract herders to take their cattle on transhumance.[234] Although elite investment in livestock and absentee ownership are not new phenomena, certain cattle drivers and security personnel have been especially brazen in their use of force and impunity as they move through landscapes in search of resources.[235] This trend has been highlighted in Nigeria, South Sudan,[236] and the Central African Republic,[237] but also linked to changing mobility patterns in sub-humid areas.[238]

GENDER NORMS IN CATTLE RAIDING AND PASTORALISM-RELATED CONFLICT

Gender norms may also play a contributing role in motivating participation in cattle raiding or other forms of armed militia violence. According to a joint analysis conducted by UN FAO, UNDP, and UNMISS in South Sudan, owning a gun and participating in cattle raids is seen as a rite of passage for adolescent boys in many communities and for men these are symbols of manhood and virility, which confer social status.[239] Communities and families celebrate young men for their participation in raids and shame those who cannot get married (e.g., if they cannot pay the brideprice in livestock due to theft).[240] In one study of inter-communal conflict in Jos [Nigeria], Krause similarly argues that notions of masculinity affect whether people are mobilized or constrained from participating in violent conflict.[241]

The significance of gender norms is also echoed in the findings of a Search study on the impact of farmer-herder conflict on women in Nigeria's Adamawa, Gombe, and Plateau States, where it was found that women are parties to conflict on multiple levels: they might directly take part or they may work behind the scenes to influence the conflict's outcome.[242] Similarly, while the Katiba Macina organization in Mali uses gender relations as an instrument of authority, women also actively participate through the same sorts of supportive roles noted in Search's study on Nigeria.[243] **There is scarce research to support wider claims about the intersection between gender norms and pastoralism-related conflicts, though these studies suggest that this may be a fruitful area for further analysis.**

233 Thierry Vircoulon, *Analysis of conflict and peacebuilding in the Central African Republic,* Conciliation Resources (London, 2015).
234 Luizza, *Transhumant Pastoralism in Central Africa: Emerging Impacts on Conservation and Security.*
235 Turner, "Capital on the move: The changing relation between livestock and labor in Mali, West Africa." Luizza, *Transhumant Pastoralism in Central Africa: Emerging Impacts on Conservation and Security.*
236 Idris, *Livestock and Conflict in South Sudan.*
237 International Crisis Group, *The Security Challenges of Pastoralism in Central Africa,* International Crisis Group (Brussels, 2014); Tomety, "Analyse de la dimension transfrontalière des conflits ruraux dans l'Est de la République Centrafricaine."
238 Ange, Kinhou, and Brice, "Transhumance and conflicts management on Agonlin plateau in Zou department (Benin)."
239 Joint Analysis on Cattle- and Migration-Related Conflict in the Tri-State Border Areas of Wau, Tonj, and Gogrial, (unpublished manuscript, Food and Agriculture Organization of the United Nations, United Nations Development Programme, UNMISS Rule of Law Advisory Section).
240 David Deng, *Challenges of Accountability: An Assessment of Dispute Resolution Processes in Rural South Sudan,* South Sudan Law Society (Juba, South Sudan, 2013).
241 Jana Krause, "Gender Dimensions of (Non) Violence in Communal Conflict: The Case of Jos, Nigeria," *Comparative Political Studies* 52, no. 10 (2019).
242 Ademola-Adelehin et al., *The Impact of Farmer-Herder Conflict on Women in Adamawa, Gombe, and Plateau States of Nigeria.*
243 Natasja Rupesinghe, *Women and the Katiba Macina in Central Mali,* Norwegian Institute for International Affairs (Oslo, 2019).

SECTION IV

Areas for Further Research

This review aims to broadly capture the current state of knowledge on pastoralism and conflict in the Sudano-Sahel. However, there remain gaps in existing research and analysis that are critical in assessing the needs and opportunities for conflict transformation, which should be the subject of additional work:

- **Tracking the evolution and adaptation of pastoralism** – As pastoral and agricultural livelihoods across the region continue to shift and adapt, the economic and social interplay between sedentary farming communities and mobile herders will continue to evolve. Restoring or establishing symbiosis between communities will require reimagining what interconnected markets and value chains can look like, as well as addressing the new challenges that are straining social relationships. More research is needed to identify these opportunities for interconnection and how we can establish a modern social contract between mobile and sedentary communities.

- **Community buy-in for rural development** – As noted in this review, rather than "competition," it may be a fear of loss of control (i.e. *dispossession*) that drives tenure-holding groups to oppose what are otherwise urgently needed measures, such as pastoral grazing reserves. Policies governing rural development and land tenure can be significant factors in conflict, but more research is needed to systematically understand how communities across the Sudano-Sahel perceive land reforms and what measures could be established to ensure that reforms are not a source of conflict.

- **The intersection of customary and statutory law at the local level** – The role of local government institutions is under-represented in the scholarly literature on the issues covered in this report. Although local capacity to administer justice and manage tensions over land use is often inadequate, it is difficult to imagine progress towards durable peace and reconciliation without local leaders to act as bridges between national governments and local populations. As decentralization measures and development programs continue to reshape the relationship between customary and statutory authorities, additional research is needed to identify the appropriate model to meet the adaptive needs of pastoral and farming communities.

- **Improving access to justice** – When aggrieved groups do not have access to viable, peaceful alternatives for expressing grievances, they may use violence to do so if the opportunity presents itself. Meaningful justice is a fragile and elusive social good that is unfortunately overlooked or taken for granted by interventions to address pastoralism-related conflict. If the actors and institutions tasked with providing justice are avoided by ordinary people, then there can be little chance of durable stability in the Sudano-Sahel. Further study is needed on how to strengthen justice systems and cultivate trust in justice institutions and actors.

- **Role of gender norms and women** – Despite the significant impact that pastoralism-related conflicts can have on women's security or economic livelihoods, very little research exists on the roles that women can play in either fueling or transforming these conflicts. Women have a dynamic political and social influence in pastoral and farming communities, even where they do not have opportunities for full and equal participation, but more research is needed to determine how to best catalyze this potential. Similarly, more analysis is needed on the intersection between notions of masculinity (or femininity) and participation in violence to preserve livelihoods.

- **Intersection between pastoralists and illicit or insurgent activity** – As noted in this report, the relationship between pastoralists and insurgent groups or other forms of criminality has become a key point of tension that shapes policy responses, often in ways that reinforce conflict dynamics. While UNECA and others have noted that this phenomenon appears to be increasing, there

is still a lack of systematic analysis on the scope of the problem: how often are pastoralists involved in fringe activities, and is that involvement increasing over time? While there exists a growing body of analysis on this subject, there is a need for a data-driven approach to study so that policymakers can avoid responses that reinforce harmful identity politics.

- **Regional and cross-border dynamics** – One of the fundamental challenges in addressing pastoralism-related conflicts is that these conflicts cut across borders and across regions, necessitating a response that is simultaneously localized and transnational. There will continue to be a pressing need for state actors and multilateral organizations to think in transnational terms if they are to address the systemic challenges that are fueling conflict. Future research should continue to adopt a cross-border or transnational lens, where appropriate, to help in setting a shared regional agenda.

References

Abbass, Isah Mohammed. "No Retreat No Surrender: Conflict for Survival between Fulani Pastoralists and Farmers in Northern Nigeria." *European Scientific Journal* 8, no. 1 (2012): 331-46.

Abdalla, Ali Jammaa. "People to People Diplomacy in a Pastoral System: A Case from Sudan and South Sudan." *Pastoralism: Research, Policy and Practice* 3, no. 1 (2013/04/29 2013): 12.

Abdul-Jalil, Musa Adam. "Nomad-Sedentary Relations in the Context of Dynamic Land Rights in Darfur: From Complementarity to Conflict." In *Disrupting Territories*, edited by Jorg Gertel, Richard Rottenburg and Sandra Calkins. Land, Commodification and Conflict in Sudan, 102-20: Boydell and Brewer, 2014.

Abdul-Jalil, Musa, and Jon D. Unruh. "Land Rights under Stress in Darfur: A Volatile Dynamic of the Conflict." *War & Society* 32, no. 2 (2013/08/01 2013): 156-81.

Abroulaye, Sanfo, Savadogo Issa, Kulo E Abalo, and Zampaligre Nouhoun. "Climate Change: A Driver of Crop Farmers-Agro Pastoralists Conflicts in Burkina Faso." *International Journal of Applied Science and Technology* 5, no. 3 (2015).

Ademola-Adelehin, Bukola, Donli Patricia, Achakpa Priscilla, Osakwe Bridget, and Jamila Suleiman. *The Impact of Farmer-Herder Conflict on Women in Adamawa, Gombe, and Plateau States of Nigeria.* Search for Common Ground (Washington: 2018). https://www.sfcg.org/wp-content/uploads/2018/07/Policy_Brief_on_the_Impact_of_Farmer_Herder_Conflict_on_Women_in_Adamawa_Gombe_and_Plateau_States_of_Nigeria.pdf.

Adzande, Patience. "Migration of Pastoralists in Africa: Reflections on Practical and Policy Implications." *AFRICAN HUMAN MOBILITY REVIEW* (2019): 1650.

Aebischer, Thierry, Tidjani Ibrahim, Raffael Hickisch, Roman D Furrer, Christoph Leuenberger, and Daniel Wegmann. "Apex Predators Decline after an Influx of Pastoralists in Former Central African Republic Hunting Zones." *Biological Conservation* (2019): 108326.

African Union. *Policy Framework for Pastoralism in Africa Securing, Protecting and Improving the Lives, Livelihoods and Rights of Pastoralist Communities.* African Union Department of Rural Economy and Agriculture (Addis Ababa: 2013).

Agger, Kasper. *Warlord Business: Car's Violent Armed Groups and Their Criminal Operations for Profit and Power.* The Enough Project (Washington DC: 2015).

Aklilu Gebreyes, Yacob, Gezu Bekele Lemma, Luka Biong Deng, and Shaif Abdullahi. *The Impact of Conflict on the Livestock Sector in South Sudan.* (Food and Agriculture Organization of the United Nations, 2016). https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/assessments/the_impact_of_conflict_on_the_livestock_sector_in_south_sudan.pdf.

Akov, Emmanuel Terkimbi. "The Resource-Conflict Debate Revisited: Untangling the Case of Farmer–Herdsman Clashes in the North Central Region of Nigeria." *African Security Review* 26, no. 3 (2017): 288-307.

Akujobi, CT, Stanley Ebitari, and HO Amuzie. "Arable Land Resource Conflict in Nigeria." *Journal of Applied Science and Development* 72, no. 1 (2016): 39-65.

Alidou, Salihou Mamadou. "Couloirs De Transhumance Transfrontalière En L'afrique De L'ouest." Swiss Agency for Development Cooperation, 2016.

Amadou, Adamou. "Bonee and Fitina: Mbororo Nomads Facing and Adapting to Conflict in Central Africa." *Conflict and Society* 4 (2018): 245-59.

Amungwa, Fonteh Athanasius. "The Evolution of Conflicts Related to Natural Resource Management in Cameroon." *Journal of Human Ecology* 35, no. 1 (2011): 53-60.

Ange, Michel, Bekpa Kinhou, and Sinsin Brice. "Transhumance and Conflicts Management on Agonlin Plateau in Zou Department (Benin)." *Journal of Biodiversity and Environmental Sciences (JBES)* 4, no. 5 (2014): 132-45.

Ankogui-Mpoko, Guy-Florent, Kedeu Passingring, Boniface Ganota, and David Kadekoy-Tigague. "Insécurité, Mobilité Et Migration Des Éleveurs Dans Les Savanes D'afrique Centrale." Paper presented at the Savanes africaines en développement: innover pour durer, Garoua, Cameroon, 2009.

Arowosegbe, Jeremiah O. "Citizenship and Resource Competition in Nigeria." *Anthropological Forum* 26, no. 1 (2016): 54-73.

Aubague, Serge, and Patrice Grimaud. "Réflexion Sur L'évolution De La Mobilité Des Pasteurs Nomades Au Tchad: Sédentarisation Ou Transhumance?". *Nomadic Peoples* 17, no. 1 (2013): 126-36.

Ayantunde, Augustine A., Rainer Asse, Mohammed Y. Said, and Abdou Fall. "Transhumant Pastoralism, Sustainable Management of Natural Resources and Endemic Ruminant Livestock in the Sub-Humid Zone of West Africa." journal article. *Environment, Development and Sustainability* 16, no. 5 (October 01 2014): 1097-117.

Azarya, V., M. Breedveld, M. de Bruijn, and H. van Djik. *Pastoralists under Pressure?: Fulbe Societies Confronting Change in West Africa.* Leiden: Brill, 1999.

Ba-Konaré, Dougoukolo Alpha Oumar. *En Afrique, le fantasme d'une "communauté peule" radicalisée.* (The Conversation. 2018/09/04).https://theconversation.com/en-afrique-le-fantasme-dune-communaute-peule-radicalisee-102276.

Babiker, Mustafa. "Resource Competition and Conflict Herder/Farmer or Pastoralism/Agriculture?". In *African Pastoralism*, edited by M. A. Mohamed Salih, Ton Dietz and Abdel Ghaffar Mohamed Ahmed. Conflict, Institutions and Government, 134-44: Pluto Press, 2001.

Badejo, Adedamola F, Ayodele O Majekodunmi, Peter Kingsley, James Smith, and Susan C Welburn. "The Impact of Self-Help Groups on Pastoral Women's Empowerment and Agency: A Study in Nigeria." *Pastoralism* 7, no. 1 (2017): 28.

Bassett, Thomas J. "The Political Ecology of Peasant-Herder Conflicts in the Northern Ivory Coast." *Annals of the Association of American Geographers* 78, no. 3 (1988): 453-72.

Bassett, Thomas J., and Matthew D. Turner. "Sudden Shift or Migratory Drift? Fulbe Herd Movements to the Sudano-Guinean Region of West Africa." *Human Ecology* 35, no. 1 (2007): 33-49.

Behnke, Roy. "Open Access and the Sovereign Commons: A Political Ecology of Pastoral Land Tenure." *Land Use Policy* 76 (2018): 708-18.

Behnke, Roy H, Maria E Fernandez-Gimenez, Matthew D Turner, and Florian Stammler. "Pastoral Migration. Mobile Systems of Livestock Husbandry." In *Animal Migration–a Synthesis*, edited by EJ Milner-Gulland, J. Fryxell and A. Sinclair, 144-71. Oxford: Oxford University Press, 2011.

Bello, Bala Abdu. Socio-Economic Effects of Postharvest Crop Residues Burning on Farmers-Herders Relations and the Level of Farmers Awareness in Demsa Lg, Adamawa State.

Benjaminsen, Tor A. "Does Supply-Induced Scarcity Drive Violent Conflicts in the African Sahel? The Case of the Tuareg Rebellion in Northern Mali." *Journal of Peace Research* 45, no. 6 (2008): 819-36.

Benjaminsen, Tor A., Koffi Alinon, Halvard Buhaug, and Jill Tove Buseth. "Does Climate Change Drive Land-Use Conflicts in the Sahel?". *Journal of Peace Research* 49, no. 1 (2012): 97-111.

Benjaminsen, Tor A., and Boubacar Ba. "Farmer-Herder Conflicts, Pastoral Marginalisation and Corruption: A Case Study from the Inland Niger Delta of Mali." *The Geographical Journal* 175, no. 1 (2009): 71-81.

———. "Why Do Pastoralists in Mali Join Jihadist Groups? A Political Ecological Explanation." *The Journal of Peasant Studies* 46, no. 1 (2019/01/02 2019): 1-20.

Bergamaschi, Isaline. "The Fall of a Donor Darling: The Role of Aid in Mali's Crisis." *The Journal of Modern African Studies* 52, no. 3 (2014): 347-78.

Berry, Sara S. *Who Owns the Land? Social Relations and Conflict over Resources in Africa.* GLOCON Working Paper (2018).

Biereenu-Nnabugwu, Makodi. "Leadership Influence on Ethno-Religious Conflicts in the Middle Belt Region of Nigeria." *Journal of Policy and Development Studies* 289, no. 2379 (2015): 1-17.

Blanchard, Lauren Ploch and Tomas F. Husted. *Nigeria: Current Issues and U.S. Policy.* (Washington, DC: Congressional Research Service. 2019/02/01) https://fas.org/sgp/crs/row/RL33964.pdf.

Blench, Roger, Selbut Longtau, Umar Hassan, and Martin Walsh. *The Role of Traditional Rulers in Conflict Prevention and Mediation in Nigeria.* UK Department for International Development (DFID) (London: 2006).

Bøås, Morten, and Liv Elin Torheim. "The Trouble in Mali—Corruption, Collusion, Resistance." *Third World Quarterly* 34, no. 7 (2013/08/01 2013): 1279-92.

Boko, M., I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo, and P. Yanda. "Africa. Climate Change." In *Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden and C. E. Hanson, 433-467. Cambridge: Cambridge University Press, 2007.

Bonnet, Bernard, Marion Anvroin, Marc Dufumier, Awal Mahamadou, and Zephirin Mogba. *Contribution À La Relance Du Dialogue Local À Berbérati.* IRAM (Paris: IRAM, 2017).

Bonnet, Bernard and Dominique Hérault. "Governance of pastoral tenure and climate change in the Sahel. Reinforce capacities of actors to secure mobility and fair access to pastoral resources." *Land Tenure Journal* 2 (2011): 158-186.

Boutrais, Jean. "Pour Une Nouvelle Cartographie Des Peuls (Remapping the Fulani)." *Cahiers d'Études Africaines* 34, no. 133/135 (1994): 137-46.

Braukämper, Ulrich. "Management of Conflicts over Pastures and Fields among the Baggara Arabs of the Sudan Belt." *Nomadic Peoples* 4, no. 1 (2000): 37-49.

Breusers, M., S. Nederlof, and T. van Rheenen, "Conflict or Symbiosis? Disentangling Farmer-Herdsman Relations: The Mossi and Fulbe of the Central Plateau, Burkina Faso." *The Journal of Modern African Studies* 36, no. 3 (1998): 357-380.

Brottem, Leif. "Hosts, Strangers and the Tenure Politics of Livestock Corridors in Mali." *Africa* 84, no. 4 (2014): 638-57.

———. "Environmental Change and Farmer-Herder Conflict in Agro-Pastoral West Africa." *Human ecology* 44, no. 5 (2016): 547-63.

Brottem, Leif and Bonnie Brooks. "Crops and livestock under the sun: Obstacles to rural livelihood adaptations to hotter 21st century temperatures in eastern Senegal." *Land Degradation & Development* 29, 1 (2018): 118-126.

Bruijn, Mirjam, Adamou Amadou, E. Doksala, and Boukary Sangaré. "Mobile Pastoralists in West and Central Africa, between Conflict, Mobile Telephony and (Im)Mobility." *Revue scientifique et technique (International Office of Epizootics)* 35 (12/01 2016): 649-57.

Buchanan, Rose Troup. "Global Terrorism Index: Nigerian Fulani militants named as fourth deadliest terror group in world." *Independent.* (2015/11/18). https://www.independent.co.uk/news/world/africa/global-terrorism-index-nigerian-fulani-militants-named-as-fourth-deadliest-terror-group-in-world-a6739851.html

Bukari, Kaderi Noagah, Shaibu Bukari, Papa Sow, and Jürgen Scheffran, "Diversity and Multiple Drivers of Pastoral Fulani Migration to Ghana." *Nomadic Peoples* 24, 1 (2020): 4-31.

Busby, Joshua. "Taking stock: the field of climate and security." *Current Climate Change Reports* 4, no. 4 (2018): 338-346.

Butler, Christopher K., and Scott Gates. "African Range Wars: Climate, Conflict, and Property Rights." *Journal of Peace Research* 49, no. 1 (2012): 23-34.

Cabot, Charlène. *Climate Change, Security Risks, and Conflict Reduction in Africa.* Springer, 2017.

Catholic Relief Services. *Literature Review of Land Tenure in Niger, Burkina Faso, and Mali Context and Opportunities.* Catholic Relief Services (Baltimore: 2014).

Catley, A. *Livestock and Livelihoods in South Sudan.* K4D (Knowledge for Development) University of Birmingham (Birmingham: 2018).

Cécile Marie, Godde, Boone Randall, J. Ash Andrew, Waha Katharina, Sloat Lindsey, K. Thornton Philip, and Herrero Mario. "Global Rangeland Production Systems and Livelihoods at Threat under Climate Change and Variability." *Environmental Research Letters* (2020). http://iopscience.iop.org/10.1088/1748-9326/ab7395.

Charbonneau, Bruno. "Introduction Au Dossier "Mali: Les Défis De La Résolution Des Conflits"." *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, no. 3 (2019/09/02 2019): 403-13.

Chukwuma, Kodili Henry. "Constructing the Herder–Farmer Conflict as (in)Security in Nigeria." *African Security* 13, no. 1 (2020/01/02 2020): 54-76.

Clanet, Jean-Charles, and Andrew Ogilvie. "Farmer–Herder Conflicts and Water Governance in a Semi-Arid Region of Africa." *Water International* 34, no. 1 (2009/02/18 2009): 30-46.

Cline, Lawrence E. "War on the Hoof: Regional Security in Africa and Livestock Conflicts." *Small Wars & Insurgencies* 31, no. 1 (2020/01/02 2020): 87-105.

Cormack, Zoe, and Helen Young. "Pastoralism in the New Borderlands: Cross-Bordermigrations, Conflict and Peace-Building." 2012.

Cotillon, S. E., and G. Tappan. *Landscapes of West Africa: A Window on a Changing World.* United States Geological Survey Earth Resources Observation and Science (EROS) Center (Garretson: 2016).

Cotula, Lorenzo, and Salmana Cissé. "Changes in 'Customary'resource Tenure Systems in the Inner Niger Delta, Mali." *The Journal of Legal Pluralism and Unofficial Law* 38, no. 52 (2006): 1-29.

Council, United Nations Security. *Letter Dated 14 December 2018 from the Panel of Experts on the Central African Republic Established Pursuant to Resolution 2399 (2018) Addressed to the President of the Security Council.* United Nations (New York: 2018).

Craven-Matthews, Catriona, and Pierre Englebert. "A Potemkin State in the Sahel? The Empirical and the Fictional in Malian State Reconstruction." *African Security* 11, no. 1 (2018/01/02 2018): 1-31.

Craze, Joshua. *Dividing Lines: Grazing and Conflict Along the Sudan-South Sudan Border.* Small Arms Survey (Geneva: 2013). https://gsdrc.org/document-library/dividing-lines-grazing-and-conflict-along-the-sudan-south-sudan-border/.

Dafinger, Andreas, and Michaela Pelican. "Sharing or Dividing the Land? Land Rights and Farmer-Herder Relations in Burkina Faso and Northwest Cameroon." *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, no. 1 (2006): 127-51.

Davidheiser, Mark, and Aniuska Luna. "Cooperation and Conflict: A Socio-Historical View of Farmer-Fulbe Relations." *African Journal on Conflict Resolution* 8, no. 1 (2008): 77-104.

Davies, Jonathan , Claire Ogali, Lydia Slobodian, Guyo Roba, and Razingrim Ouedraogo. *Crossing Boundaries: Legal and Policy Arrangements for Cross-Border Pastoralism.* (2018).

Davies, Jonathan, Maryam Niamir-Fuller, Carol Kerven, and Kenneth Bauer. "Extensive Livestock Production in Transition." In *Livestock in a Changing Landscape: Volume One*, 285-308: Island Press, 2013.

Davies, Jonathan, and Michele Nori. "Managing and Mitigating Climate Change through Pastoralism." (01/01 2008).

Davies, Jonathon, Pedro Herrera, Jabier Ruiz-Mirazo, Jennifer Mohamed-Katerere, Ian Hannam, and Emmanuel Nuesiri. *Improving Governance of Pastoral Lands: Implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. Rome, Italy: Food and Agriculture Organization of the United Nations, 2016.

de Bruijn, Mirjam, and Lotte Pelckmans. "Facing Dilemmas: Former Fulbe Slaves in Modern Mali." *Canadian Journal of African Studies / Revue canadienne des études africaines* 39, no. 1 (2005/01/01 2005): 69-95.

De Haan, Cees, Etienne Dubern, Bernard Garancher, and Catalina Quintero. *Pastoralism Development in the Sahel: A Road to Stability?* (Washington, DC: World Bank, 2016). http://documents.worldbank.org/curated/en/586291468193771160/Pastoralism-development-in-the-Sahel-a-road-to-stability.

De Haan, Leo, Anne van Driel, and Annette Kruithof. "From Symbiosis to Polarization?: Peasants and Pastoralists in Northern Benin." *Indian Geographical Journal* 65, no. 1 (1990): 51-65.

de Jode, H. *Modern and Mobile: The Future of Livestock Production in Africa's Drylands.* London: IIED, 2010.

De Juan, Alexander. "Long-Term Environmental Change and Geographical Patterns of Violence in Darfur, 2003–2005." *Political Geography* 45 (2015): 22-33.

de Montclos, Marc-Antoine Pérouse. *Une Guerre Perdue: La France Au Sahel.* Paris: JC Lattès, 2020.

de Vries, Lotje. "Navigating Violence and Exclusion: The Mbororo's Claim to the Central African Republic's Margins." *Geoforum* (2018).

De Waal, Alex. "When Kleptocracy Becomes Insolvent: Brute Causes of the Civil War in South Sudan." *African Affairs* 113, no. 452 (2014): 347-69.

Deng, David. *Challenges of Accountability: An Assessment of Dispute Resolution Processes in Rural South Sudan.* South Sudan Law Society (Juba, South Sudan: 2013).

Diallo, Youssouf. "Dimensions Sociales Et Politiques De L'expansion Pastorale En Zone Semi-Humide Ivoirienne." In *Pastoralism under Pressure*, edited by V. Azarya, 211-36. Leiden: Brill, 1999.

Dimelu, Mabel Ukamaka, Edward Danjuma Salifu, and Edwin M Igbokwe. "Resource Use Conflict in Agrarian Communities, Management and Challenges: A Case of Farmer-Herdsmen Conflict in Kogi State, Nigeria." *Journal of Rural Studies* 46 (2016): 147-54.

Dimelu, MU, DE Salifu, AI Enwelu, and EM Igbokwe. "Challenges of Herdsmen-Farmers Conflict in Livestock Production in Nigeria: Experience of Pastoralists in Kogi State, Nigeria." *African Journal of Agricultural Research* 12, no. 8 (2017): 642-50.

Dongmo, Aime-Landry, Eric Vall, Mohamadoun Amadou Diallo, Patrick Dugue, Aboubakar Njoya, and Jean Lossouarn. "Herding Territories in Northern Cameroon and Western Burkina Faso: Spatial Arrangements and Herd Management." *Pastoralism: Research, Policy and Practice* 2, no. 1 (2012): 26.

Döring, Stefan. "Come Rain, or Come Wells: How Access to Groundwater Affects Communal Violence." *Political Geography* 76 (2020): 102073.

Dowd, Caitriona, and Jean-Pierre Tranchant. *Decentralisation, Devolution, and Dynamics of Violence in Africa.* IDS, 2018.

Drent, Albert K. "Forum Shopping as Retaliation in Disguise How Nomadic Fulbe Condemn Retaliation and Forum Shopping, but Practise Them Anyway." In *On Retaliation*, edited by Bertram Turner and Günther Schlee. Towards an Interdisciplinary Understanding of a Basic Human Condition, 185-207: Berghahn Books, 2019.

Ducrotoy, Marie J, Ayodele O Majekodunmi, Alexandra PM Shaw, Husein Bagulo, Wilson J Bertu, Amahyel M Gusi, Reuben Ocholi, and Susan C Welburn. "Patterns of Passage into Protected Areas: Drivers and Outcomes of Fulani Immigration, Settlement and Integration into the Kachia Grazing Reserve, Northwest Nigeria." *Pastoralism* 8, no. 1 (2018): 1.

Dugué, Patrick, Eric Vall, Philippe Lecomte, Henri Dominique Klein, and Dominique Rollin. "Évolution Des Relations Entre L'agriculture Et L'élevage Dans Les Savanes D'afrique De L'ouest Et Du Centre: Un Nouveau Cadre D'analyse Pour Améliorer Les Modes D'intervention Et Favoriser Les Processus D'innovation." *Oléagineux Corps gras Lipides* 11, no. 4-5 (2004): 268-76.

Duteurtre, Guillaume, and A Atteyeh. "Le Lait À Moundou, Témoin De L'intégration Marchande Des Systèmes Pastoraux Au Sud Du Tchad." *Revue d'élevage et de médecine vétérinaire des pays tropicaux* 53, no. 3 (2000): 299-306.

Duteurtre, Guillaume, and Bernard Faye. "L'élevage, Richesse Des Pauvres." *Versailles (France): Quæ* (2009).

Dyer, Nat. *Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility Review of the Legislative and Institutional Environment Governing Livestock Mobility in East and West Africa.* International Institute for Environment and Development (London: 2008).

Eck, Kristine. "The Law of the Land: Communal Conflict and Legal Authority." *Journal of Peace Research* 51, no. 4 (2014): 441-54.

Egemi, Omer. *Pastoralist Peoples, Their Institutions and Related Policies.* Feinstein International Center (Medford: 2012).

Eke, Surulola. "'Nomad Savage' and Herder–Farmer Conflicts in Nigeria: The (Un)Making of an Ancient Myth." *Third World Quarterly* (2019): 1-19.

Fjelde, Hanne, and Gudrun Østby. "Socioeconomic Inequality and Communal Conflict: A Disaggregated Analysis of Sub-Saharan Africa, 1990–2008." *International Interactions* 40, no. 5 (2014): 737-62.

Fjelde, Hanne and Nina von Uexkull, "Climate triggers: Rainfall anomalies, vulnerability and communal conflict in sub-Saharan Africa." *Political Geography* 31, no. 7 (2012): 444-453.

Flint, Julie. *The Other War: Inter-Arab Conflict in Darfur.* Small Arms Survey (Geneva: 2010). http://www.smallarmssurveysudan.org/fileadmin/docs/working-papers/HSBA-WP-22-The-Other-War-Inter-Arab-Conflict-in-Darfur.pdf.

Flintan, Fiona. *Women's Empowerment in Pastoral Societies.* (World Initiative for Sustainable Pastoralism, Global Environment Facility, International Union for Conservation of Nature and United Nations Development Programme, 2008). https://www.iucn.org/sites/dev/files/import/downloads/gender_format.pdf.

Fokou, G, and B Bonfoh. "Institutional Development: From Legal Pluralism to Institutional Bricolage in West African Pastoralism." *Rev. Sci. Tech. Off. Int. Epiz* 35, no. 2 (2016): 533-41.

Food and Agriculture Organization of the United Nations. *Analyse Des Conflits Liés Aux Ressources Naturelles Dans La Région Du Liptako-Gourma: Résultats Des Trois Analyses De Conflits Réalisées Au Burkina Faso, Au Mali Et Au Niger.* Food and Agricultural Organization (Rome: 2020).

———. *La Transhumance Transfrontalière En Afrique De L'ouest: Proposition De Plan D'action.* Food and Agriculture Organization (2012).

Freudenberger, Mark, and Zephirin Mobga. "The Capture of the Commons: Militarized Pastoralism and Struggles for Control of Surface and Sub-Surface Resources in Southwest Central African Republic." Land Governance in an Interconnected World: Annual World Bank Conference on Land and Poverty, Washington, DC, 2018.

Gallais, J. *Hommes du Sahel: Espaces-Temps et Pouvoirs: Le Delta intérieur du Niger 1960-1980*, *Collection Géographes*. Paris: Flammarion, 1984.

Ganota, Boniface, Guy-Florent Ankogui Mpoko, Kedeu Passinring, Michel Tchotsoua, and Mouhaman Arabi. "Législation Des Migrations Humaines Et Animales En Afrique Centrale: Cas Du Cameroun, De La République Centrafricaine Et Du Tchad." Paper presented at the Savanes africaines en développement: innover pour durer, 2009.

Gausset, Quentin. "Agro-Pastoral Conflicts in Thetikar Plain (Adamawa, Cameroon)." In *Beyond Territory and Scarcity: Exploring Conflicts over Natural Resource Management*, edited by Quentin Gausset, Michael Anthony Whyte and Torben Birch-Thomsen, 90-111, 2005.

Gebreyes, Yacob Aklilu, Gezu Bekele Lemma, Luke Biong Deng, and Shaif Abdullahi. "The Impact of Conflict on the Livestock Sector in South Sudan." Food and Agriculture Organization of the United Nations, 2016. https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/assessments/the_impact_of_conflict_on_the_livestock_sector_in_south_sudan.pdf.

Gertel, Jorg, Sandra Calkins, and Richard Rottenburg. "Disrupting Territories: Commodification and Its Consequences." In *Disrupting Territories*, edited by Jorg Gertel, Sandra Calkins and Richard Rottenburg. Land, Commodification and Conflict in Sudan, 1-30: Boydell and Brewer, 2014.

Giroux, Jennifer, David Lanz, and Damiano Sguaitamatti. *The Tormented Triangle: The Regionalisation of Conflict in Sudan, Chad, and the Central African Republic.* Crisis States Research Centre at the London School of Economics and Political Science (London: 2009).

Global Terrorism Index 2015_Measuring And Understanding The Impact Of Terrorism. (Institute for Economics & Peace. 2015). http://economicsandpeace.org/wp-content/uploads/2015/11/Global-Terrorism-Index-2015.pdf.

Gondeu, Ladiba. *Valeurs Républicaines Et Vivre-Ensemble Au Tchad: Appartenances Religieuses.* L'Harmattan, 2020.

Gonin, Alexis, Geoffroy Filoche, and Philippe Lavigne Delville. "Dynamics of Access to Pastoral Resources in a Farming Area (Western Burkina Faso): Unveiling Rights in Open Access Regimes." *International Journal of the Commons* 13, no. 2 (2019): 1049-61.

Gonin, Alexis and Denis Gautier. "Herders' territorialities and social differentiation in Western Burkina Faso." *Nomadic Peoples* 20, 1 (2016): 62-87.

Graves, Alisha, Lorenzo Rosa, Abdoul Moumouni Nouhou, Fadji Maina, and Djimé Adoum. "Avert Catastrophe Now in Africa's Sahel." *Nature* 575 (2019): 282-86.

Greenough, Karen. "Mobility, Market Exchange and Livelihood Transition: Fulbe Flexibility in Tanout, Niger." *Nomadic Peoples* 16, no. 2 (2012): 26-52.

Harmon, Stephen A. *Terror and Insurgency in the Sahara-Sahel Region: Corruption, Contraband, Jihad and the Mali War of 2012-2013.* New York: Routledge, 2016.

Hart, Amy. "Peace in the Land of Upright People

Religion and Violence in Burkina Faso." *Journal for the Study of Religion* 27, no. 2 (2014): 172-94.

Hellendorff, Bruno. "Changement Climatique Et Conflits Agro-Pastoraux Au Sahel." *Note d'Analyse du GRIP* 2 (2012): 2.

Herrero, M, Jane Addison, Claire Bedelian, Elizabeth Carabine, Petr Havlík, B Henderson, J Van De Steeg, and Philip K Thornton. "Climate Change and Pastoralism: Impacts, Consequences and Adaptation." *Rev Sci Tech* 35 (2016): 417-33.

Hertzog, Thomas, Amandine Adamczewski, Francois Molle, Jean-Christophe Poussin, and Jean-Yves Jamin. "Ostrich-Like Strategies in Sahelian Sands? Land and Water Grabbing in the Office Du Niger, Mali." (12/23 2012).

Hesse, Ced, and Brigitte Thébaud. *Will Pastoral Legislation Disempower Pastoralists in the Sahel?* Research Network for Environment and Development (ReNED) (Copenhagen: 2006). http://agris.fao.org/agris-search/search.do?recordID=GB2013202569.

Higazi, Adam. "Farmer-Pastoralist Conflicts on the Jos Plateau, Central Nigeria: Security Responses of Local Vigilantes and the Nigerian State." *Conflict, Security & Development* 16, no. 4 (2016/07/03 2016): 365-85.

Higazi, Adam, and Zahbia Yousuf. *From Cooperation to Contention_Political Unsettlement and Farmer-Pastoralist Conficts in Nigeria.* Conciliation Resources (London: 2017).

Hochet, Peter, and Luigi Arnaldi di Balme. "La Dialectique De L'étranger. La Construction Des Relations Contradictoires À L'étranger À La Croisée Des Institutions Coutumières Et Des Politiques Publiques Dans L'ouest Du Burkina Faso." [In Fr]. *Autrepart* 64, no. 1 (2013): 55-70.

Homewood, K. *Ecology of African Pastoralist Societies.* James Currey, 2008.

Houessou, Sandrine O., Luc Hippolyte Dossa, Rodrigue V. C. Diogo, Marcel Houinato, Andreas Buerkert, and Eva Schlecht. "Change and Continuity in Traditional Cattle Farming Systems of West African Coast Countries: A Case Study from Benin." *Agricultural Systems* 168 (2019/01/01/ 2019): 112-22.

Human Rights Watch. *Leave Everything to God: Accountability for Inter-communal Violence in Plateau and Kaduna States, Nigeria.* Human Rights Watch (United States: 2013). https://www.hrw.org/report/2013/12/12/leave-everything-god/accountability-inter-communal-violence-plateau-and-kaduna.

Hussein, Karim, James Sumberg, and David Seddon. "Increasing Violent Conflict between Herders and Farmers in Africa: Claims and Evidence." *Development policy review* 17, no. 4 (1999): 397-418.

Ibrahim, Hindou. "Le Rôle Des Femmes Dans La Viabilité Economique Et Sociale Des Sociétés Pastorales: Le Cas De La Société Mbororo Au Tchad." La Contribution De L'elevage Pastoral A La Securite Et Au Developpement Des Espaces Saharo-Saheliens, N'djamena, Association des Femmes Peuls Autochtones du Tchad (AFPAT), 2013.

Ibrahim, Saifullahi Sani, A. Ibrahim, Abdelrasq Na Allah, and Lawal Abdu Saulawa. "Building of a Community Cattle Ranch and Radio Frequency Identification (Rfid) Technology as Alternative Methods of Curtailing Cattle Rustling in Katsina State." *Pastoralism* 6, no. 1 (2016/06/03 2016): 10.

Ickowicz, A, V Ancey, C Corniaux, G Duteurtre, R Poccard-Chappuis, I Touré, E Vall, and A Wane. "Crop–Livestock Production Systems in the Sahel–Increasing Resilience for Adaptation to Climate Change and Preserving Food Security." Paper presented at the Building resilience for adaptation to climate change in the agriculture sector. Proceedings of a Joint FAO/OECD Workshop, Rome, Italy, 23-24 April 2012., 2012.

Idris, Iffat. *Livestock and Conflict in South Sudan.* (Brighton, UK: Institute of Development Studies, 2018).

Ikyase, John Kennedy Tersoo, and Ibrahim Umara. "Involvement of Fulani Herdsmen in Trans-Border Crimes and Its Implication on Nigeria's Security." *Socialscientia: Journal of Social Sciences and Humanities* 1, no. 1 (2016).

International Crisis Group. *Herders against Farmers: Nigeria's Expanding Deadly Conflict.* International Crisis Group (Brussels: 2017).

———. *The Central Sahel: Scene of New Climate Wars?* International Crisis Group, (Brussels: 2020).

———. *The Security Challenges of Pastoralism in Central Africa.* International Crisis Group (Brussels: 2014).

———. *Speaking with the Bad Guys: Toward Dialogue with Central Mali's Jihadists.* International Crisis Group (Brussels: 2019).

———. *Stopping Nigeria's Spiralling Farmer-Herder Violence.* International Crisis Group (Brussels: 2018).

Joint Analysis on Cattle- and Migration-Related Conflict in the Tri-State Border Areas of Wau, Tonj, and Gogrial. Food and Agriculture Organization of the United Nations, United Nations Development Programme, UNMISS Rule of Law Advisory Section.

Jok, Madut Jok, Mareike Schomerus, Lukas Biaong Deng Kuol, Ingrid Marie Breidlid, and Michael Arensen. *Informal Armies: Community Defence Groups in South Sudan's Civil War.* Saferworld (2017).

Jourde, Cédric, Marie Brossier, and Modibo Ghaly Cissé. "Prédation Et Violence Au Mali: Élites Statutaires Peules Et Logiques De Domination Dans La Région De Mopti." *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, no. 3 (2019/09/02 2019): 431-45.

Kiema, André, Ghislain Tontibomma, and Nouhoun Zampaligré. "Transhumance Et Gestion Des Ressources Naturelles Au Sahel: Contraintes Et Perspectives Face Aux Mutations Des Systèmes De Productions Pastorales." *[VertigO] La revue électronique en sciences de l'environnement* 14, no. 3 (2014).

Kircher, Ingrid. *Challenges to Security, Livelihoods, and Gender Justice in South Sudan: The Situation of Dinka Agro-Pastoralist Communities in Lakes and Warrap States.* London: Oxfam, 2013.

Kitchell, Erin, Matthew D Turner, and John G McPeak. "Mapping of Pastoral Corridors: Practices and Politics in Eastern Senegal." *Pastoralism* 4, no. 1 (2014): 17.

Kossoumna, L. P. Dugué, and E. Torquebiau, "Change of practices by settling transhumant Mbororo farmers in Northern Cameroon." *Cahiers Agricultures* 19, 1 (2010): 60-67.

Kratli, Saverio, Pabame Sougnabe, Francesco Staro, and Helen Young. *Pastoral Systems in Dar Sila, Chad: A Background Paper for Concern Worldwide.* (Boston, Massachusetts: Tufts University Feinstein International Center, 2018). https://reliefweb.int/report/chad/pastoralist-systems-dar-sila-chad-background-paper-forconcern-worldwide.

Krause, Jana. "Gender Dimensions of (Non) Violence in Communal Conflict: The Case of Jos, Nigeria." *Comparative Political Studies* 52, no. 10 (2019): 1466-99.

Kuusaana, Elias Danyi and Kaderi Noagah Bukari. "Land conflicts between smallholders and Fulani pastoralists in Ghana: Evidence from the Asante Akim North District (AAND)." *Journal of Rural Studies* 42 (2015): 52-62.

Kwaja, Chris , and Bukola Ademola-Adelehin. *The Implications of the Open Grazing Prohibition & Ranches Establishment Law on Farmer-Herder Relations in the Middle Belt of Nigeria.* Search for Common Ground (Washington, DC: 2017). https://www.sfcg.org/wp-content/uploads/2018/02/Open-Grazing-Prohibition-Law-in-Benue-State-December-2017.pdf.

Kwaja, Chris, and Bukola Ademola-Adelehin. *Seeking Security and Stability: An Analysis of Security Responses to Farmer-Herder Conflict in the Middle Belt Region of Nigeria.* Search for Common Ground (Washington, DC: 2018). https://www.sfcg.org/wp-content/uploads/2018/11/Seeking-Security-and-Stability_Nigeria_-Search-for-Common-Ground.pdf.

Lacher, Wolfram. *Organized Crime and Conflict in the Sahel-Sahara Region.* Vol. 1: Carnegie Endowment for International Peace Washington DC, 2012.

Le Meur, Pierre-Yves, and Peter Hochet. "Property Relations by Other Means: Conflict over Dryland Resources in Benin and Mali." *European Journal of Development Research* 22, no. 5 (2010): 643-59.

Leonhardt, M. *Regional Policies and Response to Manage Pastoral Movements within the Ecowas Region.* International Organization for Migration (Abuja: 2017).

Liba'a, Natali Kossoumna. "Sédentarisation Des Éleveurs Transhumants Dans Lenord Du Cameroun: Évolution Des Conflits Rurauxet De Leurs Modes De Résolutions." *African Population Studies* 26, no. 1 (2012). https://aps.journals.ac.za/pub/article/view/223

Lombard, Louisa. *State of Rebellion: Violence and Intervention in the Central African Republic.* Zed Books Ltd., 2016.

Luizza, Matthew. *Transhumant Pastoralism in Central Africa: Emerging Impacts on Conservation and Security.* United States Fish and Wildlife Service Division of International Conservation, Africa Branch (Washington DC: 2017).

Maïga, Boureima. "L'accès Aux Pâturages Dans Le Delta Intérieur Du Niger." In *Le Droit En Afrique: Expériences Locales Et Droit Étatique Au Mali*, edited by G. Hesseling and M. Djiré, 183-214. Paris: Karthala, 2005.

Majekodunmi, Ayodele O, Akinyemi Fajinmi, Charles Dongkum, Alexandra PM Shaw, and Susan C Welburn. "Pastoral Livelihoods of the Fulani on the Jos Plateau of Nigeria." *Pastoralism* 4, no. 1 (2014): 20.

Majekodunmi, Ayodele O., Charles Dongkum, Tok Langs, Alexandra P. M. Shaw, and Susan C. Welburn. "Shifting Livelihood Strategies in Northern Nigeria - Extensified Production and Livelihood Diversification Amongst Fulani Pastoralists." *Pastoralism* 7, no. 1 (2017/07/04 2017): 19.

Manby, Bronwen. "Nationality, Migration and Statelessness in West Africa: A Study for Unhcr and Iom." *The UN Refugee Agency and International Organization for Migration* (2015).

Marega, Oumar, Catherine Mering, and Emmanuelle Maisonnave. "Sahelian Agro-Pastoralists in the Face of Social and Environmental Changes: New Issues, New Risks, New Transhumance Axe." *L'Espace géographique* 47, no. 3 (2018): 235-60.

Masson, Virginie Le, Colette Benoudji, Sandra Sotelo Reyes, and Giselle Bernard. "How Violence against Women and Girls Undermines Resilience to Climate Risks in Chad." *Disasters* 43 (2019): S245-S70.

McGregor, Andrew. "The Fulani Crisis: Communal Violence and Radicalization in the Sahel." *CTS Sentinel* 10, no. 2 (2017): 34-38.

McGrew, Laura. *Conflict Analysis: Central African Republic.* Catholic Relief Services (Baltimore: 2016).

Mercy Corps, *We Hope and We Fight: Youth, Communities, and Violence in Mali.* Mercy Corps (2017). https://www.mercycorps.org/research/%E2%80%9Cwe-hope-and-we-fight%E2%80%9D-youth-communities-and-violence-mali.

———. *Role of Religion and Religious Leaders in Farmer-Pastoralist Conflict in Plateau State.* (Mercy Corps, 2016). https://www.mercycorps.org/research-resources/role-religion-and-religious-leaders-farmer-pastoralist-conflict-plateau-state.

Menghistu, Habtamu Taddele, Amanuel Zenebe Abraha, Girmay Tesfay, and Gebrehiwot Tadesse Mawcha. "Determinant Factors of Climate Change Adaptation by Pastoral/Agro-Pastoral Communities and Smallholder Farmers in Sub-Saharan Africa." *International Journal of Climate Change Strategies and Management* (2020).

Momale, Saleh B. "Changing Methods of Animal Husbandry, Cattle Rustling and Rural Banditry in Nigeria." In *Rural Banditry and Conflicts in Northern Nigeria.*, edited by Mohammed Kuna and Jibrin Ibrahima, 70-109. Abuja: Centre for Democracy and Development, 2015.

Moritz, Mark. "Changing Contexts and Dynamics of Farmer-Herder Conflicts across West Africa." *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, 1 (2006): iv-40.

———. "Fulbe Pastoralists and the Neo-Patrimonial State in the Chad Basin." In *The Ecology of Pastoralism*, edited by P. Nick Kardulias, 171-94: University Press of Colorado, 2015.

———. "Pastoral Intensification in West Africa: Implications for Sustainability." *The Journal of the Royal Anthropological Institute* 18, no. 2 (2012): 418-38.

———. "Understanding Herder-Farmer Conflicts in West Africa: Outline of a Processual Approach." *Human Organization* 69, no. 2 (2010): 138-48.

Moutari, Elhadji Maman, and Frédéric Giraut. "Le Corridor De Transhumance Au Sahel Un Archétype De Territoire Multisitué?". *L'Espace géographique* 42, no. 4 (2013): 306-23.

Namassa Zakaria, Yahaya. "La Transhumance Transfrontalière En Afrique De L'ouest." (2014).

Niamir-Fuller, Maryam. "Managing mobility in African rangelands." In *Property rights, risk and livestock development in Africa*, edited by Maryam Niamir-Fuller, 102-131. London: Intermediate Technology Publications Ltd., 1999.

Nigeria: Unfolding Genocide? An Inquiry by the UK All-Party Parliamentary Group for International Freedom of Religion or Belief. (All-Party Parliamentary Group for International Freedom of Religion or Belief. 2020). https://appg freedom of religion or belief.org/media/200615-Nigeria-Unfolding-Genocide-Report-of-the-APPG-for-FoRB.pdf.

Nillesen, Eleonora, and Erwin Bulte. "Natural Resources and Violent Conflict." *Annu. Rev. Resour. Econ.* 6, no. 1 (2014): 69-83.

Nori, Michele. *Herding through Uncertainties - Principles and Practices. Exploring the Interfaces of Pastoralists and Uncertainty.* Robert Schuman Centre for Advanced Studies (2019). https://cadmus.eui.eu/bitstream/handle/1814/64228/RSCAS%202019_69revised.pdf?sequence=4&isAllowed=y.

———. *Herding through Uncertainties - Regional Perspectives. Exploring the Interfaces between Pastoralists and Uncertainty. Results from a Literature Review.* European University Institute (Badia Fiesolana: 2019).

Nori, Michele, and Edoardo Baldaro. "Games without Frontier: Development, Crisis and Conflict in the African Agro-Pastoral Belt." In *Crisis and Conflict in Agriculture*, edited by Rachel Bahn, Eckart Woertz and Rami Zurayk, 157-75. Boston: CABI, 2018.

Nori, Michele, Michael Taylor, and Alessandra Sensi. *Droits Pastoraux, Modes De Vie Et Adaptation Au Changement Climatique.* IIED, 2008.

Ntangti, Fabian C, Reeves M Fokeng, Ibrahim N Manu, and Augustine T Gam. "Land Cover Changes, Protected Areas and Agro-Pastoral Conflicts in Menchum, North West Cameroon." *American Journal of Humanities and Social Sciences Research* 3, no. 9 (2019): 41-50.

Nwankwo, Cletus Famous. "Essentialising Critical Geopolitics of the Farmers–Pastoralists Conflicts in West Africa." *GeoJournal* (2019): 1-18.

Ojo, John Sunday. "Governing "Ungoverned Spaces" in the Foliage of Conspiracy: Toward (Re) Ordering Terrorism, from Boko Haram Insurgency, Fulani Militancy to Banditry in Northern Nigeria." *African Security* (2020): 1-34.

Okello, Anna L., Ayodele O. Majekodunmi, Adamu Malala, Susan C. Welburn, and James Smith. "Identifying Motivators for State-Pastoralist Dialogue: Exploring the Relationships between Livestock Services, Self-Organisation and Conflict in Nigeria's Pastoralist Fulani." *Pastoralism* 4, no. 1 (2014/09/12 2014): 12.

Okoli, Al-Chukwuma, and GA Atelhe. "Nomads against Natives: A Political Ecology of Herder/Farmer Conflicts in Nasarawa State, Nigeria." *American International Journal of Contemporary Research* 4, no. 2 (2014): 76-88.

Okoli, Al Chukwuma. "Cows, Cash and Terror How Cattle Rustling Proceeds Fuel Boko Haram Insurgency in Nigeria." *Africa Development / Afrique et Développement* 44, no. 2 (2019): 53-76.

———. "The Trajectories and Dynamics of Herdsmen Militancy in Central Nigeria." *Journal of Humanities and Social Policies* 2, no. 1 (2016): 22-30.

Olaniyan, Azeez. "Foliage and Violence: Interrogating Forests as a Security Threat in Nigeria." *African Security Review* 27, no. 1 (2018/01/02 2018): 88-107.

Olaniyan, Azeez, Michael Francis, and Ufo Okeke-Uzodike. "The Cattle Are "Ghanaians" but the Herders Are Strangers: Farmer-Herder Conflicts, Expulsion Policy, and Pastoralist Question in Agogo, Ghana." [In English]. *African Studies Quarterly* 15, no. 2 (Mar 2015 2018-08-22 2015): 53-67.

Olaniyan, Azeez and Aliyu Yahaya. "Cows, Bandits, and Violent Conflicts: Understanding Cattle Rustling in Northern Nigeria." *Africa Spectrum* 51, 3 (2016): 93-105. https://journals.sub.uni-hamburg.de/giga/afsp/article/view/989/996.html.

Olaniyi, Rasheed Oyewole. "Bororo Fulani Pastoralists and Yoruba Farmers' Conflicts in the Upper Ogun River, Oyo State Nigeria, 1986–2004." *Journal of Asian and African studies* 50, no. 2 (2015): 239-52.

Oppong, Yaa Pa. *Moving through and passing on: Fulani mobility, survival and identity in Ghana*. Routledge, 2017.

Ouoba-Ima, Sidonie. "Caractéristiques Socio-Démographiques Et Dynamique De La Transhumance Des Bouviers Peuls De La Nouhao Au Burkina Faso." *VertigO: la revue électronique en sciences de l'environnement* 18, no. 2 (2018).

Oyama, Shuichi. "Farmer-Herder Conflict, Land Rehabilitation, and Conflict Prevention in the Sahel Region of West Africa." (2014).

Pastoralism in Africa's Drylands: Reducing Risks, Addressing Vulnerability and Enhancing Resilience. Food and Agriculture Organization of the United Nations (Rome: 2018). http://www.fao.org/3/CA1312EN/ca1312en.pdf.

Pavanello, Sara. *Pastoralists' Vulnerability in the Horn of Africa: Exploring Political Marginalization, Donors' Policies, and Cross-Border Issues.* Overseas Development Institute (London: 2009).

Pelican, M. *Masks and Staffs: Identity Politics in the Cameroon Grassfields*. New York: Berghahn Books, 2017.

Potts, Malcolm, Courtney Henderson, and Martha Campbell. "The Sahel: A Malthusian Challenge?". *Environmental and Resource Economics* 55, no. 4 (2013): 501-12.

Quidelleur, Tanguy. *The Local Roots of Violence in Eastern Burkina Faso: Competition over Resources, Weapons and the State.* Nora Research Network (2020). https://www.noria-research.com/the-local-roots-of-violence-burkina-faso/.

Rajoelison, Sedera Arnaud. *Gender and Conflict Analysis: Tushinde Ujeuri.* USAID - IMA World Health. https://www.sfcg.org/wp-content/uploads/2018/08/Gender-and-Conflict-Analysis_C-GBV.pdf.

Raleigh, C. "Political Marginalization, Climate Change, and Conflict in African Sahel States." *International Studies Review* 12 (2010): 69-86.

Randall, Sara. "Where Have All the Nomads Gone? Fifty Years of Statistical and Demographic Invisibilities of African Mobile Pastoralists." *Pastoralism* 5, no. 1 (2015): 22.

Rangé, Charline. *Boko Haram, révélateur des insécurités foncières au lac Tchad (Cameroun)?* Paris: Institut de Recherche pour le Développement, 2018.

Rass, Nikola. *Policies and Strategies to Address the Vulnerability of Pastoralists in Sub-Saharan Africa.* Food and Agriculture Organization (Rome: 2006).

Ratner, Blake D., Ruth Meinzen-Dick, Jon Hellin, Everisto Mapedza, Jon Unruh, Wouter Veening, Eric Haglund, Candace May, and Carl Bruch. "Addressing Conflict through Collective Action in Natural Resource Management." *International Journal of the Commons* 11, no. 2 (2017): 877-906.

Raynaut, Claude, and Philippe Lavigne Delville. "A Shared Land: Complementary and Competing Uses." In *Societies and Nature in the Sahel*, 133-61: Routledge, 2002.

Reid, Robin S, María E Fernández-Giménez, and Kathleen A Galvin. "Dynamics and Resilience of Rangelands and Pastoral Peoples around the Globe." *Annual Review of Environment and Resources* 39 (2014): 217-42.

Robert, Elodie. "Les Zones Pastorales Comme Solution Aux Conflits Agriculteurs/Pasteurs Au Burkina Faso: L'exemple De La Zone Pastorale De La Doubégué." *Les Cahiers d'Outre-Mer. Revue de géographie de Bordeaux* 63, no. 249 (2010): 47-71.

Roitman, Janet. *Fiscal Disobedience: An Anthropology of Economic Regulation in Central Africa.* Princeton University Press, 2005.

Rolandsen, Øystein H. "Trade, Peace-Building and Hybrid Governance in the Sudan-South Sudan Borderlands." *Conflict, Security & Development* 19, no. 1 (2019): 79-97.

le Roux, Pauline. *Exploiting Borders in the Sahel: The Islamic State in the Greater Sahara.* (Africa Center for Strategic Studies. 2019/076/10). https://africacenter.org/spotlight/exploiting-borders-sahel-islamic-state-in-the-greater-sahara-isgs/

Rupesinghe, Natasja. *Women and the Katiba Macina in Central Mali.* Norwegian Institute for International Affairs (Oslo: 2019).

Rupesinghe, Natasja and Morten Bøås. *Local Drivers of Violent Extremism in Central Mali,* Oslo: Norwegian Institute for International Affairs, 2019.

Ryle, J., and Machot Amoum. *Peace Is the Name of Our Cattle-Camp Local Responses to Conflict in Eastern Lakes State, South Sudan.* Rift Valley Institute (Nairobi).

Saïbou, Issa. *Les Coupeurs De Route: Histoire Du Banditisme Rural Et Transfrontalier Dans Le Bassin Du Lac Tchad.* Paris: Karthala Editions, 2010.

Sandor, Adam, and Aurélie Campana. "Les Groupes Djihadistes Au Mali, Entre Violence, Recherche De Légitimité Et Politiques Locales." *Canadian Journal of African Studies / Revue canadienne des études africaines* 53, no. 3 (2019/09/02 2019): 415-30.

Sangaré, Bakary. *Le Centre Du Mali: Épicentre Du Djihadisme ?* Groupe de Recherche et d'Information sur la Paix et la Securite (Bruxelles: 2016).

Sangaré, Yalla, and Jason J McSparren. "Acknowledging Conflict across Mali's Centre: Drivers and History." *African Solutions Journal* 3 (2018): 14-38.

Sanou, Charles L, Daniel N Tsado, André Kiema, Julia O Eichie, and Appollonia A Okhimamhe. "Climate Variability Adaptation Strategies: Challenges to Livestock Mobility in South-Eastern Burkina Faso." *Open Access Library Journal* 5, no. 2 (2018).

Sayne, Aaron. *Rethinking Nigeria's Indigene-Settler Conflicts.* 2012.

Schouten, Peer, and Soleil-Perfect Kalessopo. *Politics of Pillage: The Political Economy of Roadblocks in the Central African Republic.* International Peace Information Service (IPIS) (2019).

Search for Common Ground. *A Conflict Assessment in Bamingui-Bangoran Region: Rapid Response Project in Car - Final Report.* Search for Common Ground (2019).

———. *Amiet Market - Abyei Sudan: Baseline Study.* Search for Common Ground (2020).

Selby, Jan, and Clemens Hoffmann. "Beyond Scarcity: Rethinking Water, Climate Change and Conflict in the Sudans." *Global Environmental Change* 29 (2014): 360-70.

Service, International Peace Information. *Central African Republic: A Conflict Mapping.* (Antwerp, Belgium: International Peace Information Service and Danish Institute for International Studies, 2018). https://ipisresearch.be/publication/central-african-republic-conflict-mapping/.

Seter, Hanne. "Connecting Climate Variability and Conflict: Implications for Empirical Testing." *Political Geography* 53 (2016/07/01/ 2016): 1-9.

Seter, Hanne, Ole Magnus Theisen, and Janpeter Schilling. "All About Water and Land? Resource-Related Conflicts in East and West Africa Revisited." *GeoJournal* 83, no. 1 (2018): 169-87.

Siddig, El Fatih Ali, Khalid El-Harizi, and Bettina Prato. *Managing Conflict over Natural Resources in Greater Kordofan, Sudan: Some Recurrent Patterns and Governance Implications.* International Food Research Institute (Washington: 2007 2007). http://ageconsearch.umn.edu/record/42402/files/ifpridp00711.pdf.

Stinson, Callie. "International Military Cooperation and Water Security in the Sahel: A New Approach to Old Problems." *SAIS Review of International Affairs* 35, no. 1 (2015): 159-67.

Sulieman, Hussein M. "Grabbing of Communal Rangelands in Sudan: The Case of Large-Scale Mechanized Rain-Fed Agriculture." *Land Use Policy* 47 (2015): 439-47.

Sulieman, Hussein M. "Exploring the Spatio-Temporal Processes of Communal Rangeland Grabbing in Sudan." *Pastoralism* 8, no. 1 (2018/04/24 2018): 14.

Takana, Yousif, Afaf Rahim, and A. Hafiz E. Mohamed Adam. *Darfur Pastoralists Groups: New Opportunities for Change and Peace Building.* (Tufts University Feinstein International Center, 2012). https://fic.tufts.edu/assets/Darfur-Pastoralist-Groups.pdf.

Taylor, Adam. "It's not just the Islamic State. Other terror groups surge in West Africa." *Washington Post.* (2015/11/20). https://www.washingtonpost.com/news/worldviews/wp/2015/11/19/the-danger-in-overlooking-boko-harams-nigerian-terror/

Theisen, Ole Magnus. "Climate Change and Violence: Insights from Political Science." *Current Climate Change Reports* 3, no. 4 (2017): 210-21.

Thiam, Adam. "Centre Du Mali: Enjeux Et Dangers D'une Crise Négligée." *Centre for Humanitarian Dialogue, Geneva* (2017).

Thurston, Alex. *Mali's tragic but persistent status quo*. (Luxemburg: Rosa Luxemburg Foundation, 2018.

Tidjani, Ibrahim. *Impacte De La Crise Politico-Mlitaire De 2013-14 Sur Le Pastoralisme Et La Transhumence En Republique Centrafricaine.* Catholic Relief Services (Bangui: 2015).

Tiitmamer, Nhial. "Resolving climate change-induced migration and conflict in South Sudan." in *Climate Change and Migration in Africa.* (Africa Portal. 2020/05/24). https://www.africaportal.org/features/resolving-climate-change-induced-migration-and-conflict-south-sudan/

Tomety, Simon N. "Analyse De La Dimension Transfrontalière Des Conflits Ruraux Dans L'est De La République Centrafricaine." *European Commission, Bangui* (2009).

Tonah, Steve. "Fulani Pastoralists, Indigenous Farmers and the Contest for Land in Northern Ghana." *Africa Spectrum* 37, no. 1 (2002): 43-59.

———. "Migration and Farmer-Herder Conflicts in Ghana's Volta Basin." *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, no. 1 (2006): 152-78.

Toulmin, C. "Herders and farmers or farmer-herders and herder-farmers?" in *The Design and Management of Pastoral Development*. London: Overseas Development Institute, 1983.

Touré, Oussouby. *Sécurisation Du Foncier Pastoral En Afrique De L'ouest.* IIED (London: 2018).

Toutain, B., Marie-Noel De Visscher, and D. Dulieu. "Pastoralism and Protected Areas: Lessons Learned from Western Africa." *Human Dimensions of Wildlife* 9 (2004): 287-298.

Traoré, S. "Straying Fields: Tenure Problems for Pastoralists in the Ferlo, Senegal." in *The Dynamics of Resource Tenure in West Africa*, edited by C. Toulmin, P. Lavigne Delville and S. Traoré. London: James Currey, 2002.

Tubiana, Jérôme. "Le Darfour, Un Conflit Identitaire?". *Afrique contemporaine*, no. 2 (2005): 165-206.

Turner, M.D. "Capital on the Move: The Changing Relation between Livestock and Labor in Mali, West Africa." *Themed Issue: Land, Labor, Livestock and (Neo)Liberalism: Understanding the Geographies of Pastoralism and Ranching; Themed Issue: Organisational Geographies of Power* 40, no. 5 (2009): 746-55.

———. "Political ecology and the moral dimensions of "resource conflicts": the case of farmer–herder conflicts in the Sahel." *Ethics in Political Ecology* 23, 7 (2004): 863-889.

———. "The role of social networks, indefinite boundaries and political bargaining in maintaining the ecological and economic resilience of the transhumance systems of Sudano-Sahelian West Africa," in *Managing Mobility in African Rangelands: The Legitimization of Transhumance*, edited by M. Niamir-Fuller, 97-123. London: Intermediate Technologies Publications Ltd,1999.

Turner, M. D., A. Ayantunde, K. P. Patterson, and E. D. Patterson, "Livelihood Transitions and the Changing Nature of Farmer-Herder Conflict in Sahelian West Africa." *Journal of Development Studies* 47, 2 (2011): 183-206.

———. "Conflict Management, Decentralization and Agropastoralism in Dryland West Africa." *World Development* 40, no. 4 (2012): 745-57.

Turner, Matthew D, John G McPeak, Kramer Gillin, Erin Kitchell, and Niwaeli Kimambo. "Reconciling Flexibility and Tenure Security for Pastoral Resources: The Geography of Transhumance Networks in Eastern Senegal." *Human Ecology* 44, no. 2 (2016): 199-215.

Turner, Matthew D, and Eva Schlecht. "Livestock Mobility in Sub-Saharan Africa: A Critical Review." *Pastoralism* 9, no. 1 (2019): 13.

Turner, Matthew D. "The Micropolitics of Common Property Management on the Maasina Floodplains of Central Mali." *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 40, no. 1 (2006): 41-75.

United Nations. "Why People Fight: Inequality, Exclusion, and a Sense of Injustice." 2018.

United Nations Economic Commission for Africa *New Fringe Pastoralism: Conflict and Insecurity and Development in the Horn of Africa and the Sahel.* (Addis Ababa, Ethiopia: United Nations Economic Commission for Africa, 2017). https://www.uneca.org/publications/new-fringe-pastoralism-confict-and-insecurity-and-development-horn-africa-and-sahel.

United Nations Office for West Africa. *Pastoralism and Security in West Africa and the Sahel: Towards Peaceful Coexistence.* United Nations Office for West Africa and the Sahel (Dakar, Senegal: UNOWAS, 2018).

Van Driel, Antje. "The End of the Herding Contract: Decreasing Complementary Linkages between Fulbe Pastoralists and Dendi Agriculturalists in Northern Benin'." *Pastoralists under pressure* (1999): 191-209.

van Weezel, Stijn. "Local Warming and Violent Armed Conflict in Africa." *World Development* 126 (2020): 104708.

Vinson, Laura Thaut. *Religion, Violence, and Local Power-Sharing in Nigeria.* Cambridge University Press, 2017.

Vircoulon, Thierry. *Analysis of Conflict and Peacebuilding in the Central African Republic.* Conciliation Resources (London: 2015).

Walther, Olivier J and William F. S. Miles. *African Border Disorders: Addressing Transnational Extremist Organizations*. New York: Routledge, 2017.

Waters-Bayer, Ann, and Wolfgang Bayer. "Coming to Terms: Interactions between Immigrant Fulani Cattle-Keepers and Indigenous Farmers in Nigeria's Subhumid Zone (Relations Entre Éleveurs Immigrants Peuls Et Paysans Autochtones Dans La Zone Subhumide Du Nigeria)." *Cahiers d'Études Africaines* 34, no. 133/135 (1994): 213-29..

Webb, J. L. *Desert Frontier: Ecological and Economic Change Along the Western Sahel: 1600-1850.* Madison: University of Wisconsin Press, 1995.

Wild, Hannah, Jok Madut Jok, and Ronak Patel. "The Militarization of Cattle Raiding in South Sudan: How a Traditional Practice Became a Tool for Political Violence." [In English]. *Journal of International Humanitarian Action* 3, no. 2 (2018).

Witmer, Frank DW, Andrew M Linke, John O'Loughlin, Andrew Gettelman, and Arlene Laing. "Subnational Violent Conflict Forecasts for Sub-Saharan Africa, 2015–65, Using Climate-Sensitive Models." *Journal of Peace Research* 54, no. 2 (2017): 175-92.

Women, Livestock Ownership and Markets: Bridging the Gender Gap in Eastern and Southern Africa. Edited by Jemimah Njuki and Pascal Sangiga. London: Routledge, 2013.

Yembilah, Rita, and Miriam Grant. "The Political Ecology of Territoriality: Territorialities in Farmer–Herder Relationships in Northern Ghana." *GeoJournal* 79, no. 3 (2014): 385-400.

Young, Helen. *Pastoralism in Practice: Monitoring Livestock Mobility.* UNEP/Tufts Feinstein Center (2013). https://fic.tufts.edu/publication-item/pastoralism-in-practice/.

Young, Helen, Roy Behnke, Hussein Sulieman, Sarah Robinson, and Abdelhafiz Mohamed. *Risk, Resilience, and Pastoralist Mobility.* (Feinstein International Center, 2016). https://fic.tufts.edu/publication-item/risk-resilience-and-pastoralist-mobility/.

Zakinet, Dangbet. "Des Pasteurs Transhumants Entre Alliances Et Conflits Au Tchad. Les Arabes Salamat Sifera Et Les Arabes Djaatné Au Batha." [In Fr]. *Afrique contemporaine* 255, no. 3 (2015): 127-43.

Zampaligré, Nouhoun, Luc Hippolyte Dossa, and Eva Schlecht. "Climate Change and Variability: Perception and Adaptation Strategies of Pastoralists and Agro-Pastoralists across Different Zones of Burkina Faso." *Regional Environmental Change* 14, no. 2 (2014): 769-83.