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Cross-border pastoral mobility and cross-border conflict in Africa – patterns and policy responses

Evidence Synthesis

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About this report

This report was prepared for the Cross-Border Conflict Evidence, Policy and Trends (XCEPT) research programme. The programme brings together leading experts to examine conflict-affected borderlands, how conflicts connect across borders, and the factors that shape violent and peaceful behaviour. Funded by UK Aid, XCEPT includes actionable research on international conflict response to inform policies and programmes that support peace.

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Contents

1. Executive summary

This rapid literature review collates information on cross-border pastoral[1] mobility patterns, the connections between this mobility and cross-border conflict systems, and how these are shaped by policy responses in three regions - West Africa / Sahel, the Horn of Africa, and East Africa.

1.1 Key findings

Patterns of cross-border pastoral mobility and transhumance

Pastoralism is estimated to be the main livelihood of 268 million people in Africa, and is critically dependent on mobility which facilitates the use of transient resources in areas of high and seasonal rainfall, ecological, and nutritional variability. These landscapes are not confined within state boundaries but require cross-border movement. Pastoralism has developed over thousands of years in a dynamic process characterised by the adaptation of livestock and animal husbandry to different ecological environments.

Movement patterns vary in line with the context, livestock type, season, and decisions taken by the family unit; and are changing, particularly due to increased competition over land, demographics, and economic, environmental, and policy pressures. Pastoralists decide on distance and route by calculating trade-offs between forage/water access, energy/time expended by moving, and grazing time (Turner & Schlecht, 2019). Their decisions draw on diverse information including from historical experience, networks, traditional governance systems, and nationally designated routes (Davies, et al., 2018).

Sedentarisation is a general trend across the regions covered in this paper, associated with population growth, livelihood diversification, and security, and sometimes also wealth (the ability to afford higher input costs) or poverty (the lack of alternative economic opportunities in urban centres) (Leonhardt, 2019).

West Africa/Sahel

West Africa's pronounced aridity gradient and single season of rainfall shape the distribution of grazing resources and explain the region's historical north-south transhumance (Nori, 2019). Transhumant pastoralists cross the region's climatic zones throughout the year, most following the broad north/south pattern but with variations (Thébaud, 2017). In the last 30 years, transhumance movements have become longer, moved further south, and become more dispersed (Leonhardt, 2019). The economic dimensions are significant as herders buy food and feed, and sell livestock, in host areas (Thébaud, 2017).

There is considerable variation in who participates in transhumance - sometimes the entire family follows the herd, sometimes just the adult sons, or sons with their wives, and some herds are now led by a single hired herder (Leonhardt, 2019). The identity of those involved can affect the quality of inter-group relations: e.g., those travelling with families into the Central African Republic enjoy deeper social and commercial ties with host communities than hired herders (IPIS / Concordis, 2020).

[1] Pastoralism is a way of life based primarily on raising livestock (AU, 2013). Pastoral livestock production involves varying degrees of seasonal movement to access natural resources on a communally managed or open-access system (FAO, 2018). Agro-pastoralism integrates crop production and livestock production. Transhumance is the seasonal movement of herds between complementary ecological zones, based on the scarcity and availability of pastures and water (Leonhardt, 2019; Higazi, et al., 2019, p.13).

East Africa and the Horn of Africa

There is significant diversity in the pattern of livestock movements in the Horn and East Africa due to the heterogenous climate systems and how these interact with topography to shape the agro-ecological landscape. A variety of pastoral systems co-exist and are integrated, to a greater or lesser degree, in local and regional markets with differing mobility requirements (Lind et al., 2020). Cross-border mobility is significant, shaped by factors including ethnicity, ecology, wealth, and security.

Across the Horn and East Africa, the peripheral status of pastoral regions is changing. Border areas once ignored by the state now garner interest from local and global capital, driven by a new appreciation of their economic potential (Lind et al., 2020). Infrastructure for commercial agriculture, irrigation, or extractives are deepening the integration of border areas in national economies, but with significant implications for the food security and social relations of indigenous populations (Hodbod et al., 2020).

Connections between pastoralism and cross-border conflict systems[2]

Pastoralist communities in the three regions are affected by a range of cross-border conflict issues with substantial variance, e.g. armed insurgencies; cattle rustling; conflicts between herders and farmers; state violence; violent crime; and gender-based violence, etc. These issues occur both within and across borders, and borderlands are characterised by neglect and underdevelopment and thus are at particular risk of incubating conflict (Goodhand, 2004, p.169). Yet, importantly, while these security challenges may affect or involve pastoralists, they are not necessarily caused or even exacerbated by pastoralism.

In general, total levels of violence in West Africa, Central Africa, and East Africa have risen over the past decade, especially in some countries in West and Central Africa (Krätli & Toulmin, 2020a). Protracted conflicts have significantly impacted pastoralism by displacing populations, changing herder routes, and increasing the risks of herder militarisation (UN, 2020). While cattle rustling has evolved to be more lethal, less regulated by elders, and embedded in national and international criminal networks (Agade, 2010).

The roles that herders, farmers, and pastoralism play in this heightened conflict context is not clear due to: the overlap in geographies and grievances; the already peripheral nature of these geographies and actors; data limitations; and the misrepresentation of these issues. There is no single explanation, and the conflicts are driven by a complex mix of factors, with high local variability, e.g. including: governance and security vacuums; demographic pressures; changing agricultural and herding practices and markets; changing environmental conditions; arms proliferation; and inequitable development and marginalisation.

There are concerns that violent conflicts involving farmers and herders are becoming a major source of instability in the Western Sahel and Lake Chad Basin, as resource-related grievances intersect with political, social, and economic interests – and e.g. with increasing concerns about engagement with, and exploitation by, violent extremist groups and criminal groups (Kwaja & Smith, 2020). However, there are also questions about whether reports of increasing herder-farmer conflicts are actually over-exaggerations and misrepresentations of the situations to fit political agendas and stereotypes.

Policy responses

[2] This paper examines conflict systems, rather than just conflict, and thus includes analysis of the wider processes and actors that we understand might contribute to the conflict economy across borders, at borderlands, and relating to borders and transnational issues (e.g. through displacement, arms, drugs and people trafficking, (illegal) resource extraction, etc) (Herbert, 2022, forthcoming).

Policy responses shape cross-border pastoralist movement in different ways, whether their aim is to regulate and/or protect pastoralism or to address other issues with secondary impacts on pastoralism. The absence of policy, or its inadequate implementation, also has consequences. Legal arrangements that shape cross-border pastoral mobility include bilateral treaties, regional agreements, decisions or protocols, national legislation, and local-level arrangements between communities.

Broadly speaking, governments have not been able to protect or support pastoralism and the mobility on which it depends, while some policy responses have been harmful. The African Union Policy Framework on Pastoralism decries the "cultural and spatial isolation, and political marginalisation" experienced by pastoralists (AU, 2013, p.24). Pastoralism is associated with a history of neglect and a persistent public policy narrative that is negative and ill-informed (FAO, 2018; Krätli & Toulmin, 2020a).

An increasing proportion of pastoral land is being enclosed, or otherwise closed off to herders, creating barriers to mobility (Lind et al., 2020). This is happening due to commercial agriculture, irrigation, and conservation, and as pastoralists themselves settle. Sedentarisation can be a deliberate objective of governments, but more commonly happens through the neglect of pastoralists' claims over resources and the customary institutions that manage these (Turner & Schlecht, 2019).

Customary practices of inter-communal cooperation and shared resource use continue, but are being undermined, while pastoral property rights lack the legal recognition that other forms of land-based investment enjoy (Krätli & Toulmin, 2020a; Flintan et al., 2013). Officially demarcated livestock corridors are one approach to maintaining mobility, but are likely to be ineffective without broader respect for pastoral land rights and the institutional mechanisms that protect them (Sulieman & Ahmed, 2017).

There has been a marked trend towards decentralisation in Africa and the localisation of natural resource management. One consequence of devolution is that it increases the political value of land, and with it the hardening of administrative boundaries and the risk of ethnically-based resource claims (Leonardi & Santschi, 2016; Nori, 2019). Devolved authorities are now key actors in cross-border security and development negotiations (Eulenberger et al., n.d.; Feyissa, 2020).

A number of bilateral and regional policy initiatives attempt to address the challenges and potential associated with cross-border movement. The most comprehensive is the 1998 Economic Community of West African States (ECOWAS) Protocol, including an International Transhumance Certificate. Yet implementation has been inconsistent across countries, and herders, local authorities, and communities have all faced significant implementation challenges (Diop et al., 2012; Davies et al., 2018). The Intergovernmental Authority on Development (IGAD) endorsed a similar transhumance protocol in 2020.

There is a dissonance between national and regional policy responses, with the latter being more progressive regarding mobility and transboundary resource management (Eulenberger et al, n.d.). National level border concerns typically centre on security and sovereignty, with policies often restricting trade and cross-border movement (World Bank, 2020a). And while regional frameworks are more progressive, they tend to be non-binding and reliant on member state commitment (Davies et al., 2018).

In recognition of the conflict dimensions that affect and involve pastoralists, many of these policy frameworks include aims to reduce conflict. **There are also a patchwork of development and security initiatives that address pastoralism** – e.g. pastoralist livelihood interventions and peacekeeping initiatives. As yet, however, evidence is limited on these, including on whether and how these programmes have contributed to stability (De Haan, Dubern, Garancher & Quintero, 2014; Herbert, 2022, forthcoming).

1.2 Literature base

The literature base on the cross-border mobility of pastoralists in Africa is biased towards West African transhumance systems and those associated with longer-distance seasonal movements, which are more likely to be mapped (Turner & Schlecht, 2019). This rapid review also found more evidence available on policy responses to cross-border pastoral mobility than on the mobility patterns themselves.

The literature is interdisciplinary, drawing on fields across the social and ecological sciences. Scholarly interest in pastoral mobility has increased significantly in the past two decades (Turner & Schlecht, 2019). Similarly, it is over this period that pastoralism and livestock mobility have become more accepted within policy and practitioner circles as consistent with the sustainable use of drylands (Turner & Schlecht, 2019).

Pastoral mobility occurs within and between countries. This rapid literature review endeavours to focus on the literature on cross-border pastoralism, although it is not always clear whether mobility occurs across borders or not (particularly in the regional-level literature). Further, some of the challenges to mobility may be the same in both cross-border and domestic settings.

The literature notes a lack of longitudinal data to track change over time, as well as the challenge of understanding connections across borders when data systems are organised within national or administrative boundaries (Lind et al., 2020). It also highlights the limited evidence on pastoral mobility routes, locations and practices (e.g. Jahel, Lenormand, Seck, Apolloni, Toure, Faye & Coste, 2020; Motta, Porphyre, Hamman, Morgan, Ngwa, Tanya, Raizman, Handel & Bronsvoort, 2018). Information on mobility patterns tends to be anecdotal, informal (Motta, et al., 2018) and "reported on through narratives that describe herd movements in general terms but do not pinpoint actual movements" (Sonneveld, 2009). This dearth of information is due to the distinct challenges in gathering such information – for example, traditional methods require the "continuous presence of at least one observer per herd for extended periods of time" – as well as the high temporal and spatial variability of herd movements (Sonneveld, 2009; Jahel, et al., 2020). Some methods for data-gathering include: mapping livestock distribution through census or estimation of the number of animals; GPS-tracking devices on transhumant cattle herds; network-based approaches using mobile phone tracking; focus group and interviews; and participatory map-drawing with communities (Jahel, et al., 2020; Sulieman & Ahmed, 2017; Motta, et al., 2018). Many authors (such as Jahel, et al., 2020) highlight the need for accurate information about routes, locations and practices to enable the design and implementation of effective regulatory and supportive policy responses.

Pastoralism and conflict are increasingly conflated in media, academic and policy spheres, yet there is a lack of evidence-based analysis on the different forms of insecurity affecting pastoralist and agricultural communities (Higazi, 2021, forthcoming). Further, while there are protocols that mention conflict issues relating to cross-border pastoralism, the suggested policy responses tend to focus on approaches like sedentarisation and regulating movement, or on security responses, rather than actually addressing the underlying conflict dynamics.

2. Patterns of cross-border pastoral mobility and transhumance

Pastoralism is estimated to be the main livelihood of 268 million people in Africa, and it is critically dependent on mobility (AU, 2013). In areas of high rainfall variability, such as drylands, the distribution of water and forage varies significantly in both space and time. Pastoralists deploy a range of strategies to take advantage of these transient resources, among which mobility is key (Krätli, 2015). Livestock

movement is thus a necessary response to the nutritional requirements of the herd (Turner & Schlecht, 2019).

Pastoralists rely on access to a landscape whose various parts have particular ecological value at different times, such as for dry season or drought reserve grazing (Flintan, Behnke & Neely, 2013). These landscapes are not necessarily confined within state boundaries, meaning that cross-border movement is often essential to pastoral productivity (Feyissa, 2016).

Pastoralism in Africa has developed over thousands of years in a dynamic process characterised by the adaptation of livestock and animal husbandry techniques to different ecological environments. This is demonstrated by Lesur, Hildebrand, Abawa and Gutherz (2014), who describe the gradual diffusion of herding across the continent and explain why pastoral societies emerged in the Horn of Africa two millennia later than in the neighbouring regions of the Sahel, north-west Kenya, and Yemen.

Table 1 shows the distribution of pastoralists across the regions covered by this paper.

Table 1: Geographical and ecological distribution of pastoralists in West and East Africa

Zone	Average annual rainfall (mm)	Countries
Saharan super-arid pastoral area	< 150	Mauritania, Mali, Niger, Chad, Sudan, Eritrea
Sahelian arid pastoral area	150 – 400	Senegal, Mauritania, Mali, Burkina Faso, Niger, Chad, Sudan, Ethiopia, Somalia
Sudano-Sahelian semi-arid pastoral area	400 – 600	Senegal, Mali, Burkina Faso, Togo, Benin, Niger, Nigeria, Cameroon, Chad, Sudan, Ethiopia, Somalia, Djibouti
Sudano and Sudano-Guinean sub-humid pastoral area	900 – 1,200	Senegal, Gambia, Guinea, Mali, Côte d'Ivoire, Burkina Faso, Nigeria, Cameroon, Chad, Central African Republic, South Sudan, Ethiopia, Kenya, Somalia
Guinea humid pastoral area	> 1,200	Adamawa Plateau and Western Highlands of Cameroon
High-altitude, humid forest pastoral area	c. 1,600	Burundi, Democratic Republic of the Congo, Rwanda

Source: AU (2013, pp. 13-14); FAO (2018, p. 3)

Many different types of movement are practised according to the local environment and types of livestock reared. Mobility is usually seasonal and has purpose (AU, 2013). As Krätli and Toulmin (2020a, p.48) write, while the "dominant narrative tends to describe the southward movement of pastoral herds in West Africa as the need to flee over-grazing and desertification for which they are responsible," in reality, "this transhumant movement from south to north and south again takes place because herders across the Sahel and savanna recognise the seasonal gains". Turner & Schlecht (2019) find that short-distance daily grazing movements are more constrained, and longer-distance transhumance more predictable, than

commonly assumed, and that the most unpredictable movements in terms of both direction and distance are those which fall at an intermediate spatial scale between these two.

Movement patterns are changing, particularly as a result of increased competition over land. This competition is driven by a range of overlapping, multifaceted, and self-reinforcing factors, including the conversion of rangeland to other uses, changes in production and marketing priorities, an agrarian bias in policy-making, environmental challenges, and population growth. In some areas, conflict and instability have either forced or changed the movement of some pastoralists and led to conflicts on routes. However, pastoralists have also demonstrated that they are highly adaptive to emerging challenges and opportunities (AU, 2013; World Bank, 2020a; Feyissa, 2020). These challenges and opportunities vary by context, season, and over time.

The literature explains that pastoralists draw on diverse sources to decide on their routes, including their historical knowledge and experience, information collected from networks, and traditional systems of governance and decision-making, as well as following nationally designated routes (AU, 2013; Davies, Ogali, Slobodian, Roba & Ouedraogo, 2018). Moutari and Tan (2008, p.5) highlight that successive generations of herders tend to use the same long-established routes and corridors to "reinforce and take advantage of the social capital they have nurtured in the sedentary villages along the route. However, in times of crisis (e.g. drought), these itineraries can change in order to find available grazing". In deciding on a route, herders evaluate: the presence and quality of grazing, watering places, harvest residue in cropping areas, livestock health and diseases, access to markets, trading terms, assessment of risks, and the presence of security forces (Diop, Cesaro, Touré, Ickowicz & Toutain ,2012; AU, 2013). In international agreements governing transboundary pastoralism, grazing routes are "typically set by countries or joint institutions", or in annual negotiation processes such as that between Sudan and South Sudan where tribes come together to agree itineraries and quotas (Davies, et al., 2018, p.67).

Ultimately, distance and route are based on a calculation of trade-offs between forage/water access, energy/time expended by moving, and grazing time. "The relative balance of the trade-offs varies geographically, seasonally, and among livestock species. This helps explain the wide variation of travel mobility parameters reported among study sites, among different herds at particular study sites, and for individual herds across seasons" (Turner & Schlecht, 2019, p.11). Phone technology has considerably changed the practice of livestock mobility over the last two decades, enabling more real-time assessments of distance, transborder passage points, trade terms, host facilities, climatic conditions, and security (Diop, et al., 2012). The everyday use of mobile phones has changed the way pastoralists interact and removed the need to send out scouts (Sulieman & Ahmed, 2017).

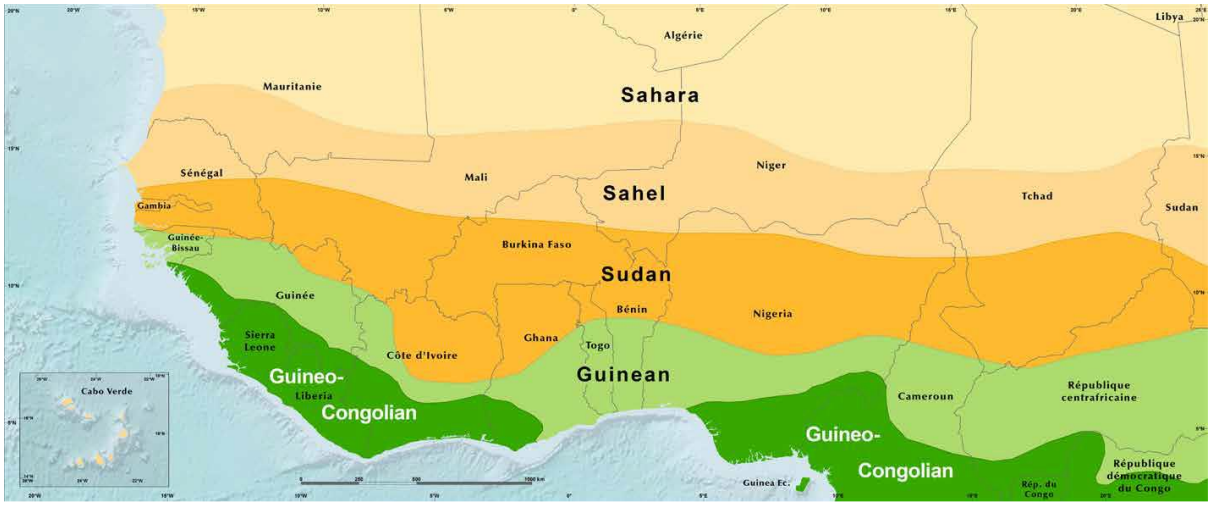
Sedentarisation is a general trend across the regions covered in this paper, associated with a range of factors including population growth, livelihood diversification, and security. However, settled or semi-settled pastoralists still practice transhumance (Leonhardt, 2019). The authors of a study on Mali, Niger, Sudan and Ethiopia found that herd-owners are moving into seemingly-more-secure areas, although they acknowledge the lack of data to make firm conclusions (Toulmin, Diakité, Gana, Dembélé, Sani, Vogt, Harouna, Yacob, Abdi, Khatir & Haroun, 2020). In the West African Sahel, some formerly-mobile herding groups have now settled and seek farmland, while many farmers have also diversified and invested their cash surpluses in cattle (Toulmin et al. 2020). Most Fulani pastoralists in Nigeria are now semi-settled, as a result of government policies neglecting to protect grazing reserves and livestock routes, exacerbating competition for land that is sometimes accompanied by violence (Higazi, Herbert & Owen, 2019). In Uganda, government policies, poverty, food insecurity and conflict are pushing pastoralists seasonally and permanently into agrarian and urban livelihoods (World Bank, 2020a).

The relationship between mobility and wealth manifests itself in different ways. For example, in West Africa, sedentarisation and intensification of livestock production has taken place where there is sufficient supply of livestock feed, such as the Inner Niger Delta in Mali and the cotton-producing zones of Burkina Faso (Leonhardt, 2019). Even so, only those with larger herds can afford the higher input costs of medicines and artificial feed (Leonhardt, 2019). In the Horn and East Africa, livelihood pathways are also diverging but sedentarisation is often associated with poverty. Constraints on access to rangeland resources, compounded by population growth, mean that growing numbers are leaving customary pastoralism, and while some, including women, are finding new economic opportunities in urban centres, large numbers are not (Lind, Sabates-Wheeler, Caravani, Kuol & Nightingale, 2020).

2.1 West Africa/Sahel

West Africa's pronounced aridity gradient and single season of rainfall (June-September) shape the geographical and temporal distribution of grazing resources and explain the historical north-south transhumance that characterises this region (Nori, 2019). Figure 1 shows the region's five bioclimatic zones, whose average annual rainfall ranges from less than 150mm per year in the Saharan belt to 2,200-5,000mm per year in the very far south (CILSS, 2016).

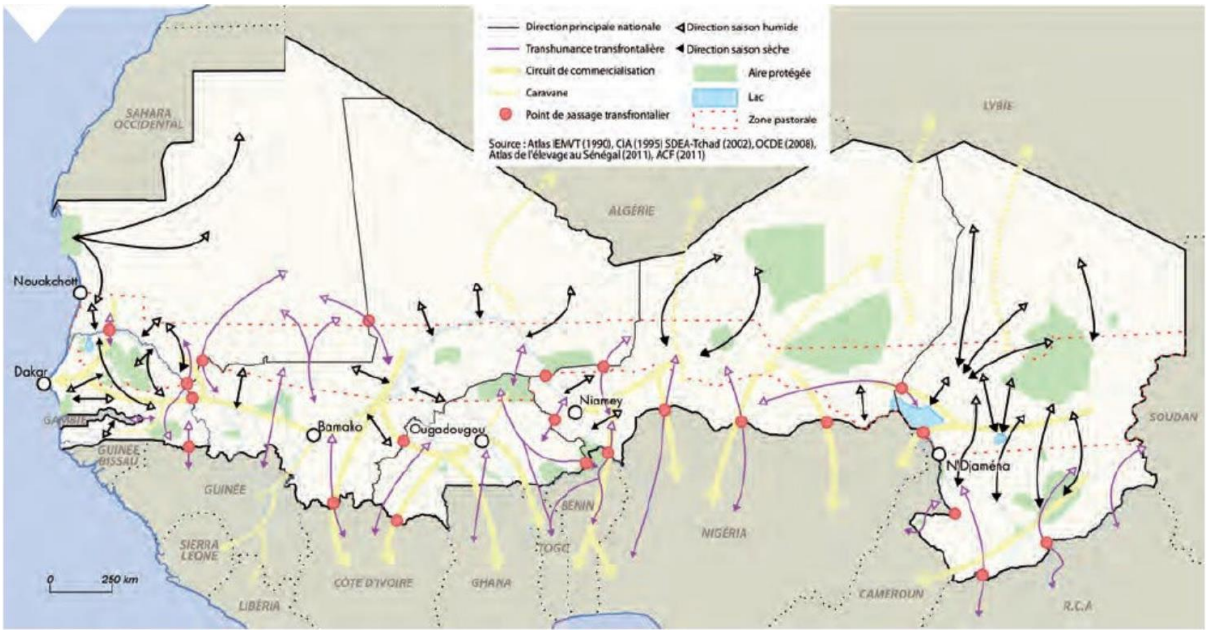
Figure 1: Bioclimatic zones of West Africa



Source: CILSS, 2016, p.8.

Transhumant pastoralists cross these climatic zones throughout the year – most following a broad north/south seasonal pattern (Moutari & Tan, 2008; Thébaud, 2017). This sees pastoralists spending the rainy season in the rich, but short-lived, pastures of the Sahel, before moving further south for the long dry season, then moving back north before the beginning of the agricultural activities of the rainy season (Leonhardt, 2019). The migration schedule is fairly predictable as it depends on the onset of the seasons, with routes tending to be centred on previously known pastures and covering both long and short distances (Leonhardt, 2019). Livestock disperse during the short rainy season when edible grasses and vegetation are widely available, and then concentrate around existing water points during the dry season (Leonhardt, 2019). Transhumance movements are estimated to involve between 70 and 90 percent of Sahelian cattle (Diop et al., 2012), and are illustrated in Figure 2.

Figure 2: Map of transhumance movements in West Africa in 2012



Source: FAO/CIRAD, 2012, in Leonhardt, 2019, p.4.

Aside from this broad, dominant pattern of movement, there are other variations in mobility. For example:

- Some pastoralists from Niger move in and around conservation areas, rather than south into Nigerian agricultural areas (Moutari & Tan, 2008, p.6).
- "Double transhumance" systems have emerged in some countries, with movement in multiple directions – north-south, south-north, and east-west; important east-west cattle movements include those between coastal states (Leonhardt, 2019).
- Some camel herders in Chad choose to remain in northern pastures year-round (Krätli & Toulmin, 2020a, p.48).
- Some pastoralists have moved into agro-pastoralism, or even sedentary agriculture permanently; most households in the Sahel practise some form of agro-pastoralism, with different emphasis given to farming or livestock. However, "for the large majority of livestock breeders, herd mobility (transhumance) remains a necessity to cope with the climatic conditions" (Leonhardt, 2019, p.5).

There is also substantial variation of mobility on a day-to-day basis, as elaborated by Anderson (2007 in Moutari & Tan, 2008, p.6) in a study of east Niger. They describe:

- "Daily movement of livestock in search of grazing and water returning to the same camp at the end of the day.
- Occasional movement of herds to deal with temporary constraints e.g. lack of pasture due to the late arrival of rains.
- Seasonal movement of livestock in search of pasture in relation to rainfall patterns.
- Exceptional displacement of the herd as a result of conflict or drought.

- And migration as a last resort in face of insurmountable socio-political or environmental constraints."

The last 30 years have seen transhumance movements become longer, more dispersed, and extend further south, while farmers in coastal areas are also moving into agro-pastoral production (Leonhardt, 2019). The southern limit of camel herd movements in Chad has shifted over 20 years from the 13th parallel (that is 13 degrees north of the Earth's equator) to the 9th parallel. Diop et al. (2012, p. 14) suggest that this trend could be explained by "herd increases, environmental aridification, the expansion of agricultural areas in transhumance corridors and the diversity of transborder cattle markets, thus forcing herders to find alternative transhumance routes".

A poor rainy season in 2014, which the majority of families interviewed considered to have been a drought, led to adaptations in transhumance during the 2014-2015 dry season (Thebaud, 2017). Primary research by Thebaud (2017) identifies key adaptation strategies in these circumstances as: leaving on transhumance earlier; moving to refuge areas away from drought-affected home areas; taking additional animals on transhumance that would normally not leave; splitting the herd into several units; and entrusting some animals into the care of other herders (Thebaud, 2017).

The transhumance period in the Sahel in 2014-2015 took an average of 203 days, varying from 149 days in Niger to 224 days in Mali (Thebaud, 2017, p. 9). Of the 386 households surveyed, the majority involved internal transhumance only (53 percent of households) rather than cross-border (47 percent of households). This also varied by country, with most Malian households staying in Mali, whereas most households in Burkina Faso and Mauritania made cross-border journeys (Thebaud, 2017, p. 9). Further, 40 percent of households said that they did not use livestock corridors for their journeys, for varying reasons: that the corridors did not exist where they travelled, or were in poor condition, or contained obstacles that made them difficult to use (Thebaud, 2017, p. 11).

Transhumance has important economic dimensions. During the 2014-15 transhumance, families spent an average of 1.2 million CFA francs, largely on food and feed, and sold livestock in host areas worth a similar amount (Corniaux, Thébaud, Powell, Apolloni & Touré, 2018). Their animals are part of a regional system of production and exchange that among other things supplies the growing population in coastal states: "The mobility of trade has also increased towards the capital cities of the coastal countries, which are becoming more and more populated, with growing demand for red meat" (Corniaux et al., p. 3). Overall, livestock production in West Africa is expanding, including in the traditional host areas for transhumance, but not keeping pace with urban demand (Leonhardt, 2019).

There is considerable variation in who participates in transhumance journeys - sometimes the entire family follows the herd, sometimes just the adult sons, or sons with their wives, and some herds are now led by a single hired herder (Thebaud, 2017; Leonhardt, 2019; Toulmin et al., 2020). Among Fulani pastoral groups, the pastoral guide is called the *Garso* or *Ardo* or *Rougga,* depending on the context, while important decisions about pastoralism are taken by a council of elders (Moutari & Tan, 2008, p.5). Interviews with a sample of 386 transhumant families in five countries of West Africa found that many women had participated in transhumance journeys every year for more than 20 years (Thebaud, 2017). Generally, however, more men take part than women, although this varies across the region and is more pronounced in the east transborder zones than in the west; women in eastern Burkina Faso and western Niger report increasing reluctance to participate in transhumance due to growing security problems in coastal countries (Thebaud, 2017, p.43). In cases where families do not travel together, young men and boys are often unsupervised by elders (Higazi, et al., 2019), but they keep in touch via mobile phones (Krätli & Toulmin, 2020a). New forms of herd ownership and management can increase tensions with farmers

(Toulmin et al., 2020). More research is needed to examine how changing herding practices have affected relations between pastoralist and farming communities (Higazi, et al., 2019).

The identity of those involved in transhumance can affect the quality of inter-group relations. Consultations with transboundary herders and settled farmers in the northern Central African Republic found that herders travelling with families were more risk-averse and enjoyed deeper social and commercial interaction with host communities. Hired herders, on the other hand, often young men travelling in groups, were less likely to follow rules, or to speak local languages, or have spokespeople to carry out negotiations (IPIS / Concordis, 2020).

2.2 East Africa and the Horn of Africa

There is significant diversity in the pattern of livestock movements in the Horn and East Africa given the heterogeneous climate systems in these regions and the way these interact with topography to shape the agro-ecological landscape (De Haan, 2016). For example, Sudan shares with West Africa the same single rainy season and a similar practice of long-distance north-south transhumance along livestock corridors (FAO, 2017). East Africa, on the other hand, has a bi-modal rainfall distribution, with short rains between October and December and long rains between March and May (De Haan, 2016), necessitating twice-yearly movement to dry season pastures.

A comprehensive review of evidence on changes in the drylands of Eastern Africa[3] since 2000 illustrates the variety of pastoral systems that co-exist (Lind et al., 2020, p.2):

i. "Commercialised forms of livestock-keeping oriented to large domestic and regional export markets;

ii. Smaller-scale livestock-keeping for subsistence and local marketing, combined with subsistence farming and other rural activities;

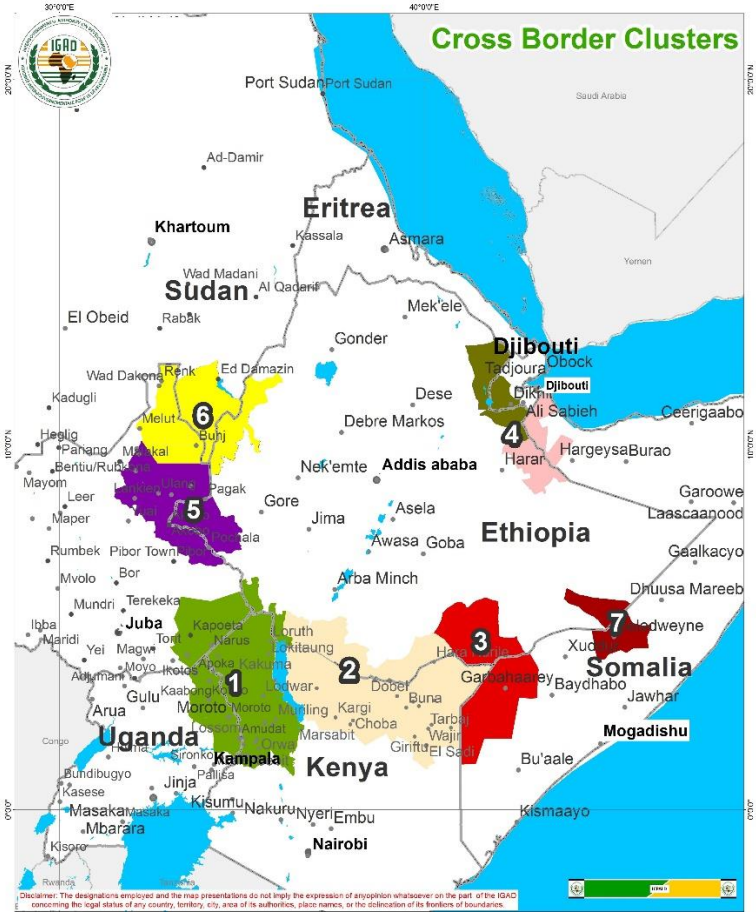
iii. The maintenance of very few small stock in and close to towns alongside the pursuit of various tasks for cash;

iv. Customary pastoralism based on long distance movements, key resource use and maintaining a network of bond friendships through which to exchange livestock and labour as the basis for managing uncertainties."

The geographical focus of cross-border movement in the Horn and East Africa can be illustrated by IGAD's cluster approach to cross-border cooperation (Figure 3). These clusters reflect livelihood systems partitioned by colonial boundaries and practised by communities that share, to a greater or lesser extent, an ethnic or cultural identity (Hammond, 2017). Two consequences of this partition are that pastoralist groups such as the Somali, Boran, Afar, and Maasai are usually minorities within the nation state, and that pastoralist areas are positioned along international borders with consequent implications for trade, service provision, security, and policy coherence (Nori, 2019).

[3] 'Eastern Africa' is used in the paper to include both the Horn and East Africa.

Figure 3: Map of IGAD cross-border clusters



Source: http://geonode.igad.int/documents/467

While all the livelihood systems in these cross-border clusters are livestock-based, their nature and composition differ. For example, in the South Omo / Lake Turkana area between Ethiopia and Kenya, households tend to diversify rather than specialise, pursuing a mix of pastoralism, rain-fed farming, flood-retreat farming, and fishing (Hodbod et al, 2019). In the drier east of the region, pastoralism is more dominant and market-oriented and relies on the seasonal and long-distance movement of camels and small stock between grazing areas in Kenya, Ethiopia, and Somalia (Hammond, 2017; Menkhaus, 2015).

Livestock movements across the borders of the Horn and East Africa are shaped by a number of factors, including ethnicity, ecology, wealth, and security, as the following examples show:

- **Kenya / Uganda:** Seasonal migration, primarily of cattle, takes place in an east-west direction but is dependent on the quality of social and kinship networks (Bushby & Stites, 2015). For example, grazing alliances between the Ngikamatak section of the Turkana in Kenya and the Matheniko in Uganda allow both groups to take advantage of the differing ecological conditions on either side of the border escarpment. Turkana cattle may move up to 50km into the Matheniko corridor, while the Matheniko access forage in the Turkana plains (Davies et al, 2018). Men generally supervise long-distance migration, leaving women, children, and the elderly in permanent homesteads. Women and younger children manage the livestock that are kept closer to home for purposes of milking or sale (Feyissa, 2020; Stites, Howe, Redda & Akabwai, 2016).

- **Sudan / Ethiopia:** Movement from Gadarif State of Sudan into Ethiopia is negotiated with local leaders and open only to certain ethnic groups. The fees paid to local militia and the risks of moving in an insecure region make this a potentially costly option used by those who lack the means to finance long-distance transhumance inside Sudan (which can involve buying water or renting land from the agricultural schemes that have expanded in the area). Only young men cross the border. The decision to cross is taken individually, but herders will enter as a group, normally with those from the same clan (Sulieman & Ahmed, 2017).

- **Ethiopia / South Sudan:** Nuer pastoralists in Gambella region of Ethiopia no longer cross the border into South Sudan because of insecurity, and now rely on shorter seasonal movements within Ethiopia that involve the whole family (Gebremeskel, Desta & Kassa, 2019).

- **Sudan / South Sudan:** Prior to the independence of South Sudan, pastoralists from the north of Sudan travelled to the south of the country to access dry season pasture and water, while southern labourers migrated to the north; this pattern was established through long-standing grazing arrangements and social ties (Davies, et al., 2018). However, restrictions along the new international border have stopped seasonal movements for many herders (Toulmin et al., 2020), and there is now increasing tension as pastoralists from the north still seek entry to the south but migration from the south to the north has declined because of persecution, leading to an increase in conflict over land and resources (Davies, et al., 2018).

Across the Horn and East Africa, the peripheral status of pastoral areas is changing. Whether driven by security concerns, such as between Somalia and Kenya, or a new appreciation of their economic potential, border areas once largely ignored by the state are now the object of growing attention, attracting interest from local and global capital alike (Lind et al., 2020; Menkhaus, 2015). For example, the construction of hydro-electric dams on Ethiopia's Omo River which have altered its annual flood, combined with sugar plantations irrigated by the river, have removed prime dry-season grazing inside Ethiopia and pushed those affected to seek livelihood opportunities further inside Kenya (Feyissa, 2020). These infrastructure investments are deepening the integration of border areas in national economies but with significant implications for the food security and social relations of the indigenous populations (Hodbod, Stevenson, Akall, Akuja, Angelei, Bedasso, Buffavand, Derbyshire, Eulenberger, Gownaris, Kamski, Kurewa, Lokuruka, Mulugeta, Okenwa, Rodgers & Tebbs, 2020).

3. Connections between pastoralism and cross-border conflict systems

Pastoralist communities in this paper's three focus regions are affected by, and involved in, a number of different issues related to cross-border conflict systems with substantial variance by area, for example including: armed insurgencies; cattle rustling; conflicts between herders and farmers; violence committed by the state, violent crime; and gender-based violence, etc (Agade, 2010; Blench, 2017; Higazi, 2020; Blench, 2017; Bukari & Schareika, 2015; Schilling, Opiyo & Scheffran, 2012). Notably, these issues occur both within and across borders, and movement across borders is not always necessarily different to internal movement. Also, while these conflict issues may affect or involve pastoralists, they are not necessarily caused or even exacerbated by pastoralism. Yet it is not always easy to distinguish between these roles, especially as pastoralists have long faced stigmatisation and scapegoating, and as the herder-farmer conflict framing is increasingly amplified in the media and in policy discourses (Krätli & Toulmin, 2020a).

This paper examines conflict systems, rather than just conflict, and thus includes analysis of the wider processes and actors that we understand might contribute to the conflict economy across borders, at borderlands, and relating to borders and transnational issues (e.g. through displacement, arms, drugs and people trafficking, (illegal) resource extraction, etc). It also takes a broad understanding of conflict to include conflict that occurs at all levels (e.g. interpersonal, group/community, national, and transnational), that includes personal/direct violence and structural/indirect violence (Galtung, 1969), and that includes open conflict (very visible and deep-rooted), surface conflict (visible but shallow), and latent conflict (with potential to emerge) (Fisher et al., 2000). This approach recognises the complexity of the manifestations, causes, and accelerators of conflict, violence, and exploitation.

Where possible, this paper focusses on the cross-border elements of these issues, recognising that borderlands, particularly in FCAS, can be "incubators of conflict" (Goodhand, 2004, p.169) characterised by neglect, underdevelopment, state weakness, governance gaps, weak state-periphery relations, and are often "regions paradoxically empowered by their centrality to trade in shadow economies" such as global commodity markets, arms, finance, people, and narcotics (TDRP, 2012, p.2). Thus, borderlands are both spaces of "difficult governance but also of economic and political opportunities" (Köhler, 2021). Pastoralists are often found in peripheral areas, and while there have been trends of sedenterisation, their livelihoods are distinguished by their movement, including movement across borders, which may be substantial in some places, and much less in other places (Köhler, 2021).

In general, total levels of violence in West Africa, Central Africa, and East Africa[4] have risen over the past decade, especially in some countries in West and Central Africa, find Krätli and Toulmin (2020a), based on analysis of Armed Conflict Location and Event Data Project (ACLED) data,[5] literature review, and key informant interviews. This includes, e.g., conflicts radiating from Mali, North-West Cameroon, the Lake Chad region more generally, the Kenya-Sudan-Uganda border region, Northern Nigeria, and Kenya and Somalia, etc. For example, "since 2012, the Sahel Region has been drawn into a spiral of ever-growing violence, led by a combination of jihadist groups and long-standing resentments among rural people. The escalating cost in human lives lost, number of displaced people and military operations has been very heavy. In the subregion including central Mali, northern and eastern Burkina Faso and western Niger, violent activity involving jihadist groups has reportedly doubled every year since 2015… and the number of active groups has multiplied from just one (Al Qaeda in the Islamic Maghreb) in 2012 to more than ten in 2018" (Krätli & Toulmin, 2020, p.12).[6]

These protracted regional conflicts have had significant impacts on pastoralism, e.g. by displacing populations and changing herder routes. In some cases, this has disrupted the herders' well-established routes and social networks, with "risks of triggering conflicts with sedentary communities with whom they haven't dealt with in the past" (UN, 2020, p.vi). Examples include pastoralists: in Nigeria displaced by Boko Haram into Cameroon; in Ghana displaced by state forces; and in Sudan displaced to the Central African Republic due to the civil war.

[4] The analysis includes 16 countries: Senegal, Burkina Faso, Mali, Niger, Nigeria, Ghana, Côte d'Ivoire, Benin, Togo, Chad, Cameroon, Central African Republic (CAR), Ethiopia, Kenya, Uganda and Tanzania (Krätli & Toulmin, 2020, p.18).

[5] The widely used ACLED database is based on national and international media reports and therefore is subject to certain biases, e.g. national media biases of what news is, and isn't reported, reduced media coverage of inaccessible areas, etc (Krätli & Toulmin, 2020a).

[6] E.g. There has been a reported increase in activities in the region of: Boko Haram, al-Qaeda, the Islamic State in West Africa (ISWAP), and Islamic State in the Greater Sahara (ISGS) (Kwaja & Smith, 2020; Köhler, 2021).

These regional insurgencies have also increased the risks of the militarisation of herders, as some herders have become co-opted as fighters, or as agents in illegal trades like arms smuggling; and as arms have become more prevalent and available (UN, 2020, p.vi). The UN (2020, viii) highlights that "although incidents may take place locally, dynamics underpinning them expand both horizontally, (transhumance usually crosses national borders), and vertically (as the political and economic agendas of elites in capitals around the regional often manipulate these incidents to their advantage), beyond the local context". UNECA (2017, p.13) explains the local to transnational connection as: "these wars take place at the local level over scarce or at least unpredictable resources, at the national level between States and pastoralists who are struggling for the right of self-determination or autonomy, at the regional level as proxy wars pitching neighbouring States against each other, and at the transnational level as expressions of transnational jihad movements".

The roles that herders, farmers, and pastoralism more generally play into this heightened conflict context is not clear due to the overlapping geographies and grievances these conflicts share with pastoralists, due to the already peripheral nature of these geographies and actors, due to data limitations, and due to the misrepresentation, politicisation, and oversimplification of these issues (Krätli & Toulmin, 2020a). There are many varied forms of conflict in Africa's rural areas that have now become understood as farmer-pastoralist conflicts, e.g. conflict over land access and ownership between farmers, farmers and pastoralists, between pastoralists, or between the state and pastoralists or farmers; conflict between groups over traditional grievances in rural areas; conflict over access to routes used for illicit purposes (such as the drugs trade); and conflict as a result of banditry, kidnapping, livestock theft, or damaged land (Kwaja & Smith, 2020; Blench, 2018). "The State is often a party to conflicts in pastoral areas, where pastoralists are forcibly evicted or denied access to grazing land" (UNECA, 2017, p.vii).

There is no single explanation, and these conflicts are driven by a complex mix of factors, with high local variability, e.g. including: the failure of governance mechanisms to mediate land and resource competition; demographic pressures; changing agricultural and herding practices and markets; changing environmental conditions; arms proliferation; governance and security vacuums; politics which has ignored the interests and needs of herders (particularly related to mobility and access to resources); the exploitation of pastoralists by violent entrepreneurs (including criminal gangs); and inequitable development and marginalisation (IIED, 2018, p.2; Higazi, et al., 2019; Higazi, 2020; UNECA, 2017). "In general, it is not the practice of transhumance as such that 'causes' conflict between pastoralists and farmers, but rather the break-down and non-enforcement of rules and norms that previously governed pastoral mobility, farming practices, land use, cooperation, and conflict resolution" (Higazi, et al., 2019, p.2). This competition over resources has become entwined with identity-based distinctions, such as ethnicity and religion, and each aspect now fuels the other (Kwaja & Smith, 2020).

There are broad concerns that "violent conflicts involving farmers and herders are rapidly becoming a major source of instability" in the Western Sahel and Lake Chad Basin, as the herder-farmers' resource-related conflicts intersect with political, social, and economic interests (Kwaja & Smith, 2020, p.8). There is some evidence of violent entrepreneurs (including violent extremist groups) exploiting herder grievances and governance and security vacuums – e.g., the Islamic State in the Greater Sahara (ISGS) in Mali has "promoted a liberation idea of freeing hired pastoralists from herd owners" (Kwaja & Smith, 2020, p.12). There are also allegations of pastoralists being increasingly implicated in international crime networks such as for human trafficking, drugs, and illegal migration, with the pastoralists' regular mobility and remoteness from government authority being advantageous for these networks (UNECA, 2017). Köhler (2021, p.15) explains how in eastern Niger – and other parts of the Sahel – violence by both state and non-state actors in the borderland areas, coupled with ISWAP's "more population-friendly strategies", have pushed

pastoralists to "accept dubious agreements with dangerous actors" to ensure their survival and access to lands. The UN (2020, p.vi) warns of "the interplay among political and military elites as well as organised crime which can manipulate political tensions between herders and farmers to advance their agendas, expand land ownership and take control of large herds for their economic and political gains… As much a consequence and a cause of regional instability, these tensions erode the social and economic fabric of both communities, fuel narratives of juxtaposed ethnic and religious identities and have become one of the main drivers of inter-communal conflicts and the leading cause of civilian casualties in most peacekeeping settings."

However, there are also widespread questions of whether reports of increasing herder-farmer conflict are actually over-exaggerations and misrepresentations of the situations to fit political agendas and stereotypes. E.g. Krätli and Toulmin (2020, p.7) conclude that while there is evidence of an overall increase in violence in the West, Central and East African regions over the past decade, they found "no evidence that incidents associated with farming and herding, or more generally incidents involving pastoralist populations, have grown at a faster rate". They find that about 2% of the total violence in their sample of ACLED data is linked to farming and herding (Krätli & Toulmin, 2020, p.7). Higazi (2021, forthcoming, p.4) discusses how the recruitment of Fulɓe youths in parts of West and Central Africa into 'violent extremist groups' is raising concerns "which are justifiable in some areas but lead to misleading stereotypes" in the areas where this is not happening. Indeed, there is an increasing discourse of securitisation of pastoralism that is evident across media, academic, and policy spheres as transhumance and conflict are conflated, with conflict challenges attributed to pastoralists (UNECA, 2017; Kwaja & Smith, 2020). These narratives build on long histories of the scapegoating of pastoralists according to ethnic, religious, and xenophobic frames, e.g. the largely Fulɓe pastoralists are still considered to be 'foreigners' by the government and large parts of the populations in Ghana and Nigeria (Bukari & Schareika, 2015).

Another important aspect of herder-farmer conflicts is the traditional practice of cattle rustling,[7] which has now become "commercialised by criminal networks that often span communal and international borders and involve a wide range of perpetrators" (Gumba, Alusala & Kimani, 2019, p.1). It is particularly practiced in East Africa and the Horn of Africa, although it is also prevalent and increasing in other African countries too (e.g. particularly in Nigeria and Niger) (International Security Sector Advisory Team (ISSAT), 2017; Kwaja & Smith, 2020). Direct violence often accompanies raids, such as kidnapping and road banditry (ISSAT, 2017; Agade, 2010); and state responses to cattle raiding in Karamoja involved "excessive use of military force against civilians" (Agade, 2010, p.96). Stites and Howe (2019) find that large-scale violent cattle raids have diminished in the Karamoja region, yet this has seen violence and insecurity shift "to the domestic sphere in the form of small-scale but pervasive thefts and rampant domestic violence".

Cattle rustling has evolved over time to be increasingly lethal, less regulated by the elders, and to be embedded in national and international networks e.g. due to increased availability of arms; the straining of traditional governance systems, limited security governance, and the move to market economy which has seen an increase in the commercialisation of raiding (Agade, 2010; Gumba, et al., 2019; ISSAT, 2017). Understanding the functions, motives and trends of raiding is extremely complex and evidence is limited (Agade, 2010). International networks have evolved as channels for selling stolen cattle and for processing meat have become embedded in broader transnational flows of goods involving market-driven international actors, and due to market differences, e.g. price differences in different markets (Agade, 2010). Cattle rustling in the Karamoja region is alleged to involve the collusion of figures from the army, local leaders, business leaders, and criminal networks (Agade, 2010). The large number of animals that are

[7] Cattle rustling is the term used to describe theft of livestock. A related term is cattle raiding.

moved across districts and/or international borders suggests the involvement of public authorities (Agade, 2010). Despite these connections, livestock raids are largely oversimplified and framed in the media as resulting from inter-ethnic violence related to resource scarcity and tradition (Agade, 2010).

4. Policy responses

Policy responses and policymakers shape cross-border pastoralist movement in different ways. This may be through policies whose primary aim is to regulate and/or protect pastoralism, those that address other issues but have secondary impacts on pastoralism, or the absence or insufficient implementation of policy.[8]

A variety of legal arrangements also shape cross-border pastoral mobility, summarised as: "bilateral treaties, regional agreements, decisions or protocols, national legislation that provides for transnational movement, and local-level arrangements between communities or local government entities on either side of the border. A range of non-binding mechanisms also exist, such as joint policies, programmes or strategies, memoranda of understanding (MoUs), and informal cooperative arrangements facilitated by civil society" (Davies et al., 2018, p. 55).

4.1. National responses

Broadly speaking, governments have not been able to protect or support pastoralism and the mobility on which it depends, while some policy responses have been harmful. Where governments have recognised the need to facilitate livestock mobility, this has not sufficiently moved beyond abstract statements of support to lead to material improvements on the ground (Kitchell, Turner & McPeak, 2014).

The African Union Policy Framework on Pastoralism decries the "cultural and spatial isolation, and political marginalisation" experienced by pastoralists across Africa, with less state investment in infrastructure and public services than other areas or sectors receive (AU, 2013, p.24). Pastoralism has "a history of passive and active neglect" by the state (FAO, 2018, p. 7). A largely negative public policy narrative persists – for example that pastoralists are "anti-modern", and "associated with disorder", "wandering about in search of water and pasture" (Krätli & Toulmin, 2020a, p.8). As a result, policies have ignored herders and their need for mobility (Toulmin et al., 2020, p.4). These narratives are reinforced by the biased media coverage of conflicts and insecurity that are framed as herders versus farmers, or that fall back on negative stereotypes about pastoralists (Higazi, et al., 2019; Shanahan, 2013).

This section discusses three broad policy areas that have a significant and direct impact on pastoral mobility, including cross-border, and that are shaped by these general biases. They concern land and land use, decentralisation, and border / security management.

Land and land use

An increasing proportion of pastoral land is being enclosed, or otherwise closed off to herders, creating barriers to mobility (Lind et al., 2020; Feyissa, 2016). This is happening for a variety of purposes, including commercial agriculture (Sulieman & Ahmed, 2017), irrigation (Krätli & Toulmin, 2020a), conservation

[8] For an overview of historical and contemporary policy narratives on pastoralism, see AU (2013, p.20-22) and Krätli & Toulmin (2020a, pp.57-67).

(Feyissa, 2016), water development (Lind et al., 2020; Krätli & Toulmin, 2020a), or as pastoralists themselves settle.

Land policies that restrict pastoralists' movements have been major drivers of conflict, forced settlement, and migration, and changes migratory routes and patterns (UNECA, 2017). UNECA (2017) finds that these policies have been major drivers of conflicts among pastoralists, and between farmers and pastoralists, and are also mobilising factors that intensify conflicts between the farmers and pastoralists against the state. "In countries such as the Central African Republic, Mali, Mauritania and the Sudan, lack of land security and frequent land appropriation by the State have intensified conflicts" (UNECA, 2017, p.21).

Sedentarisation can be a deliberate policy objective or happen by default. Bushby & Stites (2015) attribute the growing shift towards urban and crop-based livelihoods in Karamoja to a combination of government pressure, international interventions, and conflict. The protected kraal system used by the Ugandan army in 2006 placed severe limitations on livestock movement and led to an increase in livestock mortality and morbidity from overcrowding: "many respondents in Karamoja cite these losses as their final push away from pastoral production (Bushby & Stites, 2015, p.150). Ethiopia also has an active villagisation programme (Hodbod et al., 2020). However, the more common policy stance is characterised as "malign neglect": governments fail to recognise pastoralists' customary institutions and resource claims, and over time this contributes to the progressive erosion of mobility and of the institutions that support it (Turner & Schlecht, 2019, p.2).

Customary practices of inter-communal cooperation and shared resource use persist but are being undermined. Davies et al. (2018) describe the signing of cross-border grazing agreements between pastoral elders in Uganda and Kenya, as well as community-based negotiations between interested users of natural resources in West Africa, including transhumant herders. Feyissa (2016) notes that pastoralism has always co-existed with other livelihood practices, such as flood recession farming, artisanal mining, and wage labour. Krätli & Toulmin (2020a) highlight the history of cooperation between farmers and herders in West Africa and the disruption to the complementarity of their production systems, in part because of the growing convergence of these two livelihood strategies and the monetisation of customary exchange (such as manure and milk for access to crop residues and water): "Policy and interventions over decades have encouraged farmers to acquire their own herds, and herders to settle and turn to crop farming. This has reduced complementarity between the two groups, resulting in new dynamics of competition for land and grazing." (Krätli & Toulmin, 2020b). In some situations neither herders nor farmers enjoy predictable access to land (IPIS/Concordis, 2020).

Pastoral mobility requires some form of common property regime which enables flexible and negotiated access to shared resources (Turner & Schlecht, 2019). However, pastoral property rights lack the legal recognition that crop production and other forms of land-based investment enjoy (Krätli & Toulmin, 2020a; Flintan et al., 2013). Pastoral systems also operate in spaces where they must increasingly co-exist with other forms of land use, requiring institutional and tenure arrangements that can accommodate these diverse needs. In this regard, agricultural encroachment implies not just the physical transformation of the land but also the further privileging of private property regimes over those that are more open (Turner & Schlecht, 2019).

Officially demarcated transhumance corridors, more common in West Africa and Sudan than in the rest of eastern Africa, are one solution to maintaining livestock mobility in areas where there is increasing pressure from other forms of land use (Kitchell et al., 2014). These are of different categories: international transhumance routes (primary routes), national (secondary) routes, and local (tertiary) routes (Leonhardt,

2019). However, their benefit and viability depend on the extent to which pastoral land rights more generally are respected. For example, Sulieman & Ahmed (2017) describe how the growth of horticulture in eastern Sudan has reduced access to rivers in destination summer pastures, and how the expansion of mechanised agriculture has narrowed the corridors thereby increasing the risk of crop damage *en route*. Pressure to cross the corridors quickly, particularly if water is scarce, has a negative impact on animal health. Turner & Schlecht (2019) also note the failure to consider the nutritional needs of livestock in corridor design and management. A number of barriers can impede access to the corridors, including agricultural encroachment and the presence of armed groups (Leonhardt, 2019; IPIS/Concordis, 2020).

Decentralisation

Mechanisms such as livestock corridors, and pastoral mobility more generally, require coordinated action at a sufficiently high administrative level to protect the seasonal access and use rights of pastoralists and to reconcile different stakeholder interests. Corridors cross multiple jurisdictions, but the management of what is in effect a public good has not been factored into systems of decentralised natural resource management and local governance (Kitchell et al, 2014).

There is a general trend in Africa towards decentralisation and localisation (AU, 2013), including of natural resource management (Toulmin et al., 2020). However, if pastoralists' mobility is to be supported and their seasonal rights respected, then land use planning must be integrated across multiple scales, including the larger landscapes in which pastoralists move (Flintan et al., 2013).

State-led processes of decentralisation have often failed to recognise customary natural resource mechanisms (Flintan et al., 2013). A study of dryland institutions in Mali, Niger, Sudan and Ethiopia found that local management rights were largely unsupported by government or legal frameworks (Toulmin et al., 2020). In Senegal, the creation of *communautés rurales* at the lowest level of the administrative structure failed to take account of existing tenure institutions, thereby setting up a tension between formal and customary authority (Kitchell et al, 2014). Customary structures in drylands retain some degree of local legitimacy but their rules for accessing resources and managing conflict may differ from those of the formal governance system (Krätli & Toulmin, 2020a). This confusion between customary and state procedures has "created fertile ground for growing conflict" (Krätli & Toulmin, 2020b, p.3).

Government action has also undermined local resource rights and conflict management mechanisms, for example by allocating pastoral land to private investors, or by partisan interference in local politics (Toulmin et al., 2020). On the other hand, the absence of state action can also inhibit livestock mobility, such as the failure to ensure adequate sub-regional coordination between Chad and the Central African Republic (Bouslikhane, 2015).

Decentralisation increases the political value of land (Leonardi & Santschi, 2016). The new administrative boundaries and institutional structures created when power is devolved risk reviving ethnic-based claims to land and natural resources (Nori, 2019; Menkhaus, 2015). In parts of Kenya's pastoral areas, for example, the hardening of county boundaries has exacerbated ethnically-based land conflicts, impeded livestock movement, and increased the taxation of trade flows (Ng'asike, Stepputat & Njoka, 2020).

Border and security management

Devolved authorities are playing an increasingly important role in cross-border management, including in inter-state border security meetings, peace-building processes, cross-border development projects in

pastoral areas, and cross-border trade (Eulenberger, Feyissa, Iyer, Gebresenbet, Adugna, Tefera, Hoehne, Lokwang & Eaton, n.d.; Feyissa, 2020; Ng'asike et al., 2020).

Contested state borders can disrupt mobility and increase the risk of conflict. The Ilemi Triangle, for example, contains important water points and dry season grazing used by groups from four countries (South Sudan, Uganda, Ethiopia and Kenya) for herding, hunting, and cultivation (Feyissa, 2020). The area has changed hands in the past and is presently under Kenyan jurisdiction, but its borders are not demarcated and ownership is contested. Attitudes are hardening in the wake of hydrocarbon and mineral discoveries (Feyissa, 2020). While porous borders facilitate access to economic opportunities and social systems, overlapping territorial claims disrupt and lengthen migration (Bushby & Stites, 2015).

However, the literature cautions against the assumption that fixing boundaries is necessarily the right policy solution in contested areas. In their study of boundary disputes between Uganda and South Sudan, Leonardi and Santschi (2016) argue that a less exclusionary approach would be appropriate – one that applies the principle of accommodating multiple rights in land and the practices of negotiation and mediation that traditionally characterise customary land governance.

The cross-border nature of pastoralism highlights the importance of policy harmonisation between states, for example in animal health (FAO, 2018). However, action in other sectors can also affect cross-border dynamics: for example, tax legislation that discouraged traditional transboundary movements from Ethiopia to Djibouti and Eritrea further heightened tensions in Ethiopia's Afar region (Sonneveld, Keyzer, Georgis, Pande, Ali & Takele, 2009).

Evidence is beginning to emerge on the impact that COVID-19 and COVID-19 responses are having on cross-border pastoralism, especially those that have closed markets, closed borders, and restricted movement (Bisson, 2020). A paper published in July 2020 reports that most West African countries had closed their markets – with some regions in Burkina Faso, Guinea, Nigeria, Senegal and Chad closing up to 100 percent of them (Bisson, 2020). COVID-19 responses have made moving food and people difficult, disrupted pastoralist/trader value chains, and led to a significant reduction in cross-border flows and the number of animals in livestock markets (Bisson, 2020). As a result, many herders have been experiencing strains on their livelihoods while food prices have risen (Bisson, 2020). In West Africa, the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) reported that thousands of transhumant pastoralists were stuck in coastal states such as Togo and Benin, unable to travel back to the Sahel in time for the rainy season (Bisson, 2020).

National security policies often result in the tightening of borders, restricting trade and other cross-border movement (World Bank, 2020a, p.20). One of the first casualties of tensions between countries is the transboundary movement of livestock (Nori, 2019). However, there are examples of national legislation that facilitate cross-border reciprocity and livestock movement, such as the Pastoral Charter of Mali that allows herders and livestock from neighbouring countries to enter Mali on condition that those countries also allow Malian herders and livestock to enter (Davies, et al., 2018).

4.2. Bilateral responses

There are several examples of bilateral treaties on transhumance between West African countries, but fewer in other parts of Africa (Davies et al., 2018). Davies et al. (2018) list a number of these: for example, Mali negotiated treaties with its neighbours Burkina Faso (in 1988), Niger (1988), Mauritania (1989), Senegal (1993) and Côte d'Ivoire (1994) (Davies et al., 2018). These treaties determine rights and responsibilities for "vaccination and health certificates, border documents, seasons and duration of

transhumance, entry and exit points, geographical limits on pastoralism, and dispute resolution between pastoralists and farmers" (Davies et al., 2018, p. 55). Some countries, such as Togo, impose an exit date for foreign transhumant herders (Thebaud, 2017).

Kenya and Uganda signed a Memorandum of Understanding in September 2019 which permits reciprocal grazing and other forms of cross-border support, such as access to education and health services in Kenya by communities from other parts of the Karamoja cluster (Feyissa, 2020). This initiative originated at the grassroots level and was then elevated to a bilateral agreement. However, at present it remains a declaration of intent. Moreover, it does not address the issue of uneven disarmament, which has been rigorous and sustained on the Ugandan side but intermittent elsewhere in the cluster, upsetting the balance of power between different groups (Feyissa, 2020; Bushby & Stites, 2015).

As part of the peace process, Sudan and South Sudan signed an Agreement on border issues in 2012, which includes provisions for the protection of pastoral communities' "seasonal customary right to cross, with their livestock, the international boundary between the Parties for access to pasture and water" (Davies, et al., 2018, p. 56). The Agreement also tasked a Joint Border Commission with developing a comprehensive policy for the management of resources, including: rangelands, watersheds, stock routes and grazing areas" (Davies, et al., 2018, p. 56).

In recent years there has been renewed attention on pastoral, agro-pastoral and agricultural interventions that promote peacebuilding and social cohesion as part of livelihood programming (Stites & Bushby, 2017). There has also been a stronger inter-governmental and cross-border focus to policy and programming illustrated, for example, by the creation of the Lake Chad Basin Governors' Forum (Kwaja & Smith, 2020; UNECA, 2017), and by IGAD's Drought Disaster Resilience and Sustainability Initiative (IDDRSI) (Feyissa, 2020).

4.3. Regional and continental responses

The literature highlights a dissonance between national policy responses and those at regional or continental levels regarding border areas and borderland communities (Eulenberger et al., n.d.; World Bank, 2020a, p.20). Regional and continental frameworks are thought to be more progressive in their recognition of mobility and the management of transboundary resources (Feyissa, 2020). For example, the African Union Policy Framework for Pastoralism in Africa (AU, 2013) is described as a "much-needed antidote" to the sedentarisation agenda pushed by some governments (Eulenberger et al, n.d., p.60).

However, border areas are typically dominated by concerns about security and sovereignty (Ng'asike et al., 2019), and governments are often driven by immediate geopolitical pressures (Davies et al., 2018). Further, regional commitments signed by ministers other than those responsible for security or foreign affairs, such as those governing cross-border trade, may carry less weight in domestic government circles (Ng'asike et al., 2019).

Several of the key frameworks mentioned in section 4 below, including the AU Framework and the N'djamena and Nouakchott Declarations, are non-binding (Davies et al., 2018). These can be a first step towards legally binding international agreements, and can also provide momentum for advocacy at the national level, but their implementation depends on the commitment of member states (Davies et al., 2018).

A number of regional initiatives have struggled to secure adequate support. For example, the African Union Border Programme, which seeks to address the challenges of contested borders, suffers from

insufficient technical and financial resources (Eulenberger et al., n.d.). Only five countries, largely in ECOWAS, have so far signed (but not yet ratified) the African Union Convention on Cross-Border Cooperation (2012), also known as the Niamey Convention; none from East Africa have done so (Feyissa, 2020; Eulenberger et al., n.d).

The most comprehensive regional initiative concerning cross-border pastoral mobility is the 1998 ECOWAS Protocol, including an International Transhumance Certificate. This aims to: regulate and facilitate cross-border movement; protect the rights of host and transhumant pastoralists; ensure transhumant pastoralists abide by the laws in the host country; establish local and regional coordination, and conflict management mechanisms; and monitor information on the size and composition of the herd, vaccination details (through a vaccination document), the proposed border crossing and the migration route (AU, 2013; Davies, et al., 2018). It is based in part on the 1991 Benin–Burkina Faso–Côte d'Ivoire–the Niger Accord CEBV[9] Agreement on the regulation of transhumance (Davies, et al., 2018). The ECOWAS framework applies to its 15 member states, and is locally reinforced by agreements between countries, such as Mauritania-Senegal-Mali, and Niger-Burkina Faso (Diop, et al., 2012).

Yet the framework has proven significantly difficult to implement and presents a range of challenges. Many herders struggle to meet the administrative requirements, complaining that the documents are difficult and costly to complete (Krätli & Toulmin, 2020a; Diop, et al., 2012). As many border regions are ill-equipped to provide and process the paperwork, this can mean long waits, and time wasted, at border points (Krätli & Toulmin, 2020a). Even when the paperwork is in order, the livestock corridors and reception zones in host countries may be blocked or occupied (Leonhardt, 2019; Diop, et al., 2012; Davies, et al., 2018). Some authorities claim that pastoralists still cross the border via traditional livestock routes, not at the designated crossings, and do not have ITCs (Davies, et al., 2018).

Implementation of the ECOWAS framework has also been inconsistent across countries, with many favouring the implementation of national or sub-national laws over regional protocols and agreements (Kwaja & Smith, 2020, p.15). Some signatories, such as Togo and Côte d'Ivoire, have strictly limited the number of pastoralists who can enter under the framework, while others, such as Benin, Guinea and Nigeria, have introduced regulations that depart from the framework (Leonhardt 2019; Krätli & Toulmin, 2020a). Implementation has also been limited by the lack of institutional monitoring mechanisms (Kwaja & Smith, 2020).

The IGAD Protocol on Transhumance was endorsed at ministerial level in November 2020.[10] Like the ECOWAS framework, it envisages the use of transhumance corridors and a transhumance certificate (IGAD, 2020).

Regional initiatives on other issues, particularly animal health, also shape pastoralist movement. Examples include the 2009 IGAD Regional Policy Framework on Animal Health and the 2013 World Organisation for Animal Health (OIE) "Alliance of Countries with Pastoralism Activities by Nomadic Populations" (AU, 2013; Davies, et al., 2018). The OIE initiative aims to establish intergovernmental standards, global strategies for disease control and eradication, and regional vaccine banks (AU, 2013; Davies, et al., 2018).

The principles and benefits of cross-border pastoral mobility may also be reinforced by broader global commitments, including the Sustainable Development Goals (2015) and FAO's Voluntary Guidelines on the

[9] Cattle and Livestock Economic Community.
[10] https://www.celep.info/igad-transhumance-protocol-endorsed/

Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (2005).

Section 5 contains a fuller list of relevant policy and legal frameworks.

4.4. Responses that address the connections between pastoralists and conflict systems

In recognition of the conflict dimensions that affect and involve pastoralists, many of these policy frameworks also include aims to reduce conflict. For example, the Regional Sahel Pastoralism Support Project (PRAPS/*Projet Régional d'Appui au Pastoralisme au Sahel*), which is the main support programme in the West African Sahel for pastoralists and agro-pastoralists, and stems directly from the Nouakchott Declaration, identifies its programme of work is to address: "(i) facilitating regional mobility, (ii) promoting regional integration of animal health services and strategies, (iii) securing access to critical natural resources such as pasture and water (enhancing their availability, improving access and reducing conflicts related to their use), (iv) enhancing trade and market access, and (v) better managing pastoral crisis (prevention and response), improving social and economic inclusion of youth and women" (World Bank, 2020b, p.5).

There are also a patchwork of development and security initiatives that address pastoralism. Examples that take more of a development approach include pastoralist livelihood interventions. Some of these include multiple aims – not just to support livelihoods and manage movement, but also to contribute to peacebuilding and social cohesion aims, etc (Avis, 2018; Herbert, 2021 forthcoming). As yet, however, evidence is limited on these inititives, including on whether and how these programmes have contributed to stability (De Haan, et al., 2014; Pavanello, 2010). Pastoralist livelihood initiatives that have achieved the best results have tended to: take a cross-border and conflict-sensitive approach; involve and build on traditional institutions and practices; balance commercial interests and community needs; integrate peacebuilding; take a market approach; support already-existing mechanisms; be accompanied by stabilisation measures; and take a participatory implementation approach (Building Opportunities for Resilience in the Horn of Africa (BORESHA), 2018, p.3; De Haan et al., 2014). Common criticisms of pastoralist livelihood interventions are that they are often poorly implemented, lack adequate funding, and are implemented by ill-equipped non-pastoral administrators (Avis, 2018).

While examples that take more of a security approach include peacekeeping initiatives, e.g.: dialogue measures before and after the migration season; infrastructure investments to ease migration; the development and designation of informal dispute resolution mechanisms to address incidents and to conduct patrols to deter violence; establishing buffer zones; confidence-building visits; engaging with local leaders, mediation mechanisms and key actors to contain the violence; and supporting host-governments and other partners to deploy and strengthen institutions to better address the root causes of conflict (UN, 2020). Policy responses to cattle rustling have mostly focused on disarming pastoral communities and on peace initiatives (Gumba, Alusala & Kimani, 2019; Agade, 2010).

5. List of policy and legal frameworks

This sub-section largely replicates the information included in Davies, et al. (2018 pp.98-99).

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ECOWAS Commission Strategic Action Plan for the Development and Transformation of Livestock Sector in the ECOWAS Region, 2010.

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