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United Nations



Crossing boundaries

LEGAL AND POLICY ARRANGEMENTS FOR CROSS-BORDER PASTORALISM



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Foreword

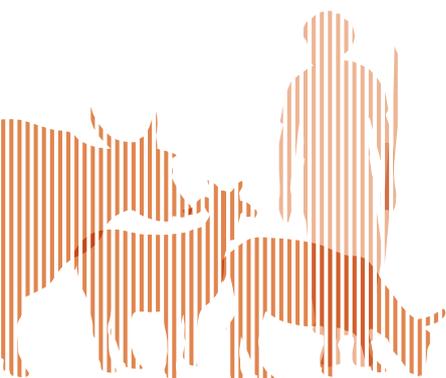
Mobility is one of the most defining features of pastoralism. Pastoralists move with their livestock herds in search of water and pasture. These movements may be within national territories or cross country borders; they may adhere to fixed predictable routes or follow flexible patterns that respond to local conditions. Strategic mobility allows pastoralists to adapt to variable weather conditions and produce food in constrained rangeland ecosystems.

While mobility has been key in generating the environmental and economic benefits of pastoralism, it has also contributed to the negative perception of pastoralism. Historically, policies to forcefully sedentarize pastoralists and restrict their movement, especially across national frontiers, have affected millions of pastoralist livelihoods across the world and sometimes resulted in violent conflict. With increasing pressures on pastoral resources from population growth, expanding agriculture and industry, climate change and adverse policies, the need to safeguard pastoral resource access through mobility has become even more acute.

There is, however, a growing recognition of the rationale of mobility for sustainable pastoralism. FAO's Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security – notably the Technical Guide, *Improving governance of pastoral lands* – and the African Union Policy Framework for Pastoralism in Africa reflect this awareness of the importance of communal access to resources. Regional economic commissions are also facilitating transboundary mobility; for example, the Economic Community of West African States (ECOWAS) regulations on transhumance between member countries provide guidelines on how to organize domestic and transboundary mobility. In addition, several countries have entered into bilateral agreements to facilitate transhumance on a voluntary basis. Moreover, these policies are embedded within a development, conservation and human rights discourse reflected in established precedents in international law.

These instruments, policies and agreements can serve as effective examples on which other countries may draw when designing their own transhumance policies. Initiated by the Pastoralist Knowledge Hub of the Food and Agriculture Organization of the United Nations (FAO), and authored by Jonathan Davies, Claire Ogali, Lydia Slobodian, Guyo Roba and Razingrim Ouedraogo of the International Union for Conservation of Nature (IUCN), this publication provides a review of various legal and policy arrangements, and offers successful examples of pastoral mobility from across the world. It aims to inspire and inform action by governments and civil society actors to develop legislation and other forms of legal instruments and cooperative agreements for transboundary pastoralism.

*Mongolia: Pastoralist herding
his flock on horseback*



While this document provides an overview of various legal instruments with a view to supporting future policymaking regarding pastoral mobility, it must be borne in mind that pastoralist contexts are dynamic and variable. Even if they have many aspects in common, pastoralist contexts differ from place to place and from landscape to landscape. Therefore, any policy recommendations must be made with caution and with a degree of flexibility to allow pastoralists to adapt to and manoeuvre their ever-changing landscapes. Nevertheless, the growing global drive towards sustainability – demonstrated by the Sustainable Development Goals adopted in 2015 – provides new opportunities to re-enable and adapt pastoral mobility in order to safeguard the role of pastoralists as stewards of the world’s vast and precious rangelands.

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Abbreviations and acronyms

AU	African Union
CACEU	Central African Customs and Economic Union
CBD	Convention on Biological Diversity
CBPP	Contagious bovine pleuropneumonia
CEBV	Cattle and Livestock Economic Community
CFS	Committee on World Food Security
COMESA	Common Market for Eastern and Southern Africa
COP	Conference of the Parties
ECOWAS	Economic Community of West African States
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FMD	Foot-and-mouth disease
FPIC	Free, prior and informed consent
ICH	Intangible Cultural Heritage
ICJ	International Court of Justice
IGAD	Intergovernmental Authority on Development
ILO	International Labour Organization
IOE	International Organisation for Animal Health
ITC	International Transhumance Certificate
IUCN	International Union for Conservation of Nature
LDN	Land degradation neutrality
MoU	Memorandum of understanding
NAP	National Action Programme
OIE	World Organisation for Animal Health
PPR	Pest of small ruminants
REC	Regional Economic Community
RVF	Rift Valley fever
SDG	Sustainable Development Goal
SPS	Sanitary and phytosanitary measures
UNCCD	United Nations Convention to Combat Desertification
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNESCO	United Nations Educational, Scientific and Cultural Organization
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security
WFS	World Food Summit
WHC	World Heritage Convention
WTO	World Trade Organization

Executive summary

Pastoralism is a livelihood and land-use system that is practised worldwide in grasslands and rangelands.¹ A central feature of sustainable pastoralism is the management of herd mobility to take advantage of the heterogeneous opportunities of rangelands and to manage risk. Despite the central role of mobility in pastoral production systems, interventions and policies by many governments have tended to restrict mobility, whether deliberately or inadvertently. This has weakened pastoral livelihoods and resilience and has contributed in some cases to the increased degradation of rangelands and their natural resources.

In many countries, pastoralism has historically been practised in areas that are now partitioned by international boundaries. This is a major barrier to sustainable resources management and to pastoral development. However, there are examples from around the world of efforts to facilitate transboundary movements and transboundary ecosystem management by pastoralists. This report examines how pastoral mobility has been impacted by the creation of unnatural boundaries within pastoral landscapes and how societies deal with these constraints through legal or informal arrangements.

¹ Pastoralists are found in approximately three-quarters of all countries and they number between 200 and 500 million. The total land area occupied and managed by pastoralists is estimated at around one-third of the global land mass (McGahey *et al.*, 2014).

REASONS FOR TRANSBOUNDARY PASTORALISM

Pastoralists cross international borders for a number of reasons, including to utilize heterogeneous and ephemeral resources, pursue trade and opportunities for livelihood diversification, and escape from risks and threats.

Transboundary movements may have social and cultural reasons, for example to connect families or to participate in traditional events and meetings. Cross-border movements also generate economic and social ties, strengthening not only communication but also the capacity of pastoralists through exchange of knowledge and information. Cross-border movements have also sometimes been used to seek security and shelter.

Rangeland ecosystems are often divided by national boundaries, and cross-border movements may be part of the seasonal cycle of pastoralists, providing access to dry- or wet-season grazing resources, or to winter or summer pastures. These resources may only be used periodically, for example as a buffer during a drought or blizzard, but their value during such periods can be extremely high, and the nature and strength of pastoralists' claims over them differ accordingly. When access to seasonal resources is curtailed, not only are pastoral risk management strategies weakened, but the rangeland resources themselves risk becoming degraded through the breakdown in patterns of rest and recovery.

CHALLENGES FOR TRANSBOUNDARY PASTORALISM

Pastoralists face a number of barriers to transboundary resources management, the most obvious of which is the outright closure of frontiers. Frontiers may be nominally closed without use of a physical barrier, but in some cases a wall or fence is erected to ensure the closure is enforced. Closure of borders, or restriction of movement across borders, has frequently led to changes in herding practices and has undermined pastoralism in a number of ways, from restricting access to vital resources to narrowing the gene pool.

Conflict in frontier areas can effectively close a border because of the heightened risk to pastoralists and their livestock. Pastoralists may find themselves living on the front line of conflict between two states. In some cases, the relative openness of borders in pastoral areas has been exploited by armed groups, such as terrorist organizations, and this has placed additional constraints on pastoralists. Governments respond by protecting and closing their borders, and pastoralists are often blocked from accessing pastures and water in neighbouring countries. This puts pressure on the resources within their limited reach and contributes to localized environmental degradation.

Incoherence in policy between neighbouring states can create disincentives to movement, particularly if pastoralists fear that they will lose their right to resource access and use in one country if they vacate the area, or if constraints to resource access are greater in one country than in the other. Differences between states in the way they respect the land and resource rights of pastoralists may affect patterns of mobility and resources management.

In an effort to control spread of disease, governments have frequently closed their frontiers. Animal movements can facilitate the spread of pathogens over long distances, and quarantine measures usually impose restrictions on pastoralists. Concerns over contagious livestock diseases have frequently led to responses in pastoral areas. Less recognized is the impact of controlling human diseases on transboundary management of animals. The recent outbreak of Ebola in West Africa, for example, led to the closure of a number of international borders and placed constraints on pastoralism.

Regulation of cross-border trade may hinder the mobility of pastoralists, but can also play a facilitating role, particularly where governments recognize the value of pastoralism and the benefits of promoting trade. However, governments often fear the flow of contraband across borders and this may lead to efforts to limit trade. Historically, cross-border trade has been intimately related to the exchange of culture, practices and knowledge. This exchange can be lost when boundaries are closed and when cross-border trade is heavily restricted.

SUPPORT FOR TRANSBOUNDARY PASTORALISM

Ensuring sustainable and safe transboundary movement may require, in the first instance, acceptance by both countries of the rights of pastoralists and the rationale for, and merits of, herd mobility. To this end, numerous publications have set out the logic and the merits of pastoralism, outlining the responsibility of states towards their pastoral citizens. The FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT – FAO, 2012a) address transboundary matters and provide good guidance to countries on their responsibility for respecting and upholding pastoral resources rights, despite those rights being held across borders.

A number of legal principles and approaches have been established in international agreements and soft law² which are relevant to developing legal arrangements for transboundary pastoralism. Relevant legal concepts include or relate to: the bundle of rights; land tenure; communal and open access rights; legal pluralism and customary law; participation; and free, prior and informed consent (FPIC).

Changing national legislative approaches to pastoral rights has an impact on the willingness of states to discuss transboundary arrangements. In recent decades, legislation in several countries has begun to change in recognition of mobile pastoralism as a legitimate and desirable form of land use. This includes explicit recognition of the transboundary nature of pastoral natural resources management. However, even when appropriate legal structures are in place, governments face challenges in implementation.

Pastoralism is greatly affected by policy and investment in a number of sectors. This can lead to overlap and conflict between different sectoral laws relevant to pastoralism, including forestry, land use, livestock, agriculture, water, decentralization and biodiversity. However, due to the cross-sectoral nature of the challenge, many international principles and agreements are relevant to transboundary pastoralism, particularly with regard to environmental issues and human rights.

LEGAL ARRANGEMENTS FOR TRANSBOUNDARY PASTORALISM

Legal arrangements in support of cross-border pastoral mobility include 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.

² Soft law refers to rules that are not legally binding and not directly enforceable, although this does not mean that they completely lack legal significance. Soft law includes international agreements, such as policy declarations and codes of conduct.

The best-known regional mechanism is the Decision of the Economic Community of West African States (ECOWAS) on the International Transhumance Certificate (ITC). A few formal bilateral treaties on pastoralism have also been established, including transhumance agreements, boundary agreements and peace agreements. In the absence of a formal international or bilateral arrangement, national legislation can facilitate transboundary movement, and several countries have adopted laws that provide pastoralists with the right to move animals across national borders.

Local-level transboundary arrangements can be established between sub-national government entities, such as the *faceries* between local governments in France and Spain. Subnational agreements can also be developed or strengthened with the support of civil society organizations and may be a component of local-level peace-building initiatives.

Although the number of legal arrangements identified is small, there is great diversity. Many laws specify processes for securing permits for border crossings, but these may be associated with a variety of institutional arrangements. Agreements variously describe the type of institution, their competence and mandate, dispute resolution, local governance and regular renegotiation, as well as questions of legal pluralism. Institutional arrangements may specify the process for periodically updating legal arrangements, consistent with the inherent flexibility of arrangements for pastoral resources management. They may also include ongoing negotiation over, for example, the timing and itinerary of migrations, emergency measures etc.

CONCLUSIONS

Transboundary movements are made by pastoralists between many countries, despite facing numerous obstacles. Many governments are opposed to these movements, and in some cases they are opposed to all forms of

*Kenya: Maasai pastoralists
guiding cattle to
the nearest water point*



pastoral mobility. However, the scientific and economic case for both pastoral mobility and transboundary movements is compelling, and a number of governments recognize its importance. This generates interest in establishing fair and effective mechanisms to regulate and support transboundary mobility.

Developing transboundary agreements is a complex task because of the nature of the overlapping rights and responsibilities of resources users either side of a boundary. It is even more complicated where pastoralists do not have secure tenure either side of the border; weak government support for pastoral tenure in one country may amplify the challenge of reaching transboundary agreements. Securing rights either side of a border should therefore be carried out with appropriate sensitivity to historical rights and claims, in order to ensure equitable outcomes and mitigate conflict.

Securing transboundary resources rights does not necessarily require allocation of all rights associated with landownership and title. Rights to pasture may be allocated separately from other rights and may be based on rights of access or passage or on mechanisms to obtain pasture rights from other landowners.

Transboundary arrangements need to be sufficiently flexible to deal with changing conditions and the natural adaptability of pastoralism. This can require periodic (e.g. annual) renegotiation of details, such as transhumance times and routes. Participation and effective representation of pastoralists are crucial not only in the development of transboundary agreements, but also in the institutions that manage these ongoing negotiations. Transboundary legal arrangements have often been undermined by weak implementation on account of several factors, including a low level of consultation of pastoralists.

Transboundary agreements can be reached in various ways, addressing a variety of transboundary concerns. The process of developing agreements is also supported by established international agreements, including agreements at the global level, such as International Labour Organization (ILO) Convention No. 169, and policies and commitments at the regional level that make provision for transboundary pastoralism.

The report concludes with recommendations to enable and secure transboundary pastoralism. States can take the lead by promoting bilateral and regional dialogue for enhanced transboundary pastoralism. However, transboundary pastoralism can also be enhanced through policy support at the national or subnational level, and lack of bilateral dialogue does not have to be an insurmountable barrier. Consultation of pastoralists is of paramount importance in developing transboundary agreements, both to ensure the suitability of regulations and to strengthen compliance. Appropriate processes of consultation and participation are required to develop and implement legal arrangements. Pertinent legal solutions need to be identified according to the local and national context. Where agreements are reached, governments and development partners should commit to their implementation, and this requires sustained investment and public support.



A progressive movement: an introduction to pastoral mobility

Pastoralism is both a production system and a way of life that is part of our shared global heritage; cherished by many, feared by others and misunderstood by the majority. Pastoralism is practised on more than one-third of the world's land surface by up to 500 million people, although this population estimate is highly dependent on how different countries classify and count pastoralists. The labels vary from place to place, and pastoralists may be known as, *inter alia*, shepherds, herders or nomads (McGahey *et al.*, 2014).

A common feature of the different names given to pastoralists is the emphasis on mobility. This can mean mobility over short distances, for example, between mountain tops and valleys following seasonal cycles, or between adjacent pastures as part of a system of rotation. In some cases, herd movements cover far greater distances, for example between wet-season grasslands and dry-season fodder reserves along riverbanks, separated by hundreds of kilometres. Movements may follow fixed patterns or they may be relatively flexible but strategic, determined by prevailing weather conditions or other circumstances. Mobility can mean movement of herds and flocks or periodic relocation of the entire household.

Mobility, which in one form or another is widely considered to be a defining feature of pastoralism, is essential for sustainable management of rangeland landscapes: for harnessing the highly heterogeneous resources and managing the unpredictable climate. Pastoral mobility is an adaptive management strategy that is increasingly important in the context of climate change, which is amplifying the natural climatic challenges of the drylands. Pastoralists may be seen as wanderers, but they are clearly wanderers with a purpose, and this purpose is increasingly well understood thanks to advances in the understanding of rangeland ecology.

Pastoral mobility is not restricted to within national borders; it often entails movement across international boundaries. In some cases, these cross-border movements follow established patterns; in other cases, movements are less predictable. Pastoralists may move across the frontier for a number of reasons, for example, to escape drought and insecurity or to pursue better terms of trade for their livestock and livestock products. Access to transboundary resources is often challenging as a result of insecure rights, lack of physical security, poor access to services or harassment by state security. Against this backdrop, the report examines legal and policy arrangements that have been developed to facilitate and manage transboundary pastoralism and current concerns around transboundary pastoralism. It examines how pastoral

India: Raika pastoralists during their annual migration



mobility has been impacted by the creation of unnatural boundaries within their landscapes, and how the barriers created by these boundaries can legally be overcome.

The report examines different challenges to transboundary pastoral mobility and provides examples of how some governments are attempting to regulate and enable such movements through legislation. It lays out some of the fundamental arguments for pastoral mobility, reflecting the growing consensus that mobility has a sound ecological and economic rationale. Building on the advances in understanding rangeland ecology and respect for pastoral rights, the report provides information that can be useful to governmental and non-governmental actors who wish to improve support for transboundary pastoralism. Based on documented evidence and case studies, it demonstrates the relevance of cross-border management of rangeland resources in several countries, which underpins the resilience of pastoralists.

WHAT IS PASTORALISM?

Pastoralism has been broadly defined as “extensive livestock production in the rangelands” and it is practised throughout the world in response to certain ecological conditions. Some definitions are more detailed: for example, they may include the practice of mobility or specify the type of livestock that is part of the system in a given country. While there is considerable diversity in pastoralism worldwide, there are also a number of common features, such as herd mobility and herd diversity, and these commonalities point to a common logic underlying this unique system of land use. Pastoralism in its various forms occupies about one-third of all land on earth, providing high-value livestock products while simultaneously protecting a vast area of natural heritage (McGahey *et al.*, 2014).

The people who practise pastoralism are often called pastoralists, and mobility of livestock herds is often inseparable from mobility of pastoral communities. The extent of movement differs greatly between societies. Some pastoralists live in permanent settlements throughout the year, moving their herds over relatively short distances between seasons, while others are almost entirely mobile, relocating their households seasonally as herds are moved to new lands (see Figure 1). However, even in the most nomadic of pastoral societies, herd movements follow patterns and pastoralists have a deep sense of belonging to certain landscape features and a strong ownership over fixed resources, such as water points, pastures and salt pans.

Typical features of pastoral production systems

Pastoralism has been described as “the finely-honed symbiotic relationship between local ecology, domesticated livestock and people in resource-scarce, climatically marginal and highly variable conditions” (Nori and Davies, 2007).

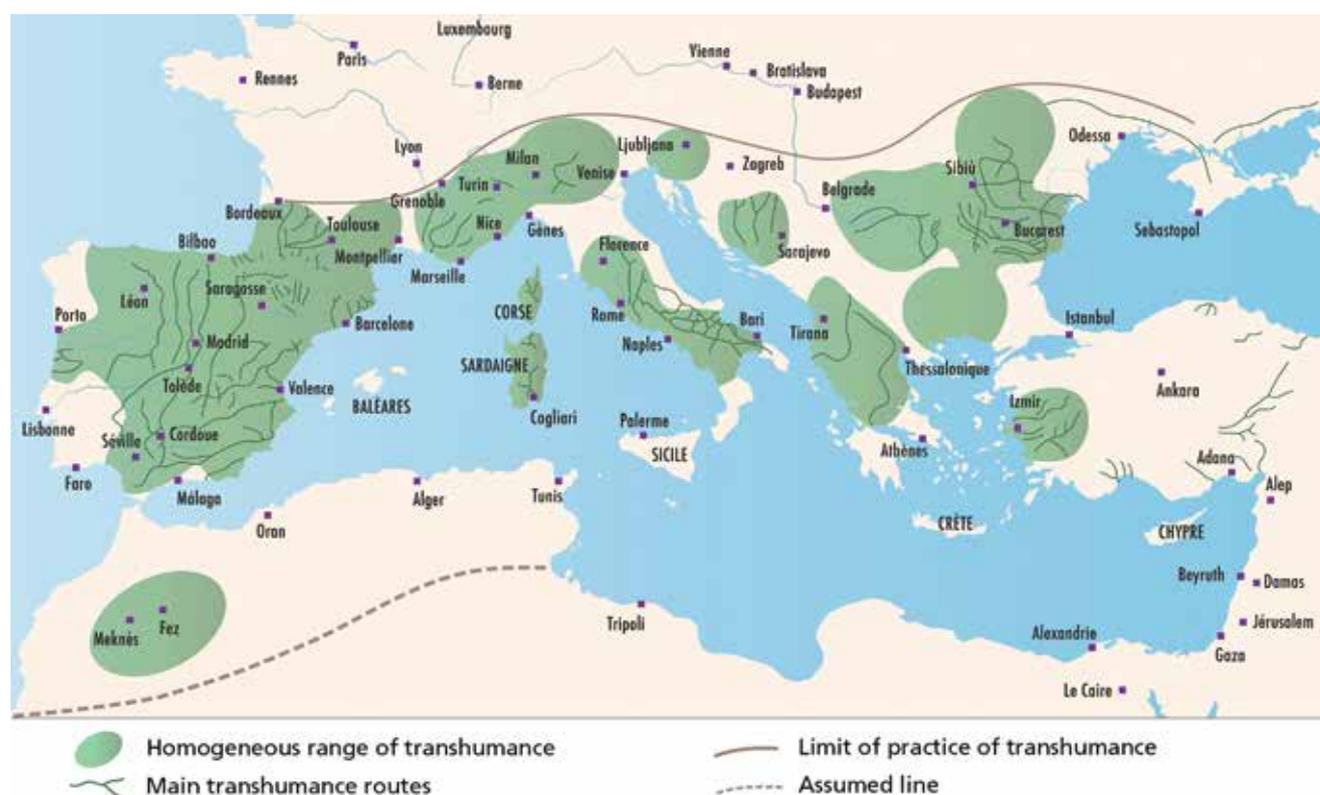
“Pastoralism in its various forms occupies about one-third of all land on earth, providing high-value livestock products while simultaneously protecting a vast area of natural heritage”

It is a sophisticated form of natural resources management based on a continuous ecological balance between pasture, livestock and people. A central feature in many pastoral systems is herd mobility, which enables strategic use of heterogeneous resources and is the basis of the overall productivity and resilience of pastoralism. Herd mobility contributes to sustainable management of rangeland ecosystems, playing a role, for example, in seed dispersal and germination rates. Many of the most productive fodder plants thrive under the influence of large, mobile herds of grazing animals, producing some of the world's most iconic landscapes, such as the Serengeti and the Asian steppe.

Understanding the social, economic and ecological benefits of mobility is key to unlocking sustainable pastoral development. In ecological terms, herd movements can promote certain plant species and assemblages of species, and herd movement is used by knowledgeable managers to promote the most nutritious species and to minimize encroachment by less nutritious plants. Herd managers influence the relationship between vegetation and animals by carefully timing the grazing period and duration, ensuring, for example, that the most nutritious species are grazed only after they have produced their seeds. Grazing animals accelerate the process of nutrient decomposition, and their manure plays an important role in nutrient cycling and soil formation (McGahey *et al.*, 2014).

“A central feature in many pastoral systems is herd mobility, which enables strategic use of heterogeneous resources and is the basis of the overall productivity and resilience of pastoralism”

Figure 1.
Paths of transhumance
in southern Europe



Note: This map is incomplete. The knowledge of the history of transhumance, its common characteristics as well as its differences are yet to be established at the scale of the entire Mediterranean Basin.

Research data: J.C. Duclos and P. Fabre.

Cartography: N. Esperguin, CPI Musée Dauphinois, 2004.

Source: Braudel (1977) and Duclos (1994).

Box 1. Protecting the environmental benefits of transhumance

Livestock mobility in Spain is made possible by the existence of a vast network of cattle trails, called *cañadas*. This ancient network comprises around 110 000 km of tracks protected by the 1995 Vías Pecuarias Act (Ley 3/1995, 23 March 1995). The Act recognizes the role of transhumance on foot in maintaining pastoral resources and lays down a legal system for the governance of cattle trails. The legal document states: “the economic and social importance involved in seasonal migration to new pastures during centuries is not held in doubt.” The document also recognizes that cattle trails are “ecological corridors, essential to migration, geographic distribution and the genetic exchange of wild species.”

The Act defines administrative powers over livestock trails, classification and demarcation, rules governing modification of routes, occupancy and use rights, compatible and complementary uses, and infringements and sanctions. Its enactment has led to greater popular support for pastoral mobility and an increase in the practice of traditional transhumance, which had become eroded over previous decades. This, in turn, has generated an appreciable resurgence of mountain biodiversity as a result of the improved ecological connectivity.

Source: Ministry of Agriculture, Food and Environment (2012).

Herd mobility contributes to the economic resilience of pastoralism in a number of ways (see Box 1). Sometimes, the most nutritious forage is accessible only during a brief season, for example, in annual grasslands during the rainy season, and migrations are made to access these resources while they are available. Herd movements are used to access important buffer resources during droughts and other crises, and they are central to pastoral risk management in environments defined by extremely high levels of uncertainty. Mobility is also used to evade seasonal livestock ailments and parasites that are more common in humid regions and riparian areas. In some countries, herd movements are synchronized with cropping cycles, with animals providing fertilization to the fields prior to sowing and then being moved away during the growing and harvesting season in order to avoid conflict (Davies and Hatfield, 2008).

Herd movements are also central to pastoral cultures and play an important role in shaping identity and promoting social cohesion. A high degree of cooperation is required to enable the long-distance movements and communal resources management that are at the heart of pastoralism; this has led to the evolution of behaviours and practices that are deeply embedded in pastoral culture. Seasonal migrations are also used to maintain distant alliances and to create bonds and obligations that underpin pastoral risk management, for example, the exchange of livestock between distant communities, establishing debts that can be recalled in times of hardship (Scoones, 1995; Niamir-Fuller, 1999).

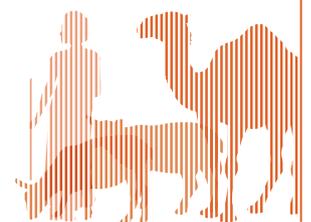
“Herd movements are central to pastoral cultures and play an important role in shaping identity and promoting social cohesion”



Macedonia: Shepherd grazing sheep in open grasslands

The nature of pastoral mobility is determined by many factors, although utilization of ephemeral resources (Krätli *et al.*, 2013) is the most important. In mountain regions, herd movements are between high-altitude pastures that are available in warm months and low-altitude pastures that provide protection during the cold season. In arid and semi-arid areas, as already noted, movements are typically between areas of higher and lower rainfall, or between areas with and without permanent sources of water. In the taiga and tundra of the northern Eurasian landmass, herd movements are largely determined by seasonal temperature and snow cover (Davies *et al.*, 2010; Johnsen *et al.*, 2012).

One important factor that shapes mobility is the imposition of borders, both domestic and international, within pastoral lands. Pastoralists inhabit lands that are frequently described by outsiders as inhospitable or harsh, usually because the preferred land-use system of those outsiders would not thrive in pastoral lands. As nation states have emerged, pastoral lands have frequently been viewed as natural frontiers, and rangelands now mark the borders between many countries (see Figure 2). Many pastoral lands have been carved up by international or domestic boundaries and, in many cases,



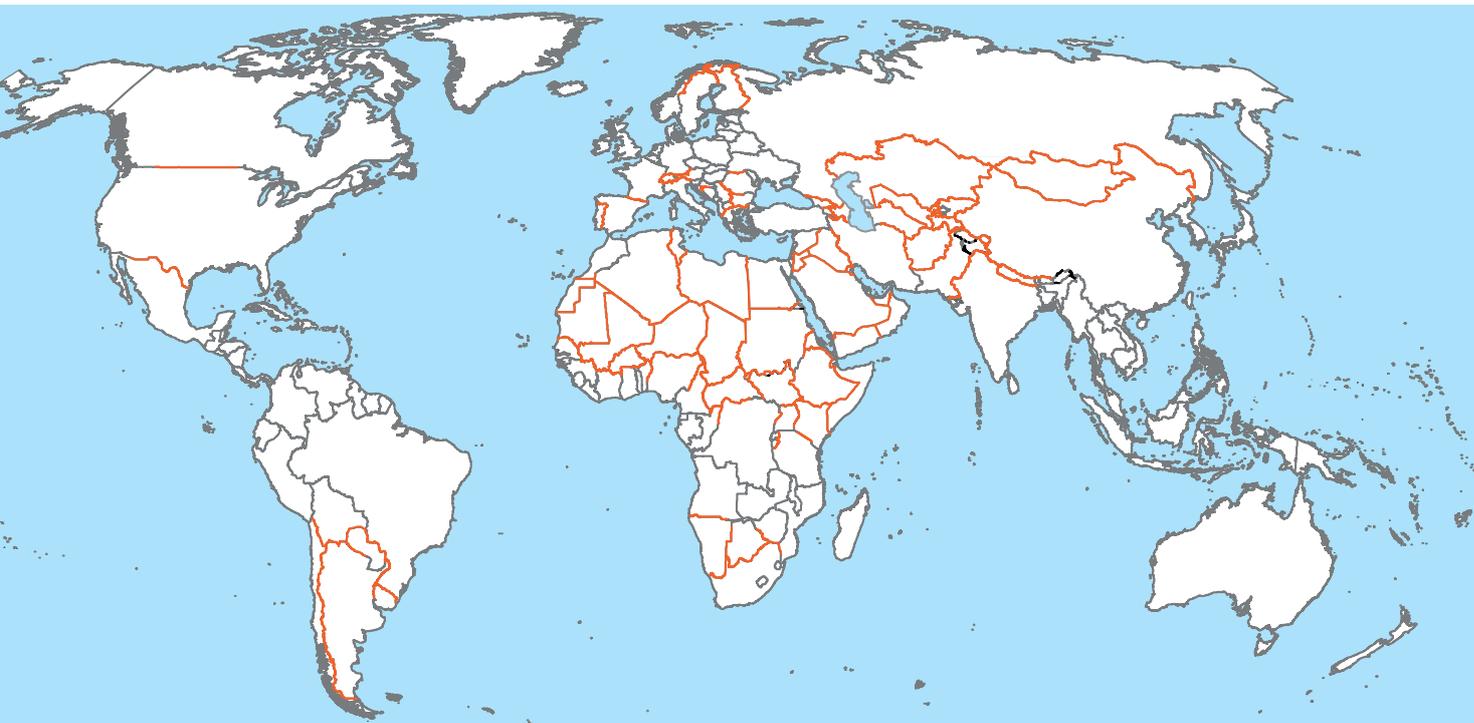


Figure 2. Pastoralism at the frontier: an approximation of international border regions inhabited by pastoralists

pastoral societies and families find themselves separated by these frontiers. As a result, many pastoralists around the world claim the right to use and manage natural resources in more than one country.

Movements between most countries are restricted, and many governments find pastoral transboundary mobility inconvenient, if not threatening. In fact, some governments continue to object to all forms of pastoral mobility and enforce policies of sedentarization. Many reasons are put forward for enforcing sedentarization, from fears about disease control to concerns about administrative inconvenience, despite evidence pointing to the cost of such policies in terms of environmental degradation and poverty. Government concerns over mobility are aggravated when movements take place across international boundaries, challenging national sovereignty and control.

WHY IS PASTORALISM IMPORTANT?

Pastoralism is one of the most sustainable food systems on the planet, providing high-value livestock products while, at the same time, protecting natural capital and safeguarding ecosystem services that ensure the welfare of millions of people (McGahey *et al.*, 2014). Strengthening sustainable pastoralism can contribute to a number of Sustainable Development Goals (SDGs), including poverty reduction (SDG1), food security (SDG2), improved water supply (SDG6), economic growth (SDG8), reduced inequalities (SDG10), climate change adaptation and mitigation (SDG13), and protection, restoration and sustainable use of ecosystems (SDG15).

Box 2. Management of transboundary ecosystems in Eastern Europe

The Stara Planina region, which extends from Bulgaria to Serbia, was traditionally known for its rich biodiversity, especially its indigenous sheep, goats and cattle that were adapted to the harsh conditions of the high grasslands. The traditional grazing patterns of the pastoral communities were important to the wild biodiversity of the grasslands. Until 50 years ago, the indigenous breeds of sheep, goats and cattle dominated the landscape and seasonally moved between the highlands and the lowlands. In recent decades, there has been a shift towards the perceived “modern” more intensive livestock rearing of high-producing breeds. These breeds cannot, however, withstand the harsh conditions of transhumance and are therefore kept in the lowlands. This has resulted in overgrazing in these areas and abandonment of highland pastures. Without moderate grazing in the highland pastures, natural succession processes speed up and valuable grassland species that previously dominated the area are replaced by hardy and unpalatable species.

Source: Amend et al. (2008).

Pastoralism contributes approximately one-quarter of global beef output, one-third of lamb and around one-fifth of milk (FAO, 2009). The relative contribution to national economies depends on the extent of the rangelands as well as the overall level of economic development. Several countries in Africa derive more than half their agricultural products from pastoralism. At the same time, there is a widespread tendency to undervalue pastoral production, particularly in regions where market penetration is low and pastoral products are consumed through a subsistence economy or traded outside the formal marketplace. Data on pastoral production in Africa, for example, are considered to be greatly underestimated, because the data are gathered in the marketplace, yet market penetration for milk – the primary pastoral product – is very low (Davies and Hatfield, 2008). Pastoral livestock breeds are well adapted to the conditions of the rangelands – both the climate extremes and the type of available forage. Indigenous pastoral breeds have been adapted by both human and natural selection to fit the production system and the environment, and they are highly tolerant of mobility, seasonal nutritional deficits, water scarcity, temperature extremes and other features of their environment. Livestock breeds and rangeland ecology have often co-adapted over time and can be interdependent, to the extent that changes in type of livestock can lead to major changes in the ecosystem (see Box 2) and contribute to degradation (Hoffmann, From and Boerma, 2014).

Pastoral culture is important for enabling pastoral management of rangelands. It plays a crucial role in the resilience of pastoral economies, for example, by contributing to the social fabric that enables pastoral risk management. In addition to their intrinsic value to pastoralists, pastoral cultures

“Pastoralism has been described as a multifunctional livestock management system that provides ecosystem services extending well beyond the boundaries of the rangelands”

are admired and valued throughout the world. In some countries, tourism is closely linked with pastoral culture and heritage and important natural sites are associated with pastoralism, for example, the Maasai Mara reserve in Kenya. Pastoral cultural events, such as the Niger’s *Cure Salée*, attract a growing number of tourists every year.

Pastoral livelihoods depend on a range of biodiversity and pastoral management strategies to protect and promote that biodiversity, including through the use of protected areas, selective grazing, social controls on resources use, and the use of fire as a management tool. There is increasing investment in pastoralism to promote, simultaneously, the two distinct roles of pastoral land use: livestock production and environmental stewardship. Examples of investment include promotion of ecotourism, harvesting and marketing of medicinal plants, and payment for ecosystem services (Davies *et al.*, 2012).

Pastoralism has been described as a multifunctional livestock management system that provides ecosystem services extending well beyond the boundaries of the rangelands. When managed effectively, pastoralism can maintain soil fertility and soil carbon, promote hydrological cycles and protect water supply, as well as help to regulate pests and diseases. In many countries, pastoralism has been shown to protect habitat and the connectivity between habitats that enables biodiversity to thrive. Grazing lands cover 5 billion ha worldwide and sequester 200–500 kg of carbon per hectare per year, thus playing an important role in climate change mitigation. Taking all aspects of emission and sequestration into consideration, pastoralism has lower emissions per unit of production than intensive feedlot production systems, and also protects biodiversity and other important ecosystem services like water supply (McGahey *et al.*, 2014).

The positive impact of pastoralism on the environment is derived from both the livestock management practices and the broader natural resources management practices of pastoralists (see Box 3). Pastoralists actively manage their environments, protecting high-value trees and resource patches, limiting the harvest of natural resources for consumption or construction and using fire to manage vegetation loads and pests. With their mobility, pastoralists improve the ecological functions of the environment through herbivory, seed dispersal and nutrient cycling (McGahey *et al.*, 2014).

Although there has long been an assumption that pastoralism is associated with land degradation, there is growing realization that this belief has frequently been politically motivated. There is little data to support the suggestion of widespread degradation in many pastoral areas, and it has been observed that where traditional practices of mobility and local governance remain intact, pastoral lands are generally found in good condition (Niamir-Fuller, 1999). Nevertheless, areas of land degradation do exist, particularly where pastoral practices have been eroded by inappropriate policies and investments. Rapid social changes and demographic pressures also contribute to a breakdown in the way pastoralists have traditionally managed rangelands. Furthermore,

Box 3. Pastoral conservation practices

Considering the importance of pasture and other natural resources to the livelihoods of pastoralists, it is no surprise that pastoral societies have developed ways of protecting them. Pastoralists throughout the world have mechanisms for setting aside reserve pastures for use under specific circumstances, and have systems for ensuring that all users respect the rules. In eastern Africa, for example, Borana pastoralists, who reside on either side of the Ethiopia–Kenya border, create zones called *madda*, where the management of each well is coordinated with its adjacent pasture. Afar pastoralists in Ethiopia and Eritrea create similar areas called *metaro*, where pasture is restricted for agreed uses, such as feeding lactating cows or fattening bulls for market. Enclosures for calves or lactating females and other specific livestock are known as *kalo* among the Borana and as *deso* among the Afar. These protected areas are a useful tool in livestock production, but they also contribute to conserving biodiversity in the pastoral landscape.

Such conservation practices are a common feature of pastoral systems worldwide and numerous examples can be cited. Similar arrangements are called *olokeri* by the Maasai in Kenya and the United Republic of Tanzania and *ngitili* by the Sukuma in the United Republic of Tanzania. In West Asia and North Africa, Bedouin pastoralists adopt the practice of *hima*, which literally means protected area, to control grazing on high-value resource patches. Moroccan pastoralists protect a mosaic of pastures known as *aghдал* that enable transhumance through the mountainous areas of the country. There is growing realization of the environmental benefits of these rangeland protection measures, in terms of protecting both ecosystem functions, such as hydrological cycles, and biodiversity.

Source: McGahey *et al.* (2008).

restriction on herd movements and on access to critical resources, including through the imposition of state borders, has undermined the effectiveness and resilience of pastoralism.

REASONS FOR TRANSBOUNDARY PASTORALISM

Pastoral mobility has, in most cases, existed for much longer than the imposition of the international boundaries that pastoralists cross. The fundamental reasons for pastoral mobility explain to a large extent the need for transboundary management. However, the logic of pastoral mobility often only becomes apparent to outsiders after the mobility has been curtailed, and many of the examples shown in Table 1 derive from cases where transboundary pastoralism has been restricted.

Resource utilization and sustainable rangeland management

Pastoralists take their herds across borders to access pasture and water resources on a daily basis, seasonally, annually or just occasionally, for example

Box 4. *Cure Salée*, the Niger

At certain times of the year, most pastoral livestock suffer from dietary mineral deficits and need to boost their intake of salts to balance their nutrition. Salt supplements contribute to higher growth rates and body weight, improved reproductive performance, and a number of other aspects of animal health. Many transhumance routes therefore include areas that are rich in natural salt deposits.

One of the most famous such areas is in Irhazer in central Niger, to the west of the city of Agadez. It is a place of extensive salt pans and rich pastures that play an important role in the diet of livestock not only from the Niger but also from neighbouring countries, particularly Nigeria to the south. The *assamanei*, or *Cure Salée* (salt cure), is an annual event traditionally organized by Touraeg pastoralists and held for a few weeks during the rainy season. During the salt cure, a large number of pastoralists of different origins gather at the invitation of chiefs to settle conflicts and renew allegiance to the sultan's authority. The event has great cultural importance and is the centre of trade and other exchanges. Since colonial times, the Government has managed the event, changing its nature to some extent. Nevertheless, it remains a highly important gathering for dialogue and solidarity between pastoralists.

Source: Sommerhalter (2008).

Table 1. Reasons for transboundary pastoralism

Category	Purpose	Examples
Resource utilization and sustainable rangeland management	<ul style="list-style-type: none"> - Exploit different pasture, water and other resources according to the season - Rest and rotate pastures to ensure sustainable management 	Himalayas, Nepal–China border ¹ Gilgit-Baltistan, Pakistan ²
Livelihood diversification and trade	<ul style="list-style-type: none"> - Trade and exchange breeding stock to diversify the herd gene pool and livelihoods - Generate income and access other commodities and services 	Hindu Kush Himalayan region ³ Kenya–Ethiopia–Somalia ⁴
Risk and threat minimization	<ul style="list-style-type: none"> - Seek security, shelter and protection against livestock raids and conflict - Manage the effects of drought and other risks by accessing regions with historical use rights or diversifying risk 	Uganda–Kenya border and Kenya–Sudan ⁵ East Africa ^{6,7} Sahel, West Africa ⁸

Notes:

¹ Wu, N., Oli, K.P., Gilani, H., Joshi, S. & Bisht, N. 2016a. Yak raising challenges: Transboundary issues in Far Eastern Nepal. In N. Wu, S. Yi, S. Joshi & N. Bisht, eds. *Yak on the move: Transboundary challenges and opportunities for yak raising in a changing Hindu Kush Himalayan region*, pp. 52–63. Kathmandu, ICIMOD.

² Khan, R.S. & Rahman, S.A. 2009. Integrating yak herding as a resource for community livelihood in protected area management: A case study of Northern Pakistan. *Global Journal of Environmental Research*, 3(3): 258–263.

³ Ali, I. & Butz, D. 2003. The Shimshal governance model: A community conserved area, a sense of cultural identity, a way of life. *Policy Matters*, 12: 111–120.

⁴ Catley, A., Lind, J. & Scoones, I. (eds). 2012. *Pastoral development in Africa: Dynamic change at the margins*. London, Earthscan/Routledge.

⁵ McCabe, J.T. 2004. *Cattle bring us to our enemies: Turkana ecology, politics, and raiding in a disequilibrium system*. Human-Environment Interactions Series. Ann Arbor, USA, University of Michigan Press.

⁶ Scoones, I. 1995. *Living with uncertainty: New directions in pastoral development in Africa*. London, Intermediate Technology Publications Ltd.

⁷ Thornton, P.K., van de Steeg, J., Notenbaert, A. & Herrero, M. 2009. The impacts of climate change on livestock and livestock systems in developing countries: A review of what we know and what we need to know. *Agricultural Systems*, 101: 113–127.

⁸ Boutrais, J. 2007. Crises écologiques et mobilités pastorales au Sahel: Les Peuls du Dallol Bosso. *Sécheresse*, 18(1): 5–12.

during drought years. The nature and strength of their claim over those resources may differ accordingly. Cross-border movement can benefit pastoralists by creating economic and social ties, strengthening communication (see Box 4), providing access to productive resources, or allowing pastures in one location to be rested and improved. Pastoralists have also sometimes moved across borders to seek security and shelter, either on a temporary basis or, in some cases, permanently. Livestock mobility is beneficial for rangeland ecosystem management, and this sometimes necessitates management across international borders. Cross-border livestock movement represents an important livelihood strategy for some pastoral communities and can strengthen the resilience of pastoralism in some countries.

In the Himalayas, for example, pastoralists have managed resources across international borders for centuries in order to access pastures in different seasons. Pastoralists have developed transhumant grazing arrangements through mutual understanding between neighbouring institutions across the international frontier. This has allowed pastoralists from either side to access the neighbouring resources when required. Before the closure of the border between China and Nepal in the early 1960s, for example, herders would move across different pastures in northern Nepal and the Tibet Autonomous Region in China. Pastoralists would normally keep their livestock on mountain pastures across the Nepal–China border in summer and move down to lower subalpine pastures or temperate forests in winter. Their movements were driven by the need to access seasonal resources, but there were numerous other motives, including the need to breed their livestock, trade resources and participate in social events (Wu *et al.*, 2016a).

Seasonality of pastures in drylands plays a key role in determining the movement of pastoralists and their livestock. Mobility enables pastoralists to take advantage of resources that are only seasonally accessible, and allows access to salt patches (critical for animal health) and other resources and services (IFAD, 2009). Pastoralists from Gilgit-Baltistan in northern Pakistan, for example, traditionally took their herds of yak to Srinagar, Kashmir and Ladakh in India. Herders also traditionally accessed summer pastures in Afghanistan and China, which ensured they exploited the different pasture resources available throughout the year (Khan and Rahman, 2009).

Cross-border livestock mobility can be important for protection of ecosystems and sustainable use of rangeland resources. Mountain ecosystems create natural frontiers between many countries and in many cases, these lands are used for, and to some extent depend on, pastoralism. High-altitude pastures are typically used during the summer season, and animals are returned to valleys during winter. This often entails moving animals across the frontier, or grazing in areas where the exact location of the frontier may be ambiguous and is not clearly demarcated on the ground. Such transboundary management can be essential for the sustainable use of rangeland resources and the survival of the livestock management system. Loss of locally adapted



livestock can undermine pastoralism and rangeland ecosystems if it leads to further changes in patterns of herding and resources use (Wu *et al.*, 2016b).

Trade and livelihood diversification

Pastoralists have for centuries carried out cross-border livestock trade. Indeed, in many cases, this trade predates the creation of current international borders. It has usually followed the region's natural resource distribution and pastoral movement routes. Cross-border trade not only generates revenue for pastoralists and for others in the value chain, but can also contribute in other ways to the pastoral economy. Breeding stock is traded and exchanged to diversify the gene pool in a given population and to exchange favourable production or survival traits. For example, in the Himalayan region, yaks were traditionally exchanged for genetic improvement and diversity; closure of the border has led to a noticeable decline in the quality of breeding stock (Wu *et al.*, 2016b). Transboundary movement of livestock has traditionally been synchronized with the animal breeding cycle and allowed cross-breeding between different herds (Ali and Butz, 2003). The indigenous practice of transhumant grazing, together with reciprocal arrangements between local institutions, has enabled pastoralists on either side of an international border to overcome problems of livestock inbreeding.

Cross-border trade has been central to pastoral livelihoods in East Africa for centuries. Much of this trade takes place informally – 95 percent of cross-border trade in East Africa, for example – and is therefore poorly accounted for in national records. The value of unofficial cross-border trade of cattle, camels, sheep and goats from Ethiopia has been estimated at around USD 250–300 million annually, which is 100 times greater than the official figure. This trade contributes to the local economy and food security, and it promotes regional integration that in turn relieves border tensions. However, governments are often concerned about loss of tax revenue and the other risks associated with unregulated cross-border trade (Catley, Lind and Scoones, eds, 2012).

Risk and threat minimization

Cross-border movements are influenced by rainfall uncertainty and the need to access drought reserves (Thornton *et al.*, 2009). Changes in the frequency of extreme climatic conditions, such as drought and flood cycles, adversely affect livestock and community livelihoods, and pastoralists may have to find new routes to access pasture and water. The droughts of 1973/74 and 1984/85 in the West African Sahel, for example, led to significant changes in wet-season transhumance towards the north to access pasture and water (Boutrais, 2007).

Many pastoralists in Africa practise herd-splitting as a way to manage drought. Herds are divided between different herders, or an individual household may have claims to the livestock in a number of other households, and

these herds migrate to different areas in order to diversify risk. Moving some herds across international boundaries allows them differential access to natural resources, spreading risk and creating a higher chance of some stock surviving the crisis (Scoones, 1995; McGahey, Davies and Barrow, 2008).

Pastoralists also cross borders to reduce the risk of, or threat from, insecurity. In the East African districts of Moroto in Uganda and Turkana in Kenya, for example, strong grazing alliances exist between the Karamojong, the Karamojong-Matheniko and the Turkana (Ngikamatak section) peoples. These alliances enable groups to move between the Karamoja side in Uganda and the Turkana side in Kenya. The Turkana can move up to 50 km into the Matheniko northern “livestock corridor” and, reciprocally, the Matheniko may descend the escarpment south of the Loima Hills to access forage, particularly during drought. There is also further regular cross-border mobility on the part of the Tepeth of Katikekile Subcounty (located on the slopes of Mount Moroto in Uganda) and the Pokot of Kenya (McCabe, 2004).

THE FUTURE OF PASTORAL MOBILITY AND THE IMPLICATIONS FOR TRANSBOUNDARY PASTORALISM

Pastoralism is distributed throughout the world and support from governments is highly varied, making it difficult to paint a general picture of the future. Nevertheless, it is fair to say that advances in the science of rangeland ecology, combined with changing attitudes towards the rights of indigenous peoples and other marginalized groups, are having an impact on how pastoralism is viewed and treated in many countries. There is growing scientific recognition of the positive role that livestock management can play in protecting grassland ecosystems and increasing understanding of the importance of herd mobility.

Pastoralism remains a widespread practice that is slowly gaining recognition and political support. In some parts of the world, governments are striving to protect it and to enable it to recover from past declines. By regarding pastoralism as a global phenomenon rather than a local curiosity, common trends have been identified as countries move through different stages of development and industrialization. This changes the way some countries view pastoralism and stimulates new ways of thinking about pastoralism in the long term.

The existence of high levels of disparity in pastoral wealth is increasingly recognized in several developing countries, and there are concerns regarding the implications for the overall resilience of the pastoral system. Wealth disparities create new dynamics in pastoral resources management and have an impact on mobility. In some cases, the rise in powerful elites has led to an increase in commercial pastoralism but a decline in the effectiveness of rangeland management: for example, herds remain closer to markets and become increasingly dependent on imported fodder (Davies and Hatfield, 2008).

“There is growing scientific recognition of the positive role that livestock management can play in protecting grassland ecosystems and increasing understanding of the importance of herd mobility”

Box 5. Pastoralists' views on sedentarization

Pastoral mobility is an adaptation to the natural variability of rangelands and it is a way to optimize range resources. The patterns of mobility have adjusted over time in response to numerous pressures. In many societies, the nature of mobility is increasingly influenced by the demands of the amenities of modernity and by the opportunities of development. Pastoral women play a role in influencing these changes and, in some cases, they may derive more benefits than men do from leading a settled life.

In Kenya, Maasai women identify several advantages to being settled, including better access to markets, schools and health services. Settled pastoral women in the Islamic Republic of Iran have better access to markets, as traders are more willing to go to homesteads with a fixed location. Similarly, in Afghanistan, pastoral women have stated a preference for a more sedentary life simply to alleviate the hardship of annual migration.

These changes in lifestyle inevitably have an impact on livestock production, often contributing to the degradation of pastures surrounding settlements and to an overall decline in the economic performance of livestock. The challenge for pastoralists is to balance the benefits of sedentarization with the economic and environmental advantages of herd mobility – a process that may produce profound changes in pastoral societies. In the future, some communities may see a continuation of herd movements, but in a greatly altered state.

Source: Flintan (2008).

Although pastoralism persists, in most parts of the world it is undergoing profound change and the extent of mobility is decreasing in many countries. The decline in mobility is in response to a combination of push and pull factors: factors that discourage movement and factors that encourage settlement (see Box 5). Mobility is hindered by, among other things, changes in access to natural resources, closure of migration routes and borders, and regulations (e.g. disease control measures). On the other hand, there are many factors that can make sedentarization more attractive to herders, including better access to social services and markets and the expectation that it will improve their quality of life (Davies *et al.*, 2010).

Development and modernization in the Indian Central Himalayas has greatly affected livestock production and natural resources management, leading to a shift away from traditional pastoral herding. Many pastoral communities have chosen to settle, and a key factor behind sedentarization is the introduction of property laws that favour sedentary over mobile pastoralism. The discourse on property rights celebrates proprietorship and divides people into two main categories: proprietor and tenant. This also applies to common lands and grazing areas. Pastoralists are portrayed as misfits in the new discourse and have been deprived of the use of common land. The right to pasture was appended to the right to revenue-yielding cropland. Pas-

tures were later assimilated into agricultural land and therefore partitioned between proprietors. As a result, access to common land was allocated to crop farmers. Grazing was not regarded as a source of income generation and therefore the rights of nomadic pastoralists and agropastoralists were adversely affected (Dangwal, 2009).

Although a growing number of governments recognize the importance of pastoral mobility, there are increasing global concerns about human mobility in general. In addition, there is ongoing unease about international terrorism with pressure on a number of frontline countries to restrict freedom of movement across their borders.

In policy discussions, the growing voice of pastoralists is influencing development agendas, trying to ensure protection for important elements of pastoralism, such as herd mobility, which can be decoupled from human mobility to some extent and in some contexts. In the industrialized world, it is a major challenge to encourage each new generation to maintain mobility practices that are arduous and unattractive to many. New incentives may be needed to sustain pastoral mobility if countries want to continue to enjoy the associated environmental, social and economic benefits.

In a nutshell, there is a slowly growing awareness of the need for mobility to achieve sustainable pastoralism and protection of rangelands and their ecosystem services. There is increasing recognition of the importance of land tenure, including tenure in communal lands, as evidenced by the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT – FAO, 2012a) and the associated technical guide (Davies *et al.*, 2016). Some Regional Economic Communities, including the African Union (AU), are endeavouring to remove trade barriers and facilitate transboundary movements. However, any improvement in acceptance of pastoral mobility and transboundary rights must be viewed in the light of international security concerns and local geopolitics, both of which entail many pressures to secure international frontiers and discourage freedom of movement. Hence regional/bilateral cooperation mechanisms are required to encourage coordination, legal harmonization, law enforcement and dispute resolution, as well as early warning mechanisms for securing pastoralists rights to use resources that span borders.

“There is a slowly growing awareness of the need for mobility to achieve sustainable pastoralism and protection of rangelands and their ecosystem services”



Challenges and opportunities for transboundary pastoralism

BARRIERS AND BOUNDARIES TO TRANSBOUNDARY PASTORALISM

Transboundary pastoral movements face restrictions from a number of sources. In some cases, physical barriers have been constructed to firmly close the border, but barriers are often less evident. In some countries, pastoralists may find their citizenship is disputed or ambiguous if they are perceived to spend time in a different state. Some border regions are characterized by insecurity, and pastoralists may encounter physical threats in frontier areas. Often, the rights of pastoralists to resources in one country are contested, particularly when they come into contact with settled populations across a border. Pastoralists may also face challenges in accessing public services such as education and health if they are perceived to be citizens of another state. Some of the most important issues are described in detail below.

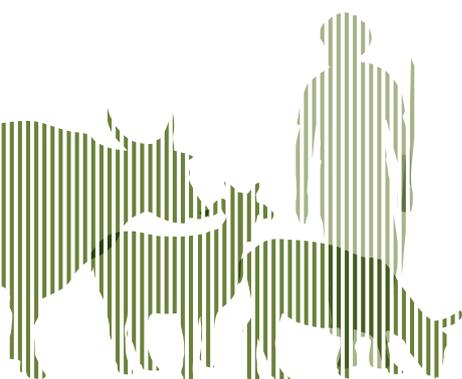
Closure of frontiers

Transhumance practices often predate the delineation of national borders; consequently, the creation of new frontiers has frequently impacted negatively on pastoralism. Closure of international borders in pastoral grazing zones curtails access to important resources, interferes with rangeland management, and can contribute to rangeland degradation. In some countries, the closure of borders has restricted access to resources that are used on a day-to-day or seasonal basis, greatly compromising pastoral livelihoods. Pastoralists have sometimes lost access to resources used primarily in emergencies – for example as drought reserves – resulting in increased exposure to risk and reduced ability to manage the normal uncertainties of their rangeland environment.

Curtailing herd movements takes away one of pastoralists' most important rangeland management tools. Rangeland degradation is influenced as much by the timing of grazing pressure as by the absolute number of animals. The simple rangeland management practice of resting areas of natural resources to allow the regeneration of desirable vegetation is often no longer possible when herders lose the option of moving across a border (Coppock, 1993).

The Gilgit-Baltistan area on the border between India and Pakistan clearly highlights the challenges pastoralists face when borders are closed. Movement across the frontier has been restricted for the past six decades, leading to major changes in herding practices due to the loss of access to summer pastures. Pressure on winter pastures has increased leading to the degradation of resources and a decline in wildlife populations. The isolation

Iraq: Sheep are herded alongside the main Al Jazeera irrigation canal

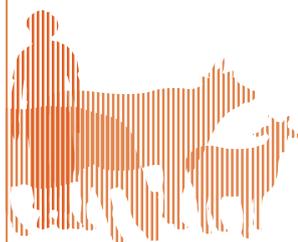


of communities in the border areas has led to herd inbreeding and a decline in the genetic health of the yak population. In addition, the long-existing barter trade in yak dairy products ended with the closure of the transboundary grazing corridors (Dong, Yi and Yan, 2016).

A similar pattern has been observed between northern Nepal and the Tibetan Plateau in China. Herd movements traditionally occurred either during the winter, when herds from western Nepal were moved to the dry uplands of Tibet to escape the harsh winter, or during the summer, when animals were moved from eastern Nepal. With the Chinese takeover of Tibet in 1959, the centuries-old annual movement of Nepalese herds was disrupted. As a result of this, further negotiations were held on rangeland availability for both Nepalese and Tibetan herds, but in 1983 the two governments agreed to completely stop animal migration from both countries by April 1988 (Yonzon, 1998). The loss of key pastures, cessation of mobility and changes in herding practices led to considerable degradation of pastoral areas, with knock-on effects for the habitat and wildlife populations (Yonzon, 1998; Rai and Thapa, 1993).

Herd movements between the Sudan and the newly founded Republic of South Sudan were based on long-established grazing arrangements and social ties between pastoralists from the north and host communities in the south. Joint grazing was based on pastoralists from the north herding in the south during the dry season while southern labourers migrated to the north. Public support was given for demarcating livestock corridors and providing public services, such as veterinary care, along the route. However, there is increasing tension along the newly established frontier between the two countries, where pastoralists from the north still seek entry to the south to access pastures and water during the dry season, but migration from the south to the north has declined because of persecution. Continued conflict over land and resources use has led to numerous clashes between communities (Craze, 2013).

In West Asia, Bedouin pastoralists reside in many countries and their traditional transhumance routes have been severed by various international boundaries. Until 1948, cross-border livestock movement by the Bedouin communities in Israel and Egypt was conducted with few restrictions. The Bedouins' most important range management strategy included exploiting local resources when ecological conditions were favourable and exercising a high degree of flexibility about when and where resources were used (Meir and Tsoar, 1996). Within their territory, the Bedouins grazed their herds eastwards and westwards across the borderline, depending on the availability of pasture and water. The open nature of the border ended, however, in 1949, and the geographic arrangement of Bedouin lands and their economic activities in the northern Negev–eastern Sinai area changed dramatically. With the closure of the border, the Sinai Bedouins of the border area had little choice but to opt for a survival strategy of grazing and cutting for domestic use. This



caused considerable damage to the vegetation, triggering a process of land degradation in the area west of the border (Meir and Tsoar, 1996).

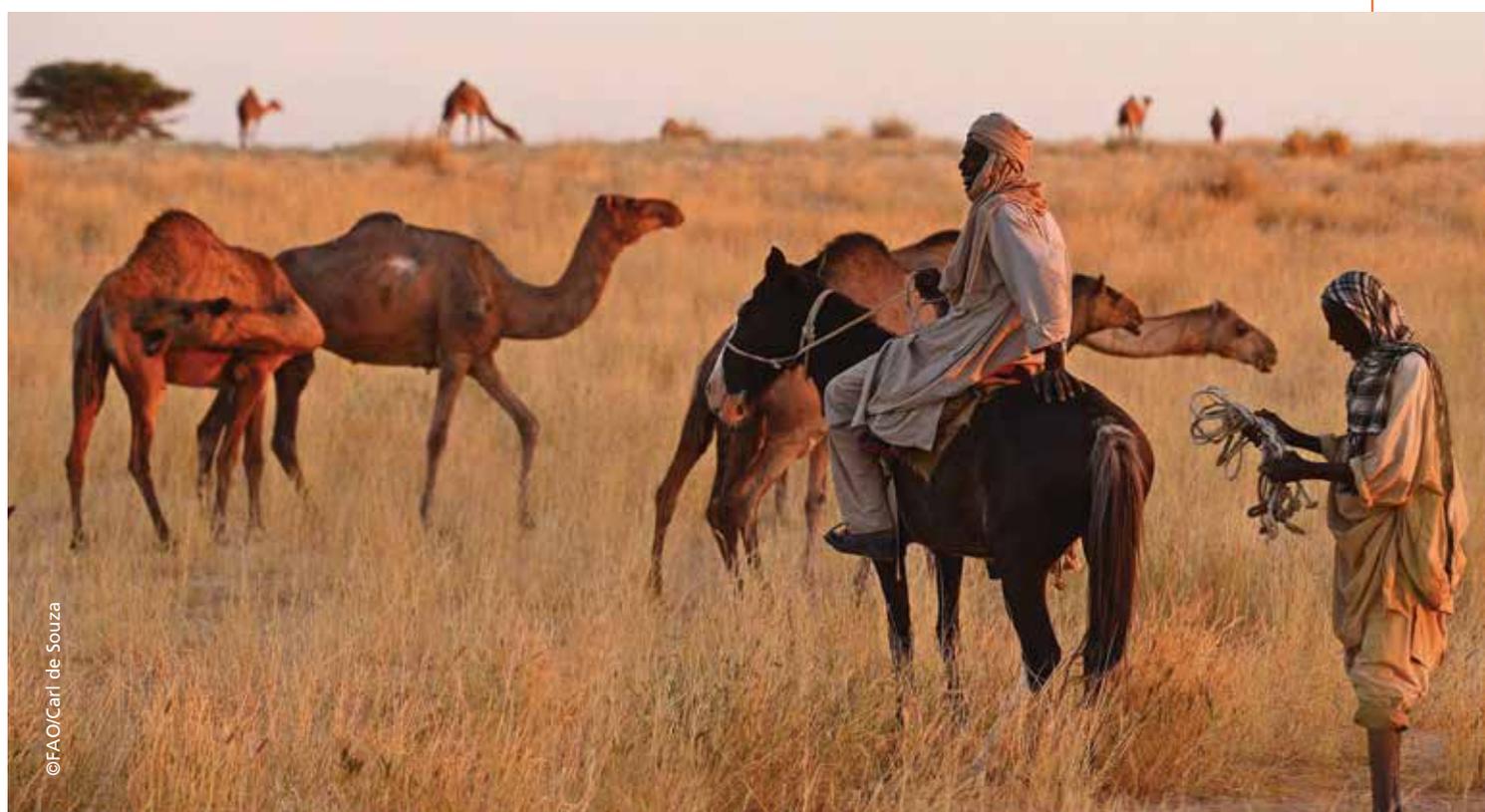
Conflict in border areas

Conflict between two neighbouring countries inevitably has a profound impact on pastoralism in the border region, and curtails cross-border movements. Conflict directly affects the physical security of pastoral communities, who often have to move to escape violence. Pastoralists in cross-border areas may also be unable to access resources within the country due to the risk of conflict.

In some regions, terrorist organizations have exploited the weaker security and relative openness of the borders in pastoral areas, and pastoralists have suffered the consequences: as governments respond by protecting and closing borders, pastoralists are often prevented from accessing pastures and water in neighbouring countries. This was the outcome when the border between Pakistan and Wakhan in Afghanistan was closed due to terrorism concerns in 1990.

Recurrent tensions and violent strife in pastoral areas of the Horn of Africa, for example, negatively affect the well-being of pastoral communities, weaken the social fabric and have caused numerous deaths. Conflicts increase pastoralists' vulnerability and represent a major obstacle to the free movement of pastoralists and their livestock, greatly contributing to chronic vulnerability in the region (Markakis, 2004). At the same time, pastoralists

Chad: Camel herders tending to their herd in the Sahelian drylands



©FAO/Carl de Souza

“Differences between neighbouring countries in terms of policies on pastoralism and attitude towards pastoralists can affect patterns of herd mobility and resource management”

are frequently drawn into conflicts. Since the second half of the twentieth century, pastoralists have also been involved in larger conflicts in the East Africa region, and many have joined the various armed opposition groups struggling for independence (Pavanello, 2010). The presence of the Oromo Liberation Front in northern Kenya, for instance, has in the past provoked Ethiopian military incursions into Kenya. There have also been Ethiopian incursions into Somalia resulting from the presence of the Ogaden National Liberation Front and the Al-Ittihad al-Islami groups on both sides of the Ethiopia–Somalia border (Markakis, 2004).

Similarly, conflict in pastoral areas of northern Mali can be traced back to the early twentieth century, when the nomadic Tuareg violently resisted French colonial occupation. The conflict has been associated with, among other things, sedentarization policies, repressive use of force, marginalization of pastoralists, and wider regional instability in the Niger, Algeria and Libya. The severe droughts of the 1970s and 1980s had an impact on the Tuareg rebellion of the early 1990s, but complex historical and political factors and regional instability were more significant than environmental stress in determining insurgency in northern Mali (Benjaminsen, 2008).

In some pastoral areas, most notably in eastern Africa, pastoralists have been directly involved in violent conflicts, ranging from cattle raiding to conflicts over natural resources. Cattle raiding has been a source of conflict among some pastoral groups for centuries, predating the creation of international boundaries. In recent years, however, the intensity and frequency of cattle raiding has increased between Kenya and Uganda, between Kenya and the Sudan, and between Kenya and Ethiopia (Markakis, 2004; Abdulrahman, 2006). In the past, cattle raiding “was a communal venture, organized and sanctioned by community leaders whose goal was to ensure optimal size of the group” (Markakis, 2004, p. 26). However, this customary practice – traditionally carried out with spears and bows – is being increasingly replaced by new forms of raiding and theft, involving modern firearms and on a much more commercial basis.

Drought has often triggered conflict over natural resources in border areas, leading to major changes in transboundary movement and natural resources management. Kenya’s Pokot pastoralists, for example, access only about three-quarters of their territory to avoid clashing with the neighbouring Karamojong groups in Uganda. However, during drought periods, they are forced to take a risk as they rely quite heavily on the contested areas (Abdulrahman, 2006).

Policy differences between states

There are considerable differences between neighbouring countries in terms of policies on pastoralism and attitude towards pastoralists. In bordering countries, very different levels of respect may be paid to the land, resources and movement rights of pastoralists. This can affect patterns of mobility and

resources management, for example, when a wet-season grazing area is in one country and a dry-season area in an adjacent country. Pastoralists may be discouraged from moving towards one of the two areas if their rights are not respected, or from leaving the other if they fear their land will be annexed during their absence (IUCN, 2008).

Pastoralists can demonstrate their historical claims over land where they are able to show that they have modified the land and developed infrastructure. In West Africa, pastoral infrastructure is essential for transhumance and includes corridors allowing pastoralists to move between seasonal grazing areas and exploit seasonally limited forage in the Chad Basin. This infrastructure may be semi-natural since it often consists of natural features modified by pastoralists over centuries of use. Nevertheless, the pastoral infrastructure is often “invisible” to outsiders, particularly because pastoralists do not remain in a single location during the year and do not leave significant traces of their occupancy. This creates a challenge in terms of protecting existing pastoral infrastructure and allows farmers to convert resource patches within transhumance routes into crop fields (Moritz *et al.*, 2013).

Livestock disease

Animal movements across and within national boundaries can facilitate the spread of pathogens over long distances. The mobility of herders also exposes the animals to new pathogens; the risk of disease therefore operates in both directions. Transboundary spread of animal diseases can have serious economic consequences in terms of livestock morbidity and mortality and the cost of control measures. In non-industrialized countries in particular, cross-border trade of live animals is an important component of the livestock production system. Diseases such as foot-and-mouth disease (FMD), contagious bovine pleuropneumonia (CBPP), pest of small ruminants (PPR) and Rift Valley fever (RVF) are of major concern and have led to efforts by governments to close borders. The eradication of some of these livestock diseases can only be achieved through collaboration across international borders (Bouslikhane, 2015).

Animal movements play an important role in the spread of contagious diseases and have been implicated in, for example, the spread of FMD in the Maghreb in 1999 and the outbreak of CBPP in West Africa in 2012. Recurrent outbreaks of CBPP are recorded in almost all countries in East Africa, and most of sub-Saharan Africa is considered to be infected. Indeed, since the eradication of rinderpest, CBPP is considered to be one of the main infectious transboundary diseases posing a threat to cattle production. Regional collaboration and strict border controls are proposed to combat cross-border spread of the disease, with a knock-on effect on the free movement of livestock across national borders (Bouslikhane, 2015).

Governments have a responsibility to control the spread of contagious livestock diseases, particularly zoonoses, which can be naturally transmitted to





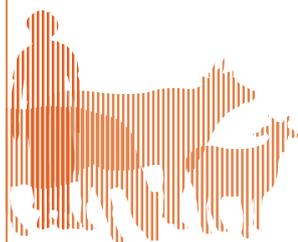
Kenya: Maasai pastoralist looking over his cattle

humans. The standard response is to isolate the contagion and this usually involves restriction on livestock movement and trade. Long-term solutions are needed both to improve disease control and to ensure that control measures are consistent with pastoral production systems, including the need to move across borders.

Regulating trade

As mentioned earlier, cross-border trade is widespread wherever pastoralists can move across borders and it is usually an important part of their livelihoods. Regulation of cross-border trade can therefore have an impact on transboundary pastoralism, although not all regulation necessarily impedes mobility. In some cases, however, governments have imposed measures to restrict informal cross-border trade, unaware of the benefits to their economies along the value chain. Governments may also be influenced by fears of smuggling of contraband goods and the flow of small firearms across borders where pastoral trade is unregulated.

In the Horn of Africa, despite the huge potential of cross-border trade in terms of meeting national, regional and international demands for livestock and contributing to food security, governments have often adopted a hostile and punitive stand towards such trade. Cross-border activities in the region are widely considered to be informal and illegal. The Government of Ethiopia, for example, labelled livestock trade across the border as “contraband” (Umar and Baulch, 2007). As most governments in the Horn of Africa earn foreign exchange from the export of primary commodities, they see unofficial cross-border trade as lost public revenue (Little, 2006, p. 1). In addition, governments view transboundary trade as tax evasion that reduces their revenue (Umar and Baulch, 2007).



Box 6. Support for transboundary pastoralism

A number of initiatives have been implemented around the world in support of transboundary pastoralism, focusing, for example, on veterinary service provision, trade and conflict management. These projects typically take place outside of explicit legal frameworks and they are not directly addressed in this report. Nevertheless, they may provide a platform from which to address the broader legal ramifications of transboundary pastoralism and influence the attitude of neighbouring countries towards a more favourable consideration of the issue.

In eastern Africa, cross-border initiatives include peace-building to address cross-border conflict and livestock theft (e.g. Kenya–Uganda), cross-border trade (e.g. Kenya–Ethiopia) and veterinary disease control (e.g. Kenya–United Republic of Tanzania) (Catley, Lind and Scoones, eds, 2012). Initiatives to manage and respond to drought or livestock diseases, build peace, or facilitate marketing and trade, often transverse national boundaries and a regional approach may be desirable (Aklilu and Wekesa, 2002; Abdulrahman, 2006). Recent policy debates also recognize the importance of adopting a regional approach to reducing the vulnerability of pastoral communities to drought, conflict and other risks (Pavanello, 2010).

In 2013, the World Organisation for Animal Health (OIE) established the “Alliance of Countries with Pastoralism Activities by Nomadic Populations” to assist countries to address transboundary animal disease threats. Actions include establishment of intergovernmental standards, global strategies for disease control (e.g. foot-and-mouth disease, FMD) or eradication (e.g. pest of small ruminants, PPR) and regional vaccine banks (OIE, 2013).

Notes:

Abdulrahman, A. 2006. *Cross-border livestock trade and small arms and conflict in the pastoral areas of the Horn of Africa: Case study from Southern Ethiopia and Northern Kenya*. Paper prepared for the 11th IASCP Biennial Conference, 19–23 June 2006, Ubud, Bali, Indonesia.

Aklilu, Y. & Wekesa, M. 2002. *Drought, livestock and livelihoods: Lessons from the 1999–2001 emergency response in the pastoral sector in Kenya*. Humanitarian Practice Network Paper 40. London, ODI.

Catley, A., Lind, J. & Scoones, I. (eds). 2012. *Pastoral development in Africa: Dynamic change at the margins*. London, Earthscan/Routledge.

OIE. 2013. Preparatory meeting to establish an “Alliance of countries with pastoralism activities by nomadic populations”, Paris, France, 29 May 2013. [Cited 18 October 2018]. <http://www.oie.int/doc/ged/D13115.PDF>

Pavanello, S. 2010. *Working across-borders: Harnessing the potential of cross-border activities to improve livelihood security in the Horn of Africa drylands*. HPG Policy Brief 41. London, ODI.

In the Hindu Kush Himalayan region, border closure greatly affected cross-border yak trade and the associated benefits. Trade in the region was often accompanied by cultural exchange and the sharing of information and knowledge; it contributed to diversifying livelihoods and enabling mountain communities to adapt to change. The loss of cross-border trade not only affected pastoral culture and knowledge but also restricted access of herders to new yak germplasm, undermining the quality of their herds (Wu *et al.*, eds, 2016).

Regulation of trade is not itself a deterrent to cross-border pastoralism. On the contrary, combining regulation with the provision of market-related services or infrastructure could facilitate mobility and contribute to more resilient pastoral livelihoods (see Box 6). However, where measures are taken

to eliminate, rather than facilitate cross-border trade, there can be negative consequences for pastoralists and other actors along the value chain, and ultimately for national economies on either side of the border.

REQUIREMENTS AND CONSIDERATIONS FOR SUSTAINABLE AND SAFE TRANSBOUNDARY MOVEMENT

“Pastoralism is a highly adaptive land-management system and, throughout their history, pastoralists have changed their patterns of natural resources management according to the challenges faced”

Pastoralism is a highly adaptive land-management system and, throughout their history, pastoralists have changed their patterns of natural resources management according to the challenges faced. The emergence of modern nation states has created many opportunities and constraints, of which the imposition of international boundaries is only one (see Box 7). Pastoralists have adapted to the obstacles that these boundaries present by, for example, modifying their herding behaviour, changing their social relationships and tapping into new markets. Reverting to historical patterns of mobility may not always be possible or even desirable. In each case, good insight is needed into the local context and the potential environmental, economic or social benefits of transboundary movements.

There are, nevertheless, many places where transboundary pastoralism continues and, in these cases, pastoralists often face major ongoing challenges. Various measures may be needed to ensure that transboundary movements are safe, responsible, legally accepted and appropriately supported. This may also be the case where cross-border movements have been suspended, but where their resumption could bring benefits to pastoralists and national economies, and possibly also to international relationships.

Ensuring sustainable and safe transboundary movement would require, in the first instance, acceptance by both countries of both the rights of pastoralists and the rationale for, and merits of, herd mobility. Many countries still consider mobile herding to be an undesirable activity, regardless of whether or not it is transboundary. As long as governments are deliberately settling pastoralists, it will remain hard to convince them to support transboundary movement. Continuous efforts are needed to generate recognition of and respect for pastoralism and pastoralists and for mobile herding to be viewed as a modern production strategy. Highlighting the benefits of pastoralism for rangeland ecosystem management and biodiversity conservation can be a valuable entry point in this discourse.

The FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) provide a framework for states developing strategies, policies, legislation, programmes and activities to strengthen governance (FAO, 2012a). The VGGT endorse regional and bilateral cooperation (para. 22.1) and the progressive harmonization of legal frameworks regionally and between countries (para. 22.1 and para. 22.3). The VGGT address transboundary matters as follows:

Box 7. Frontier grazing law in Europe

Transboundary pastoralism has been prevalent in much of Europe for centuries and there is a long history of closure, or re-opening, of borders to livestock movement. In the eighteenth century, many Central European countries closed their borders to trade in sheep and other livestock. In the late eighteenth and early nineteenth centuries, these restrictions started to be relaxed and shepherds were given rights to drive their sheep from summer to winter grazing lands across multiple Central European principalities and kingdoms. By 1860, 3 million sheep, of which 90 percent were transhumant, shared the pastures of Bavaria, Württemberg and Baden. However, with the development of sheep industries in America, Africa, Australia and New Zealand, these numbers have declined (Luick, 2004).

Following the First World War, new borders crossed traditional transhumance routes between Germany, Austria, Italy and Switzerland. These routes were used for two types of cross-border pastoralism: short-term frontier grazing, in which border residents habitually used daily pastures on the other side of the border; and seasonal grazing, in which pastoralists crossed for an entire season to take advantage of summer or winter pastures. The second type was particularly common in the Alps, where pastoralists from neighbouring countries moved their herds up the mountain and into Switzerland during the summer months (Konkoly-Gyuró and Wrba, 2004). In the mid-twentieth century, this led to the development of new agreements, such as the 1953 Italy–Switzerland Convention concerning frontier traffic and grazing, which provides for both daily and long-term entry for grazing.

Notes:

Konkoly-Gyuró, É. & Wrba, T. 2004. The Fertő-Neusiedler See Landscape. In D.M. Wascher & M. Pérez-Soba, eds. *Learning from European Transfrontier Landscapes. Landscape Europe*, pp. 29–30.

Luick, R. 2004. Transhumance in Germany. In R.G.H. Bunce, M. Pérez-Soba, R.H.G. Jongman, A. Gómez Sal, F. Herzog & I. Austad, eds. *Transhumance and biodiversity in European Mountains*, Report of the EU-Fp5 Project Transhumant (EVK2-CT-2002-80017). IALE publication series No. 1, pp. 137–154.

Para. 22.1:

In States where transboundary matters related to tenure rights arise, parties should work together to protect such tenure rights, livelihoods and food security of the migrating populations while on their respective territories.

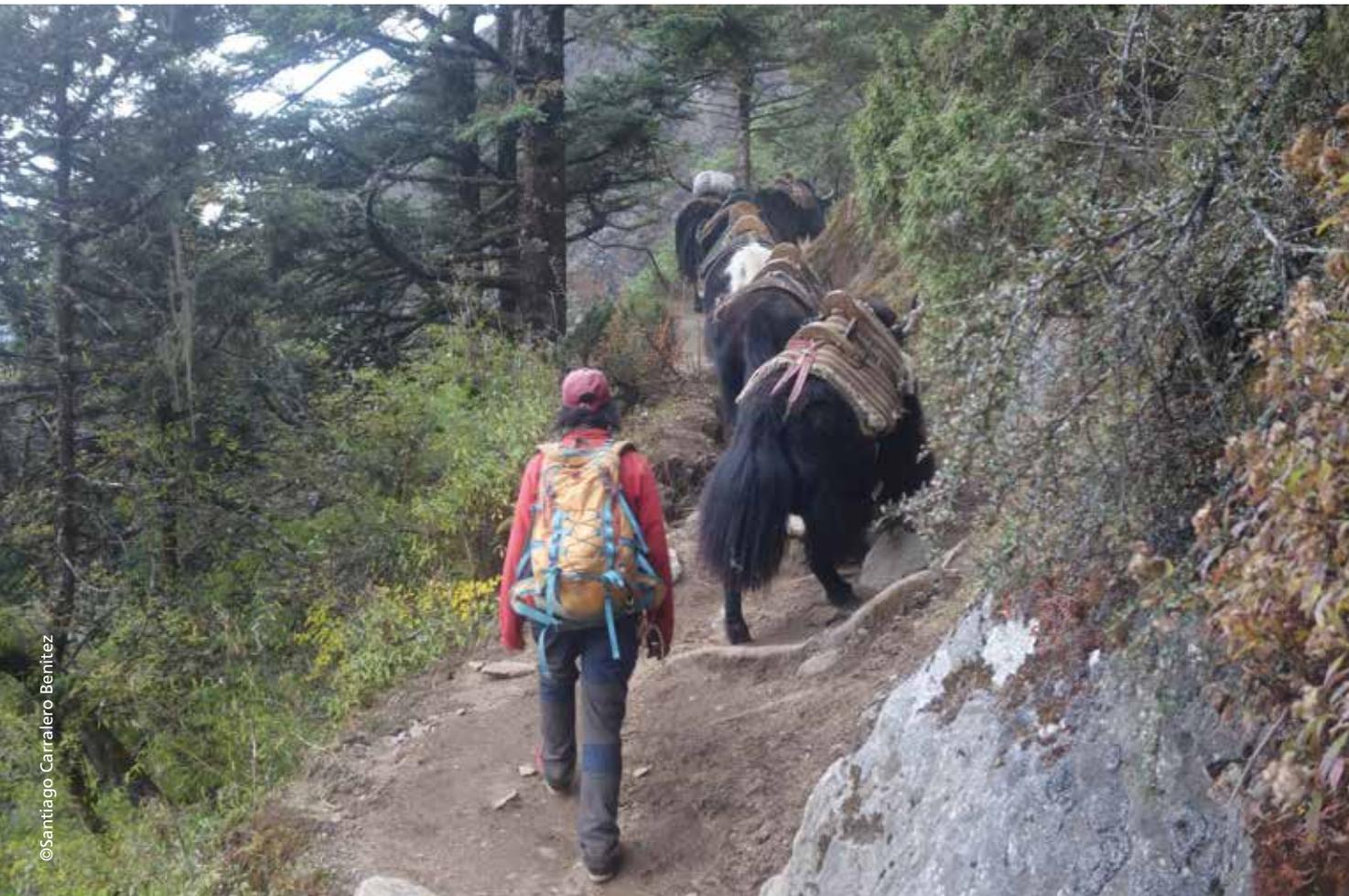
Para. 22.2:

States and other parties should contribute to the understanding of transboundary tenure issues affecting communities, such as with rangelands or seasonal migration routes of pastoralists, and fishing grounds of small-scale fishers, which lie across international boundaries.

Para. 22.3:

Where appropriate, States should harmonize legal standards of tenure governance... States, with the participation of the affected parties as appropriate, should develop or strengthen existing international measures to administer tenure rights that cross international boundaries.

The technical guide to implementing the VGGT in pastoral lands addresses transboundary management comprehensively. Countries that share a single



Nepal: Yak herder hiking up to greener pastures

pastoral system are recommended to manage the system as a single ecological unit, notwithstanding national boundaries, and they should cooperate through bilateral and multilateral agreements to develop harmonized policies and strategies. Treaties should include the obligation to notify the other state of movements, including the risk of harm, and should provide mechanisms to resolve transboundary disputes (Davies *et al.*, 2016).

The guide notes:

States should contribute to the understanding of transboundary tenure issues affecting communities and should harmonize legal standards of tenure governance, in accordance with existing obligations under national and international law, and with due regard to traditional and indigenous rules (especially on mobility and seasonal movement), and voluntary commitments under relevant regional and international instruments (Davies *et al.*, 2016, p. 107).

Neighbouring states are recommended to collaborate to ensure that mobility corridors and seasonal routes remain accessible for pastoral and traditional communities (Schulz, 2007).

In cases where governments either side of a boundary recognize the need for mobility, and where transboundary movements continue, measures are



India: Pastoralists coming back to their homestead after a day of grazing

still needed to ensure that movements of herds and people are safe and sustainable. Legal support may be required for disease control, for trade, or to ensure that pastoralists have access to services in both countries. As Section 3 shows, support may vary according to the nature of the cross-border movements, in particular whether they are routine or occasional. In all cases, however, pastoralists should expect governments to demand responsible behaviour that follows agreed guidelines. If pastoralists are involved in the process of establishing the guidelines, they are more likely to follow them.





Legal principles and approaches for transboundary pastoralism

LEGAL CONCEPTS RELEVANT TO TRANSBOUNDARY PASTORALISM

The effective regulation of transboundary pastoralism requires a clear understanding of the rights, legal systems and institutional processes associated with pastoral mobility.

Bundle of rights

A fundamental legal concept that is integral to understanding pastoral governance is the “bundle of rights” (Schlager and Ostrom, 1992). Modern property rights cannot be reduced to a simple concept of ownership, but should be understood as a set of different rights, including rights to access, exclude, alienate, use, occupy, develop, enjoy and withdraw benefits from natural resources. These rights can be vested in one or more individuals, legal entities or the state.

The needs of pastoralists stretch beyond rights to grazing land. Pastoralists also require appropriate routes – transhumance corridors – for moving between pastures, as well as access to water, infrastructure and other resources, including crop residues, forest reserves and wetlands. **Rights to different resources in the same space, such as land, water and mineral resources, may be held by different rights holders and governed by different laws and regulations.** Rights can be temporally as well as geographically bound – they may be restricted to a particular time or season. The allocation of a right does not necessarily include the ability to transfer or bequeath that right. Finally, rights can be exclusive or shared among multiple holders.

This is an important concept for understanding legal systems related to pastoralism, because pastoral rights are a specific type of resources right that is typically allocated separately from other rights more closely associated with the concept of “ownership”. Securing rights to pasture does not require conveying full title or exclusive use to a site. In fact, exclusivity is typically inefficient, as it prevents other productive uses of land and resources that would not necessarily conflict with pastoral uses or which may be carried out at a different time.

The rights of transhumant pastoralists have a strong temporal aspect. Pastoralists may hold, or require, rights to graze on a specific site only during certain months of the year, or only during the day (Cotula, 2012). Pastoral rights may also need to be geographically flexible, which poses a challenge for modern property rights systems, which are often organized spatially. The

Kenya: Gathering of pastoralist civil society representatives in Nairobi



amount of use may also vary by month or by year, as the size and needs of a herd change. **Due to the need for flexibility depending on current conditions, pastoral rights may need to be constantly renegotiated.**

Tenure

Tenure describes the conditions under which people or groups gain and hold access to, use of, or other rights relating to land or other natural resources. For example, a person may rent or lease land for a specified time (leasehold), or buy some or all rights to it (freehold). A person or group may also gain rights through use, custom, public allocation or even necessity.

Tenure can be public or private, individual or communal. Tenure rules can come from different legal orders, including customary or religious law. There can be problems if tenure rules established by one regime are not recognized by another, for example, when customary tenure is not recognized in the statutory regime.

The FAO VGGT recommend that “States ... recognize and respect all legitimate tenure right holders” (para. 3.1) and “provide and maintain policy, legal and organizational frameworks that promote responsible governance of tenure of land, fisheries and forests” (para. 5.1). It also stipulates that states should ensure that these frameworks recognize and respect “legitimate tenure rights including legitimate customary tenure rights that are not currently protected by law” (para. 5.3).

Many of the most difficult struggles faced by pastoralists derive from problems recognizing pastoral tenure. Because of the special characteristics of pastoral resources needs, it may be difficult for pastoralists to gain tenure through recognized means, such as use of specific property or routes over time. One of the most common measures for securing tenure – assigning private or communal title – may not be appropriate for pastoral mobility. For example, in Cameroon, mapping and official designation of pastoral corridors reduced flexibility, as pastoralists ended up fenced into rigid and overused tracks (Moritz *et al.*, 2013). Securing pastoral access to necessary resources may require a more nuanced approach to tenure, involving multiple tenure systems and renegotiation of rights.

Communal and open-access rights

The question of who can hold rights is as important as the questions of what rights are relevant and how they can be held. Under different systems, rights may be held by an individual (natural person), a legal entity such as a corporation (legal person), a community or other collective group, the state, the public as a whole, or no one. Pastoralism can involve any or all of these systems, or a combination.

A registered community might hold rights to a resource as a legal person. Individual use may be governed by written or unwritten norms established by the community through by-laws or custom.





Kyrgyzstan: Kyrgyz shepherd driving sheep to pasture in the Tuyk canyon

Not all tenure systems recognize all types of rights holders. For example, many statutory legal systems do not recognize communal tenure. In these systems, a community may require legal personality to hold rights; this can be achieved through processes such as incorporation or registration as a community, tribe or pastoral union. However, such processes can be costly and time-consuming, or involve difficult bureaucratic hurdles. They may impose requirements on the community – such as the listing of members, specific membership requirements or a declaration of governance structures – resulting in reduced community flexibility. Solutions should be found locally to overcome these administrative hurdles.

Communal tenure can be an effective means of governing natural resources. The “tragedy of the commons” theory popularized by Hardin (1968) has frequently been refuted in pastoral rangelands, where research has shown that resources users’ self-organization can be as effective as or more effective than government regulation in ensuring sustainable use (Ostrom, 1990).

However, communal tenure arrangements can create special questions of management both within the group and between the group and outsiders. Allocation of rights within the group may raise questions of nepotism or discrimination on the basis of gender or social standing, and there are many risks associated with defining who is in and who is excluded from the group.

“Research shows that self-organization in pastoral rangelands can be as effective as or more effective than government regulation in ensuring sustainable use”

The group may lack the capacity to enforce its access norms in relation to outsiders, or rights may be transferred to outsiders by specific group members for benefits that do not accrue to the rest of the group. These are not reasons to discount or discredit communal tenure systems; rather, they are factors to consider in clarifying and improving tenure arrangements.

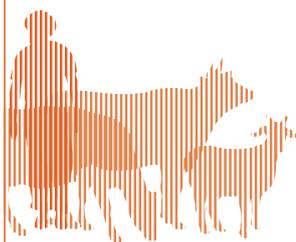
It is important to distinguish between communal tenure and open access. Open-access pastures are available to any user, regardless of ethnicity or other group membership. Not all common property is open access: in most systems, the right to exclude is held by the governing group. An example of an open-access pasture is the Logone floodplain in the Chad Basin in Cameroon (see Box 8). This pasture is used in the dry season by herders from Cameroon, Nigeria and the Niger, who graze more than 200 000 cattle there each year (Moritz *et al.*, 2013). Custom holds that every pastoralist has a right to use this grazing land, regardless of ethnicity, nationality, wealth or who was there first. Herders can gain customary rights to particular campsites along the network of transhumance corridors used to access the pasture, but they cannot gain rights to the pasture itself (Moritz *et al.*, 2013).

Despite the challenge of collective property management, privatization of communal or open-access systems is often inappropriate in a pastoral context. It can reduce flexibility and disrupt traditional, and often ecologically sustainable, resources management systems. However, it is important to recognize that different approaches may be effective for different resources in different situations. For some resources, such as pastures, it may be appropriate to use agreements or other tools to assign pastoral rights to certain user groups. For others, such as water or transhumance corridors, it may be preferable to maintain state ownership and open access.

Legal pluralism and customary law

Transhumant systems are often governed by local community norms rather than statutory law (Ayantunde *et al.*, 2014). **Rights to pasture and other resources may derive from custom, practice or community authority in addition to national or local legislation or regulation.** Where different sources of legal norms or authority overlap, the system can be described as showing legal pluralism.

Legal pluralism is a fact of many governance systems around the world. In a legal pluralist system, customary law can operate outside the general legal framework and have equal or greater legitimacy than statutory law. Multiple, interacting legal orders can contribute to more dynamic, flexible and resilient property systems by expanding potential sources for claims in the discourse of negotiating rights (Meinzen-Dick and Pradhan, 2002). In understanding legal pluralism, it is a mistake to assume a dichotomy between customary and statutory law; most systems instead contain a multifaceted fabric of, *inter alia*, religious, cultural, community, state, industry, professional, ethical and social norms and authorities covering multiple sectors, political levels and geographic areas.



Box 8. Pastoral infrastructure in Northern Cameroon

The Logone floodplain on the Cameroon–Chad–Nigeria border hosts over 200 000 cattle each year as part of the annual migration of Arab and FulBe pastoralists from Chad, Cameroon, Nigeria and the Niger, whose movements are driven by seasonal variations in rainfall. Pastoralists move into the floodplain as the water retreats, usually in December, to take advantage of the nutritious fresh pasture and abundant surface water that is found as the flood recedes and as the surrounding pastures dry up. At the start of the rainy season, they return to the higher altitude plains of Diamaré or to neighbouring countries.

This transhumance is made possible by the existence of a network of pastoral infrastructure that includes campsites, watering points and transhumance corridors. This network has been developed over centuries, but it is considered to be invisible, because pastoralists do not occupy it year-round and they leave few traces of their ownership. The result is that this vital infrastructure is seldom recognized or protected, and farmers find it easy to convert campsites and transhumance routes into croplands.

Most water points in the floodplain are natural, although some artificial water points have been installed and are open to all pastoralists from the member states of the Lake Chad Basin Commission. Access to water and pasture is an important determinant of the location of campsites, and herders manage these areas to maintain pasture cover and restrict bush encroachment. Such areas are highly sought after by crop farmers because of the access to resources, combined with the accumulation of manure over the years. The route of transhumance corridors is largely dictated by water points and campsites, and these routes frequently traverse densely populated agricultural areas. One of the main threats to pastoral mobility is the closure of these corridors because of expanding croplands.

Source: Moritz et al. (2014).

Problems arise where legal orders overlap or conflict, for example, where statutory systems fail to recognize customary law as a source of norms and authority. This can undermine the rule of law, by exclusively emphasizing a system not seen as solely legitimate, and lead to conflict. Limits to jurisdiction and competence create issues of implementation and enforcement. Community authorities may lack capacity to enforce their norms, particularly in relation to non-members of the community. At the same time, statutory law can fail to penetrate local communities which recognize their own legal systems as more legitimate. In Burkina Faso, 1984 land reforms abolished customary land regulation. Nevertheless, government officials and other actors continue to refer to customary norms, and even refuse to implement court rulings based on statutory law that conflicts with customary rules (Dyer, 2008). In China, the Rangeland Law institutes private rights-based land use through the allocation of 50-year land-use contracts to individual households. Most local groups continue to use customary common grazing arrangements, which can be more efficient and more flexible (Nelson, 2006).



“The challenges of reconciling customary law with statutory law can be addressed by appropriate measures to coordinate the different legal systems”

Failure to recognize and integrate existing legal orders can create multiple overlapping or conflicting regimes for property rights and land and resources management (Bonfoh *et al.*, 2011). Where legal pluralism is not appropriately recognized and addressed, there may be confusion about what regime to apply, or conflict may arise between different authorities or between formal and informal institutions (Moritz *et al.*, 2013). In the United Republic of Tanzania, village government leaders reportedly allocated land to pastoralists from Rwanda and Uganda, in violation of national statutory law. Local livestock owners complained that the immigrant pastoralists brought large herds of cattle, pushing out local small herds. They claimed that village officials were selling village land to foreign livestock owners, resulting in shortages of grazing land for villagers and intensification of livestock practices, contributing to land degradation. In response, the state police confiscated cattle and forcibly evicted the immigrant pastoralists from the land granted to them by the customary authorities (Lwekaza and Kisoza, 2014).

The challenges of reconciling customary law with statutory law can be addressed by appropriate measures to coordinate the different legal systems. For instance, statutory law can formally recognize norms and authorities from other legal orders. Customary norms can also be directly included in statutory law. Whatever the approach, the decision to recognize customary law as a valid source of law should be made in a participatory manner, and only to the extent that it does not conflict with fundamental rights and freedom, including gender equality.

The customary open-access status of the Logone floodplain has been incorporated into national and international law. Cameroon Ordinance 74-1 of 1974 provides that grazing lands are national property which all pastoralists have a right to use. The statute does condition the right, however, by providing that, in order to access pastures, herders must ensure their animals are vaccinated, and the State reserves the right to reallocate pastureland for other purposes. Agreements between member countries of the Lake Chad Basin Commission also recognize pastoral freedom of movement in the region, on condition that pastoralists vaccinate their animals and pay state and local taxes (Moritz *et al.*, 2013).

All legal systems should be held accountable to principles of good governance and basic human rights. Community authorities may lack accountability to government officials or the wider public (Ayantunde *et al.*, 2014) and there is a risk of customary law being gender biased. In the United Republic of Tanzania, statutory law dictates equal rights to inherit land, but customary law gives priority to men (Lwekaza and Kisoza, 2014). These are not reasons to dismiss or ignore customary law, which would only result in the above-mentioned types of conflict. Instead, measures such as well-implemented constitutional provisions should be taken to ensure fundamental rights, such as gender equality, across the legal systems existing in a country.

LEGAL APPROACHES TO GOVERNING TRANSBOUNDARY PASTORALISM

Changing national legislative approaches to pastoral rights

Historically, pastoral uses of land and resources have been given low priority. European colonialists in Africa saw rangelands as unoccupied and they appropriated them for arable farming or commercial ranching. Livestock movement was regulated to protect the interests of farmers and other land users, and wildlife reserves and game parks were established on former pastoral lands (Toulmin, Hesse and Cotula, 2004; Fratkin, 2001).

In the twentieth century, rangelands were widely used as the archetype of the tragedy of the commons (Hardin, 1968). This idea drove the enactment of legislation for the privatization and enclosure of grazing areas around the world, resulting in disruption of mobile pastoral systems. In Central Asia and the Sahel region of Africa, government programmes of land privatization have heavily impacted the livestock sector and associated communities (Bonfoh *et al.*, 2011). In China, public policies to sedentarize Tibetan nomads resulted in increased pressure on pastures as more intensive sedentary pasture use replaced sustainable traditional practices (Nelson, 2006).

In recent decades, legislation has started to recognize mobile pastoralism as a legitimate and desirable form of land use. The Constitution of Ethiopia, which entered into force in 1995, states: “Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own lands” (Art. 40[5]).

In the late 1990s and early 2000s, the Niger, Guinea, Mauritania, Mali and Burkina Faso passed legislation granting pastoralists certain rights to land use and movement (Toulmin, Hesse and Cotula, 2004). This legislation variously gives herders rights to move with their herds to meet their productive needs, protects grazing land and corridors from conflicting land uses, secures herder access to seasonal resources, and provides for local conflict management (Cotula, 2012). Similar legislation has been adopted elsewhere in the world.

Many countries still predicate landownership based on *mise en valeur* (productive use), which usually implies visible signs of land use, such as ploughing; however, such signs are absent from most pastoral land. *Mise en valeur* systems entail development or investment in infrastructure – requirements that are often impractical for pastoralists, particularly if the right they require is temporary or partial. Even countries that recognize *mise en valeur pastorale*, such as Mali, can tie property rights to improvements such as fencing or water systems (Toulmin, Hesse and Cotula, 2004; Cotula, 2012). Even without *mise en valeur* requirements, these systems are based on a unitary ownership conception of land rights. The Niger Rural Code has been praised for promoting priority, non-exclusive rights to pastures, while excluding privatization (Bonfoh *et al.*, 2011).

In West Africa, many governments passed decentralization laws in the 1990s, devolving power to local control and giving communities a degree of authority over transhumance. In some cases, the result was multiplication of taxes on livestock, as each jurisdiction through which a herd passed could levy its own tax or fee for movement. Decentralization also created fragmentation of standards, with different rules in each community. Some communities refused to allow pastoralists into their territory at all, in contravention of national laws guaranteeing freedom of livestock movement (Ayantunde *et al.*, 2014).

Relationship to different sectors

While **many countries do have specific pastoral legislation, pastoral practices can touch on many different sectors and legal fields.** National and international legal frameworks relating to, *inter alia*, forests, land use, livestock, agriculture, water, decentralization, biodiversity and protected areas can define pastoral rights and processes.

Due to the cross-sectoral nature of pastoralism, **there may be overlaps and conflict between different sectoral laws relevant to pastoralism.** In Kyrgyzstan, for example, the Forest Code covers pastures in forest areas, while the Pasture Law covers pastures in all other areas, making implementation complicated (Lim, 2012). In the Niger, the Rural Code gives pastoralists the right to access water, but the Water Code does not consider the needs of transhumant herders (Dyer, 2008). A detailed review of all sectoral legislation should therefore be carried out prior to the adoption of new laws and regulations, in order to ensure adequate coordination, and avoid gaps, overlaps and conflicts in legal provisions.

Conflicts can arise where land traditionally used by pastoralists is legally designated for a different use. This frequently occurs in the context of protected areas. Protected areas – or their buffer zones – are sometimes located on lands traditionally used by herders as grazing grounds, thus creating situations of illegality. For example, in the Hindu Kush Himalayan region, rangelands are found across a network of protected areas, including wildlife sanctuaries, national parks, sacred landscapes and reserves (Wu *et al.*, 2016b; Chettri, Thapa and Shakya, 2007). To avoid such conflicts, the designation of national parks and protected areas should take place in consultation with herders and should seek to accommodate pre-existing tenure systems rather than impose new arrangements that negatively affect pastoralists and their livelihoods.

Sustainable pastoral activities can be consistent with conservation goals. International Union for Conservation of Nature (IUCN) Category V and Category VI protected areas provide, respectively, for safeguarding the interaction between people and nature, and for sustainable low-level non-industrial use of natural resources (Dudley, ed., 2018). However, in some sites, livestock grazing can pose a threat to

“A detailed review of all sectoral legislation should be carried out prior to the adoption of new laws and regulations to ensure adequate coordination, and avoid conflicts in legal provisions for pastoralism”

Box 9. ECOWAS Decision on regulation of transhumance

Regional instruments can create specific mechanisms to regulate cross-border livestock movements. The most comprehensive example is the Economic Community of West African States (ECOWAS) Decision A/DEC.5/10/98 of 1998. The ECOWAS Decision established a framework for its 15 member countries, based on the issue of the International Transhumance Certificate (ITC) regulating cross-border movement. ITCs include information on the size and composition of the herd, vaccination details, and the proposed border crossing and migration route.

The ECOWAS Decision provides for pastoral rights and obligations, as well as conflict resolution. It stipulates that the host country set the time period for entry and exit of herds and inform other states (Art. 14). Host countries have the responsibility to determine transhumance routes (Art. 7) and to designate pastures for use, referred to as *zones d'accueil* (Art. 15) or reception areas. Host countries also set the maximum number of livestock for the reception areas (Art. 15).

The Decision further provides that herders be protected by the authorities of the host country and their fundamental rights guaranteed (Art. 16). Herders must in turn respect the regulations and legislation of the host country, including its conservation rules (Art. 16). Herds not accompanied by an ITC will be quarantined at the border at the expense of the owner (Art. 9). The Decision also provides for conflict resolution between land users. Disputes between herders and farmers are referred to a commission of conciliation comprising representatives of breeders, farmers, agencies and the local political administration (Art. 17 and Art. 18). If conciliation is not possible, disputes are referred to a competent tribunal (Art. 19).

In 2003, Burkina Faso and the Niger adopted an MoU (memorandum of understanding) to create an institution for cooperation, in part to implement ECOWAS Decision A/DEC.5/10/98. The MoU establishes an annual meeting of livestock ministers and a joint technical committee to provide recommendations as well as to manage conflicts and implement projects (Dyer, 2008).

Although the ECOWAS ITC is comprehensive and thorough, concerns have been raised about its implementation. Herders face challenges in navigating the administrative requirements and in some cases have found that, despite securing the relevant paperwork, livestock corridors in the host country are blocked and reception zones are occupied. Some authorities also claim that pastoralists continue to cross borders using traditional livestock routes rather than designated crossings, and without an ITC (Dyer, 2008; Jise, 2015).

Notes:

Dyer, N. 2008. *Review of the legislative and institutional environment governing livestock mobility in East and West Africa*. London, IIED.

Jise, D.D. 2015. *The ECOWAS Protocol Relating to the Regulation on Transhumance between ECOWAS Member States 1998/2003: Challenges of Implementation*. International Conference on ECOWAS at 40, Benue State University Makurdi.

protected areas, and vice versa. Protected areas that do not allow entry of livestock can block access to traditional grazing sites, as in the Kangchenjunga Landscape between Nepal and India (Wu *et al.*, 2016a). Livestock incursion into protected areas – often as a result of pressure from cultivation and other land uses – can sometimes pose a significant threat to biodiversity (see Box 9).

Appropriate consideration of pastoral uses in protected area system planning and integrated spatial planning can help prevent these problems.

However, pastoralists are often not sufficiently involved in planning processes. Where planning calls for consultation with stakeholders, local resident (non-pastoralist) populations are typically targeted: mobile pastoralists, particularly those from a different country or tribe, do not have a voice.

Access to water is a major determinant of rangeland management and, in some dry regions, it is one of the biggest problems pastoralists face. Water infrastructure is a primary determinant of access to pasture and other resources, and to a large extent it dictates patterns of mobility. **At the international level, water basin agreements and the institutions they set up can reinforce and support transboundary pastoral arrangements.** The Lake Chad Basin Commission supports access to grazing resources, including water and other natural resources, and coordinates veterinary regulations. Bilateral agreements between member countries – Cameroon, Chad, the Niger and Nigeria – support freedom of movement of animals on condition that they are vaccinated and may be taxed (Moritz *et al.*, 2013).

Implementation

It is important to keep in mind that adoption of legal instruments is only the first step. **Where appropriate legal structures are in place, there may still be problems of implementation.** A study of trade routes for cattle and buffalo between Cambodia, Viet Nam, Thailand, the Lao People's Democratic Republic and China showed that herders were using unofficial border crossings to avoid the high payments, vaccination requirements and quarantine procedures at official crossings. Moreover, official crossings brought together many different herds, and mixed livestock intended for live trade with livestock intended for slaughter, facilitating the spread of disease (Kerr *et al.*, 2013). This report details numerous examples demonstrating the problems of implementation in the realization of legal frameworks for transboundary pastoralists.

INTERNATIONAL LEGAL PRINCIPLES AND FRAMEWORKS SUPPORTING TRANSBOUNDARY PASTORALISM

International principles and agreements, particularly in the fields of environment and human rights, can be relevant to transboundary pastoralism through either application to particular sites or establishment of relevant legal principles and obligations. Above all, reference to pastoralism in global conventions and other instruments demonstrates recognition of its importance by the international community. Many legal international principles and frameworks exist; this report focuses on those considered most relevant to strengthening transboundary pastoralism. International principles not addressed herein include principles of precaution, prevention and polluter pays, access and benefit sharing, and common heritage.

International legal principles

Certain internationally accepted legal principles should guide the treatment of transboundary pastoralists. These principles derive from the international conventions described below, and from customary international law, which is understood and interpreted through judicial decisions and international statements and declarations.

Sustainable development

The set of principles related to sustainable development are broadly relevant to transboundary pastoralism. Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987). In recent decades, the principle of sustainable development has been recognized in international declarations and judgements. In his concurring opinion in the International Court of Justice (ICJ) case concerning the Gabčíkovo–Nagymaros Project, Judge Weeramantry describes the principle as “an integral part of modern international law.”³

Sustainable development comprises three integrated and interdependent pillars: economic, social and environmental. The integration principle states that considerations from each of these pillars should be integrated into development policy. It is partly reflected in Principle 4 of the Rio Declaration on Environment and Development, which states that “in order to achieve sustainable development, economic protection shall constitute an integral part of the development process and cannot be considered in isolation from it.”

Intergenerational and intragenerational equity are key component principles of sustainable development. The principle of intergenerational equity stipulates a duty of each generation to manage and pass on to succeeding generations the natural and cultural patrimony that it inherited from prior generations (Brown Weiss, 1992).⁴ The complementary principle of intragenerational equity addresses inequality among countries, communities and individuals in the present generation, and is encapsulated in SDG10, “Reduce inequality within and among countries.”

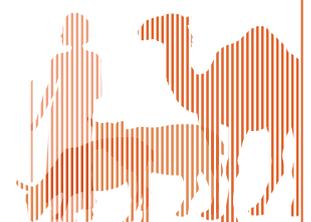
The principle of sustainable development should be at the heart of policy relating to pastoralism. Pastoral systems touch on all three pillars of sustainable development: as effective ecosystem management practices; as livelihoods and means of production of economically valuable goods; and as culturally important ways of life. Integration of these considerations, as well as recognition of the principles of inter- and intragenerational equity, should define pastoral governance policy.

Transboundary harm and cooperation

The territorial principle, including the principle to not cause transboundary harm, is one of the oldest legal principles related to the management of

³ Case concerning the Gabčíkovo–Nagymaros Project, Hungary vs Slovakia, 1997 ICJ 7 (25 Sept.), Separate Opinion of Judge Weeramantry.

⁴ See also Weeramantry's dissenting opinion in Nuclear Test Case, New Zealand vs France, 1995 ICJ 288 (22 Sept.), which elaborates that each generation is a custodian of the planet for the generation that follows.



natural resources and the environment. Principle 21 of the Stockholm Declaration, 1972, states:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 21 has been used as the basis for a long line of judicial decisions, from the Trail Smelter Arbitration in 1941 to the ICJ Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons in 1996. It is stated as Article 3 of the Convention on Biological Diversity (CBD).

If the territorial principle is the starting point of natural resource governance, the principle of cooperation is its evolution. As stated by Judge Weeramantry in his dissent to the ICJ Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons (Section 10[e] at 47):

The principle [of good neighbourliness] is one of the bases of modern international law, which has seen the demise of the principle that sovereign states could pursue their own interests in splendid isolation from each other. A world order in which every sovereign state depends on the same global environment generates a mutual interdependence which can only be implemented by co-operation and good neighbourliness.

The principle of cooperation is also stated in Principle 7 of the Rio Declaration on Environment and Development and in Article 5 of the CBD.⁵ These principles provide the basis for transboundary cooperation in conservation and sustainable development.

Peoples' rights to self-determination and the principle of subsidiarity

Respect for the self-determination of peoples is enshrined in the Charter of the United Nations (Art. 55) as well as in numerous human rights instruments and declarations, including the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. These conventions recognize that the right to self-determination entails a right to not be deprived of means of subsistence, which would constitute a form of genocide. This in turn implies a right to control over natural resources, as detailed in the ILO Indigenous and Tribal Peoples Convention, 1989 (No. 169) and the UN Declaration on the Rights of Indigenous Peoples.

States have an obligation to promote the realization of peoples' rights to self-determination. One mechanism for achieving this is decentralization of control over natural resources. Decentralization, or subsidiarity, has been proposed as an emerging principle of international law. The principle states that decisions relating to natural resources should be taken at the most local level that is appropriate. The measure of appropriateness is key; the principle does not advocate blind decentralization, but instead requires careful consideration of how to best allocate competence among levels of governance.

⁵ In fulfilling this duty, "States have common but differentiated responsibilities," in view of their different capacities and different contributions to global environmental degradation (Rio Declaration, Principle 7).

“States have an obligation to promote the realization of peoples' rights to self-determination, which entails rights to means of subsistence including natural resources”

The right to self-determination is critical to pastoral peoples, as they may not have direct ownership or control over the natural resources on which they depend. The principle of subsidiarity can work if pastoral peoples are explicitly involved in the decision-making process. Arrangements between local communities can be an effective means of managing transboundary pastoral practices and resources, particularly when backed by national and international legal frameworks. In all cases, local-level decision-making is critical to ensure flexibility to respond to emergencies and changing circumstances.

Good governance principles: transparency, participation and access to justice

Good governance is a prerequisite to fair and sustainable management of pastoral resources. Good governance comprises a wide set of principles including, *inter alia*, participation, transparency, rule of law, equity, access to justice and accountability. Some of these are described in the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters, which has been recognized as globally relevant, although it is European in scope.

The emerging concept of “environmental rule of law” integrates these principles in the environmental context. The IUCN World Declaration on the Environmental Rule of Law, adopted at the World Congress on Environmental Law in Rio de Janeiro, 29 April 2016, elaborates key governance principles, elements and means of implementation.

Participation

The right to participation, as a component of effective representation, is established in both hard and soft law, including the Convention on Biological Diversity (CBD) and the International Covenant on Civil and Political Rights, and in commitments such as the United Nations Declaration on the Rights of Indigenous Peoples (UN, 2007) and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) (FAO, 2012a). Article 10 of the UNDRIP states:

Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return.

Free, prior and informed consent

The principle of free, prior and informed consent (FPIC) may have a number of implications for transboundary pastoral resources rights. FPIC is an international human rights standard derived from the collective rights of indigenous peoples to self-determination and recognizing their land rights. UNDRIP requires states to:

... consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them (Art. 19).

States must seek the consent of indigenous peoples, including pastoralists, before adopting legislation or administrative policies that affect them, and prior to undertaking projects that affect peoples' rights to land, territory and resources (Art. 32). In addition, where indigenous peoples have lost possession of their land, without their free, prior and informed consent, they are entitled to restitution or other appropriate redress (Art. 28).

Sustainable Development Goals

The Sustainable Development Goals (SDGs) were adopted by the United Nations in September 2015 as part of the 2030 Agenda for Sustainable Development. The 17 goals and their targets constitute an ambitious global strategic plan to end poverty, conserve planetary resources and promote equity and equality. They incorporate and build on existing international targets and regimes, such as those established in the global agreements described below. As pastoralists include many of the poorest and most vulnerable people in the world, their needs implicate almost all of the SDGs. However, certain goals are particularly relevant to the transboundary movement of pastoral peoples.

Only one target explicitly mentions pastoralists. It is part of SDG2, "End hunger, achieve food security and improved nutrition and promote sustainable agriculture." Target 2.3:

By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

Land and resource tenure is a key aspect of pastoral livelihood emphasized in the SDGs. SDG1, "End poverty in all its forms everywhere," includes Target 1.4: "... ensure that all men and women, in particular the poor and vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property ... [and] natural resources," which in turn comprises Indicator 1.4.2: "Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure."

SDG 5, "Achieve gender equality and empower all women and girls", includes Target 5a: "... give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property ... in accordance with national laws."

Several of the SDGs refer to resilience, specifically in the context of climate change. Target 1.5 aims, by 2030, to "build the resilience of the poor and

those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.” Target 2.4 calls for improving resilience through practices that maintain ecosystems and strengthen capacity for climate change adaptation. Mobility, including pastoral mobility, is a key factor in the resilience of pastoralists in the face of climate change.

Sustainable management and use of natural resources is a key aspect of the SDGs. SDG15, “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,” references obligations under existing international agreements, including the CBD and United Nations Convention to Combat Desertification (UNCCD) described below, and establishes targets for conservation, restoration and sustainable use of forests, wetlands, mountains and drylands (Target 15.1). It includes Target 15.9, “By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.”

SDG12, “Ensure sustainable consumption and production patterns,” includes Target 12.2, “By 2030, achieve the sustainable management and efficient use of natural resources.” This complements Target 2.4, which calls for sustainable food production systems. Traditional pastoral practices can be a form of sustainable natural resources management and use, and – compared with intensive systems – they represent a more sustainable form of production of food and other products. Promoting and supporting pastoral traditions can contribute to achieving these goals.

Other SDG targets are relevant to specific aspects or types of transboundary pastoralism. SDG11, which focuses on cities, includes Target 11.4: “Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.” The relationship between pastoralism and world heritage is described below. Target 9.1, “Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure,” applies to the important infrastructure needs of transboundary pastoralists.

Finally, SDG16 broadly addresses issues of good governance and rule of law. Target 16.7, “Ensure responsive, inclusive, participatory and representative decision-making at all levels,” speaks to one of the most important, and most challenging issues in governing transboundary pastoralism: securing participation and inclusion of mobile communities.

UNESCO: World Heritage, Intangible Cultural Heritage and Biosphere Reserves

The World Heritage Convention (WHC) provides that **states have a duty to cooperate and conserve cultural and natural heritage, including “combined works of nature and man” of outstanding universal value** (Art. 1). In 1992, the World Heritage Committee adopted revised criteria to include outstanding cultural landscapes (Decision CONF 002 XIII.1-3). Multiple



Peru: Pastoral woman with her sheep



Norway: Saami reindeer herder amidst his animals in the cold Arctic landscape

agropastoral areas have since been inscribed as world heritage sites, including: the Laponian Area (Sweden), the site of seasonal movement of the Saami reindeer herds; the Causses and the Cévennes Mediterranean Agropastoral Cultural Landscape (France); and the Pyrénées–Mont Perdu (France, Spain), an ancient system of transhumance (UNESCO, 2018a; Rössler, 2010).

States have specific obligations with regard to cultural heritage, including agropastoral areas. These include obligations to, as far as possible and as is appropriate: adopt policies to give the heritage “a function in the life of the community” (Art. 5[a]); “integrate the protection of that heritage into comprehensive planning programmes” (Art. 5[a]); set up services for the protection of the heritage (Art. 5[b]); and take the appropriate “legal, scientific, technical, administrative and financial measures necessary” for the protection of the heritage (Art. 5[d]). These obligations are not limited to sites inscribed on the World Heritage List (see Art. 12, for example).

The WHC is closely related to the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (ICH). While the WHC takes a site-based approach to the recognition and protection of heritage, the ICH focuses on practices, knowledge, skills and other intangible expressions of cultural heritage. The ICH Convention obliges states to take necessary measures to safeguard intangible cultural heritage at the national level, including through inventories, training, awareness-raising and appropriate legal, technical, administrative and financial measures, with the widest possible participation of communities, groups and individuals involved (Arts 11–15). It also provides for a Representative List of the Intangible Cultural Heritage of Humanity (Art. 16).

The Representative List contains mainly musical and artistic aspects of heritage, but there are also some listed examples related to pastoralism. The cultural space of the Yaaral and the Degal (Mali) encompasses the bi-annual herding of cattle across the inner Niger Delta and the accompanying festivities, poetry, costumes and renewal of intercommunity pacts. The coaxing ritual for camels (Mongolia) is practised by (primarily female) herders to encourage a camel to accept a calf. This traditional practice is disappearing on account of urbanization and loss of pastoral culture in the region. Other examples on the ICH list are closely associated with pastoral culture, e.g. the Sardinian pastoral songs (Italy), *Canto a tenore*, which are threatened by the decline of pastoral culture (UNESCO, 2018b).

A third UNESCO initiative, the Man and the Biosphere Programme (MAB), is also relevant for pastoralism, with many pastoral landscapes designated as biosphere reserves within the Programme. MAB sites often overlap with World Heritage Sites (Rössler, 2010). For example, the Causses and the Cévennes area (France) was a biosphere reserve before it was inscribed as a World Heritage Site.

There are relatively few pastoral World Heritage Sites – almost all of them in Europe – and only one transboundary site. Likewise, there are few direct examples of pastoral practices on the Representative List of the Intangible

Cultural Heritage. However, the recognition of pastoralism as a form of cultural heritage, both site-based and intangible, is a significant symbolic step that may help strengthen the argument for protection of cultural pastoral practices around the world.

Convention on Biological Diversity

The Convention on Biological Diversity (CBD) sets forth fundamental principles and obligations for conservation and sustainable use of biodiversity. It does not directly address pastoralism, but several provisions are relevant.

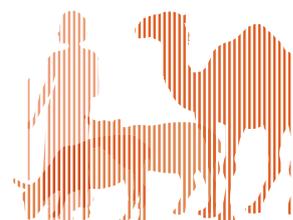
Article 8 provides that parties shall “endeavour to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and the sustainable use of its components” (Art. 8[i]). The Convention goes on to require parties to “protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements” (Art. 10). Where pastoral practices are consistent with conservation goals, these provisions should support their protection. More directly, Article 8(j) provides that each party shall “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.” As an effective practice for sustainable use of rangeland ecosystems, pastoralism should be covered under this provision.

The Convention further provides that parties shall “promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas” (Art. 8[e]). This is applicable where livestock grazing takes place immediately next to reserves or parks. This is not necessarily a conflict, as long as the pastoral use is sustainable. If it is not, parties should endeavour to provide the conditions necessary for compatibility, pursuant to Article 8(i).

Several resolutions of the CBD Conference of the Parties (COP) refer to pastoralists directly or indirectly. Decision X/17, adopted in 2008, set up a process for the CBD Secretariat to explore, together with FAO and the UNCCD, means to strengthen collaboration in pastoralism and agricultural use of dry and sub-humid lands (para. 8 and para. 9). This was followed by Decision X/35 in 2010, which urges parties to incorporate biodiversity into their drought-management plans, “including through the involvement of all stakeholders, particularly women and pastoralists and other indigenous and local communities” (para. 2).

The CBD Programme of Work on Mountain Biodiversity, adopted in 2004 through Decision VII/27, includes the goal:

Promote integrated transboundary cooperation, strategies for sustainable activities on mountain ranges through mutually agreed-upon arrangements by countries concerned. Cooperative arrangements should cover specific thematic issues such as ... pastoralism ...



In 2014, the CBD adopted the Chennai Guidance for the Integration of Biodiversity and Poverty Eradication. Recognizing that biodiversity is integrally related to key development sectors, including pastoralism, the Guidance provides tools and considerations for integrating biodiversity and poverty eradication, including integration of poverty eradication into national biodiversity strategies and action plans, implementation of the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests, and measures to promote land management transparency.

UN Convention to Combat Desertification

Pastoralism is one of the main land uses in many drylands which fall under the scope of the UN Convention to Combat Desertification (UNCCD). The Convention is one of few global instruments to explicitly refer to pastoralists; it requires parties to provide for the effective participation of pastoralists and other resources users in policy planning, decision-making, and implementation and review of national action programmes (NAPs) (Art. 10[2f]). National action programmes can address, as priority fields, sustainable management of natural resources and sustainable agricultural practices (Art. 10[4]).

Annexes to UNCCD provide guidance for implementation of the Convention in different regions. The Regional Implementation Annex for Africa provides that NAPs can include features such as an increase in the participation and management responsibility of local populations, including pastoralists, and measures to conserve natural resources through the integrated and sustainable management of agricultural land and pastoral land, vegetation cover and wildlife, forests, water and biological diversity (Annex I, Art. 8). It also provides for subregional action programmes, including joint programmes for the sustainable management of transboundary natural resources through bilateral and multilateral mechanisms, and cooperation in management of plant and animal diseases (Art. 11). The Regional Implementation Annex for Latin America and the Caribbean provides that NAPs may include the goal of achieving food security and sustainable development and management of agriculture, livestock-rearing, forestry and multipurpose activities (Annex III, Art. 4[c]). The Regional Implementation Annex for the Mediterranean promotes consideration of land-use patterns, management of water resources, soil conservation, forestry, agricultural activities and pasture and range management in NAPs (Annex IV, Art. 6[b]).

In October 2015, the UNCCD COP12 adopted land degradation neutrality (LDN) as a target for the Convention.⁶ LDN is Target 15.3 of the SDGs. The COP decision “invites affected country Parties ... to establish baselines and national-level voluntary land degradation neutrality (LDN) targets within their NAPs and to address ecosystem aspects at their discretion.” Countries are recommended to establish LDN targets at the subnational level, ensuring neutrality at the landscape or ecosystem level to avoid trade-off between ecosystems, landscape types or populations. This, however, could present a

⁶ Decision 2/COP.12: Formulation, revision and implementation of action programmes in view of the 2030 Agenda for Sustainable Development.

challenge in transboundary ecosystems, particularly those managed by pastoralists. Countries may benefit from collaboration across borders in order to ensure LDN at the transboundary ecosystem level.

Human rights and indigenous rights instruments

Global and regional human rights instruments are relevant to mobile pastoralists, as they represent some of the world's most vulnerable populations. While most instruments do not mention pastoralists specifically, their provisions are still relevant, particularly regarding rights to freedom of movement, life, work, non-discrimination and participation in cultural life.

In the VGGT, pastoralists are identified along with “historically disadvantaged groups, marginalized groups... indigenous peoples” in relation to land reforms (para. 15.5). Recent years have also seen pastoral societies increasingly self-identify as indigenous peoples, although the terminology may not be adopted by all governments. Two major indigenous rights instruments directly address issues related to pastoralism: the ILO Indigenous and Tribal Peoples Convention, 1989 (No. 169) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Both are limited in scope to indigenous peoples, but nevertheless encompass a number of pasture users.

ILO Convention No. 169 provides that measures should be taken to safeguard “the right of the peoples concerned to use lands not exclusively occupied by them, but to which they have traditionally had access for their subsistence and traditional activities” (Art. 14[1]). It states that “subsistence economy and traditional activities of the peoples concerned, such as hunting, fishing, trapping and gathering, shall be recognised as important factors in the maintenance of their cultures and in their economic self-reliance and development” (Art. 23). It also stipulates recognition of legal pluralism, stating that, in applying national laws to indigenous peoples, “due regard shall be had to their customs or customary laws” (Art. 8). It does not address transboundary pastoral movement, but does provide that “**governments shall take appropriate measures, including by means of international agreements, to facilitate contacts and co-operation between indigenous and tribal peoples across borders**, including activities in the economic, social, cultural, spiritual and environmental fields” (Art. 32).

UNDRIP, adopted by the UN General Assembly in 2007, contains similar provisions. It provides that indigenous peoples “**have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired**” and requires states to give legal recognition and protection to these lands and resources, “with due respect to the customs, traditions and land tenure systems of the indigenous people concerned” (Art. 26).

Similar to ILO Convention No. 169, it does not address transboundary movement of herders or livestock, but provides that indigenous peoples have the right to maintain and develop contacts, relations and cooperation, including economic activities, with peoples across borders (Art. 36).



©FAO/Eran Raizman

Mongolia: Woman herder normally responsible for milking and dairy activities

International soft law instruments and frameworks

A number of non-binding instruments – “soft law” – have been adopted by states and international organizations that could guide the development of legislation for transboundary management of pastoral resources. These resolutions take the form of recommendations, guidelines, programmes of action, codes of conduct, declarations of principles etc. While non-mandatory, states frequently use them to guide the development of legislation, and elements of soft law may be subsequently included in binding instruments (“hard law”). Soft law is often rooted in established international human rights law.

An example of soft law relevant to securing transboundary rights comes from the policy recommendations of the Committee on World Food Security (CFS, 2016). A number of the recommendations touch on the rights and responsibilities of pastoralists in transboundary rangelands. Article Vd recommends:

Recognize, respect and protect those traditional production systems, including pastoral systems and their mobility strategies, that use ecosystems sustainably and contribute significantly to the food security and nutrition of their communities and associated ways of life.

Article IXb recommends:

Enable pastoralists’ mobility, including transboundary passage as appropriate; securing access to land, water, markets and services, adaptive land management, and facilitate responsible governance of common resources, in accordance with national and international laws.

In the Declaration of the 2002 World Summit on Sustainable Development (UN, 2002), states committed to:

provide access to agricultural resources for people living in poverty, especially women and indigenous communities, and promote, as appropriate, land tenure arrangements that recognize and protect indigenous and common property resource management.

While not explicit on transboundary rights, the Declaration nevertheless establishes the importance of protecting management of resources for rural communities and indigenous peoples, including pastoralists. A more elaborate set of guidelines is the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (FAO, 2012a). Section 3 of the Guidelines addresses transboundary tenure rights and the need to strengthen international measures to administer tenure rights that cross international boundaries.

Other aspects of international soft law relevant to securing transboundary pastoralism include commitments to accountability and participation and pledges to respect the rights of indigenous peoples. For example, Agenda 21, in particular Chapter 26 on “Recognizing and Strengthening the Role of Indigenous People and their Communities” states:

In view of the interrelationship between the natural environment and its sustainable development and the cultural, social, economic and physical well-being of indigenous people, national and international efforts to implement environmentally sound and sustainable development should recognize, accommodate, promote and strengthen the role of indigenous people and their communities.

Principle 22 of the Rio Declaration on Environment and Development (1992) states:

Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

These various agreements may form the basis of an emerging international legal framework governing land rights of marginalized communities, which may in the future grow into customary international norms regulating state behaviour.

International policy/law on livestock trade

Increasing globalization and the persistence of transboundary animal diseases pose a substantial risk to the world's animal agriculture and to food security, as well as endangering international trade. Animal production and marketing under formal trade schemes also tends to institutionalize and protect systems which are increasingly demanding in terms of both quality and sanitary conditions. The World Food Summit (WFS) in 1996 acknowledged these circumstances, stressing the essential, limiting role of transboundary animal diseases on food security, sustained animal agriculture and trade. The heads of state and governments pledged under Commitment No. 3 of the WFS Plan of Action to "seek to ensure effective prevention and progressive control of plant and animal pests and diseases, including especially those which are of transboundary nature, such as rinderpest, cattle tick, foot and mouth disease."

The World Organisation for Animal Health (OIE) Terrestrial Animal Health Code (Terrestrial Code) sets out standards for the improvement of animal health and welfare and veterinary public health worldwide, including standards for safe international trade in terrestrial animals and their products. The value of the Terrestrial Code is twofold: the measures published in it are the result of consensus among the veterinary authorities of OIE members; and it constitutes a reference within the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) as an international standard for animal health and zoonoses. The health measures in the Terrestrial Code should be adopted by the veterinary authorities of importing and exporting countries to provide for early detection,

reporting and control of agents that are pathogenic to animals or humans, and to prevent their transfer via international trade in animals and animal products, while avoiding unjustified sanitary barriers to trade. The health measures in the Terrestrial Code have been formally adopted by the World Assembly of OIE Delegates. The 25th edition of the Terrestrial Code incorporates modifications agreed at the 84th General Session of the World Assembly of OIE Delegates in May 2016. The development of these standards and recommendations is the result of the continuous work since 1960 of one of the OIE's Specialist Commissions, the OIE Terrestrial Animal Health Standards Commission. The first Terrestrial Code was published in 1968.

The SPS Agreement also sets out measures on how governments can apply food safety and animal and plant health measures. This applies to the transboundary nature of trade between countries and prevents the spread of disease across countries. According to Article 6 of the SPS Agreement, WTO members are required to adapt SPS measures to the regional conditions from which the product originated and to which the product is destined. In particular, WTO members are required to recognize the concepts of pest- and disease-free areas and areas of low pest/disease prevalence. Exporting WTO members claiming pest-/disease-free areas or areas of low pest/disease prevalence must demonstrate to the importing WTO member that such areas are, and are likely to remain, pest-/disease-free areas or areas of low pest/disease prevalence.

Standards are for the benefit of pastoralists and they ensure that pastoralism can be sustained by preventing the spread of disease. Their application,

Austria: Shepherd watching his cows in the highlands



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however, inevitably has an impact on the transboundary management of pastoral resources. Their application could, for example, limit cross-border movement of livestock, which would in turn prevent the utilization of some pastures and increase the utilization of others, leading to degradation. As discussed elsewhere in the report, this may be circumvented to some extent by the issuance of transboundary permits or veterinary certificates; however, this may not be possible for all diseases.

Regional frameworks

At the regional level, there are examples of principles and initiatives specifically intended to address pastoralism, as well as broader conventions that touch on pastoralism indirectly.

The most numerous and specific regional policy frameworks addressing pastoralism are found in Africa. **The AU Policy Framework for Pastoralism in Africa (2010) was adopted in part to facilitate policy coordination and harmonization, and provide a platform to address “in a holistic manner, the many challenges confronting pastoral communities,” including challenges associated with its transnational character.** The framework enumerates principles on the rights of pastoralists. It “recognizes that mobility is the basis for efficient use and protection of rangelands, and that mobility is key to appropriate adaptation to climatic and other trends” (para. 4.1.4). It acknowledges the importance of regional approaches because of the cross-border nature of pastoral communities (para. 4.1.5).

In 2013, two regional forums brought together policymakers from countries in the Sahara–Sahel region to discuss the strengthening of policies related to pastoralism. In May, a meeting of ministers from North and West Africa in N’djamen, Chad, resulted in the N’djamen Declaration concerning the contribution of pastoral livestock to the security and development of the Saharo–Sahelian areas. **The N’djamen Declaration affirms that pastoral practices help promote security in the region, and that “mobility requires unhindered free movement of herds and animal products across national borders.”** The Declaration includes recommendations to adopt decentralization policies which “fully involve nomadic and sedentary communities,” to consider livestock in spatial planning and to “reinforce interstate co-operation with a view to facilitating cross-border movements and regional trade” (p. 11). Five months later, representatives of six West African countries met in Nouakchott, Mauritania, and adopted the Nouakchott Declaration on Pastoralism. The Nouakchott Declaration recognizes pastoralism “as an effective practice and lifestyle suited to the Sahelo–Saharan conditions” and adopts an objective of “securing the lifestyle and means of production of pastoral populations, and increasing the gross output of livestock production by at least 30% in the 6 concerned countries over the next 5 years.” It declares a commitment to enhance frameworks for concerted action and to “accelerate the formulation, financing and



implementation of national, multi-country and cross-border programs.” Both declarations, as well as the AU Policy Framework, are non-binding.

Regional economic integration bodies, such as the Economic Community of West African States (ECOWAS), have adopted binding decisions on cross-border transhumance, which set up the regulatory mechanisms discussed below. The Common Market for Eastern and Southern Africa (COMESA) and the Intergovernmental Authority on Development (IGAD) advocate for policies that support and enhance mobile pastoral production systems and livestock trade across national borders. COMESA has, for instance, since 2008 developed the “Green Pass” system, a commodity-based health certification that offers opportunities to formalize and facilitate transnational movements and trade of livestock in the region (Pavanello, 2010). Since 2007, the AU Border Programme has also sought to facilitate cross-border integration of African states and the development of local cross-border cooperation initiatives within the framework of the Regional Economic Communities (RECs), such as COMESA, IGAD and ECOWAS.

The East African Community Protocol on environment and natural resource management includes a section on rangelands, which calls for the development of “common policies, law and strategies for ensuring sustainable development of rangelands” (Art. 22). It also includes a section on managing transboundary resources that calls on states to “jointly develop and adopt harmonized common policies and strategies for the sustainable management of transboundary natural resources” (Art. 9). However, the Protocol, which was signed in 2006, has not yet entered into force.

In other regions, regional conventions and decisions address pastoralism indirectly. In Eastern Europe, the Framework Convention on the protection and sustainable development of the Carpathians (2003) provides that parties should take appropriate measures “to ensure a high level of protection and sustainable use of natural and semi-natural habitats, their continuity and connectivity” (Art. 4) and should “aim at preserving the traditional architecture, land-use patterns, local breeds and domestic animals and cultivated plant varieties” (Art. 11) (Mróz and Olszańska, 2004).

The Framework Convention on environmental protection for sustainable development in Central Asia (2006) lays down general obligations for cooperation in the management of transboundary resources. It provides for the use of regional projects and other bilateral and multilateral schemes and mechanisms for cooperation to combat land degradation. To this end, the Convention provides for the adoption of protocols to establish rules and procedures, which can relate to, *inter alia*, “joint action on sustainable livestock and rangeland management in arid zones.”

In Europe, some habitats important for transhumance are included in Annex I of the European Union (EU) Habitats Directive. These include siliceous alpine and boreal grasslands, as well as priority habitats, such as the species-rich *Nardus* grasslands. Specific sites may be listed as Natura 2000 sites. In

some cases, maintenance of the habitat depends on transhumant grazing practices, which constitute an important part of the ecosystem. In addition, habitats managed by transhumant pastoralists are vital for many species, including birds of prey (e.g. Griffon vultures), insects and small mammals that live in grasslands, and plant species such as the autumn crocus. Some of these species are listed in the EU Habitats Directive (Herzog *et al.*, 2004).

Currently, these sites and species are endangered by threats to pastoralism, including conflicts between rural communities and herders, hygienic standards hindering both movement of herds and sale of transhumant pastoralists' products, and lack of infrastructure (e.g. drover roads and tracks) for herd movement (Herzog *et al.*, 2004).

SUMMARY

There are several legal principles and approaches that can help plot a way forward in securing transboundary pastoralism. Considerable challenges are faced in understanding pastoral resources rights, which often have fuzzy boundaries and multiple overlapping or nested layers. However, there is growing legal support and increasing opportunity in many countries to secure tenure, including communal tenure and open-access rights. This may include systems of legal pluralism that combine statutory and customary law.

There are various legal approaches to governing transboundary pastoralism: from the development of political acceptance of pastoralism by changing national legislative approaches to pastoral rights through to building cross-sectoral support.

There are a wide range of international legal principles and frameworks supporting transboundary pastoralism, although many such agreements are non-binding in nature. These frameworks can provide momentum for advocating the rights of pastoralists and can contribute to improving overall acceptance of and commitment to pastoralism. The various frameworks and agreements may have more or less appeal, depending on the country; work at the national level can be enhanced if actors understand where public priorities – and sensitivities – lie.



Types of legal arrangements for transboundary pastoralism

Cross-border pastoral mobility and participatory transboundary governance are increasingly under negotiation at national, regional and global levels, as Section 3 illustrates. There are various ways to pass from discussion to practice, for example: 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 a border. There are also a range of possible non-binding mechanisms, such as joint policies, programmes or strategies, MoUs or informal cooperative arrangements facilitated by civil society.

This section explores the different types of legal arrangements governing transboundary pastoralism. Examples are given to illustrate the various options used in the past or currently being implemented to address transboundary pastoralism. They are not a comprehensive list of options, rather a starting point for discussion.⁷

⁷ For the sake of clarity, all legal provisions in this report are referred to in the present tense, even where the legal instrument is no longer in force.

BILATERAL TREATIES

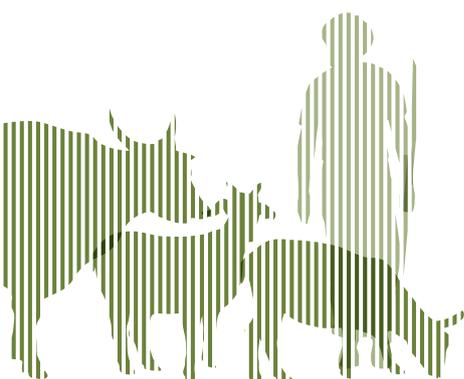
Formal bilateral treaties on pastoralism are relatively rare, but examples exist throughout the world. Some serve as stand-alone treaties on transhumance, animal health or shared pastures. Others take the form of a protocol or exchange of letters on pastoralism provided for under a broader treaty that can address a range of border issues. In several cases, pasture issues are addressed as part of a peace treaty or a treaty for establishing boundaries between states.

Transhumance agreements

In West Africa, there are several examples of bilateral treaties on transhumance. In the late 1980s, Mali began negotiating treaties with its neighbours: Burkina Faso (1988), the Niger (1988), Mauritania (1989), Senegal (1993) and Côte d'Ivoire (1994). They provide 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 (Dyer, 2008; Zakaria, 2014).

There are fewer transhumance agreements elsewhere in Africa. In 2013, a cross-border animal health agreement was signed between Uganda and Kenya (Mangano, 2013). It provides for a joint programme for enforcement of animal health laws and policies.

Kenya: A herd of goats at the local livestock market in the pastoralist county of Wajir



In the rest of the world, there are few examples of stand-alone agreements on pastoralism or movement of livestock. The Italy–Switzerland Convention concerning frontier traffic and grazing (1953) provides rights, customs procedures and tax exemptions for frontier inhabitants grazing their herds in the frontier zone. The Belgium–France Arrangement concerning frontier pastures (1982) sets conditions and a permitting process for transboundary use of both daily and seasonal pastures in the frontier zones. The China–Nepal Agreement on cross-border grazing of inhabitants of border areas (2012) regulates grazing zones and activities that may be undertaken by herders who cross the border, and sets up a process for annual meetings of local governments to agree on livestock quotas, time frames and disease prevention. The Iran–Iraq Agreement concerning transhumance (1975) provides for use of the grazing land within the countries’ frontier zones, in accordance with stipulated conditions. The Agreement is no longer in force.

Boundary agreements and peace agreements

Agreements on transhumance may be included as protocols or annexes to boundary agreements or peace agreements. The Saudi Arabia–Iraq International Frontier Treaty (1981) provides for negotiation of a protocol “regulating rights to pasture, movement and the use of water sources in the frontier zone” (Art. 7).⁸ The Saudi Arabia–Iraq Protocol regulating rights to pasture, movement and the use of water sources in the frontier zone (1982), was adopted a few months later to implement this article. The Oman–Yemen International Boundary Agreement (1992) contains an Annex concerning the regulation of rights to grazing, movement and the use of water resources in the border zone.

In 2012, as part of the peace process, the Sudan and South Sudan signed an Agreement on border issues in Addis Ababa. The Addis Ababa Agreement provides for protection of pastoral communities’ “seasonal customary right to cross, with their livestock, the international boundary between the Parties for access to pasture and water” (Art. 14[1]). It charges a Joint Border Commission with the adoption of a comprehensive policy for “management of resources, including: rangelands, watersheds, stock routes and grazing areas” (Art. 14[2]).

REGIONAL MECHANISMS

Regional instruments can provide principles or obligations related to transboundary pastoralism. **Where pastoralism has a regional scope, regional instruments can create specific mechanisms regulating cross-border movement of herders and livestock.** The most comprehensive example is the system set up by ECOWAS in Decision A/DEC.5/10/98 (1998).

⁸ Deposited by Saudi Arabia with the UN in 1991.

This system was based in part on the Benin–Burkina Faso–Côte d’Ivoire–the Niger *Accord CEBV relatif à la réglementation de la transhumance* (CEBV Agreement on the regulation of transhumance) (1991), which provides for livestock corridors, times of entry and exit, designated pastures (*zones d’accueil*) and conflict resolution before national judges (Dyer, 2008).

The ECOWAS Decision sets up a detailed framework for the 15 member states of ECOWAS. The primary mechanism of this system is the International Transhumance Certificate (ITC), which functions as a herd passport to help monitor cross-border movement. The certificate must include information on the herd, vaccinations, itinerary, and border posts to be used. The Decision also provides for pastoral rights and obligations and conflict resolution.

Despite its comprehensiveness and regional coverage, the ECOWAS ITC system has faced implementation challenges. **Herders object to the bureaucracy and administrative harassment involved in obtaining the necessary paperwork to support transboundary movement** and complain that, when they do arrive in the host country, livestock corridors are blocked and reception zones are occupied; on the other hand, local populations complain that pastoralists damage crops and protected areas and commit violence against locals. In addition, authorities claim that many pastoralists are crossing the border on traditional livestock routes rather than at designated crossings, and without using an ITC (Dyer, 2008; Jise, 2015).

A similar system was set up in Central Africa in 1987 by six member states of the Central African Customs and Economic Union (CACEU). Like the ECOWAS system, it uses a form of ITC, but it is substantially less developed (Dyer, 2008).

Niger: Pastoralists coming back home after a day spent at the livestock market in Tahoua region



NATIONAL LEGISLATION

Even in the absence of a formal international arrangement, national legislation can allow for transboundary movement. Burkina Faso, Guinea and Mali have adopted laws that provide pastoralists the right to move animals across national borders. In the Côte d'Ivoire, Decree No. 96-431 (June 1996) regulates external transhumance, establishes a calendar and governs movements within the country. Subsequently adopted decrees and orders establish dispute-resolution mechanisms, compensation measures for damage caused to livestock or crops, and other appropriate measures (FAO, 2012b).

Unilateral legislation can be based on the principle of reciprocity. For example, the Pastoral Charter of Mali allows entry of herds from neighbouring countries into Mali on condition that those countries also allow entry of Malian livestock (Art. 23). In other cases, national legislation may refer to international agreements, either existing or expected. The Kyrgyz Pasture Law provides that pastures may be allocated to foreign users in accordance with interstate and intergovernmental agreements (Art. 13), though no such agreements currently exist (see Box 10). The Pastoral Charter of Mali likewise states that entry and movement of herds from neighbouring countries are subject to bilateral and regional agreements (Art. 23).

As with regional or bilateral arrangements, national law can provide for certification of foreign herds. Legislation in the Niger specifically provides for

Box 10. National legislation governing transboundary pastoralism: Kyrgyzstan and Tajikistan

Although there is extensive transboundary movement of herds between Kyrgyzstan and Tajikistan, there is no formal agreement governing transhumance between the countries. However, national legislation in Kyrgyzstan allows for the transboundary use of pastures. The Kyrgyz Pasture Law provides for local pasture users unions to authorize use of pastures through issuance of pasture tickets for a fee fixed by the union (Art. 10). Unused pasture may be allocated to foreign entities in accordance with interstate and intergovernmental agreements (Art. 13). While there is no such agreement to date, Tajik herders are routinely granted tickets for use of Kyrgyz pastures, but often for a higher fee than that collected from Kyrgyz herders.

Until 2013, Tajikistan had no pasture law and did not recognize pasture as a distinct land type. The 2013 Pasture Law does not explicitly provide for foreign users and there have been many discussions between countries on a legally binding agreement on pastures. Such an agreement could help address conflict between Tajik farmers and Kyrgyz pastoralists, as well as promote more efficient utilization of pasturelands on both sides of the border.

Source: Lim (2012); Murzakulova and Mestre (2016).

a national certificate of transhumance of camels from non-ECOWAS territories (Zakaria, 2014). The South African Animal Improvement Act (1998) provides for issuance of permits for citizens of Lesotho to graze cattle in South Africa. A few years ago, this system came under criticism when South African residents alleged that the South African Department of Agriculture, Forestry and Fisheries lacked capacity to effectively enforce the permit system, with the result that Lesotho farmers were grazing animals in South Africa illegally, leading to overgrazing and spread of disease. One source claimed that 80 percent of the 180 000 cows, sheep and goats from Lesotho that were grazing in South Africa at the time lacked the necessary permits (Phillips, 2013).

National legislation can create processes for identifying transhumance corridors that may involve participation of users from both sides of the border. Cameroon adopted legislation to identify corridors used by herders from Nigeria and the Niger; the legislation has been criticised as fundamentally inflexible, because it does not allow for transhumance routes to change as necessary depending on conditions (Moritz *et al.*, 2013). Nigerian regulations also define transhumance corridors, dictating movement of both domestic and foreign herds; insufficient participation of the pastoralists in identifying corridors has undermined the effectiveness of provisions that could enable transboundary movements (Bouslikhane, 2015).

India: Gujjar pastoralists with their buffalo herd



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LOCAL ARRANGEMENTS

Transboundary arrangements between local entities may, in some cases, be the most effective or appropriate mechanism for regulating transboundary pastoralism. These arrangements are often based on historic relationships, but they may also be newly negotiated agreements between tribes. They can be written or unwritten, with varying degrees of formal legal recognition. Local arrangements are periodically renewed or re-negotiated, providing the necessary flexibility to respond to changing needs.

Box 11. *Facerías*: local agreements between France and Spain

The *facerías* between French and Spanish communities in the Pyrenees are among the oldest examples of transboundary community arrangements for shared pasture that still exist today. In this region, neighbouring valleys have been sharing pasture resources since time immemorial. In the Middle Ages, and possibly earlier, these arrangements were formalized in pacts and letters of agreement for pasture use. The oldest pacts surviving today are from the sixteenth century, but there are references to earlier pacts going back to the twelfth century. The pacts were renewed each year through annual meetings to resolve conflicts and pay agreed taxes.

These agreements served to maintain local peace, even during times of war. Neighbouring valleys would refuse to allow entry by national military forces that might threaten their neighbours. Some scholars claim that the word “*faceria*” comes from a word meaning “to graze”; others maintain that it is related to the Latin word for “peace”, highlighting the dual function of the agreements.

In the nineteenth century, the *facerías* began to be formalized in national and international law. National legislation in Navarro incorporated norms from domestic *facerías*. The Treaty of Bayonne (1856) establishing the French–Spanish border, recognized the existence of the international *facerías* and stipulated that the agreements would stay in force.

Some of these agreements remain in force today. One example is the international *faceria* between Valle de Aezkoa (Spain) and Cize, Saint-Jean-Pied-de-Port (France). The oldest legal documents relating to this *faceria* date to 1556. The Treaty of Bayonne recognized this *faceria* in perpetuity and described its boundaries. In modern times, the agreement governs the use of about 4 ha of pasture, grazed by about 250 cows, 150 horses and almost 8 000 sheep. It is regularly renegotiated to adapt to changing conditions. Since its inception, it has been modified to include specific regulations, such as stock quotas and pasture rates per head. With each successive agreement, grazing rates are updated and the number of grazing cattle is adjusted.

One of the most well-known *facerías* respected today is that between Roncal (Spain) and Barétous (France), with the oldest agreement dating as far back as 1375. It is famous for the annual “Tribute of the Three Cows” celebration – a rite of immense cultural importance and a tourist attraction. While the *faceria* still exists and the legal agreement continues to be renewed, pastoral practices have declined during the last century faded.

Source: Amorena Udabe *et al.* (1994); Guilera (1963); Jaurrieta (2004).

The oldest and possibly most famous examples of local arrangements for transboundary pastoralism are the medieval *faceries* between France and Spain (see Box 11). However, community agreements can also be used as a modern device to support transboundary pastoralism. Elders of communities in Uganda and Kenya signed a cross-border agreement in 2012 to share grazing areas located between the communities (Mangano, 2013). In West Africa, community-based agreements (*conventions locales*) are negotiated by interested natural resources users, often with the support of development projects. These agreements are intended to be inclusive of transhumant herders, potentially including those from another country (Cotula, 2012).

Civil society organizations can help implement local-level cooperation. For example, the Aga Khan Foundation worked with governments from Afghanistan and Tajikistan to reach an agreement to cooperate in granting access for the provision of veterinary and other services to Kyrgyz pastoral communities in the Afghan Pamir (Nazarbekov *et al.*, 2016).

Community-level pastoral arrangements can also help in building peace. To preserve pastoral freedom of movement, the ancient *faceries* included promises to keep the peace. Agreements between tribes in the Sudan and South Sudan provide a modern example of local pastoral arrangements in times of international conflict (see Box 12).

NON-BINDING ARRANGEMENTS: PLANS, PLATFORMS AND MoUs

Frameworks to support transboundary pastoralism can include soft law arrangements, such as MoUs or joint strategies, as well as initiatives under sectoral arrangements. In West Africa, for example, a number of joint initiatives and MoUs elaborate specific mechanisms and long-term strategies for managing transhumance (Zakaria, 2014). In 2003, Burkina Faso and the Niger adopted an MoU to create an institution for cooperation, in part to implement ECOWAS Decision A/DEC.5/10/98. This MoU set up two institutions: an annual Meeting of Ministers responsible for livestock and a Joint Technical Committee to provide recommendations, manage conflicts and implement projects (Dyer, 2008). The two countries also adopted a Plan of Action, including mechanisms to track transhumant breeders, combat contagious diseases and jointly manage pastoral space.

Networks and associations can also play a role in transboundary governance. Africa's network of breeders' and pastoral organizations creates a regional reference framework for breeders and pastoralists from seven countries in the region. The Association for the Promotion of the Livestock in the Sahel and the Savannah promotes the involvement of breeders in economic, social and political development (Zakaria, 2014).



Box 12. The Sudan and South Sudan: local arrangements and peace

The Rizeigat tribe from the Sudan in the north annually migrate south with their herds during the dry season. This migration was affected by the conflict, which left large sections of the border in dispute. In order to continue its migration, the tribe had to cross a 14-mile wide stretch of contested land between the Sudan and South Sudan. The Comprehensive Peace Agreement (2005) (CPA) between the Sudan and South Sudan provides for freedom of movement, but this did not stop the Government of the Sudan from preventing northern pastoralists from going into South Sudan out of fear that they would strengthen ties with their southern relatives, potentially leading to security threats.

Prior to the conflict, grazing agreements had existed between local communities – the new border made it an international issue. This led to confusion about which administrative level should organize the grazing route, how to handle dispute resolution, and which authority had the capacity to tax mobile herders. Some parts of the border remained open to transhumance, while others were heavily militarized, blocking passage. Though most local grazing agreements, as well as national law and the CPA itself, did not allow weapons in certain zones or to be carried across the border, pastoralists normally carried small firearms, and feared entering South Sudan without the protection of weapons. Concern about whether pastoral rights would be maintained affected the border negotiations themselves, as the Sudan wanted to ensure that its pastoralists had enough pasture in the event that transboundary migration had to end.

The Addis Ababa agreements (2012) explicitly grant pastoralists rights to freedom of movement across the border. However, the social and cultural situation had changed: previously, migration was reciprocal, with seasonal workers travelling north as seasonal pastoralists travelled south; now, migration of workers had ceased and communities in South Sudan began to view the pastoralists as foreign intruders with little value. Intertribal conflict between the Rizeigat from the Sudan and the Dinka Malual from South Sudan became a serious problem.

In 2013, leaders from the Rizeigat and Dinka Malual tribes met for the first of what would become annual pre-migration conferences to negotiate an agreement for the following season. At the conferences, the tribes agree on access to rangeland, pasture and water, rules on environmental protection, vaccination and health requirements, compensation for violence or destruction of property, restrictions on activities of herders, and dates and itineraries for the migration. The tribal authorities also discuss any issues or conflicts that arose in the previous migration, resolve disputes between herders and farmers that could not be resolved privately, and agree on compensation. The Rizeigat tribal administration is responsible for ensuring that pastoralists follow the agreed terms, guaranteeing payment of taxes and development fees, and regulating the timing of departure to avoid pressure along the route. The Dinka Malual tribal authorities must notify farmers in advance to expect the herds, and ensure that farmers do not encroach on designated livestock corridors.

The agreements also include aspects related to security and peace. Both sides agree to control use of firearms by their members. In addition, the Rizeigat tribal administration agrees not to allow military camps inside its territory that could attack the Dinka Malual. On at least one occasion, it has ordered a military camp to leave its territory to honour the agreements.

Source: Craze (2013); Lind et al. (2016); Young et al. (2016).



Peru: Pastoralists in the Peruvian Altiplano

These plans and initiatives are not binding, but they can have legal and political weight when harmonizing standards or promoting joint activity between countries. Non-binding arrangements can be a first step towards international legally binding agreements, but this is not necessarily either the result or the goal of such arrangements. Transboundary movements may benefit from the promotion of international cooperation and legal harmonization between neighbouring states.



Content of legal arrangements

Despite their different forms and origins, there are clear trends in the content and scope of legal arrangements for transboundary pastoralism. The various instruments may cover substantive issues, such as rights of herders and regulation of their activities, as well as processes for border-crossing and permitting systems and institutional structures for cooperation.

The following analysis is based on a small sample of legal instruments, some of which may no longer be in force. Nonetheless, they offer some perspective on the different options that have been discussed or implemented for transboundary regulation of transhumance, demonstrating the range of areas such arrangements can cover. While local arrangements, national legislation and non-binding arrangements play a key role – as described in Section 4 – the analysis focuses primarily on formal bilateral and multilateral instruments.

Finally, assessment of the level of implementation or effectiveness of these provisions is outside the scope of this study. Legal frameworks must be supported by effective implementation and dispute resolution mechanisms to allow pastoralists to claim and exercise their rights. Understanding the circumstances and challenges of implementation is essential for the development of legal frameworks for transboundary pastoralism.

SUBSTANTIVE PROVISIONS

One of the primary roles of international frameworks is to establish substantive norms to be implemented at the national level. The norms address rights and duties of transboundary herders, requirements relating to sanitation, and rules regarding time and place for movement and grazing.

Authorization of cross-border transhumance

Many agreements begin with a general statement that grants a right or authorization to defined herdsmen to cross the international border and to use pasture resources, pursuant to the conditions set forth in the agreement. For example, the Iran–Iraq Agreement concerning transhumance (1975)⁹ provides that herdsmen “shall be authorized ... to migrate to the grazing areas of both Contracting Parties, provided that they return to their countries of origin at the closure of the transhumance season” (Art. 2).

The authorization may specify particular species for which the right is allowed. ECOWAS Decision A/DEC.5/10/98 provides that border crossing is allowed between all of the countries of the community for cows, pigs, goats, camels and donkeys. In contrast, the Belgium–France Arrangement does not list the species covered but specifically exempts pigs, which are covered by regulations of the destination country (Art. 6).

Kenya: Women of the Samburu pastoral community with their goat

⁹ Not in force.





Jordan: Bedouin herder in the Hima Eyra Range Reserve in Balqa Governorate

This provision of broad authorization, subject to the conditions of the agreement and other laws, is in line with international obligations regarding freedom of movement.

Border grazing for frontier inhabitants

Several agreements provide for short-term grazing by frontier inhabitants within a defined border zone. The China–Nepal Agreement on cross-border grazing of inhabitants of border areas (2012) defines the border zone as the zone within 30 km of the border (Art. 2) and provides that border residents from one country may graze animals in that zone in the other country, subject to security checks and passport requirements (Art. 4).

The Italy–Switzerland Convention provides for a 10-km frontier zone and defines frontier inhabitants as “persons residing in the frontier zone of either State who frequently proceed to the adjoining frontier zone by reason of their habitual activities or private interests or for family reasons of a continuing nature” (Art. 1). Frontier inhabitants who have agricultural/forestry undertakings in one state and engage in cultivation or forestry on lands situated in the other state may travel free of customs duties and any other tax or impost, with their families and employees and with their livestock and fodder. Once grazing is completed, they must return with all livestock and equipment (Art. 2).

The Oman–Yemen International Boundary Agreement (1992) provides for a grazing zone within 25 km of the border. Herdsmen who are nationals of the two parties and in the border zones and their vicinity may make use of rangelands and water resources in the grazing zone in accordance with tribal custom (Art. 2).

The Saudi Arabia–Iraq Protocol defines a frontier zone from the border to 10 km inside each country’s territory within which grazing is not permitted (Art. 1). The grazing zone extends from the frontier zone 30 km into the territory of each country (Art. 2). Nationals who reside in the vicinity of the frontier zone may use rangelands and water sources in the grazing zone, subject to an application process (Art. 3).

Provisions for border grazing may be found alongside provisions for seasonal pastoral movement, for example in the Italy–Switzerland Convention. Obtaining permission for border grazing tends to be simpler and can involve no application process at all, although livestock may still be subject to sanitary and vaccination requirements. A simplified process for users of daily pasture makes sense as a means to support traditional livelihoods of border inhabitants.

Grazing season timing and duration

In many cases, the timing and duration of the grazing season is determined by institutions or in regular meetings set up by the agreement. For example, ECOWAS Decision A/DEC.5/10/98 provides that the host country sets the time period for entry and exit of the herd and informs other states (Art. 14).

The China–Nepal Agreement provides that local governments decide during annual meetings on the time frame and season for grazing (Art. 3).

Some agreements provide more guidance regarding the timing and duration of the grazing season. The Iran–Iraq Agreement provides that the transhumance period shall not exceed four months (Art. 11). The Saudi Arabia–Iraq Protocol provides that the “grazing season shall run from mid-February to mid-May each year, and after the end of the grazing season, persons and herds shall be returned to the frontier authority of the country of which they are nationals” (Art. 7). Stipulation in the agreement of the grazing season may work where conditions are relatively stable from year to year. However, where there is variation potentially requiring movement at different times, it may be preferable to have a mechanism that allows the timing to be set for each season.

Grazing routes and pastures

Like grazing seasons, grazing routes are typically set by countries or joint institutions. ECOWAS Decision A/DEC.5/10/98 provides that host countries determine transhumance routes (Art. 7) and designate pastures to be used, termed reception areas or “*zones d’accueil*” (Art. 15). Host states also set the maximum number of livestock for the reception areas (Art. 15).

The Niger–Mali MoU on livestock transit (1998) lists specific itineraries for transit (Art. 4). In many systems, these matters are determined through a process of annual negotiation. In their annual pre-migration conferences, tribes from the Sudan and South Sudan agree on pasture use, itineraries and quotas. Under the China–Nepal Agreement, livestock quotas are decided by the annual meeting of local governments (Art. 3).

Some agreements, such as the Saudi Arabia–Iraq Protocol, provide that herders may not travel outside designated grazing regions or transhumance routes except in the case of *force majeure* or with authorization (Art. 13). This is an inflexible approach that may be difficult to enforce, but which may help prevent conflict.

Rights and obligations of transboundary herders

Agreements grant transboundary herders certain rights while in the host country. These include the right to health services, the right to legal protection and the right to purchase food or consumer goods. For example, the Oman–Yemen Agreement provides that herdsmen can benefit from health services in the territory of the other country (Art. 7). ECOWAS Decision A/DEC.5/10/98 provides that herders are protected by the authorities of the host country and their fundamental rights guaranteed (Art. 16). The Saudi Arabia–Iraq Protocol provides that herders have the right to buy food and consumer goods in the receiving country (Art. 12).

The most sweeping duty imposed on transboundary pastoralists is the obligation to respect the law of the host country. For example, ECOWAS



Kenya: Pastoralist woman leading a caravan of camels to the local well in the Afkaba region of the Chalbi Desert

Decision A/DEC.5/10/98 provides that herders must respect the regulations and legislation of the host country, including its conservation rules (Art. 16). Agreements can also impose more specific rules and restrictions on transboundary herders.

Many agreements restrict the carrying of weapons across the border. The Oman–Yemen Agreement provides that parties have a right to limit the number and types of vehicles and firearms that may be carried across the border (Art. 5). The Iran–Iraq Agreement provides that there is no right to bear firearms or transport inflammable or explosive materials in the host country (Art. 6). While ostensibly sensible, this kind of provision can create problems for herders who need to carry firearms to protect themselves and their livestock. For example, most grazing agreements between communities in South Sudan and pastoralists from the Sudan do not allow weapons to be carried across the border, despite the fact that pastoralists customarily carry small firearms and may be unwilling to travel without them (Craze, 2013). In other situations, the regulation of firearms can help manage conflict and control unsustainable activities, such as hunting in protected areas. For example, herders were found to practise subsistence hunting with firearms within the W Regional Park (Toutain, De Visscher and Dulieu, 2004).

The China–Nepal Agreement prohibits farming, hunting, logging and collection of medicinal plants by transhumant herders while in the host country, unless they have special permission (Art. 5). It prohibits slash-and-burn farming (Art. 7) and allows collection of firewood for everyday use only (Art. 5). The Niger–Mali MoU on Livestock Transit prohibits transfer of animals in transit, on pain of sanction, and requires that lost livestock be reported to the competent authority (Art. 6).

The Iran–Iraq Agreement prohibits encroachment on state-owned areas, crops, grazing land or forests, with offenders subject to prosecution under the law of the host country (Art. 15). The Agreement also requires herders to refrain from causing damage to fields, grazing land and livestock belonging to nationals of the host country (Art. 16). In contrast, local arrangements between tribes in the Sudan and South Sudan enable community leaders to set compensation rates annually and to resolve disputes over damage at the same time (Young *et al.*, 2016). The 2014 tribal conference set penalties for destruction of property and killing of cattle as well as other offences (e.g. adultery and rape).

Tax/duty and passport/residence exemptions

International agreements can provide exemptions from taxes or duties on transhumant livestock, to avoid repeated taxation of animals moved for the purpose of pasture rather than trade. The Italy–Switzerland Convention, Oman–Yemen Agreement and Saudi Arabia–Iraq Protocol all explicitly provide for exemption from taxes and duties on livestock as well as, variously, their products, equipment and household goods.

Agreements can also provide exemption from passport or residence requirements. Under the Oman–Yemen Agreement, for example, when permitted to make use of pasture, nationals of the parties are exempt from residence and passport regulations. Herders are instead issued with a transit document by the border authority of the home country (Art. 4). This is useful where herders do not have access to national identity documents because of bureaucratic barriers.

Sanitary requirements and disease-control measures

One of the biggest reasons given by countries for closing borders is fear of spread of contagious disease. Therefore, it is not surprising that provisions on sanitary requirements and emergency measures for responding to outbreaks of disease are found in almost all agreements on transboundary pastoralism.

Agreements may allow for veterinary checks and other sanitary requirements as part of the permitting and border-crossing processes described below. They may also directly impose sanitary requirements on animals that cross borders.

The Italy–Switzerland Convention provides that no cloven-hoofed animal that has suffered from foot-and-mouth disease in the previous 24 months shall be admitted across the border (Vet Regs Art. 5). The Belgium–France Arrangement provides that herders cannot graze animals that come from farms quarantined because of health measures, and nor can they graze on pastures that have been quarantined because of health measures (Art. 7). For beef cattle, there are additional requirements: proof of vaccination, a test for brucellosis and an official declaration that the animal is free from tuberculosis (Art. 8). Uniquely, the Iran–Iraq Agreement provides that health authorities should undertake a health inspection of “both people and herds” and certify that they are free from contagious diseases (Art. 10).

The China–Nepal Agreement provides that, in the event of contagious disease outbreak, local government must take relevant measures immediately – potentially including measures to stop transboundary grazing – after first notifying the other government (Art. 6). The Oman–Yemen Agreement provides only that parties may take necessary measures in case of contagious livestock disease (Art. 6). The Belgium–France Arrangement provides for cooperation in the event of outbreak of disease, stating that competent veterinary authorities on each side of the border should coordinate action to prevent the disease from spreading (Art. 2). The Saudi Arabia–Iraq Protocol likewise provides for cooperation between competent authorities, as well as necessary measures including prohibition of import and export (Art. 11).

The Italy–Switzerland Convention contains detailed provision on appropriate measures in the event of appearance or detection of livestock disease. In the event of an outbreak of livestock disease in any commune in the frontier zone, livestock from that commune shall not be permitted to cross the border unless accompanied by a certificate from a competent authority stating that



the animals originate from disease-free localities (Vet Regs Art. 2). If signs of foot-and-mouth disease appear in zones adjacent to the border, all cross-border livestock movement shall be prohibited (Vet Regs Art. 2). If contagious disease is detected on inspection at the frontier, all animals affected and exposed shall be returned to the country of origin (Vet Regs Art. 5).

Both the WTO and the OIE establish standards for international movement of livestock. The SPS Agreement and its international reference standards create principles of risk-based regulatory action, time-bound necessity, transparency and non-discrimination. There are specific OIE standards on contingency measures and emergency preparedness. Among other elements, legal frameworks should ensure an appropriate chain of command that enables governments to undertake sanitary action when needed and implement mechanisms to prohibit or restrict movements as necessary.

PROCESSES FOR PERMITS AND BORDER CROSSINGS

Permit/certification process

Many agreements put in place a process for herders to obtain a permit, certification or other authorization for transborder movement of livestock. These processes may apply only to long-term or seasonal grazing, as in the case of the Italy–Switzerland Convention (Art. 6).

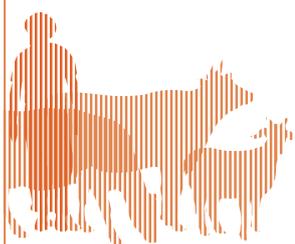
The first step is typically to notify the stipulated authorities of the intent to cross the border for grazing purposes. Under the Belgium–France Arrangement, owners or lessees must transmit documents one month before the first border crossing (Art. 9). Under the Iran–Iraq Agreement, documents are required at least two months before the start of the grazing season (Art. 3).

The application may be transmitted directly to the host country – as in the case of the Iran–Iraq Agreement – or to a national or local authority in the herd’s home country. Under the Italy–Switzerland Convention, applications must be submitted to the commune where the livestock is kept and signed by the mayor or livestock inspector before being transmitted to the competent authority in the province or canton (Vet Regs Art. 5). There may be provision for a visit by an appointed veterinary surgeon or health inspector prior to transmission to the other party’s authority (e.g. Italy–Switzerland Convention Vet Regs Art. 5 and Belgium–France Arrangement Art. 9).

Finally, there may be a time limit for the response by the other party. Under the Saudi Arabia–Iraq Protocol, the host country frontier authorities must respond within 15 days of an application being forwarded (Art. 5).

Content of applications and permits

Many agreements list the required content for a permit or application for transborder movement of herds. ECOWAS Decision A/DEC.5/10/98 requires that the International Transhumance Certificate list:



- composition of the herd (number and species);
- vaccination information;
- border crossing;
- final destination; and
- routes for transhumance.

The Italy–Switzerland Convention also requires listing of the location of the livestock and the name and address of the owner in the notice provided by the owner or lessee (Vet Regs Art. 5).

The Belgium–France Arrangement requires that grazing permits include all of the above as well as information on the sex and age of the animals and the name and address of the owner of the destination pasture (Art. 9).

The Saudi Arabia–Iraq Protocol requires information about the number of persons and number of households who will accompany the herd and the dates of entry and exit (Art. 4).

Border control measures

Border controls can include measures related to immigration and customs authorities, requirements for veterinary checks at the crossing point, or special processes set up for transhumance of livestock. Under the China–Nepal Agreement, for example, citizens in border areas must carry a passport and accept a security check when necessary (Art. 4). This is a relatively simple arrangement designed to accommodate short-term grazing.

The Italy–Switzerland Convention provides that customs shall “take all necessary steps to ensure proper control over all movements of livestock” (Art. 6) and that the Convention shall not modify regulations in force concerning customs clearance and control (Art. 10). It provides for both states to organize veterinary inspection at frontier crossing points, but stipulates that they should inform each other of the days and hours of inspection. At the crossing, the inspection should be carried out by the appointed veterinary surgeon of the state of entry (Vet Regs Art. 5).

Both the Iran–Iraq Agreement and the Saudi Arabia–Iraq Protocol state that, following issuance of the transhumance permit, each party will send representatives to the frontier to set up facilities for the crossing of people and livestock, and then prepare a joint report on the subject.

ECOWAS Decision A/DEC.5/10/98 provides that herds not accompanied by an ITC will be quarantined at the border at the expense of the owner (Art. 9).

INSTITUTIONAL STRUCTURE

In pastoral agreements, institutions are vital. Institutional frameworks allow for regular meetings to agree on aspects of the arrangement that require flexibility: timing and itinerary of migrations, number of animals, emergency

measures etc. Institutional structures also provide mechanisms for dispute resolution, and can help mitigate or avoid conflict.

Type of institution

Different agreements set up different types of institutions. The China–Nepal Agreement establishes a joint implementing agency under which local authorities meet once a year to establish aspects of the Agreement. The Belgium–France Arrangement also provides for annual meetings of heads of veterinary services of local governments, as well as exceptional meetings at the request of either party. The Oman–Yemen Agreement provides for an annual consultation between the border authorities of the two parties.

The Burkina Faso–the Niger MoU sets up a two-organ institutional structure. A Meeting of Ministers in charge of animal husbandry gives instructions on regulation of transhumance between the countries and examines and approves proposals made by a Joint Technical Committee. This Committee supports the Meeting of Ministers and proposes measures to promote and support the definition and implementation of transhumance between the countries (Art. 3).

Competence and mandate

The various institutions set up by the agreements are charged with resolving questions and setting specific regulations for each season’s grazing migration. For example, the meetings of local governments under the China–Nepal Agreement make decisions on livestock quotas, grazing times and seasons, disease prevention and restoration of degraded land (Art. 3). Under the Oman–Yemen Agreement, border authorities also consult annually to establish the range of grazing and the crossing points that may be used (Art. 3).

Institutions also serve as a conduit for information across the border. For example, under the Belgium–France Arrangement, local governments exchange reports on a set of contagious diseases listed in an annex.

Dispute resolution

One of the most important functions of transboundary pastoral arrangements is the resolution of disputes. ECOWAS Decision A/DEC.5/10/98 states that disputes between herders and farmers should first go to a commission of conciliation composed of representatives of breeders, farmers, agencies and local political administration (Art. 17 and Art. 18). If conciliation is not possible, disputes are referred to a competent tribunal (Art. 19).

The Iran–Iraq Agreement provides a process for resolving claims of damage to fields, grazing land or livestock belonging to nationals of the host country. The frontier commission of the host country conducts an investigation and awards compensation for damage caused. If the award is contested, frontier commissioners of the two parties consider the matter together to reach agreement on compensation. Joint decisions of the frontier commissioners are

“One of the most important functions of transboundary pastoral arrangements is the resolution of disputes”

“final and binding”. If the frontier commissioners cannot reach agreement, the matter is referred to the legal authority of the host country (Art. 16).

Local governance and regular renegotiation

A key aspect of many institutional frameworks for transboundary pastoralism is the involvement of local-level authorities (both statutory and customary) in regular negotiation and renegotiation of details. This is a feature of both formal legal agreements and informal arrangements, often in the form of annual consultations to establish details, such as specific routes and grazing areas and the timing and duration of pastoral migrations. These authorities also perform essential dispute resolution and emergency management functions.

The involvement of local authorities is in line with the principle of decentralization/subsidiarity and helps ensure necessary flexibility, as well as fast and culturally appropriate measures and responses. Delegation of governance specifics to regular local-level meetings can allow for more sustainable management of resources, rather than entrenching specific grazing zones and corridors in rigid legal instruments.

Legal pluralism

Legal pluralism is a fact of many societies that cannot be ignored. Customary or religious law can establish norms, processes and authorities that are as legitimate as – or more legitimate than – those created by statutory law. Such systems are most effective when different legal orders are fully recognized and mutually reinforcing.

A few agreements provide explicitly for recognition of legal pluralism. The Oman–Yemen Agreement provides that border inhabitants may make use of rangelands and water resources in the grazing zone “in accordance with the tribal customs prevailing in the area” (Art. 2). The Iran–Iraq Agreement provides that herdsmen use the grazing land “in accordance with pre-established custom and agreements” (Art. 1). It states: “With regard to grazing rights, the procedure shall be in accordance with the rules and customs observed prior to the signature of this Agreement” (Art. 8). The Sudan–South Sudan Border Issues Agreement (2012) states that parties shall protect the livelihoods of nomadic and pastoral communities, especially their “seasonal customary right to cross, with their livestock, the international boundary between the Parties for access to pasture and water” (Art. 14[1]).

Such provisions can create a statutory legal hook for community arrangements made by tribal authorities – such as the arrangement between communities in the Sudan and South Sudan – adding weight to such arrangements and providing mechanisms for their enforcement, including against community outsiders.



Conclusions and recommendations

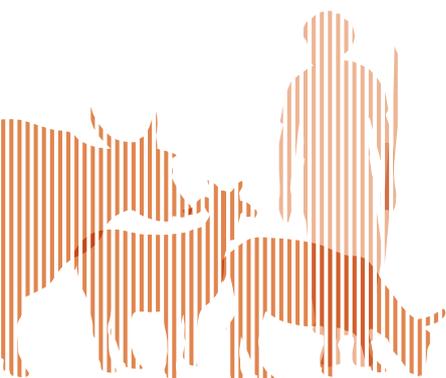
Pastoral mobility predates the imposition of international boundaries and in many countries transboundary movements continue to contribute to pastoral resilience. Pastoralists move their herds across international borders for a number of reasons, including to access pasture and water resources, to exchange breeding stock in an effort to diversify the herd gene pool, to pursue cross-border trade, and to manage drought and other risks. Movements may be made on a daily, seasonal, annual or occasional basis. Cross-border mobility delivers secondary benefits by creating economic and social ties, strengthening communication, providing access to productive resources, and allowing pastures in one location to be rested and improved.

Despite the established benefits of cross-border mobility, pastoralists face many restrictions in crossing international borders. Physical barriers have sometimes been constructed to close borders, for example to prevent the spread of livestock disease or to manage insecurity, but in other cases the barriers are less evident. Movements can be impeded by disputed or ambiguous citizenship, insecurity and physical threats in frontier areas, challenges in accessing public services (e.g. education and health), and unclear or contested rights of pastoralists to resources, particularly when they come into contact with settled populations across a border.

Against this background are examples of government support to facilitate transboundary pastoralism, focusing, for example, on veterinary service provision, trade and conflict management. International agreements in both hard and soft law have set precedents for securing transboundary pastoralism. This includes those at the global level, such as ILO Convention No. 169, as well as regional policies and commitments, such as the AU Policy Framework. Other established international agreements, such as water basin agreements, may facilitate transboundary pastoralism.

Transboundary pastoralism is often a question of respecting transboundary rights and responsibilities with regard to natural resources, including land and water. Many countries are yet to provide secure tenure regarding pastoral lands, which further complicates the challenge of securing transboundary rights. Securing rights, particularly communal rights, either side of a border must be carried out with appropriate sensitivity to historical rights and claims, in order to ensure equitable outcomes and to mitigate conflict. This is made more complex by the plurality of rules and laws that may govern pastoral resources, the varying extent to which neighbouring countries respect customary arrangements, and the extent to which the customary arrangements of neighbouring pastoral groups respect the legal requirements of each state.

Turkey: Pastoralist in the remote Munzur Valley





*Sudan: Man herding cattle
in the savanna*

Where transboundary legal arrangements have been developed, they have sometimes been undermined by weak implementation. In some cases, governments have not allocated sufficient resources to establish mechanisms for implementation. In other cases, legislation has been constrained because of the failure to consult pastoralists, leading to low compliance. There is a need for successful mechanisms of negotiation and regulation, built on effective participation and representation of pastoralists and able to play a role in developing, monitoring and enforcing legal arrangements, including provisions for dispute resolution.

The past two decades have witnessed growing consensus in the scientific community with regard to the merits of livestock mobility for sustainable management of rangelands, and the economic and environmental importance of rangeland ecosystems. This is driving the conversation over how to support and effectively regulate herd movements, including those that cross international borders. Building on established international consensus and drawing lessons from established examples of cross-border legislation, the following recommendations can be made.

1. PROMOTE BILATERAL AND REGIONAL DIALOGUE FOR ENHANCED TRANSBOUNDARY PASTORALISM

Legal arrangements that support transboundary pastoralism have been developed between some countries and within regions (notably West Africa), providing lessons and inspiration for further action. Steps can be made towards stronger transboundary legislation as a result of dialogue in other sectors, for example, to address security or trade. Improved dialogue between states, or between subnational entities either side of a frontier, can be instrumental in enabling transboundary pastoral mobility.

There are several mechanisms that can be considered to improve transboundary movements:

- Bilateral treaties, including transhumance agreements or other arrangements on resources use.
- Boundary agreements or peace agreements, covering a broader area or more than one boundary.
- Regional mechanisms, particularly in regions where pastoralists cross multiple frontiers.
- National legislation and subnational arrangements (see Recommendation 2).
- Non-binding agreements (in the absence of legal arrangements), lending credibility to transboundary movements and potentially paving the way for stronger arrangements.

2. PROMOTE ENHANCED TRANSBOUNDARY PASTORALISM AS A POLICY GOAL AT NATIONAL OR SUBNATIONAL LEVEL

There is abundant evidence of the importance of mobility for sustainable pastoralism and effective management of rangeland landscapes, but there is a need to involve key actors in sectors such as the environment, agriculture and water. Awareness can be raised through greater adoption of landscape approaches in the rangelands and with improved dialogue over resources use across domestic boundaries (e.g. between internal administrative units).

Governments committed to strengthening pastoral management of rangelands should evaluate the opportunities and diversity of potential benefits of improved transboundary pastoralism, including positive impacts on the local economy, rangeland ecology and pastoral society. Where governments are addressing conflict in border areas, it is important to avoid oversimplifying the causes and responses, and to recognize that support for pastoral mobility can be integral to resolving disputes. Transboundary legal arrangements may be embedded in wider processes of conflict management; this is one way to avoid partisan approaches and address historical grievances. Deep insights into conflict in border areas are needed to differentiate between disputes over local resources, lawlessness, geopolitical tensions and other sources of discord.

Legal arrangements for transboundary pastoralism are likely to require political support from the highest levels of government. This can benefit from dialogue through established intergovernmental mechanisms, including Regional Economic Communities and other international bodies. A step towards this goal could be the establishment of mechanisms for cross-border landscape dialogue with the participation of government and community representatives.



3. ESTABLISH AN APPROPRIATE PROCESS OF CONSULTATION AND PARTICIPATION FOR THE DEVELOPMENT AND IMPLEMENTATION OF LEGAL ARRANGEMENTS

Pastoralists and their representatives need to be proactively involved in the process of developing legal arrangements for transboundary movement. Their involvement is necessary to find appropriate arrangements; contributes to awareness and acceptance of the laws, their origins and justification; and makes pastoralists more responsible for their implementation. In addition, pastoralists should be enabled – through training and awareness raising – to take advantage of legal mechanisms when they are established.

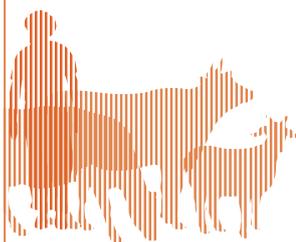
Consultative and participatory processes need to ensure representation of women and people from different age groups, given both the differentiation in roles and responsibilities and the specific needs of different groups in pastoral societies. Consultations also need to support dialogue between competing resources-user groups, including different pastoral groups, farmers, forest dwellers and other rights holders.

In many countries, pastoral resources rights are weak regardless of the presence of international frontiers. Governments have made many commitments to securing pastoral rights and environmental governance, and these need to be given higher priority. Securing pastoral rights and strengthening governance at the local level may be a necessary first step towards addressing the specific challenges of transboundary legal arrangements. The processes and mechanisms of participation and consultation established for securing governance domestically may also provide an avenue for advancing legal arrangements across international borders.

4. IDENTIFY APPROPRIATE LEGAL SOLUTIONS ACCORDING TO THE LOCAL AND NATIONAL CONTEXT

Transboundary resources management by pastoralists can be strengthened in many ways. Although binding bilateral treaties may be desirable in some cases, absence of such arrangements does not have to be a barrier to effective transboundary governance. Solutions can be found at the community level, for example, and engagement at this level may be a more realistic first step, particularly for civil society organizations. Demonstrating effective community-level solutions across borders may help convince governments of the value and feasibility of formal legal arrangements.

Governments can take a broad perspective of resource rights in transboundary rangelands by drawing inspiration from the Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the



context of national food security (FAO, 2012a). Transboundary resources management often requires complex, negotiated and flexible solutions, as demonstrated by the customary institutions that have historically governed pastoral resources use. Governments should explore ways to build on and strengthen customary rangeland rules and regulations for transboundary resources management. Some elements of transboundary agreements, such as the timing of movement or adherence to changing sanitary requirements, may need to be frequently (e.g. annually) negotiated through appropriate transboundary mechanisms.

Cross-border dialogue should be strongly informed by established precedents and commitments, and non-governmental actors should also be aware of these opportunities and their implications for national action. The guiding principle behind efforts to strengthen transboundary pastoralism should be to ensure effective, peaceful and equitable governance of resources, and there are a number of ways of achieving this.

5. GOVERNMENTS AND DEVELOPMENT PARTNERS SHOULD COMMIT TO IMPLEMENTATION OF TRANSBOUNDARY LEGAL ARRANGEMENTS

Attention should be given not only to the formulation of laws but also to their implementation. This requires sufficient resources allocation and ownership by the target populations. The process of developing transboundary legal arrangements should be inclusive and encourage the participation of women and different age groups.

Implementation of transboundary legislation requires clarity over legal jurisdiction, and it requires the relevant authorities to have sufficient personnel, as well as other material resources. The role of security services must be clarified; security services must also be resourced and competent legal services set up as required. Transboundary mechanisms for ongoing negotiation may need to be established and resourced. Investment in capacity building will be required – both for the relevant authorities and for affected communities.

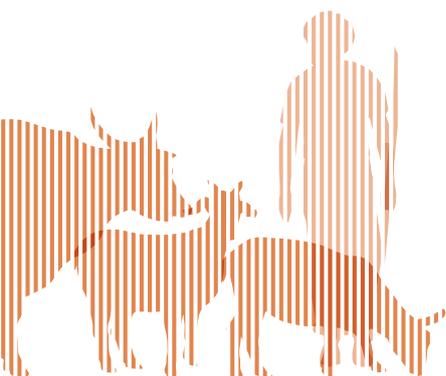
Pastoralists' understanding of new legal arrangements will be strengthened through their participation in the process of developing, monitoring and enforcing laws, but this may be insufficient to enable their full compliance. Awareness-raising programmes may be needed to ensure full understanding of new regulations, enforcement mechanisms, and any sanctions for infringement. Awareness-raising efforts should also focus on the benefits of improved transboundary resources management.



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Peru: Pastoral woman
with her group of alpaca
in the Peruvian Altiplano



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