

**Processes of Political Marginalization:
Situating Sudan within Regional Trends of Exclusion Facing African Pastoralists**

By

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Acronyms

AU	African Union
CIDA	Canadian International Development Agency
CPA	Comprehensive Peace Agreement
FAO	(United Nations) Food and Agriculture Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
ICC	International Criminal Court
IPCC	Intergovernmental Panel on Climate Change
MARF	Ministry of Animal Resources and Fisheries
MRP	Major Research Paper
NCP	National Congress Party
NDC	Nomads Development Council
NGO	Non-governmental Organization
PU	Pastoralists' Union
SPLM/A	Sudanese People's Liberation Movement/Army
UN	United Nations
UNEP	United Nations Environment Program
US	United States
WB	World Bank
WISP	World Initiative for Sustainable Pastoralism

1 Introduction

1.1 Research Topic

Over the last several decades a rich literature on pastoralism in Africa has developed, one that is often centered thematically on land tenure and resource management and more recently on the viability of pastoralism as a sustainable livelihood. Perusing this literature also reveals a gradual shift in thinking amongst academics from a negative perspective of pastoralism to a view that better recognizes the complexity and value of pastoralist systems functioning in difficult political and environmental contexts. For instance, contrary to previous opinions, many research organizations now believe that pastoralism is an ecologically appropriate land-use system that can generate significant economic returns in dryland areas characterized by scarce and variable natural resources (see, for example, the International Institute for Environment and Development; the World Initiative for Sustainable Pastoralism). In academia this “new” more positive understanding of pastoralism deviates starkly from former interpretations by more justly capturing the agency of individuals, households and communities engaging in this form of production. It is also increasingly supported within international policy circles and by national and international non-governmental organizations (NGOs) (Pavenello, 2009).

Unfortunately, a change in thinking around pastoralist issues has yet to fully reach national African governments where a negative perception of pastoralism continues to pervade policy and legislative decisions (WISP, 2008). Amongst other negative

connotations, pastoralists have been equated with poverty, violence, environmental degradation, economic inefficiency, ineffective tenure systems, and food aid dependency. These anti-pastoralist narratives have significant political, policy and practical implications and their persistence reflects the lack of political power possessed by pastoralist groups (Little, 2013). Certainly since colonialism, and possibly before, pastoralists across Africa have been systematically marginalized by political administrations. Their way of living has attracted suspicion from governments who have at times purposefully discriminated against nomadic people for their independent lifestyles (Chatty, 2006).

Many of the effects of these perceptions have been addressed in literature on pastoralism that has often focused on East African countries such as Kenya, Tanzania and Ethiopia. Considerably less research has been conducted among pastoralists in Sudan, and very few researchers have tracked the history of marginalization that pastoralists have experienced at the hands of the state (Young, 2009). The research that does exist tends to concentrate on pastoralism in relation to conflict and ecological crisis in Darfur. Such research does not, for instance, provide a comprehensive picture of exclusionary processes in the country. As Catley et al. (2013) observe:

[G]eneralizations of geographical and political marginalization, misguided policy and conflict and crisis apply to much of the Horn of Africa region, [but] there are marked differences in the specific ways these trends have played out in different places. Each local set of conflict and livelihoods issues has a long and complex

history, a history that is often poorly understood by policy-makers and development planners. (p. 3)

The purpose of this Major Research Paper (MRP), therefore, is to build on literature describing trends of regional pastoral marginalization, while drawing attention to the less-studied experiences of pastoralists in Sudan. The research will seek to answer the question: what can we learn from exclusionary trends of political marginalization with respect to pastoralism in the rest of Africa, in order to better understand the situation of pastoralism in today's post-secession Northern Sudan?

Marginalization describes a process by which certain groups of people are systematically excluded from meaningful participation in political, economic, social, and cultural life (Jenson, 2000, p. 1). In this analysis, political marginalization refers to the exclusion of pastoralists from government systems of protection and integration (Pavenello, 2009). Colonial and African political administrations have tended to undervalue pastoralism as a form of production and promote policies that aim to change or replace this livelihood in order to use pastoral grazing land for other, allegedly more beneficial, purposes (Hesse & MacGregor, 2006). As a result the land available to pastoralists is shrinking and with it their ability to sustain their livelihoods.

1.2 Approach and Method

My interest in this subject stems from my work experience with the Sudan Program in the Canadian International Development Agency (CIDA). Alongside projects on “Children

and Youth”, and to a lesser extent “Governance”, CIDA’s “Bilateral Program” thematically focuses its assistance to Sudan on “Food Security”. Having acted as both a Junior Development Officer and Analyst on the Sudan Program, I have become familiar with some of the opportunities and constraints within the agricultural sector. I noticed, for instance, that few discussions inside the agency, with partners, and in outside media reporting, directly explore the issues affecting pastoralists in Sudan – with the exception perhaps being when conflict involves pastoral groups. Considering the historic importance of pastoral forms of livelihood, and the high concentration of livestock in the country, my own lack of knowledge on pastoralism encouraged me to delve more deeply into the subject. I quickly learned that pastoralism in Sudan is less frequently studied than other African countries, especially compared to neighbouring East African states.

This realization prompted me to create an intrinsic case study of Sudan for my MRP. An intrinsic case study is used when a researcher is genuinely interested in understanding a subject matter with which s/he is unfamiliar. The case may not necessarily represent other cases or, conversely, an anomaly, but the case itself is of interest (Baxter & Jack, 2008). This approach is therefore useful for my MRP given that my objective is not necessarily to "fit" Sudan in a broader theory or argument, but rather to learn more about pastoralism and explore the experiences of Sudanese pastoralists in relation to other African countries. Consequently, I will not make a formal comparison between Sudan and the rest of Africa, but will present similar issues in other African countries to introduce my research on pastoralism in Sudan.

In terms of methodology I chose to learn as much as I could from the secondary literature on pastoralism in Sudan, within a broader literature review on pastoralism across Africa. I made extensive use of anthologies to acquire broad-based knowledge from a greater number of academics writing on the subject of pastoralism. A notable exception was an informative and thorough single-authored book by Homewood (2008). I also included an analysis of “grey literature”, i.e. documents available in the public realm related to the work of organizations and institutions involved in aid, analysis, or support to African pastoral groups. Reports and journal articles were found through Internet searches using Google Scholar and online databases accessed through the University of Ottawa library catalogue.

A literature-based approach has a number of limitations. For example, difficulty in accessing policy-specific information has limited my capacity to analyze in detail specific state policies. Some writers attribute this dearth of policy-related literature to efforts by the government to restrict information flows (Babiker, 2013). While that may or may not be the case, language barriers further affected my ability to conduct detailed research; the website, for example, of the Sudan Ministry of Animal Resources and Fisheries (MARF) which oversees pastoralist development, is solely available in Arabic. As a result, the secondary research presented here is useful because it pieces together a comprehensive historical account of pastoralist marginalization in Sudan, but further research would benefit from field work conducted within the country.

In addition, although much of the information presented in this paper pertains to both Northern and Southern Sudan because of their shared history, I concentrated my analysis in the latter part of the paper on trends in Northern Sudan, now known as the Republic of Sudan. My reasoning for doing so was three-fold. First, less research has been conducted among specific pastoral groups in the North, as compared to in the South, where several anthropological studies were undertaken among the Dinka and the Nuer. Pastoralists represent a highly diverse group with differing histories, experiences, needs and levels of vulnerability (Pavanello, 2009). Even within Sudan the experiences of pastoralists vary widely. This underscores the justification for looking closely at one specific area, in relation to other areas and countries.

Second, land usage in the North is particularly vulnerable to expressions of climate change due to the presence of the Sahara desert and the Sahel belt. Climate models, supported by satellite imaging and historical data, predict a reduction of rainfall in both North and South, but confirm that the Sahel region is especially prone to longer, more frequent droughts (Moritz, Kyle, Nolan, Patrick, Shaffer & Thampy, 2009). For centuries the Sahel has been a major production zone for pastoralists in Africa because of its physical and climatic conditions and the plant species this dry region supports (Dong, Wen, Liu, Zhang, Lassoie, Yi, Li, Li & Li, 2011).

Third, the North's shrunken oil revenue as a result of the South's secession (taking with it the greater share of oil fields, as well as swathes of arable land) has increased the likelihood that the North may increasingly need to rely on livestock development

(Babiker, 2013; Buchanan-Smith et al., 2012). This has ambiguous implications for pastoralism, as the form that such future development might take, may or may not fit with pastoralists' needs and rights.

In summary, coming from a prior policy-oriented background centering on subjects like food security and governance in Sudan, I began exploring secondary and “grey” literature on pastoralism in Sudan and more generally, in Africa. I opted to focus on Northern Sudan in my final analysis below, given the relative lack of attention to Northern pastoral groups, the vulnerability to environmental change, and the reduced economic options facing the country after the South's secession.

1.3 Chapter Overview

This research paper is divided into two: pastoralism in Africa, and pastoralism in Sudan. The first part introduces the concept of pastoralism, before looking more closely at the ways in which African pastoralists have been marginalized since colonialism, by political administrations that are frequently supported and influenced by foreign actors. The literature reveals a trend of exclusion characterized by stereotypes against pastoralism and pastoralists, sedentarization policies, land appropriation through privatization and conservation, and blame attributed to pastoralists for resource conflict. Cumulatively these processes have increased the insecurity of pastoralism as a livelihood and challenged its sustainability, as well as contributed to an uneven pattern of development across Africa. Such a contextual investigation helps to situate Sudanese pastoralism –

discussed in the second section of the research paper – within wider trends and historical trajectories.

To a certain extent, therefore, the second section mirrors the first in its exploration of exclusion. Like the first section, the research on pastoralism in Sudan considers government efforts to sedentarize, legally control, and essentially replace pastoral systems with ‘modern’ commercial agriculture. Yet in the Sudanese context, as I demonstrate in the sections below, these patterns take on relevance for their relative omission from narratives of resource conflict that have to date dominated literature on pastoralism in Sudan (see, for example, Verhoeven 2011). They are significant because these examples of marginalization suggest that land degradation and conflict could at least in part be explained by a common set of policies deleteriously affecting pastoralist livelihoods. In other words, by first examining pastoralism in Africa and then considering the applicability of these wider trends to the case of Sudan (and more recently, North and South Sudan), we can emerge with a more complete picture of the determinants shaping pastoralist activity than what is normally conveyed through the predominant focus on conflict and the role of pastoralists in that conflict.

Conversely, I hope that a re-examination of pastoralism in Sudan through a lens that is not solely conflict-oriented will highlight how pastoralism in Sudan can and should be mentioned in the wider regional literature identifying processes of marginalization affecting pastoralism in Africa. The material presented here could be of value to development organizations working in Sudan who have a deep interest in the well-being

of pastoralists, and for whose goals and activities this study's historical and regional perspective could be supportive. As discussed in the conclusion of this paper, the case of Sudan is important to include when searching for an understanding of the future viability of pastoral livelihoods in Africa.

2 Pastoralism in Africa

2.1 African Pastoralists

African pastoralists have historically been mobile people rearing ruminants (animals with a digestive system suited to grazing): goats, sheep, cattle and camels (AU, 2010). Although popular conceptualizations still strongly draw on this image, in reality pastoralists today embody a flexible and diverse category of people. They range from nomadic and transhumant (seasonally-migratory) animal owners, to livestock traders and stockless hired herders, to settled agro-pastoralists who participate in both animal husbandry and cultivation (Morton, 2005).

While varying definitions emphasize differently pastoralism's occupational function and cultural distinctions, the ancestral practice is far from static. Pastoralists regularly engage and disengage from livestock-based livelihoods to adapt to climate change, circumvent disease, evade conflict, and respond to political and economic opportunity and constraint (Homewood, 2008). This makes it virtually impossible to precisely estimate the number of pastoralists in Africa, although they constitute a sizable portion of the total population (Leff, 2009).

Attempting to capture the dynamism of contemporary pastoralism, Chang and Koster (1994) broadly define pastoralists as:

[T]hose who keep herd animals and who define themselves and are defined by others as pastoralists . . . The point is that keeping herd animals requires human beings to shape their lives – socially, culturally, economically, and ideologically – in ways that are structured by an interdependence with their animals. (pp. 8-9)

The importance of livestock for both livelihood and cultural identity has been aptly summarized by Hutchinson (1992), who identified livestock as “in a very real sense the currency of power” (p. 297).

Pastoralism is practiced to varying degrees across the entire African continent (AU, 2010). Pastoral groups predominantly inhabit sparsely-populated arid and semi-arid landscapes with highly variable rainfall patterns, which are marginal for crop production (Young et al., 2009). These areas are generally remote, underdeveloped, and associated with high levels of physical vulnerability (AU, 2010). Consequently, African pastoral livelihoods are shaped around incorporating adaptive measures to manage their herds (Leff, 2009).

Many pastoralists are transhumant: during the dry seasons and in times of drought, they migrate with their livestock to find water and open rangeland for grazing (Blackwell, 2010). Rangeland refers to uncultivated terrain where the native vegetation is mostly grasses, or grass-like plants and shrubs, suitable for animal grazing (U.S. Environmental Protection Agency, 2012). Pastoralists return with the onset of the wet season to avoid flooding and insect-borne diseases that flourish with the humidity (UNEP, 2007). Such movements are not inadvertent, but are part of a practice rooted in local knowledge and

supported by traditional systems of governance (AU, 2010). Pastoralism has thus been described as a ‘flexible subsistence strategy’ (Moritz et al., 2009) that enables herders to optimize grazing conditions and access water throughout the course of the year. By necessity, pastoralists have learned over the centuries to become resourceful, innovative entrepreneurs in order to grapple with the challenges of living in some of Africa’s most difficult ecosystems (Catley, Lind & Scoones, 2013).

2.2 Pastoralism and Sedentarization

Recognition of pastoralism as a resourceful and valuable livelihood has only really consolidated in academic literature in the last few decades. In addition, it appears to be just emerging in some African policy writing – most notably the 2010 *African Union Policy Framework for Pastoralism in Africa* (AU, 2010). By contrast, throughout most of the twentieth century, conceptualizations of pastoralism were influenced by colonial Western interpretations of such livelihoods as backward, irrational and primitive (Gilbert, 2007).

Generally operating outside formal administrative networks, pastoralists’ mobile lifestyle, particularly their trans-border movements, have attracted suspicion from political administrations. As a result, they have been systematically branded as a political and economic threat to security (Young et al., 2009). Pastoralists have been perceived as ignoring basic market principles of supply and demand (Raikes, 1981) and as being driven by a fixation for accumulating livestock irrelevant of quality, environmental

sustainability or economic gain (Herskovits, 1926). In the post-colonial decades, pastoral societies who have resisted reforming their production systems have been portrayed as an impediment to ‘modernization’ (Chatty, 2006).

Little (2013) suggests that pastoralism, perhaps more than any other livelihood, has been subjected to biased language and detrimental narratives. These have had significant policy implications and been used to justify harmful action on part of the state and private sector. African governments, influenced by foreign assumptions about pastoralists and ideas about development in general – what Leach and Mearns (1996) refer to as ‘received wisdom’ – have been seen to embrace discriminatory characterizations and modes of thinking. Stereotypes about pastoralism have guided Western donor agendas (Catley et al., 2013) and prejudiced African policy-making (Galaty, 2011) which, in a period of nation building, has sought to further control nomadic groups. According to Anderson (1999), the majority of state and foreign-supported interventions have been premised on the belief that (East) African pastoralism is “inherently self-destructive and that a more progressive approach to development should steer pastoralists into other, allegedly more secure means of assuring their livelihood” (p. 240). This has been attempted by encouraging pastoralists to adhere to market ‘rationality’ and to settle in permanent locations (i.e. to become sedentary) (Little, 2013; Spencer, 1997).

Sedentarization refers to the change from a mobile lifestyle to having a fixed homestead, which is often, although not always, associated with a change in livelihood production (McPeak et al., 2011). For colonialists, settlement policy was essential for acquiring and

consolidating control, as sedentary populations were easier to “manage”. For subsequent African governments, stationary lifestyles have also been perceived as superior to those dependent on movement and necessary for “modern” development (Chatty, 2006).

Consequently, sedentarization has become a long-term objective of policy and legislation for political administrations that have aimed to ‘assimilate’ nomadic peoples through any means possible, including force (Gilbert, 2007). Brockington (2002) for example, has closely examined government livestock policy in Tanzania and concluded that the state aims to replace pastoralism with intensive, sedentary production systems. In his research, he demonstrates how the Tanzanian Village Land Act of 1998 ensures that local residents nominally own village lands while pastoral lands are featured under a general law, which identifies them as empty and prevents pastoralists from claiming occupancy rights. This makes the land pastoralists dependent on susceptible to state reallocation.

In Kenya some pastoralists have purposefully reduced their mobility and/or participated in cultivation in order to assert their right to claim certain territory (Homewood, 1992). The notion that “land belongs to those who cultivate it” has been heavily endorsed by various African administrations as a means of encouraging pastoralists to settle. Furthermore, throughout Eastern Africa plans for settling pastoralists have been greatly influenced by major development agencies and international organizations, who for some time posited that livelihood diversification away from livestock herding was necessary for improving food security (Chatty, 2006; Anderson, 1999).

Sedentarization has especially been promoted in the wake of major regional disasters such as famine (Anderson, 1999). Humanitarian aid provided to respond to droughts and other catastrophes tends to encourage mobile people to settle in order to ‘benefit’ from income-generating projects (O’Leary, 1990). Reflecting on the period since colonialism, a pattern of sedentarization emerges, which, out of necessity or choice, has become more common because of an increasing vulnerability amongst pastoralists.

2.3 Customary Rights Violation and Mobility Restriction

One of the ways pastoral livelihoods have become more vulnerable and insecure is through the progressive erosion of their traditional practices and governance systems. Throughout most of Africa, pre-colonial usage of communal rangeland was managed through dynamic, negotiable systems of access established through customary use (Homewood, 2008). Common property regimes often involved consultative decision-making and collective enforcement. Priority was frequently determined by some hierarchical measure such as caste, heredity, age, or simply by residence and tradition (see, for example, Scoones et al., 1993; Hitchcock, 1990). In contrast to rigid Western ideas of property ownership – which are typically individually defined and protected by a right to enforce exclusion – flexibility and the possibility of reciprocity were central to the organization of social and spatial boundaries (Homewood, 2008).

The arrival of colonialists in Africa marked the imposition of new legal systems that supplanted traditional governance arrangements. As colonial administrations claimed

communally-owned land in the name of the Crown or state (Galaty, 2011), nomadic people were stripped of their customary rights to utilize certain lands because their periodic occupation and joint administration fell outside colonial understandings of fixed property (Gilbert, 2007).

Colonial administrations tended to interpret [the] absence of clear, cut-and-dried individual property rights as absence of [a] legal framework, rather than as a manifestation of alternative systems evolved in the context of an unpredictable and variable environment. (Homewood, 2008, p. 73)

Over the course of the twentieth century, a proliferation of fixed borders – international, national, regional and local – were erected by colonial powers and post-independence governments. These cut through land that was (incorrectly) considered un-owned, unmanaged and unproductive. Boundaries inevitably transected pastoral rangelands (Nugent, 1996) while ensuing land policies, particularly those that encouraged land enclosure, restricted the movements of nomadic groups (Little, 2003).

Throughout Africa a pattern of land fragmentation and commoditization has emerged (Galvin et al., 2008) to the point that academics like Homewood (2008) have suggested that the “African commons are fast becoming African enclosures.” (p. 251). Common property resources have generally been reallocated or sold for individual private tenure under free-market systems or, when they have survived, faced enormous pressure from encroaching outside investors or settlers keen to acquire legal title (Homewood, 2008; Galaty, 2011). As a result, common property regimes have been widely disrupted across

the continent and the total area of land governed communally has declined (Galvin et al., 2008).

2.4 Uneven Development and Privatization

In addition to stripping pastoralists of their customary rights and restricting their mobility, political and economic ‘development’ has resulted in a pattern of uneven development, benefiting sedentary groups, while disadvantaging the majority of pastoralists (Pavanello, 2009). Well-meaning state efforts to devolve control of land and natural resources to local communities are an example of this; they have, at times, seriously disadvantaged mobile pastoralists who, despite customary seasonal use of certain lands, are often forgotten or disregarded in development planning. In Burkina Faso, for instance, the nationwide Gestion de Terroirs program prioritized the needs of settled farmers and did not account for mobile pastoral groups (Homewood 2008). Several studies on settlement programs have also documented the increased impoverishment and destitution of sedentary pastoralists (see, for example, Fratkin, 1992; Hogg, 1986; McCabe, Leslie, & Deluca, 2010). As early as 1981, a survey of development schemes for pastoralists showed a long history of poorly conceived plans and no evidence of lessons learned (Spencer, 1997).

Post-independence, international development agencies influencing state policy-making believed that privatization would lead to investment, more sustainable management, and economic growth (Homewood, 2008). In reality, for pastoralists, privatization benefited a

select few while contributing to the impoverishment of the majority (Tache, 2013). Transitions in land tenure, notably the state's imposition of land rights and the commoditization/privatization process, have facilitated the opportunistic appropriation of pastoral lands by a range of actors, such as the political elite, entrepreneurs, commercial farmers and conservationists (Galaty, 2011). Many pastoralists, when successful in acquiring property title, have been unable to maintain their traditional way of living and, by effect, end up losing private land (Galaty, 1999).

As a result of land commoditization, subsequent privatization has increased pressure on land where open access remains (Kabubo-Mariara, 2002) and common property resources have often become burdened year-round by constant use (Hitchcock, 1990). For example, in Northern Somalia the privatization of key resources forced most pastoralists onto land formerly used on a seasonal basis, which impacted the ability of the land to regenerate (Prior, 1994). In another example, elites who benefited from Botswana's privatization of land also continued to use common-property grazing lands to allow their individual ranchlands periods of regrowth. Where the commoditization of land has obstructed migratory routes by enclosing grazing lands in private ranches, mobile herders have been forced to pay grazing fees for resources they previously had customary rights to use (Tache, 2013). Thus the privatization of communal resources has typically excluded poorer herders (or alternatively imposed new financial burdens) and impacted their access to resources - thereby challenging their ability to stay in the pastoral system (Catley & Aklilu, 2013).

That said, the commercialization of land has enabled some wealthier herders to use their financial and political capital to acquire larger herds and gain greater control over essential resources such as water and grazing land. These actors have been especially successful when formal institutional tenure arrangements are ambiguous or supervised locally (Catley & Aklilu, 2013). Hence, accompanying privatization has been the emergence of a class of 'pastoral elites'. These are typically wealthier herders who have gained a formal education and now live in urban centers. While these actors can theoretically use their status to positively influence political decision-makers, some have become alienated from their pastoral livelihoods and may no longer represent the collective interests of pastoralists (Pavanello, 2009). Evidently, national processes of 'development' have improved the standing of some pastoralists, but often at the expense of others who experience greater marginalization (Spencer, 1997).

According to Galaty (2011) one of the major reasons pastoralists' rangelands are being appropriated, either through state allocation or private purchase, is for commercial agriculture. The World Bank (WB) reported in 2010 that land acquisition in Africa by international agro-businesses has reached unprecedented levels. Countries outside of Africa that are wealthy, but lack sufficient arable land or alternatively have burdensome populations, are securing property abroad to improve their own food security (Galaty, 2013). The impact of an incessantly expanding commercial agricultural sector has been enormous for African pastoralists who are dependent on their environment. In Nigeria, the rapid expansion of agriculture appropriated large tracts of land used by pastoralists, thereby jeopardizing their livelihoods (Gefu, 1991). A similar phenomenon has been

observed throughout Somalia where crop cultivation fortified by state policy has reduced the number of pastoralists and scale of livestock production, increased land degradation and resource conflicts, and hindered the ability of local institutions to regulate resource access and use (Unruh, 1995).

2.5 Narratives of Mismanagement and Conflict

A further reason for land appropriation is wildlife conservation (Galaty, 2011).¹ Despite the fact that pastoralists and wildlife populations have coexisted in Africa for centuries, huge expanses of ‘protected areas’ were established and often enclosed during the twentieth century (Homewood 2008). This has facilitated widespread displacement under the banner of conservation, where governments have evicted pastoralists from areas they are interested in ‘preserving’. As early as the 1930s, charges of poor resource management prompted colonial administrations to implement interventionist programs in pastoral areas to correct what they perceived as environmentally degrading practices (Anderson, 1999).

Beginning with the colonialists and continued by post-independence governments, a ‘fortress conservation’ model (Brockington, 2002) has been applied across Africa’s rangelands and particularly in East and Southeast Africa where vast stretches of savannah support a spectacularly large mammal population (Homewood, 2008). This approach is

¹ According to a list created by Little (2003), the encroachment of alternative land uses includes settlements, irrigated agriculture, game parks and reserves, and hydro-power projects, all of which have had drastic implications for pastoralists’ access to key resources essential for their livelihoods.

based on policies designed to prevent the consumption of natural resources to the extent that in many cases the use of resources by former residents and those living adjacent to demarcated areas has actually been criminalized (Mackenzie, 1987). Policy in the name of conservation has become the means of restoring landscapes and ecosystems to some imagined ‘natural’ state grounded in Western conceptions of what ‘the wild’ should look like (Robbins, 2004). Ironically these ideals are frequently tied to lucrative business opportunities for tourism (Galaty, 2011).

In the 1980s, there was a policy shift away from the purely conservationist approach to a new model intended to promote community development alongside sustainable natural resource use. ‘Conservation with development’ became the new rhetoric, but its projects have struggled to foster strong indigenous participation and define communities of users within enclosed areas (which is an exclusionary process itself) (Brockington, 2002). Consequently, conservation efforts continue to displace large numbers of people, cutting them off from their lands and other natural resources central to their livelihoods (Chatty, 2006).

Inherent in many justifications for conservation are charges about the (mis)management of finite resources by pastoralists, farmers and the rural poor (Geist & Lambin, 2004). In the 1980s the consolidation of a powerful discourse held pastoralists largely responsible for land degradation (see, for example, Sinclair and Fryxell, 1985; Lamprey, 1983). This argument continues to hold weight in many of today’s policy discussions on pastoral development, despite research demonstrating the positive ecological benefits of

pastoralist systems in arid and semi-arid regions (Brockington, 2002). The discourse suggests that resource scarcity stemming from over-exploitation is the fault of poor communities with burgeoning human and animal populations. According to this scarcity/degradation narrative, these groups degrade their natural environments and must therefore compete, sometimes violently, with the onset of shortages (Adams, 2009).

Resource (mis)management narratives targeting pastoralists have emphasized herd sizes, livestock grazing and their associated movement, as contributing to land degradation (Scoones, 1996). These assumptions have been strongly rooted in “equilibrium theory”, where “fragile” ecosystems are seen as possessing a “carrying capacity,” defined as the maximum number of animals that can graze annually on a given area of rangeland (Munro, 2003). Thus, the argument goes, animal overstocking and overgrazing exceed the land’s carrying capacity, upset the equilibrium, and degrade the fragile ecosystem.

These theoretical underpinnings of pastoral land degradation have been reinforced by Hardin’s (1968) “tragedy of the commons” thesis. Hardin suggests that open-access resource management systems inevitably lead to the depletion of natural resources, as individuals act independently and based on self-interest:

It will be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal war, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally however comes the day of reckoning, that is, the day when the long-desired goal of social stability

becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy. (p. 1244)

Hardin's thesis follows the line of thinking of eighteenth-century English aristocrat Thomas Malthus. Malthus' 1798 *Essay on the Principle of Population* has been heavily criticized for its class and racial prejudices; he even raises the idea of eugenics or, in his words, "an attention to breed" (ch. 9, p. 72).

Despite strong criticism of both Hardin and Malthus in academia, the notion that diminishing natural resources are the underlying reason for conflict has maintained its appeal in some academic and policy circles (Brown & Mcleman, 2007; Benjaminsen, 2008). For instance, in 2007 the Nobel Peace Prize Committee made specific reference to "climate wars", and more specifically, pastoral-versus-agriculturalist clashes in the Sahel belt, during their presentation of the award to former US vice-president Al Gore and the Intergovernmental Panel on Climate Change (IPCC) (Benjaminsen et al., 2012). The lethal race for the remaining resources implied by Hardin is an underlying theme reiterated in literature on pastoralism in the African drylands, and in particular the Sahel belt. This literature often exemplifies violent disputes between farmers and herders over land and water as evidence of the direct relationship between the environment and conflict (Benjaminson et al., 2012).

The risk of this theme, which causally links environment and conflict, is that ecology may be disassociated from its social, cultural and political context. For example, specific political or economic processes which might also explain agro-pastoral conflicts and/or

land degradation - such as access restrictions to natural resources as a result of privatization - can be overlooked (see, for example, Benjaminsen et al., 2012). State and private actors can thus be absolved of responsibility for creating or supporting the very conditions that make marginalized people vulnerable to crises and provoke their engagement in conflict (Verhoeven, 2011). Furthermore, according to Verhoeven (2011), “Neo-Malthusian narratives about resource crunches, climate change and environmental conflict are not just theoretically problematic, but lead to the disempowerment of the very people who are blamed for tragedies of the commons” (p. 685). For pastoralists, accusations of land degradation leading to resource shortages are based on essentialist assumptions that capitalize on the stereotypes against this already-marginalized group.

2.6 Conclusion

This chapter has demonstrated that despite their historical permanence across Africa, pastoral livelihoods are being threatened by processes of marginalization linked to factors such as: stereotypes and sedentarization; customary rights violation and mobility restriction; and perhaps most importantly, uneven development, privatization, conservation, and agro-business. This stems in part from prejudicial colonial legacies that have become part of a wider trend of governmental policies across sub-Saharan Africa which frequently attempt to constrict, control and make sedentary, nomadic groups (Adams, 2009). Governments have often shown a biased preference for sedentary populations and pursued harmful land reforms and policies favouring privatization and enclosure predominately for large-scale agriculture and conservation (Leff et al., 2009).

Frequently supported by international donors and institutions, governments, intentionally or not, have successfully alienated pastoralists from their land and show little motivation for changing. This warrants close attention to how individual countries, building on their independent histories and reflective of regional trends, understand pastoralism and accommodate or exclude this livelihood in national policy and programming.

African pastoralists have also frequently been implicated in narratives of resource mismanagement allegedly leading to scarcity and competition. However, the direct link that is often forged between the environment and conflict, can omit important factors such as those contributing to marginalization, which may explain conflict and/or land degradation. Thus, when resource scarcity is uncritically upheld as the independent variable causing conflict, crucial sociopolitical factors can too often be overlooked.

This particular aspect of pastoralist marginalization is pertinent in the case of Sudan, where a substantial portion of research is directed toward describing and understanding conflict. As will be shown in the following chapter, an emerging trend in conflict-related writing on Sudan is the oblique reference to pastoralists via mention of the environment (see, for example, UNEP, 2007; Leff, 2009; Brown, Hammill & Mcleman, 2007). Connections between climate change and conflict, for example, imply that pastoralists and their livestock outstrip resources, and resort to conflict for survival. The following chapter, therefore, draws attention to these sociopolitical factors and their relation to conflict, through a historical background of Sudan, and a later focus on North Sudan, today's Republic of Sudan.

3 Pastoralism in the Republic of Sudan

3.1 Historical Background

Until 1821, when the Northern part of the country was conquered and consolidated by Egypt, Sudan was a collection of independent kingdoms. This remained the case in the South, while the North later underwent a process of Islamic and anti-colonial state-building during the Mahdist rule (1884-1898) (Woodward, 1990). Despite these years of formidable resistance, in 1898 British colonial rule in Egypt extended into Sudan, to remain until Sudan's independence in 1956 (Fadlalla, 2004).

The British left a year after witnessing the beginning of what would become a 17-year civil war (1955-72) between the North and the South (Country profile: Sudan, 2004). The war ended when a 1969 coup overthrew the government and granted self-governance to South Sudan in the 1972 Addis Ababa Agreement (Fadlalla, 2004).

Later the same government repealed the Addis agreement, which led to the militant revival of the Southern-based Sudanese People's Liberation Movement/Army (SPLM/A) and marked the commencement of the second civil war (Fadlalla, 2004). In the 1990s a succession of regional and international interventions were staged to broker an end to the conflict, but it was not until 2005 that a Comprehensive Peace Agreement (CPA) was signed between the Sudanese government and the SPLM/A. In January 2011, a referendum in the South opted for secession from Sudan (Dagne, 2010) and on July 9, the

Republic of South Sudan declared itself a separate entity from the Republic of Sudan.

The partition of Sudan and South Sudan placed the burden of \$38.5 billion in debt on the shoulders of the North, while cutting off 75% of their oil and much of their agricultural resources. Sudan also bears the strain of international economic sanctions led by (but not confined to) the United States (CIA, 2012). South Sudan, while at a resource advantage, has also faced economic challenges associated with separation: for instance, the refining, pipeline, and export infrastructure for oil are in the North, and in January 2012 oil exports ground to a halt in both countries because of a disagreement concerning pipeline fees (USIP, 2011).

The two countries have since reached an agreement on the distribution of oil wealth, but it is unclear when the flow of oil will actually resume. Regardless, Sudan will not benefit from oil production to the same extent that it did when the South was considered within its borders. At the beginning of the century, Sudan's economy boomed as a result of high oil prices and significant foreign direct investment (FDI) (CIA, 2012): Sudan enjoyed one of the highest growth rates in Africa between 2000 and 2009 (Behnke, 2012). Since 2011, the loss of oil earnings associated with the South Sudan's secession has led to deteriorating macro-economic indicators in Sudan: inflation is rising, currency has depreciated, shortages of foreign exchange continue, and the country has been forced to introduce an austerity budget (CIA, 2012). This has contributed to the Government of Sudan's plans to diversify its economic base (Buchanan-Smith et al., 2012).

The rise and fall of oil as a national asset has taken place alongside that of agriculture, and livestock in particular. Agriculture was the leading source of income until oil exports began in 1999, although it has remained the bulk (80-90%) of non-oil earnings since then (Young et al., 2012; Pantuliano, 2010; FAO, n.d.). Despite the importance of both crops and animals to the economy, the livestock sector has been comparatively neglected by government policy, which has favoured crop expansion and after 1999, oil production (Fahey, 2007; UNEP, 2007).

As oil revenues eclipsed those of other exports in the early 2000s (such that agricultural exports fell to 5-10% of the total revenue), government emphasis shifted from agriculture to oil (Behnke, 2012). Conversely, when Sudan's revenue from oil production diminished following the 2011 secession of the South, state interest revived in agriculture, and in livestock in particular – counter to previous trends, and perhaps due to the reduced crop-suitable land base (Babiker, 2013; Buchanan-Smith et al., 2012).

The Republic of Sudan's 2011 *National Salvation Plan* and the interim *Poverty Reduction Strategy Paper* highlight livestock as a source of foreign exchange and potential driver of economic growth (Buchanan-Smith et al., 2012, p. 21). Approximately 80% of the work force is employed in agriculture, which now contributes one-third of the country's gross domestic product (GDP) (CIA, 2012). According to Sudan's Central Bureau of Statistics, more than 60% of agriculture's total GDP is attributed to animal husbandry, compared to less than 40% accounted for by crop production (Behnke, 2012).

Animal husbandry is practiced across nearly all of the formerly unified state: anywhere between 40-60% of the population is engaged in the rearing of cattle, sheep, goats and camels (UNEP, 2007, p. 184). After neighbouring Ethiopia, Sudan and South Sudan combined possess the second largest number of livestock in Africa (UNEP, 2007). Alongside the Kordofan region, Darfur (in the North) has long been one of the most prominent sources of livestock production for domestic and foreign markets; since the South's separation, the three Darfurian states are purported to possess between one-quarter and one-third of North Sudan's livestock resources (Buchanan-Smith et al., 2012, p. 10). The vast majority of these animals in Sudan are raised through nomadic and semi-nomadic pastoral systems (Ahmed, 2002; Ahmed & Ghaffar, 2001).

3.2 Pastoralism and Sedentarization

The Republic of Sudan has one of the largest pastoralist populations in Africa; pastoralism is not only a crucial rural livelihood, but also part of a cultural identity – even for those who no longer practice herding (Young et al., 2012). Herd population sizes are intimately connected to a cultural perception of livestock as a financial asset and a representation of social wealth (Blackwell, 2010). In addition, large herds act as a form of insurance against potential losses triggered by disease, drought and insecurity (Pantuliano, 2010).

At the same time, pastoralism over the last several decades has been greatly threatened in Sudan by drought, conflict, discriminatory policy and legislation, and negligible political

representation (Homewood, 2008). Such pressures affect the mobility of herders, their access to vital resources, the health and productivity of their animals, and their physical security (Feinstein International Center, n.d.). These pressures have persuaded or forced some pastoralists to seek alternative economic opportunities, sometimes completely outside of pastoralism (Homewood, 2008). Today, relatively few ‘purely’ nomadic pastoralists remain in Sudan, although these groups do typically possess the largest herds (Ibrahim, 1999). The majority of pastoralists are transhumant or have become agro-pastoralists, maintaining their herds while participating in cultivation and/or wage labour (Fahey, 2007).

Sudan has been no exception to trends across Africa depicting a political preference for sedentarization. Over the twentieth century, pastoral groups in Sudan were subjected to a succession of administrative and economic policies that undermined the security of their already tenuous livelihood, and pushed them towards sedentary lifestyles (Fahey, 2007).

Sedentarization is still a policy objective today in the Republic of Sudan, exemplified by the National Congress Party’s introduction of the “Green Alert” program in 2006. This four-year, US\$1.4 billion development plan was designed to facilitate the growth of agricultural production, and explicitly allocated money towards the sedentarization of nomadic herders. It grounded its ambitions in its “responsibility” to secure the “rational utilization of the animal wealth” and provide “essential services to the pastoralists” (Fahey, 2007, p. 19). Similarly, the Department of Education for Nomads has articulated

a goal of “absorbing” 99% of children from pastoralist families and communities into the education system by 2015 (Young et al., 2012).

Currently, pastoralist development is subsumed under the responsibilities of the Ministry of Animal Resources and Fisheries (MARF). Compared to the Ministry of Agriculture and Forestry, the MARF is inadequately funded and politically weak, once again demonstrating the importance that has been attributed to crop production and the perceived lesser value of livestock systems (Fahey, 2007).

Furthermore, the MARF is geared predominately towards enhancing commercial productivity by focusing on controlling livestock disease, regulating domestic and export trade and formulating national livestock policy (Fahey, 2007). The focus of the Ministry is therefore on livestock development as opposed to pastoral development. Pastoral development policies, by contrast, are best understood as social programs intended to improve the standard of living among pastoral groups based on self-defined needs (Salih, 1990). MARF’s absent focus on pastoralist livelihoods is exemplified by the fact that livestock censuses typically do not even acknowledge pastoralist systems as the source of most animal-related production (Young et al., 2012).

Even international organizations have indirectly favoured sedentarization over pastoralism: a country review of the United Nations (UN) 2011 project database by a team of researchers at Tufts University, revealed that pastoralists are generally under-represented and rarely considered in UN humanitarian and development programming in

Sudan. When programming did target pastoralists and agro-pastoralists, it was in relation to animal health. Virtually no programs addressed specific challenges for pastoralists or, importantly, policy issues (Young et al, 2012).

In sum, state and international actors alike have heralded sedentarization as a perceived means of improving the socio-economic conditions of pastoral communities and integrating them into national processes (Salih, 1990). Political administrations have failed to recognize and appreciate the significant economic contribution and range-management knowledge possessed by Sudanese pastoral groups (Niamir-Fuller, 1999). Instead, a constructed perception of pastoralism as uncivilized has justified plans and coercive actions for sedentarization, while framing policies in the language of modernization and national development. This has simultaneously helped to obfuscate the process of (forced) land transfer from pastoralists to state and/or private sector use (Ahmed, 2002).

3.3 Customary Rights Violation and Mobility Restriction

Making land “available” for (international) private purchase has become more possible as a result of legislative changes from the 1970s to the present. Customary rights were once relatively respected under the Land Settlement and Registration Act of 1925, which included registered rights for cultivation, as well as customary rights related to passage and access to water (Pastoral Society of Sudan, 2007). Members of common property regimes were recognized as having primary rights to access and use land for herding and

farming (El Hadary, 2010). Customary institutions were seen as legitimate mechanisms that gave indigenous leaders the authority to arbitrate conflict and control resources at the local level (Pantuliano, 2010).

The 1970 Unregistered Land Act began to dismantle these rights, by designating all unregistered land across the country as government property (El Hadary, 2010). Although local people maintained usufruct privileges (i.e. rights to use the land), the Act allowed the government to dispossess large segments of the population, including pastoralists, and to claim ownership of huge tracts of rangeland and parts of migratory routes (Deng, 2002).

In 1972, customary institutions were abolished. While these institutions had historic ties to colonial rule, as “Native Administration” systems for the British to “cheaply control the remote, less useful parts of Sudan”, their abolition negatively affected indigenous pastoralists (Verhoeven, 2011, p. 693). In place of these customary institutions came new local government and judicial councils, which frequently ruled in favour of political and economic elites, and lacked social legitimacy (Morton, 2005). Thus, pastoralists lost access to a trusted institution representing their interests (Shazali & Ahmed, 1999). Native Administration was reinstated in 1980, but it is still accused of being more accountable to the government than the people it is intended to serve (Pantuliano, 2010; Pastoral Society of Sudan, 2007).

In 1990, the government amended the Civil Transactions Act to reinforce state ownership of non-registered land, and to prohibit appeals against land decisions made by the government; all cases that were before the courts at the time were subsequently dismissed (Justice Africa, 2002). While nationalization of land laid the groundwork for later privatization, it also solidified patronage toward the government, by reallocating land to the political and economic elite (Verhoeven, 2011).

In a 2011 survey of stakeholders, including pastoral groups, state representatives, researchers, regional bodies, the private sector, and international organizations, an overwhelming majority of participants identified land legislation as the most crucial policy issue facing pastoralist communities (Young et al., 2012). The second and third policy issues related to obstructed migratory passages and agricultural laws and policies, particularly pertaining to access to grazing land, farming corporations, and distinctions between rangeland and agricultural land (Young et al., 2012). Land legislation, however, was perceived as *the* determining factor to accessing basic necessities such as water and grazing areas.

3.4 Uneven Development and Privatization

Sedentarization policies have faced little opposition in formal political circles where pastoral groups have virtually no representation or voice (Pavanello, 2009). At the national level pastoralists are represented by the 2007 (Darfur-focused) Nomads Development Council (NDC), and the Pastoralists' Union (PU), which was formed in

1994 for pastoralists to initiate and influence national and state livestock policies (Young et al., 2012). The Union's membership though is primarily composed of traders, veterinarians, and wealthy herders; as such, the Union has been accused of being politically weak, not representative of Sudan's poor animal herders (Fahey, 2007), and acting as an extension of the current government (Raziq & Ballal, 2006). Moreover, fears exist that the Union may dissolve if the 1992 Organizations of Farmers and Pastoralists Act – which created the Pastoralists' Union and Farmers' Union – is annulled via government endorsement of the 2010 Agriculture and Animal Producers' Association Act (Young et al., 2012).

As a consequence of inhabiting isolated spaces and being dispersed across vast expanses of land, collective action amongst disaggregated pastoral communities is often difficult to build and organize (Grahn, 2008). Only four Sudanese non-governmental organizations at the national level specifically address pastoralism: Al Massar, Elhawdag, the Sudan Camel Association and the Pastoralism Association (Young et al., 2012). Pastoralists' lack of political representation weakens their ability to ensure that pastoralism is not only protected, but also treated without prejudice (Pavenello, 2009). A 2011 survey of pastoralists, policymakers, and non-governmental organizations found that respondents repeatedly emphasized decision-makers' lack of understanding of pastoral issues (Young et al., 2012).

It is therefore no surprise that land expropriation from pastoralists has a long history in Sudan, beginning with British colonial expansion of sedentary agriculture to feed their

troops in East Africa (Bilsborrow & DeLargy, 1990). Pastoralists, who had previously enjoyed some degree of independence under pre-colonial state administrations, found themselves increasingly dispossessed from their land. Pastoralists' land was then converted to sedentary agriculture, with large-scale agricultural investments in irrigated and rain-fed crop production (Olsson, 1993). For instance, in the early 1900s a monoculture production scheme in Gezira state was devised for the export of cotton to Britain's industrial mills. The adoption of this program excluded any integration of livestock, despite the fact that pastoralists and semi-pastoralists comprised the majority of the region's population and land users (Ayers, 2010). Similarly in Gedarif state, rain-fed mechanized farming schemes (focused on sorghum production) were established in 1945, in areas already inhabited by the Shukriya, Jalyi'in and other pastoral communities (Salih, 1990). For the colonialists – and to the detriment of pastoralists – Sudan appeared to have abundant “uncultivated” land and water, ideal for their agricultural schemes (Olsson, 1993).

After independence, national policies of the 1950s and 1960s continued to exhibit a preference for the horizontal expansion of crop production through large-scale irrigation and mechanized agricultural projects (Adams & Howell, 1979). In the 1960s, for instance, the Manaqil Extension of the colonial Gezira agricultural scheme entailed the appropriation of an additional 400,000 hectares of land for cotton production (Babiker, 2013, p. 178). The 1961-1971 *Economic and Social Development Plan* focused on investing in “modern” commercial agricultural techniques, as opposed to traditional

activities and land use systems (Fahey, 2007). Private investors readily welcomed the exploitation of Sudan's natural resource base (Niblock, 1987).

National political and economic agendas increasingly superseded local interests (DeWit, 2001). The expansion of agriculture blocked pastoralists from use of certain rangelands and forced them to find new grazing spaces, often in areas where land was of poorer quality (Salih, 1990). Pastoralists displaced by agricultural schemes risked heightened insecurity by relocating to new land and potentially infringing on, if not competing with, other tribal groups for fodder and water (Salih, 1990).

After the 1972 end to civil war, Sudan secured loans from the World Bank and investments from oil-producing Arab countries such as Saudi Arabia and Kuwait for agricultural development (Fahey, 2007). Economic production was geared specifically towards international export-oriented markets (Ayers, 2010). Sudan's president from 1969 to 1985, Gaafar Nimeiri, envisioned the country as the "breadbasket" for the Arab world. At a time when the Green Revolution had taken hold internationally, Nimeiri saw Western technology for capital-intensive agriculture as Sudan's solution to its 'backward' production practices and the most promising engine for economic growth (Verhoeven, 2011; Tignor, 1987).

Private corporations and Northern bourgeoisie were sold large expanses of land to implement mechanized commercial crop production schemes (Niblock, 1987). As a result, across Sudan, land available to pastoralists declined substantially. The rapid

expansion of mechanized farming depleted soil quality and generated an “appetite for new land [that was] rapacious and continuous” (Ayers, 2010, p. 164). This pushed agricultural development to expand into Sudan’s peripheral regions, further eroding pastoralists’ customary rights and mobility (Johnson, 2003).

In 2007, Sudan introduced a Five Year Plan for expanding agriculture across arable land using Middle Eastern and Asian capital (Babiker, 2013). The plan involved seizure of pastoralists’ land for irrigated and mechanized farming – formally sanctioning a process of land appropriation already occurring throughout the country:

[T]he current situation in many rural areas, especially Nuba mountains, Southern Blue Nile and Northern Upper Nile, is that large tracts of land have been confiscated by commercial farmers with the support of the government. No accurate statistics exist for the extent of large-scale land confiscation, because many mechanized farms have been set up or expanded on an opportunistic basis without formal registration, and because some of the allocations have been made in secret. (Justice Africa, 2002, p. 10)

Sudanese and international media outlets report that currently over two million hectares of land is “available” for purchase, attracting a range of foreign investors (Babiker, 2013).

3.5 Narratives of Mismanagement and Conflict

In 1975, ecologist Hugh Lamprey was commissioned by the United Nations Environment Program (UNEP) to investigate desertification, and determined that the Sahara desert had expanded in Sudan by 90-100 kilometers between 1958 and 1975 – an average of 5-6 kilometers per year (Benjaminsen, 2008, p. 822). Twenty years later, the United Nations codified its views on desertification, defining it as degradation of (semi)arid regions through human activity and climate change (UNCCD, 1994; FAO, n.d.).

Meanwhile, however, Lamprey's estimates were proven incorrect, yet continued to be recycled by public figures and academics alike; there is no consensus that desertification is even occurring in Sudan (Adams, 2009). That rainfall will decrease in Sudan's Sahel region is considered scientifically proven, through satellite imagery, historical data, and climate models (Moritz et al., 2009); that this is due to human or specifically pastoralist activity in Sudan – rather than global climate change and by extension, human activity elsewhere – would be an erroneous assumption. Indeed, pastoralism has proven one of the few forms of livelihood possible in the Sahara area, North of the Sahel (Ayoub, 1997).

In addition to erroneous climate estimates, livestock estimates are equally fraught with inaccuracy. The United Nations estimate, for instance, of livestock's "exponential" growth from 28.6 million in 1961 to 134.6 million in 2004, is extrapolated from the last livestock census taken – three decades earlier – in 1975 (UNEP, 2007, p. 184; Young et al., 2012). These statistics are frequently used to support arguments of land degradation where pastoralists are accused of owning too many animals and pushing land beyond its

“carrying capacity”. Claims of livestock population growth also overlook the major impact of agricultural intensification and land conversion (Ahmed & Ghaffar, 2001), which forces herders onto smaller and smaller rangelands (Geist & Lambin, 2004), and places them in direct competition with sedentary agriculture (Leff, 2009).

Such oversights are compounded when they are unquestioningly linked to conflict; in 2007, for instance, UN Secretary-General Ban Ki-moon attributed violence in Darfur to ecological crises (Brown & Mcleman, 2007). While conflict is indeed of concern due to increased arms availability (Blackwell, 2010), fatalities, displacement, and depleted livestock herds (Osamba, 2000), simplistic links to “desertification” or pastoralism require nuancing.

Superficial interpretations of the relationship between environmental degradation and conflict do not account for a plethora of perhaps equally or more important factors, such as policy and legislation, that have a direct influence on the practices of pastoralists. Instead, they allow attention to be shifted away from actors and processes that might be implicated in the materialization of violence. For instance, during the civil war in Sudan, the Sudanese government armed members of the Misseriyya pastoral group to act as a proxy militia against the more Southerly-based Dinka tribe. Today, not only does the Misseriyya community have a more militant youth population, but they also (unsurprisingly) have a strained relationship with the Dinka who they come into contact with during migration for grazing land and water sources (Pantuliano, 2010).

The rhetoric around environmental security, with its focus on resource scarcity and consumption, helps to obscure the government of Sudan's involvement in conflict and its continued efforts to exclude certain segments of the population. Consequently, political actors can be absolved of responsibility for provoking the very conditions that make marginalized people vulnerable to crises (Verhoeven, 2011). Assumptions about feckless resource management that fail to recognize the broader reasons for pastoralists engaging in conflict are symptomatic of an incomplete perspective.

4 Conclusion

4.1 Situating the Sudan

Prejudicial colonial legacies have become part of a wider trend of governmental policies across sub-Saharan Africa to restrict, control and make sedentary, nomadic groups (Adams, 2009). Communally owned rangeland and natural resources have been appropriated by elites, outsiders and states for commercial agriculture, tourist developments, and conservation projects. These individuals and groups have been strongly positioned to usurp control of ‘unoccupied wasteland’ (Galaty, 1999). They have been able to exploit opportunities and ambiguities related to land and resource ownership, and navigate through local politics and national legalities to solidify their claims (Homewood, 2008). In many cases this has occurred without consultation or even communication with pastoralists living in the area (Pavanello, 2009). The outcome has had detrimental effects on the individual entitlement claims of pastoralists and the sustainability of their livelihoods, as well as subsequent implications for uneven development (Hitchcock, 1996). This warrants close attention to how individual countries, building on their independent histories and reflective of regional trends, understand pastoralism and accommodate or exclude this livelihood in national political processes.

Similarly, Sudanese policies and legislation have had a dramatic effect on the use of land available to pastoralists and their patterns of movement. Amidst calls for ‘modern

development' the rapid intensification of export-oriented, mechanized agricultural schemes has seriously undermined the social and economic fabric of pastoral livelihoods in Sudan (Johnson 2003; Verhoeven, 2011). During the twentieth century, pastoralists in Sudan saw their customary land rights seriously eroded by government development policy and legislation, with no viable form of recourse (Homewood, 2008; Fahey, 2007; Johnson, 2003). Under the banner of modernization, sedentarization and land appropriation have disrupted customary resource use and management. The effects of political discrimination on pastoralists have been overshadowed by negative stereotypes and their implication in narratives of degradation.

The use of customary land has been disregarded, forcing pastoralists to move to more marginal areas or land already occupied by farmers and other pastoralists, and in turn prompting livelihood-related competition (Pantuliano et al., 2010). Trends of increasing pastoral conflict in Sudan have made the country a prominent example buttressing a broader environmental security discourse that links climate change, land degradation, scarcity and conflict. This literature frequently portrays pastoralists as unsustainably managing their natural resources. Meanwhile, pastoralists in Sudan have been unable to concertedly defend their practice, correct biased decision-making, or oppose development policies and legislation because of weak institutional power and poor political representation. Sudanese pastoralists' vulnerability has thus increased as a result of political exclusion and alienation.

In comparison with other African countries, these processes in Sudan are thinly documented in academia, although they resonate with trends encountered elsewhere. Given the secession of South Sudan in 2011, and the economic restructuring necessary to compensate for lost oil revenue, Sudan's rejuvenated interest in the agricultural sector could have troubling implications for pastoralists if trajectories of discrimination do not change. Now is an especially timely moment for Sudan to collect much needed data on its human and livestock populations as well as conduct a land assessment to investigate the status of its natural resources.² Such information could lead to positive policy outcomes for pastoralists who have historically been excluded, blamed and disadvantaged by national 'development' schemes.

4.2 Pastoralist Futures

The increasing vulnerability of pastoralists in Sudan and across Africa has led to the emergence of a debate in academia between those who predict the evolution of pastoralism, and those who foresee its gradual extinction of pastoralism. The former optimistically point to pastoralists' history of adaptation (Devereux & Scoones, 2008) and their marketing opportunities in an emerging 'livestock revolution' (Young et al., 2009); the latter see pastoral groups as unable to benefit from economies of scale and cope with environmental change (Sandford, 2006). A distinction between these two viewpoints revolves around the issue of mobility: those who emphasize resilience

² Sudan conducted population censuses in 1957, 1973, 1983, 1993 and 2008. During the earlier censuses parts of the country, especially in Southern Sudan, were excluded from participation; nomadic populations were also poorly surveyed. The 2008 census marked the first time coverage was extended throughout Southern Sudan in Sudan's post-independence history, however its results were marred and were rejected by key stakeholders including the Sudan's People's Liberation Movement (DRDC, 2010).

consider the decline of mobility to be a form of survival and adaptation; while those who predict the end of pastoralism point to declining mobility as symptomatic of this outcome.

Some would argue that, by migrating and pursuing livelihood diversification, pastoralists have succeeded in somewhat offsetting vulnerability (Hogg, 1986). According to Fratkin (2013), “[w]hile exogenous factors have ‘pushed’ former pastoralists into settling and seeking alternative livelihoods, many have also been ‘pulled’ by the benefits of sedentary life, including food security physical safety, access to health care and formal education and new economic opportunities” (p. 197). Relatively wealthier pastoralists have decreased their dependency on livestock-based production and invested in rural activities such as farming, trade and transport. While these activities may be interpreted as a pattern of uneven development, they are also correctly interpreted as a means of mitigating risk and building urban networks that may increase economic opportunity (Homewood, 2008).

Less wealthy pastoralists have sought temporary employment in towns and cities or pursued agriculture to produce food (and on occasion sellable surplus) to complement livestock production during difficult times (McPeak et al., 2011). Consequently, some mobile pastoralists are voluntarily abandoning their livelihoods in favour of fixed lifestyles where they can more easily integrate into ‘modern’ economies. However, once a part of stationary communities, the prospects of re-entering a nomadic pastoral production system are seriously limited (Homewood, 2008).

Despite the obstacles facing pastoralists today, pastoralism is still an integral part of African culture; in countries like Sudan, it continues to represent a dominant livelihood (AU, 2010). The economic importance of livestock and of pastoral strategies in arid and semi-arid regions, leads academics like Little (2013) to believe that animal husbandry will continue across Africa's rangelands, and future production strategies will likely incorporate elements of indigenous systems. That being said, already livestock rearing contributes less to the sustenance of pastoral individuals, households and communities. In addition, the transhumant nature of many pastoralist groups may further contract, as grazing land and water become harder to access and livestock more challenging to manage and keep (Homewood, 2008). Despite these evident threats to pastoralism, optimists argue that, "it is not pastoralism as such that is in terminal crisis, but the particular forms it assumed in the past century" (Waller, 2012, p. 21).

The counterargument to this optimistic view of socioeconomic change among pastoralists, however, is that the decline of mobility is but one indicator of the marginalization of pastoralism. In this line of thinking, pastoralists have been one of the principal victim groups of global processes of commoditization, privatization, agrobusiness, and uneven development – benefiting some and disadvantaging the majority. This interpretation – of decreased mobility as a harmful sign of the globalized times – is supported by literature describing mobility as one of the most prominent survival mechanisms to date among pastoral peoples.

Mobility has been one of the principle strategies employed by pastoralists to manage sociopolitical risks, adjust to climate variability, and adapt to the vagaries of occupying challenging ecosystems (Sorbo, 2003; Brown & Mcleman, 2007; Ahmed & Ghaffar, 2001). In Sudan, mobility is almost a necessity for pastoralists because of the extreme temporal and spatial variability of rainfall (Babiker, 2013). Yet while migration has traditionally reinforced resiliency, it has also become a major disadvantage for transhumant pastoralists who are more susceptible to land loss, eviction and exclusion as a result of periodic movement (Peters, 2004). Furthermore, as described in this paper, private land tenure and conservation enclosures have decreased the grazing land available to pastoralists and restricted their freedom of mobility.

The result of changing circumstances is that pastoralist mobility is now misidentified as a source of conflict, rather than simply a means of coping. The areas in which pastoralists live and migrate have been re-classed as “high-risk areas” and their resources have been labeled as no longer within their ‘right’ to access (Blackwell, 2010). Consequently, pastoralists have been identified as targets and instigators of escalating resource violence (Homewood, 2008; Goldsmith, 2013; Scoones, 1995; Fratkin, 1992; Hogg, 1986). Such a view of pastoralists as conflict-instigators, however, is both damaging and inaccurate in its omission of wider factors. The larger picture is that pastoralists have become increasingly integrated in local, regional and international systems, while remaining outside decision-making processes (Galaty, 2011).

Given the influence of wider trends of sedentarization, customary rights violation, mobility restriction, uneven development, privatization, and narratives of mismanagement and conflict, the future of pastoralism may very well depend on the specific localities pastoralists inhabit, and the support they receive from respective governments invested in the continuity of their livelihoods. As the World Initiative for Sustainable Pastoralism (WISP) aptly states,

[G]etting supportive policies implemented and suppressing the disincentives of contradictory policies requires a continuous effort in making the case for pastoralism as a worthwhile investment for scarce public resources, and ensuring that government gives greater support to the over-arching policy objective of supporting pastoralism. (p.10)

If this is the case, then understanding regional trends becomes even more important for states interested in differentiating between useful and harmful policy and programming options.

4.3 Avenues for Future Research

In this paper, I have explored how sedentarization, customary rights violation, mobility restriction, uneven development, privatization, and narratives of mismanagement and conflict can compromise pastoralism's sustainability in Sudan and in Africa more generally. This exploration has not been easy, as the small literature on pastoralism in Sudan concentrates on the (negative) role of the state – a pattern that is reflected, albeit less intensely, in the broader literature on pastoralism in Africa.

What emerges from this analysis, however, is that national governments alone cannot be blamed for the exclusion pastoralists are experiencing throughout Africa; such exclusion is also the outcome of an intersection of forces that goes beyond national and even regional borders. In this paper, I have pointed briefly to some of the ways outside forces have influenced governments at times, but a systematic analysis of the private sector would greatly contribute to a discussion on pastoralist marginalization in Africa and in Sudan. A more thorough investigation of international donor involvement is also needed.

Furthermore, while cursorily mentioned here in the conclusion, additional literature exists on strategies of adaptation and resilience, which could add a further dimension to this research paper. Just as the political processes identified in this paper have undermined pastoralist livelihoods, positive development strategies may likewise improve the options and opportunities for pastoralists to restore and protect traditional practices. Given the decades of challenges and obstacles that pastoralists have faced and weathered, strategies for political empowerment, representation, and inclusive decision-making may benefit not only pastoralists, but also all people of the region.

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