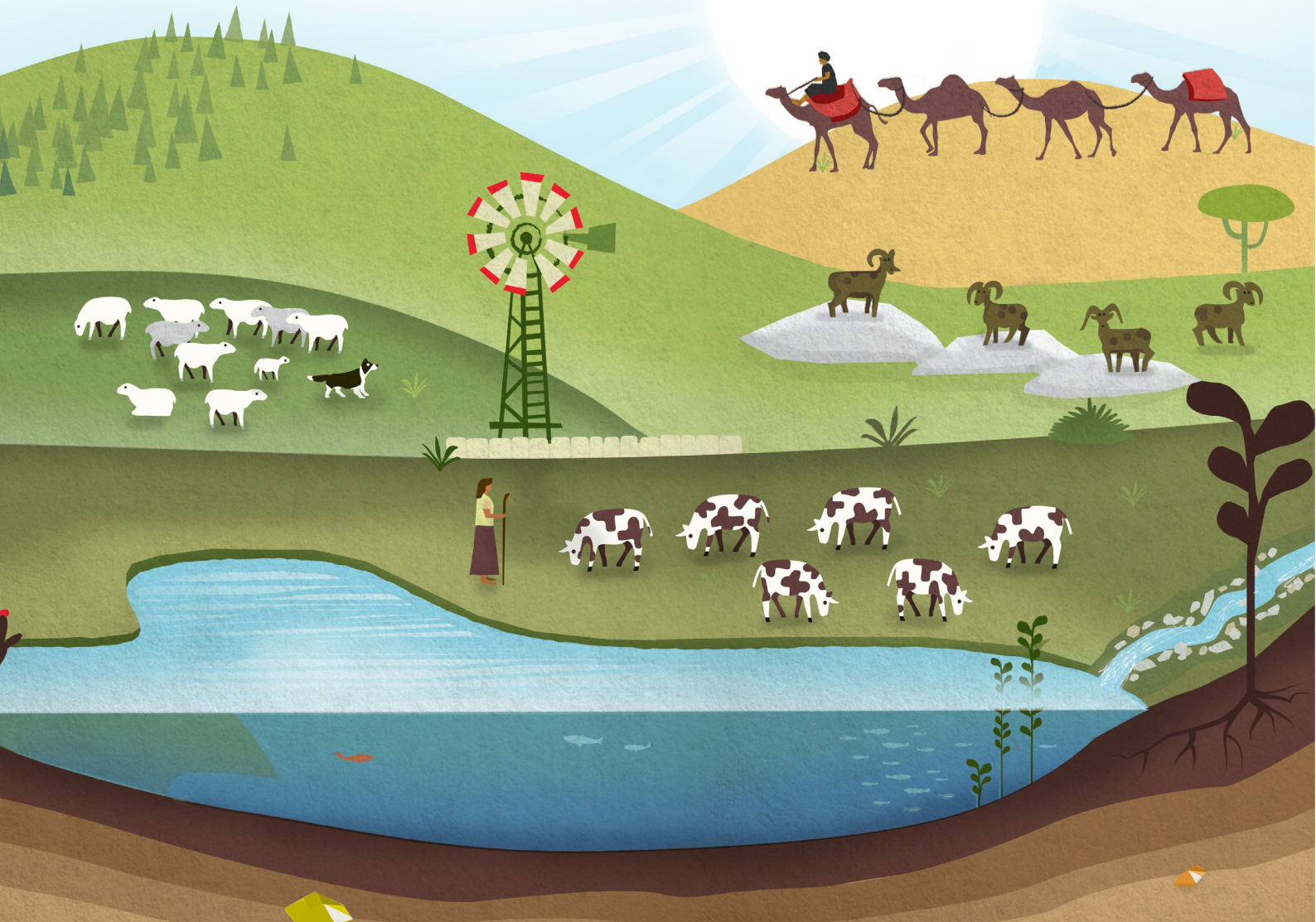
Food and Agriculture Organization of the United Nations

GOVERNANCE OF TENURE
TECHNICAL GUIDE
6

Improving governance of pastoral lands

Implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security



The FAO Governance of Tenure Technical Guides are part of FAO's initiative to help develop capacities to improve tenure governance and thereby assist countries in applying the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.* The FAO Governance of Tenure Technical Guides are prepared by technical specialists and can be used by a range of actors. They:

- translate principles of the Guidelines into practical mechanisms, processes and actions;
- give examples of good practice – what has worked, where, why and how;
- provide useful tools for activities such as the design of policy and reform processes, for the design of investment projects and for guiding interventions.

For more information on the Guidelines and FAO's activities on governance of tenure visit: **www.fao.org/nr/tenure**

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This publication is intended to support the use of the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. It is not intended to contradict the language of the Guidelines as endorsed by the Committee on World Food Security on 11 May 2012 nor the role of States in their implementation.

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Foreword

On 11 May 2012, the Committee on World Food Security endorsed the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT; hereafter also referred to as the Guidelines). The Guidelines are intended to contribute to global and national efforts towards the eradication of hunger and poverty by promoting secure tenure rights and equitable access to land, fisheries and forests. This technical guide on *Improving the governance of pastoral lands* provides advice and examples of how to strengthen governance of tenure in a pastoral context, recognizing the complexity of pastoral tenure arrangements and the great diversity of pastoral societies worldwide. It complements other technical guides, including *Governing tenure rights to commons, Governing land for women and men, Improving governance of forest tenure, Responsible governance of tenure and the law,* and *Respecting free, prior and informed consent.*

The technical guide on *Improving the governance of pastoral lands* builds on a number of initiatives and studies from recent years that have highlighted pastoral governance and land tenure, revealing the inherent challenges pastoralists face, the shortcomings of governments in securing pastoral tenure, and the emerging examples of success and progress from around the world. Among these is the World Initiative for Sustainable Pastoralism (WISP), a global partnership that gathers and reviews case studies through an extensive network. Two notable global reviews have been particularly influential in the creation of this technical guide: *The land we graze*[1] and *Governance of rangelands*[2] – *collective action for sustainable pastoralism*. Additionally, the emergence of the World Alliance of Mobile Indigenous Peoples (WAMIP) as a credible voice of pastoralists on the global stage has been invaluable in ensuring a high degree of consultation and accountability in the development of studies like this.

Reflecting these initiatives, the technical guide on *Improving the governance of pastoral lands* has been developed through a consultative process. The overall guide has been authored by the International Union for Conservation of Nature (IUCN) and WISP in collaboration with the Commission on Environment, Economic and Social Policy (CEESP) and the World Commission on Environmental Law (WCEL). A technical board consisting of experts in the field of pastoralism, including pastoralist representatives identified through WAMIP, have overseen the development of the guide. It has further been peer reviewed by volunteers identified through the WISP-network and by FAO staff.

The technical guide on *Improving the governance of pastoral lands* is designed for several audiences including government and non-government actors. While most readers will have a basic knowledge of pastoralism, many will be unfamiliar with the great diversity of pastoralist systems and cultures throughout the world. The guide addresses those who recognize the importance of securing pastoral land

[1] https://cmsdata.iucn.org/downloads/land_rights_publication_english_web.pdf

[2] https://portals.iucn.org/library/node/44904

tenure and who are looking for practical guidance on how to proceed. The guide is, therefore, not an advocacy document, but it provides arguments in Section 1 for securing pastoral tenure that can be used by different actors to strengthen their justification for such work. While these guidelines provide practical advice that can be operationalized, further work will be required to translate the current document into more local user-friendly products for pastoral communities. It is also recognized that some of the recommendations within this guide will be unattainable for some of the more marginalized pastoralist communities. This is inevitable in a guide that is designed to be applicable in all contexts. It is hoped that, by exposing readers to a range of solutions, the guide can contribute to developing higher aspirations for strengthening governance of pastoralist tenure worldwide.

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Acronyms

CBD	Convention on Biological Diversity
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization of the United Nations
FAR	fuzzy access rights
FPIC	free, prior and informed consent
ICCA	Indigenous peoples' and community conserved territories and areas
IFAD	International Fund for Agricultural Development
IUCN	International Union for Conservation of Nature
NGO	non-governmental organization
PPP	polluter-pays principle
PUG	pasture user group (Mongolia)
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNEP	United Nations Environment Programme
VGGT	Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security
WAMIP	World Alliance of Mobile Indigenous Peoples
WISP	World Initiative for Sustainable Pastoralism

Introduction

Introduction

The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT; hereafter also referred to as the Guidelines) make explicit mention of pastoralists, as end users of the guidelines and as targets of capacity building. Under "Rights and responsibilities related to tenure" (paragraph 4.8), the Guidelines note that "states should respect and protect the civil and political rights of … pastoralists … and should observe their human rights obligations when dealing with individuals and associations acting in defence of land, fisheries and forests."

Pastoralists are identified along with "historically disadvantaged groups, marginalized groups … indigenous peoples" and others in relation to land reforms (paragraph 15.5). This emphasizes one of the most fundamental challenges that must be addressed in strengthening tenure of many pastoral lands: the historical and often ongoing marginalization of pastoralists from national discourse. The Guidelines also makes explicit mention of pastoralists and their land in relation to transboundary tenure issues (paragraph 22.2). This is illustrative of the many unique challenges that pastoralists face in securing governance of land tenure; challenges that are determined by the ecology of pastoral rangelands. Pastoral societies are well adapted to these challenges and they have developed customs and rules governing the management and use of pastoral land that are deeply embedded in pastoral culture. While some governments may see the strength of customary governance as a hindrance to development, this technical guide will demonstrate that it is, in fact, the cornerstone not only for securing pastoral tenure but for the resilience of pastoral societies and sustainable development.

Why a guide on governance of pastoral land?

"Pastoralism has been defined as extensive livestock production on the rangelands". This broad description encompasses many different herding practices and production systems that are found worldwide. However, it has been clearly demonstrated that the planned herding of livestock is a central common practice that is vital for sustainable management of rangelands. Managed herd movements are essential for sustainable

pastoralism and pose the single greatest challenge to securing pastoral tenure.

This technical guide presents the arguments for herd mobility in detail. However, herd movements can take place on very different scales, from long-range nomadism to seasonal transhumance of different distances, to relatively localized herd movements and pasture rotations. Historically, the mobility of pastoralists has often been used as justification for not securing their land rights; since pastoralists are constantly wandering, the argument goes, they do not lay claim to any particular piece of land. This argument has been used in places where pastoralists have followed the same transhumance routes for centuries and where there is clear evidence of their historic use and management. Yet even in the most nomadic of pastoralist communities, herd movements rely on natural and human infrastructure that has been protected and maintained by pastoralists since time immemorial.

Mobility is one response to the uncertainty and heterogeneity of rangeland resources; communal tenure practices are another. Together, these create complex customary tenure arrangements that require sophisticated responses from governments and other agents involved to uphold them. Pastoral lands are largely communal, but can also include lands or other resources (e.g. trees) that are privately owned, or which have different rights according to the season. Pastoralists may have historical claims over lands that are large distances apart, or which they only use in certain years. Different resource patches that are geographically distant, such as salt pans or woodlands, may be absolutely essential for effective livestock production. Often these patches are used by non-pastoralists, or sought by outsiders for commercial exploitation, and can be particularly challenging to secure.

This technical guide is therefore needed to provide solutions to securing pastoral governance and tenure without undermining the inherent, necessary complexity of customary arrangements. It must also provide solutions within a rapidly changing context in which traditional practices and crucial patterns of livestock mobility are transforming.

How this technical guide on pastoral lands relates to other guides

The technical guide on *Improving the governance of pastoral lands* touches on a number of issues that are covered in other technical guides in this series, including the forthcoming technical guide on governing tenure rights to commons and *Governing land for women and men,*[3] *Responsible governance of tenure and the law,* and *Respecting free, prior and informed consent.*[4] These guides provide important advice and examples of how to strengthen pastoral governance and tenure and they are consistent with this guide. However, while these guides are complementary, the technical guide on *Improving the governance of pastoral lands* covers specific challenges of pastoral tenure that are unique to pastoralism and considers how these different facets of pastoralist tenure (issues of the commons; free, prior and informed consent (FPIC); gender etc.) can be combined in a coherent approach to securing pastoral lands.

[3] http://www.fao.org/docrep/017/i3114e/i3114e.pdf

[4] http://www.fao.org/3/a-i3496e.pdf

The technical guide on *Improving the governance of pastoral lands* attempts to address the full range of tenure arrangements in pastoral rangelands in different regions of the world. The guide is developed in recognition of the fact that the economic and ecological importance of pastoralism is compromised by weakness in governance of tenure. It is designed to be relevant to a range of pastoralists including those in industrialized and developing countries, those who identify themselves as indigenous peoples and those who do not. In addition to communal tenure the guide recognizes that individual tenure can also be an important component of pastoral systems. The challenge of scale is discussed, including governance of tenure across international boundaries. Additionally, this technical guide considers tenure over resources that are not necessarily covered by "land" rights, including water, salt pans and trees, and how these rights interact with rights over land.

Governing tenure rights to commons

Commons are natural resources such as land, fisheries and forests that a community, group of communities or group of people owns, manages and/or uses collectively to support their food security and sustain their livelihoods and well-being. Collective tenure rights are crucial for millions of people worldwide. Poor, marginalized, vulnerable and landless people rely most on commons, as they represent a source of income as well as a safety net in times of hardship for them. Commons are of important cultural, social and spiritual value to many communities worldwide and provide essential environmental services at local and global levels. The recognition of collective tenure rights to commons is, hence, a cornerstone to achieving sustainable development and the realization of the right to food.

Governing tenure rights to commons supports the application of the Guidelines in practice by providing an understanding of commons, arguments for securing collective tenure and guidance for the responsible governance of commons. It provides strategic guidance relevant for collective tenure rights to commons across different natural resources and regions. The strategy guidelines are illustrated with cases from different countries across the globe which serve as sources of inspiration. The strategy guidelines are complemented by methodological guidelines for the process of local adaptation.

The technical guide on commons complements this technical guide on pastoral lands. Though pastoral lands include all types of tenure, in most countries commons form the dominant tenure arrangement. However, the specific management strategies of pastoralism, implying use on a large scale, seasonal occupation and mobility, bring added layers of complexity to securing pastoral commons.

Human rights framework, resilience and human well-being

The Guidelines seek to improve tenure governance through three inter-related and mutually-dependent objectives: (1) achieving food security and supporting the progressive realization of the right to adequate food; (2) improving social and development aspects, including poverty eradication, sustainable livelihoods, social stability, housing security, rural development; and (3) ensuring environmental protection and sustainable social and economic development (paragraph 1.1). To operationalize the Guidelines this technical guide takes a "big picture" approach that

considers the diversity of relationships and economic, social and political conditions that affect the realization of the objectives within pastoral communities. Based on the foundational values and key priorities and strategies in the Guidelines, this technical guide identifies three critical aspects that must underpin operationalization:

1. An overarching set of human rights commitments;
2. The interdependence of human and environmental well-being;
3. The strengthening of human capabilities (i.e. well-being) to enable pastoral communities to claim their rights, utilize opportunities within the public realm and make full contributions both economically and ecologically.

The overarching set of human rights commitments

Key elements of the human rights commitments set out in the Guidelines include:

1. Recognition of existing obligations under international law, including the Universal Declaration of Human Rights and other international human rights instruments;
2. Particular focus on the progressive realization of a right to food;
3. A set of general principles to guide priorities and actions (including strategies);
4. A set of implementing principles to ensure that these approaches are carried out and implemented in ways that are consistent with human rights.

Why is this significant?

These commitments acknowledge that responsible tenure governance must go beyond a "do no harm" approach to include positive rights and corresponding responsibilities and obligations for both state and non-state actors. In general, states have the following duties:

- Respecting rights means refraining from interfering with the pursuit or enjoyment of rights.
- Protecting rights means ensuring that third parties – including businesses and non-governmental organizations (NGOs) – do not interfere with the pursuit or enjoyment of rights.
- Fulfilling rights means creating enabling environments for the realization of rights.
- Governance arrangements, therefore, need to be consistent with human rights. The law must be consistent with these rights and the lived experience of people must meet these standards, or incremental steps must be taken to achieve these rights. This requires understanding and addressing the multiple and diverse factors affecting the implementation of law and governance practices, including, for example, social status (education, ethnicity, gender etc.) and the access that communities and individuals have to life-supporting resources. For pastoral communities this includes the social

differentiation within groups and within families, such as the different levels of access women have to livestock resources or their diverse roles in relation to use and management of natural resources. These different experiences demonstrate the importance of gender equity. Responding to this reality requires interventions that are consistent with existing human rights obligations, as elaborated in Section 2. These social and economic realities are discussed more fully in Section 1.

The capabilities of pastoral communities matter

The set of capabilities people have affects their ability to "live lives they value" (Sen, 1999); that is, to be in a position to make choices freely about the kinds of lives to which they aspire. Strengthening the capacity of pastoralists and other actors is recognized as a specific objective in paragraph 1.2.4 of the Guidelines. Strengthening the capabilities of pastoral communities to achieve the social and development objectives of the Guidelines — including poverty eradication, sustainable livelihoods, social stability, self-determination, rural development, as well as the environmental sustainability of the resources on which they depend — is a key focus of this technical guide. It is important to note that these aspirations have strong government commitment as reflected in the Sustainable Development Goals.

The Sustainable Development Goals and governance of pastoral tenure[5]

Many of the Sustainable Development Goals are relevant to strengthening governance of tenure in pastoral land, including the following:

Goal 1. End poverty in all its forms everywhere.

Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

Goal 3. Ensure healthy lives and promote well-being for all at all ages.

Goal 5. Achieve gender equality and empower all women and girls.

Goal 6. Ensure availability and sustainable management of water and sanitation for all.

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.

Goal 13. Take urgent action to combat climate change and its impacts.

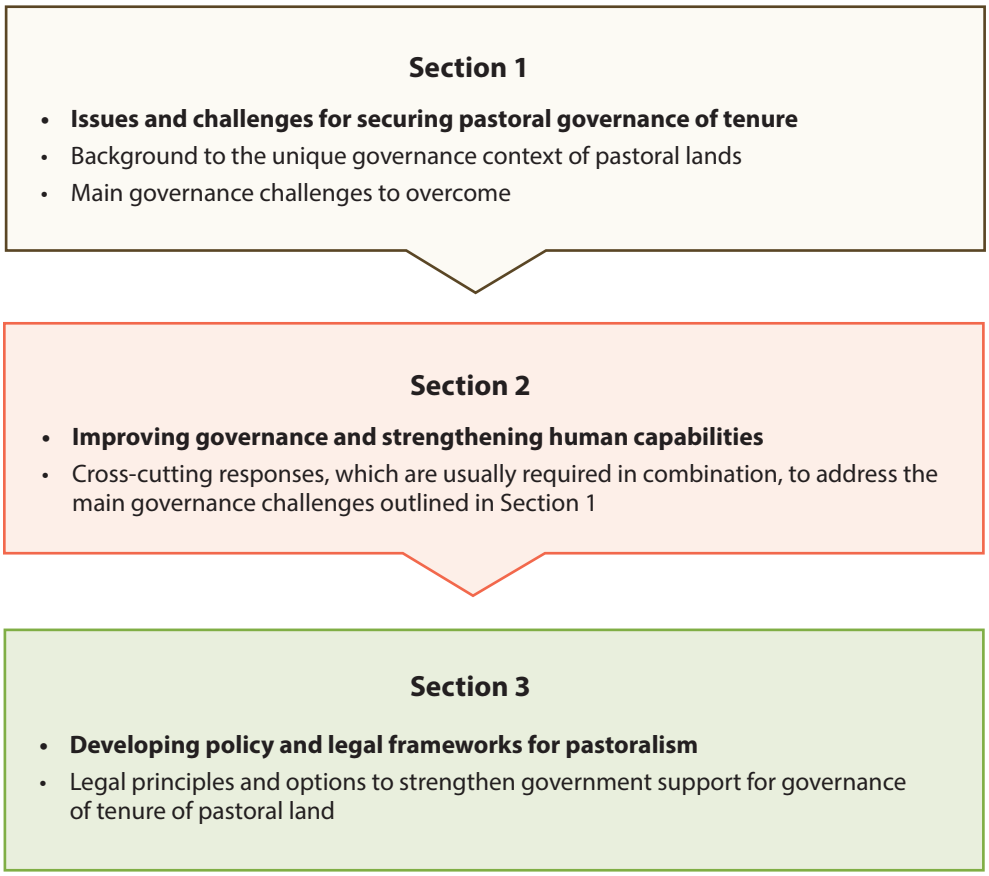
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

[5] See https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

Participation of pastoralists in defining solutions is important to ensure that strategies adopted improve their well-being. State responses to social vulnerabilities, such as isolated households lacking educational and health facilities, often occur through external development interventions to strengthen adaptive capabilities of people and institutions. However, external responses may also exacerbate the vulnerability of pastoralists; for example, by creating new kinds of competition for pastoral rangelands and their key resources. Flexibility and adaptive community-based management approaches are needed to ensure local choice is freely exercised. This guide consequently identifies implementation strategies that contribute to strengthening these capabilities (Herrera, Davies and Manzano Baena, 2014; Reid, Fernández-Giménez and Galvin, 2014).

FIGURE 1:
Outline of the technical guide on pastoral land



SECTION

1

Issues and challenges for securing pastoral governance of tenure

Section 1: Issues and challenges for securing pastoral governance of tenure

An overview of pastoralism as a land-use system

"Pastoralism is defined as extensive livestock production in the rangelands and it is practised worldwide as a response to unique ecological challenges." The ways different societies have responded to those challenges have much in common, and equally create some common challenges in terms of strengthening governance of tenure. Pastoralism is a system of managing livestock and land for economic benefit and ecological sustainability, and a particular tool is the management of herd mobility, often over vast distances. Pastoralists are the people behind the system, managing and protecting the land, and profiting from livestock. Their culture is inseparable from their herding strategies and is central to the way they govern their natural resources.

Pastoralism is, to a large extent, an adaptation to ecological and climate variability, although pastoralists also face other sources of unpredictability, particularly from markets and political contexts. Rangeland climate has strong seasonal variability (e.g. extreme cold or dry seasons) that limit resource access or availability, but rangelands also show extreme interannual variability. In many drylands, for example, precipitation can vary by considerably more than 50 percent of the mean in normal years, and in extreme years may be several times the mean or may fail completely. Natural resources mirror this variability and pastoralists manage a matrix of resources of different value, different accessibility and different productive use. This can include, for example, several distinct grassland zones, wetlands and oases, riparian areas, woodlands and forest patches, salt pans and many more. Pastoralists use a wide array of market and management tools to balance the variability in their business, attempting to track these many factors.

There are an estimated 500 million pastoralists worldwide, the majority in developing countries where they face many development and poverty challenges (McGahey *et al.*, 2014). However, pastoralists are also widespread in most industrialized countries: in Australia, China, Europe, the United States of America and other countries. Pastoralists usually make their living through a complex set of activities, raising livestock not only for domestic use (dairy, fibre, manure, meat, hides), but also for market as a way to obtain goods they themselves cannot cultivate or manufacture.

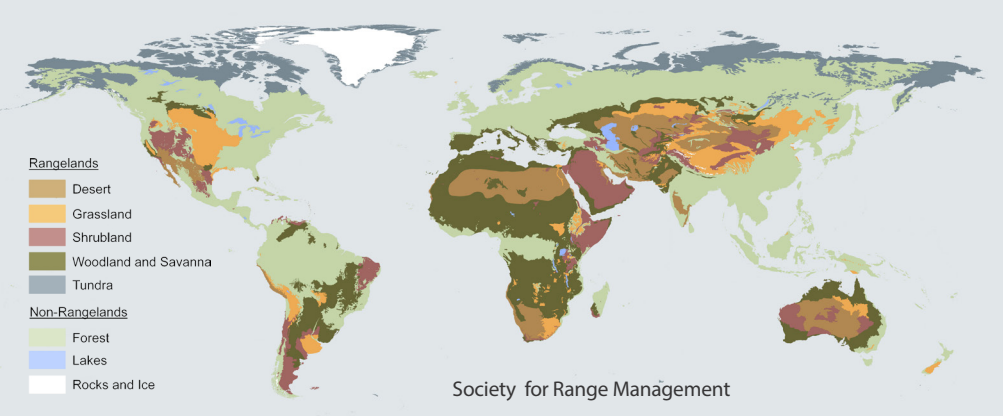
Pastoral livestock use a variety of feed sources including pastures, harvested and woody crops, fallows, stubbles, mown prairies, fruits, forests, trees, heathlands and even roadsides and urban margins. This requires adequate access rights and often presents unique challenges to upholding those rights. Moreover, pastoralism depends on a double imperative: extensive land use and freedom of movement. This imperative determines the pastoralist conception of land rights. Through their mode of life, pastoralists gain access to dispersed, ecologically specialized and seasonally-varied pastures and water, which provide a margin of safety against erratic vegetation growth, seasonal disease vectors and other challenges.

The uniqueness of pastoral lands

The land occupied by pastoralists is often referred to as the rangelands. Rangeland ecosystems have largely evolved in places of climate extremes and high climatic uncertainty. They are challenging and unpredictable environments in which nature and society have evolved, leading to unique biological and cultural diversity. Rangeland ecosystems provide many goods and services to humanity, including provision of food and fibre, regulation of water supply and sequestration of carbon.

Rangelands are sometimes defined in ecological terms as "land on which the indigenous vegetation (climax or sub-climax) is predominantly grasses, grass-like plants, forbs or shrubs that are grazed or have the potential to be grazed, and which is used as a natural ecosystem for the production of grazing livestock and wildlife" (Allen *et al.*, 2011). Rangelands can include natural grasslands like prairies or steppes, savannahs, wetlands, drylands and deserts, tundra and certain low forbs and shrublands like chaparral or Mediterranean maquis. Rangelands are often found in drylands and mountains where plant growth is restricted by low rainfall, extreme cold, high altitude, steep slopes or other factors. Figure 2 illustrates the global distribution of rangelands according to the Society of Range Management, based on the following land categories: desert; grassland; shrubland; woodland and savannah; and tundra. However, rangelands are also social landscapes in which indigenous cultures influence ecosystems and vice versa. As indicated by Figure 2, the rangelands account for roughly half of all land (51 percent) and this provides a crude approximation of the distribution and possible extent of pastoral lands.

FIGURE 2.
Rangelands of the world



The benefits to humanity from the world's rangelands are under threat in many countries due to land degradation. Degradation of the rangelands is a major global concern, although land degradation processes in the rangelands are poorly understood. This lack of understanding has contributed to poorly-informed interventions and policies that have sometimes exacerbated degradation. Rangelands are subject to conversion to crop cultivation, over-exploitation of livestock, over-extraction of woody biomass and increased aridity due to both climate change and to extraction of water. These types of degradation are driven by population growth, growing demand for food and other products, changes in management and technologies, and by a range of policy and institutional factors. Policy failures can, in turn, be attributed to a combination of weak resource rights and governance, weak influencing capacity of rangeland stakeholders, and insufficient or inaccurate data, information and knowledge (Mortimore *et al.*, 2009; Davies *et al.*, 2015).

Policy failures can also be attributed to misunderstanding of pastoralism, or even to deliberate portrayal of pastoralism as backwards. Herd mobility is crucial for sustainable management of rangelands, yet mobility has frequently been condemned as archaic. Flexible and opportunistic stocking practices are a vital risk management tool, yet have also been labelled as out of date and even irrational. Though infrequent, use of refuges during harsh years is essential for survival, yet pastoralists have been depicted as anarchists for demanding access to them. Many rangelands depend on wildfire for their maintenance, yet pastoralists are criticized when they use fire as a management tool to renew pastures and to combat pests (IUCN, 2011a).

Evidence shows that the value of pastoralism and rangelands in most countries is greatly underestimated, and conversion of rangeland resources to other uses can have greater costs than benefits when measured across the entire system (Davies and Hatfield, 2007). Yet despite evidence that converting rangeland to cropland is one of the most significant drivers of land degradation, overwhelmingly, many countries still focus attention on crop farming to the detriment of the health of rangelands. However, it should also be noted that in many countries the evidence for rangeland degradation is weak, and the diagnosis of degradation, usually attributed to overgrazing, may be politically motivated and has been used to justify confiscation of pastoral land. At the same time, it has been observed that where mobility and customary institutions for local governance remain effective, rangeland degradation is scarce (Niamir-Fuller, 1999).

Pastoral management of land and water

Fodder and water are the most significant resources for pastoral livestock management, but a wide range of other assets are also used and claimed by pastoralists. Pastoralists consume — as food or medicine — wild fruits, seeds, tubers, barks, gums and leaves. They also use many species of tree for fodder, shade, fencing, construction and for fabricating household furniture and tools. Due to the predominant reliance on lands with low biological productivity and high variability, pastoralists require access to vast areas of land to ensure they have resources for their herds. Parcelling up the land for

Governance of trees in pasture lands

Many pastoral communities have rich knowledge of the use and value of different tree species, reflecting the high importance of trees in the pastoral economy and culture. Many pastoral societies have regulations over the harvesting of trees with strict prohibitions against the felling of some species. For example, throughout eastern Africa the practice of lopping branches and pollarding trees is common, both to harvest wood sustainably and also to improve the provision of shade and fruit. The Turkana of North West Kenya pollard trees such as *Balanites aegyptiaca* (the desert date) and *Dobera glabra,* for example, to promote low branching and to improve access for livestock and humans. The Turkana manage their trees under a tenure system called *ekwar* which is associated particularly with ownership of *Acacia tortilis* that are found in riparian areas and provide seed pods that are a critical dry season fodder resource (IUCN, 2007). Similarly, the Mediterranean agrosilvopastoral systems combine pastoralism, arboriculture and small cropping to create complex management systems. In those systems, rangeland and livestock cycles are synchronized, using trees as resource pools to supplement the fodder needs of livestock in times of scarcity (e.g. browsing, fruits or fallen leaves) (Barrow, 1990; Moreno and Pulido, 2009).

individual use does not generally work as individual plots would have periodic gluts interspersed with periods of deficiency. When pastures are not efficiently grazed by sufficient livestock it can lead to a form of degradation: undergrazing is as great a threat as overgrazing and this degradation can be harder to reverse. Using the market to adjust livestock numbers to climatic variability is seldom efficient and pastoralists, instead, use mobility to optimize their use of resources across the landscape and to avoid degradation (IUCN, 2011a).

There are a few examples around the world of individuals controlling sufficiently large areas of land privately to allow for effective risk management (e.g. some American ranchers and Australian sheep producers), but the overwhelming majority of pastoralists rely on communal rangelands. Many pastoralists do own or control individual resources, including parcels of land, trees and water resources. However, the management and use of these resources has to be balanced with management and use of the communal lands within which they are situated. Often individuals (or households) have exclusive rights to manage such resources but they customarily practise sharing and reciprocity, thereby safeguarding their own access to resources that are similarly controlled by others. In some European pastoral systems, access to communal (often state-owned) rangelands is dictated by private tenancy of adjacent pastures. However, the rules for stocking the communal lands (both timing and numbers) directly impact on the management of the privately-held land (Herrera, Davies and Manzano Baena, 2014).

Pastoralists capitalize on the diversity of rangeland ecosystems by using indigenous livestock breeds that are adapted to both the rangeland environment and to the production system. Many pastoralists also keep a variety of livestock species to harness a wider range of resources: for example, combining cattle or sheep for pastures with camels or goats for shrublands. This combination allows pastoralists to use a wider range of ecological niches and also buffers production against uncertainty.

Access to water plays a fundamental role in managing rangelands, particularly in the seasons that pasture is dry. Water is irregularly distributed over the landscape and this can dictate livestock management. Although pastoralism can operate effectively in well-watered environments, in many pastoral communities management systems are organized around the access to variable grazing lands and their limited water supplies. The close relationship between water and fodder availability is the primary basis for livestock mobility. Determining who will have access to water resources and when, is a key tenure issue for pastoralists. Regulations over timing of access and number of animals are based on clearly defined roles, responsibilities, rights and priorities, which require sophisticated management institutions.

Governance of water resources in East African rangelands

In the Boran Areas of Kenya and Ethiopia, construction and maintenance of surface catchments are usually undertaken cooperatively. Use of these resources is carefully monitored and managed to minimize overuse and damage. When water levels are observed to be dropping too fast, precedence is usually given to use by the closest households. Sometimes adult cattle are excluded in favour of calves, but when necessary, even calves will be moved to other ponds or wells. On the other hand, deep wells in Borana are vital dry season resources and often have more restrictive rights, since considerable labour is needed for construction and for extraction of water. The Abba Ella, or 'father of the well', instigates the digging or repair of a well. This secures access priority and decision-making privileges, although he is closely observed by clan elders who make sure that decisions are made according to Borana customs. The Abba Ella recruits assistance from within his own clan and from other clans and lineages for the construction work. Contributing clans thereby also earn access rights to the well, although Borana who have not contributed to well construction may also be granted temporary access rights in times of need depending on the amount of water available and the rate of water flow (Layne Coppock, 1994).

The territories of most pastoral communities are closely associated with their permanent water points and, where pastoralists do not traditionally "own" land, often their ownership of water resources gives them de facto control. There can be important differences between seasonal rangelands such as wet season grazing areas or summer pastures, which are accessed through seasonal herd movements, and dry season grazing areas or winter pastures, which, in most cases, are used from more stationary sites. The latter often include more strategic resources like permanent wells which require a greater investment for installation and maintenance and which are usually subject to narrower use rights.

Mobility at the heart of pastoral management systems and culture

Mobile pastoralism is highly suited to the management of rangelands and provides both economic and environmental benefits. Mobility contributes to ensuring access to fodder, water supplies and shelter, to avoiding external problems like drought, disease and conflict, and to selling products in volatile markets. It is a flexible, adaptive and appropriate strategy to manage variable environments. Livestock mobility is not an end in itself, but a means for effective rangeland management and is a key tool in preventing and managing risks. However, mobility has a deep social and cultural influence among pastoralist communities and is often central to their identity and relationships. Pastoralists connect between land where aridity or altitude limit the use options with more humid or lower altitude areas that may be shared by many other users.

Long-range transhumance and the challenge of governing pasturelands at scale

Pastoral mobility can be short to long range depending on the context. Pastoralists in the Sahel may move hundreds (Fulani cattle herders) or even thousands of kilometres annually (Tuareg camel pastoralists). The Wodaabe of the Niger make clear that mobility is a cultural asset and the herder who becomes sedentary is considered a good for nothing layabout. The herder is viewed as unfit to be a member of the herder community and during times of drought or disease such a herder would not be supported by others (Schareika, 2003). Spanish transhumance can cover distances of between 20 km (seasonal movements to high altitude mountain pastures) and 500 km (transhumance between the northern mountains and the southwestern plains) while the Qashqai of Iran make an annual migration of 500 km or more.

Pastoral mobility is influenced by the condition of essential resources and infrastructure that are needed for movement, including water points, livestock tracks, pastures and campsites. Degradation or loss of these facilities can greatly compromise mobility. Pastoralist land tenure systems need to secure such natural and artificial infrastructure while maintaining flexibility in their use. This tension between security and flexibility imposed by mobile patterns makes the allocation of land rights a complex task. Delimitation, mapping and legal protection of pastoral infrastructure may often be necessary, but it also may affect their operation. Sometimes, fixing rights or permanently defining some structures like livestock tracks can lead to the disappearance of others, reducing flexibility and interfering with pastoralist movements. Mobility is threatened by numerous factors, including access to social, educational or health services, or to security and legal services. Securing governance for effective tenure of pastoral lands sometimes has to address a wide range of interrelated challenges if it is to achieve success.

Risk management and pastoral tenure

Risk management is deeply rooted in the pastoralist way of life and explains many of the unique features of the system. These features are often seen as barriers to strengthening governance of tenure. Restrictions to mobility and flexibility greatly limit pastoralist access to resources and their responses to risk. Risk management strategies may have implications for governance, including perceptions of rights over livestock and their products. A common insurance strategy is to invest in networks with distant communities through stock sharing and loans, establishing debts that can be drawn down after crises. However, this creates a sense of shared rights over livestock that can limit how they are managed: for example, who must be consulted before livestock are slaughtered or sold? Care must be taken to ensure that securing tenure and strengthening governance does not inadvertently undermine these capacities to manage risk.

Communal resource pooling for risk management

Nukhurlul is a Mongolian risk-pooling strategy that fulfils, at least partially, most of the requirements for "functioning and viable institutions for coordination of activities across households" in support of communal pooling as an adaptive strategy (Upton, 2009; Agrawal, 2008). Communal pooling activities may, to some extent, mirror traditional strategies, but they also offer a more formalized and extensive means of cooperation, sustained by arrangements closely related to land tenure. The behaviour of reciprocity is central to Mongolian herding culture and supports strategies such as herd movements *(otor)* during severe winters *(dzud)* and drought. The practice of reciprocity, such as sharing pastures, can be essential to the survival of those who are moving, but they can also increase exposure and overall vulnerability of communities hosting incoming herds.

Emerging risks to pastoral tenure

Pastoralists maintain a complex web of rights over different resources within a landscape, sometimes asserting these rights infrequently. As a result, losing land and other rights is a common risk for pastoralists and communally managed lands without title are an easy target for land grabs and acquisitions. Land can be taken from pastoralists for many purposes, including cultivation on different scales, mining concessions, hunting reserves and for nature conservation. Pastoralists can also annex land from other pastoralists through the process of privatization and fencing, with harmful consequences for the wider pastoral landscape and economy (IUCN, 2011b).

Pastoralists are among the people who will be most affected by climate change, and this has major implications for pastoral tenure. Climate change will exacerbate the variability inherent in their environment, bringing more powerful events like drought, flood or blizzard. The absolute extent of the rangelands will also change as weather patterns change, with some pastoral lands becoming drier and, therefore, perhaps more challenging to access. Meanwhile, other pastoral lands may get wetter and could come under greater pressure to convert to other uses (Davies and Nori, 2008).

Pastoralists have historically been the most adaptable of people. Pastoralism may have emerged in some parts of the world as a direct adaptation to historical periods of climate change, yet the adaptive capacity of pastoralists is being eroded in parallel with their increasing need to adapt. Many pastoralists have limited access to government services and have low literacy rates, poor access to health care and weak security, which compound the decline in adaptive capacity and undermine resilience. Existing adaptation strategies may be strengthened to reduce risk in the medium term, but addressing fundamental development needs may be essential to enable pastoralists to adapt to climate change in the long term. Rather than costly investments in technical solutions, strengthening pastoralists' rights so they can better manage climate variability may be a better alternative (Davies and Nori, 2008).

Features of pastoralist systems that determine governance arrangements

Since pastoralists typically use land and other resources collectively, the narrowest sense of ownership (i.e. the right to control a resource in a complete and exclusive way) fits poorly with their traditions and livelihoods. Pastoral property rights are better understood as overlapping rights, often with rights to one resource nested within a different set of rights over another resource, operating at multiple spatial scales with different authorities and functions.

Pastoralists' rights need recognition in all the territories they use, even if they belong to different regions or countries or are ruled by different systems of tenure. This may include periodic usufruct rights in land that are considered outside the rangelands, such as some drought reserves. Despite this apparent difficulty, historically, land tenure systems have proven adequate for sustainable management of rangelands and their resources.

The role of customary pastoral tenure systems

Customary land tenure systems play a major role in rangeland governance, but their function remains poorly recognized and rarely supported by land policies. Government policy has often been misguided due to the usually erroneous assumption of "the tragedy of the commons" (Hardin, 1968), in which completely free access to a shared resource (rangelands in this case) leads to overexploitation and eventually to its complete depletion. More recent work on common property regimes clearly shows not only how systems of collective management work, but why they are both necessary and efficient (Ostrom, Gardner and Walker, 1994). Traditional community-based systems, even those with quite flexible access rights, have demonstrated their sustainability and the effectiveness of their regulatory institutions. By assuming the absence of control, many governments have invoked policies to nationalize land, which has led to the weakening or collapse of local common property regimes, creating a "tragedy of the commons" where none formerly existed.

Defending customary governance in Bolivia

While many governments have attempted to dissolve collective land rights systems, there are also examples of pastoral communities resisting privatization and trying to maintain collective tenure systems. The struggle of the Aymara pastoralists in Bolivia against the agricultural reform that intended to distribute individual ownership provides an example. Land tenure, rules of entry to social groupings and collaborative practices were at stake in the conflict. The final agreement between the Aymara and the state allowed a subdivision of large areas of communal land into smaller plots held collectively by groups of families while maintaining basic customary laws. This not only helped the Aymara to preserve their culture but also enabled them to maintain practices of communal natural resource management that were important for their livelihoods (Global Drylands Imperative, 2003).

Customary systems are not static: they continuously adapt to changes in economic, social, political, cultural or environmental conditions. Bringing customary land tenure systems under the realm of statutory law may offer new opportunities and benefits for pastoralists, but many initiatives have failed in this regard, concentrating wealth, privileges and decision-making powers in the hands of the most powerful individuals in the group (Dressler *et al.*, 2010). Reforms intended to secure rights for poor and marginalized people need to have enough flexibility to accommodate the complexity of rights and practices at multiple levels. This includes addressing gender inequities found in many traditional pastoralist institutions.

Customary pastoral tenure systems are found throughout the world's rangelands, operating with different degrees of effectiveness. They are not confined to developing countries but can also be seen in many industrial economies, such as rural commons in Europe (e.g. Romania, Spain, Italy and Switzerland). Many efforts have been made to revive and formalize traditional tenure systems in order to capture their efficiency in rangeland resource management. Customary institutions can provide the rules and regulations through which local knowledge is used to manage the rangelands. Customary institutions may not always deal effectively with statutory law and with government institutions and, in some cases, hybrid institutions or intermediary institutions are created to act as an interface (Herrera, Davies and Manzano Baena, 2014).

Reviving Al Hima: local governance in West Asia

Rangelands in Jordan and Lebanon are characterized by traditional land tenure systems and grazing rights associated with Bedouin tribal institutions. Hima is the governance system of an area protected by local authority for public interest and natural habitat conservation. It was developed in the Arabian Peninsula even before Islam. However, the Islamic influence changed the ancient private Hima system, which belonged to selected powerful individuals, into a legal system that protected natural areas for more communal benefits. The Hima system allows rangeland protection during the vegetation regeneration season and has indirectly controlled carrying capacity of grazing parcels by specifying the size of herds.

The elimination of these tenure systems to convert rangelands into state-owned lands led to their degradation. Efforts by NGOs to revive Hima in Jordan have revolved around developing a multistakeholder process of dialogue and participatory planning, and mediating between the community and government to allocate management rights to the community. The community has implemented management plans based on short duration grazing and periods of rest to allow natural regeneration of pastures. The rapid revival of rangeland vegetation has generated respect from the government and a rapid interest in scaling up community management of rangelands throughout the country, under a revised national rangelands strategy (Haddad, 2014).

Overlapping rights for variable resources

Pastoralists require secure access to specific resources at different times of the year, including grazing lands, wells, salt pans, trees and others, and these rights are usually ruled by principles of flexibility and reciprocity. Many pastoral societies require that territorial boundaries remain uncertain — often referred to as fuzzy — with continual negotiation over access in which individuals or user groups re-evaluate their share of, and level of control over, strategic resources. This can create tension with sedentary communities with whom pastoralists share resource rights, particularly where statutory law gives priority to settled

populations and to tenure claims based on cultivation and permanent (year-round) use.

A frequent pitfall of land reform is the rigid and arbitrary definition of the boundaries of a community while ignoring the claims of neighbouring groups. When property rights are rigidly formalized, overlapping interests are neglected through the establishment of exclusive forms of ownership of resources. As a landscape is progressively surveyed, demarcated and allocated, pastoralists' mobility may be obstructed and their practices of repeatedly renegotiating access rights to resources become less effective, essentially depriving them of those rights.

Nested and flexible pastoral rights: examples from Mali and Uganda

The inland delta of the Niger River in Mali provides a valuable insight into how overlapping and nested rights work. The area hosts particularly valuable natural resources on a vast scale, which have created complex systems of overlapping rights and competing resource uses. A piece of land may support pastoralism, farming and fishing, practised by resident and non-resident herders, farmers, agropastoralists and others, who may succeed one another over different seasons. Competing claims are governed through arrangements like the Dina system. The effectiveness of such customary systems has been well-documented, along with their capacity to adapt over time. The systems combine interethnic nested and flexible rights, along with the internal nested and flexible rights to specific areas controlled by "masters of grazing" embedded in a matrix of negotiating and sharing (Cotula and Cissé, 2006).

A typology of nested rights is reflected in the case of Ugandan Karimojong pastoralists. The boundaries of customary pastoral territory claimed by the tribe as its home base are relatively fixed and identifiable by landscape features. Each clan, subclan or fraction has an annual grazing area through which it moves seasonally, that usually extends outside the home base. The geographical boundary of this grazing area is extremely fluid from year to year because of variability in rainfall. In many sites (particularly areas of relatively high value), each annual grazing area is intended to be self-sufficient. However, in times of need, access by other clans or factions is agreed through negotiation (Niamir-Fuller, 1999).

Mechanisms regulating access to resources must be flexible enough to allow the necessary negotiations and arrangements to accommodate different and often overlapping rights. These negotiations are dynamic and subject to change under agreement from those involved, generating mutable scenarios of allocated rights. As Figure 3 illustrates, there may be a hierarchy of rights and responsibilities from the household level, or domestic unit, right up to the level of the ethnic group as a whole, and the specifics differ from one pastoral society to another. It should be noted that such hierarchies of rights are under constant pressure and in the example cited there are also a growing number of exceptions: for example, due to widespread privatization of land in Kenyan Maasailand or state alienation of grazing lands in the United Republic of Tanzania.

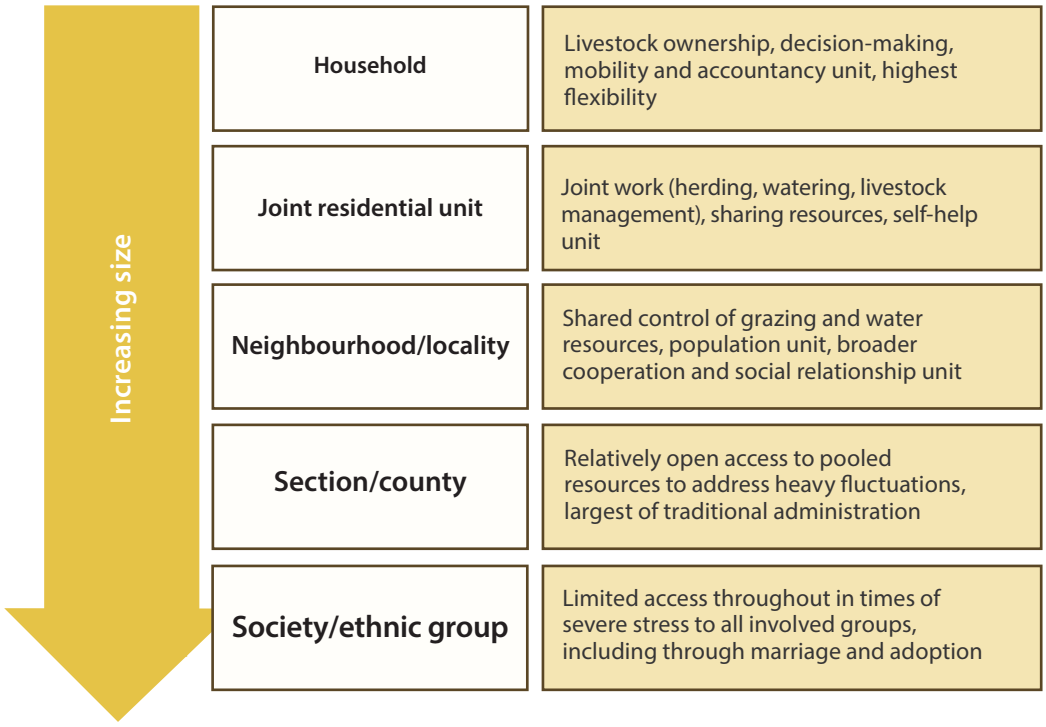


FIGURE 3:
Hierarchy of nested rights in a Maasai pastoral society in Kenya/Tanzania
(Spear and Waller, 1993)

This complexity transforms the concept of communal property into a more sophisticated flexibly-defined tenure; the so-called 'fuzzy access rights' (FAR). FARs dominate tenure arrangements in uncertain environments, and they are implemented through culture-specific mechanisms based on formal negotiations and informal arrangements. The distinguishing characteristics of FAR include complex rights over land and resources. Those rights can be defined in multiple dimensions: overlapping rights to different resources in the same land (e.g. different rights for fodder, fruits, fuel), partial rights (e.g. a right of herd passing but not grazing a patch of land), asymmetric rights (e.g. the owner cannot deny access to herds but he or she is entitled to a compensation), flexible boundaries (e.g. livestock tracks that vary annually), time-bound rights (e.g. definition of grazing and resting periods for communal rangelands), and mutual trust and reciprocity.

This complexity, in addition to the coexistence of customary and statutory regimes (legal pluralism), creates a wide set of overlapping and sometimes contradictory regulations: local cultural norms, colonially imposed rules, formal and informal institutions, customary, statutory and modern legislative frameworks, and religion-related influences. Consequently, rights need to be codified in a manner that does not interfere with the flexibility and adaptability inherent to pastoral systems, or at the very least, codification should ensure enough space for negotiation and agreement over resources.

Gender issues

Women pastoralists perform many of the essential functions of pastoral society and are the de facto rights holders over many natural resources; for example, controlling the use of certain pastures and trees closer to the homestead. In places where men are increasingly leaving the rural economy in search of employment, women make most of the major decisions over rangeland resources. Yet men often retain power over decision-making and can exercise control when it suits them; for example, over questions of selling land or livestock. Inheritance rules typically also neglect the rights of women. As a result, pastoral women need to continuously negotiate as secondary claimants through male relatives and their ability to manage and develop livestock activities can be limited.

The relatively weak position of women within pastoral society becomes most evident when changes in land rights take place, particularly through efforts to secure land rights for pastoral society at large. Often the rights that women pastoralists enjoy under customary rules are lost through the process of formalizing ownership rights. As pastoralists become more sedentary, rights to land tend to become more privatized, impacting the access and rights to land of both men and women. The process of privatization does not offer everybody the same opportunities to acquire rights to land and to participate in the land market system.

Upholding women's rights over pastoral land

Women's participation should be improved in land tenure processes and decisions, contributing to their empowerment and a better recognition of their rights. In Bisanda Cultural Village in India, for example, pastoral women tend to group in clans and any wrongdoing against women is considered as an offense against the clan, triggering some defence mechanisms. Community-based management applied in the Hima system in Lebanon includes awareness-raising activities on land law legislation and recognition of the roles of women and their land rights. In the United Republic of Tanzania, the Pastoral Women's Council (PWC) is facilitating the access of Maasai women and children to education, health, social services and economic empowerment. Women's voices have begun to be heard in community fora, where discussions on land and rights issues are held before proposals are submitted to governmental institutions (Flintan, 2008; Sattout, 2014).

While customary institutions have much to offer in terms of governing the rangelands at scale, they frequently have deeply entrenched gender inequities that need to be addressed during the process of institutional revival or reform. Reforming customary institutions is a highly sensitive issue that requires a strong commitment from members of the community and leadership by pastoral women as well as men, since land rights shape power relationships within and among the different groups involved. Although there are differences between pastoral societies and some may be more "democratic" or "egalitarian" than others, social stratification as well as ethnic and gender differentiations often represent a main feature of the societal hierarchy. The two biggest pastoralist groups in sub-Saharan Africa, the Peul/Fulani and the Tuareg/Kel Tamasheq, are highly stratified with a gulf between elites and lower castes. Even the allegedly egalitarian Maasai are gerontocratic, with the young men subservient to the old, and women to both.

Changing power relationships in pastoral communities

Power relationships in pastoral societies are in a constant state of flux, an attribute closely related to mobility and flexibility. Alongside this inherent dynamism, significant widespread changes in power relations have taken place in recent years influenced by many factors. Among these factors is the growing power of the state and its encroachment on governance of pastoral lands and also the powerful influence exerted by development agencies and their projects. Factors contributing to shifting power relations include:

- **State interventions:** enforced settlement programmes; inequitable laws or application of law.
- **Elite capture of pastoral power:** educated elites gaining power over customary institutions; absentee herd owners.
- **Change in property regimes:** delimitation of pastoral zones; allocation of private individual or group rights; land grabbing/reallocation.
- **Development priorities:** loss of land, water and other resources to crop farming, hydroelectricity schemes, urbanization, mining etc.; closure or blocking of migration routes; loss of land to conservation projects and protected areas.
- **Change in territorial identities:** land claims over forced interventions on land (e.g. land clearance); aggressive disputes over land.
- **Armed conflicts:** conflict between nomads and farmers and among nomadic groups; border conflicts in pastoral areas; disruption of the pastoral economy; degradation of shared institutions of cooperation and conflict resolution.

The emergence of absentee herd owners in pastoral societies has led to various forms of livestock tenancy arrangement, with impoverished pastoralists increasingly contracted by wealthy elites. In some cases, these absentee herd owners disrupt traditional herding strategies; for example, demanding that herds are moved according to the dictates of the market rather than the seasonal availability of resources, thereby contributing to rangeland degradation. In North Africa, for example, absentee herd owners insist that herds remain near market centres where they can be quickly traded, leading to widespread degradation in those areas and underutilization of distant rangelands (Davies and Hatfield, 2007). On the other hand, some countries with absentee herd owners, such as Mongolia, show few associated environmental impacts and mutually beneficial relationships exist between absentee herd owners and pastoralists (e.g. access to transportation and labour that improves access to remote pastures as well as connectivity to markets). However, absentee herd owners are an important issue for pastoral tenure, as they usually have many more rights and stronger networks of influence than the pastoralists themselves.

FIGURE 4:
Defining characteristics of pastoral management and governance


Management adaptations of pastoralism
Natural fodder as main resource input
Use of complementary resources: trees, crop residues etc.
Locally-adapted breeds and species
Variable herd sizes determined by resource availability, market conditions and risk management
Diversity of production: multiple species and multiple products
Seasonal and opportunistic marketing of livestock products and live animals
Herd mobility to access resources and opportunities and to avoid risks and threats
Synchronizing marketing and mobility with climate and ecological variability
Risk management including social capital, resource pooling, fodder reserves etc.
Governance adaptations of pastoralists
Specific institutions governing mobility
Overlapping tenure, "fuzzy" rights, fluid boundaries, flexibility, and continual negotiation
Seasonal and inter-annual variability of rights and periodic use of strategic resources
Complex layers of rights over land, water, trees and other natural resources
Tenure based on customary institutions in coexistence with statutory systems
Governance based on relationships, kinship, communal pooling and sharing, legal pluralism
Communal land rights, including shared ownership and State-owned lands, with limited use of private land

Benefits of effective governance and secure tenure

Secure and flexible access to land and resources is crucial for the economic, social and environmental benefits from rangelands managed by pastoralists. Recognition of the multiple benefits of pastoralism is behind the growing number of initiatives worldwide to strengthen tenure arrangements. This is the case in North Australia, for example, where land and water tenure changes are fostering more diverse uses within tenure niches in a clear but flexible rights framework (Commonwealth Scientific and Industrial Research Organisation (CSIRO), 2013). Expected outcomes for these arrangements include the economic empowerment of indigenous communities, diversification and growth of livestock industries, and further development of conservation and ecosystem service markets (e.g. carbon and biodiversity).

Economic and social benefits

Pastoralism provides goods and services that not only support the livelihoods of millions of pastoralists, but which are valued far beyond the rangelands. This includes production of food, fibre, hides and manure as well as natural products from sustainably managed land such as fuel, fruits and medicinal plants. There is a multiple and extensive set of values associated with pastoralism, some of which are tangible and others of which are not; some that can be measured and many that cannot. They also include the many cultural values of pastoralism both to pastoralists and to the wider society. Two broad categories of value are found:

1. Direct values that include products such as milk, meat, fibre and hides as well as less easily measured values such as employment, transport or social insurance;
2. Indirect values such as inputs into agriculture (manure, traction, transport) and complementary products such as medicinal and cosmetic plant products, honey and wildlife tourism. These indirect values could also include less tangible values like risk management or protection of ecosystem services.

Food production is vital for most pastoralists, although a few pastoralists derive their primary income from fibre or from manure. Food is produced for the market and although many pastoralists also rely on livestock for a large part of their subsistence, the vast majority supplement their diet with purchased grain, vegetables and other goods. The result is that pastoral goods contribute to national and even global food markets, providing high-value livestock products to rapidly growing and increasingly affluent urban populations. Development efforts in Africa in the 1970s and 1980s were invested in the belief that pastoralism should produce single products (e.g. beef) for export markets, where possible based on sedentary management using imported breeds. Later research has shown that multiple species, multiple products and large-scale mobility in pastoral systems are significantly more productive, sustainable and reliable (Scoones, 1995).

Past efforts to transform the pastoral sector have contributed to poverty, land degradation and weakening of tenure and governance. Strengthening access rights to land and resources, on the other hand, can help to overcome these setbacks and is essential to improve pastoral food security and sustainable development. However, governments often lack data on the contribution of pastoralism to national economies because mobile pastoralists are poorly visible to official statistics, or because such data are gathered in the marketplace and governments are not adequately investing in appropriate markets (Randall, 2015; IUCN, 2008a).

There are also intrinsic benefits to strengthening pastoral tenure. Stronger tenure can help to consolidate pastoralist identity and promote respect and awareness, inside and outside pastoral communities. It can contribute to pastoralism being perceived as a desirable livelihood, which can encourage the return of educated youths with new ideas and resources in countries where depopulation is a major threat to pastoralism such as in Europe. The social networks and institutions that sustain land tenure systems can also provide a starting point for other initiatives, including land planning, health care, educational projects or sustainable development schemes. The existence of functional participatory groups can make it easier for governments and NGOs to implement and monitor the success of new initiatives, and will certainly reinforce the sense of community and mutual help.

Value of ecosystem restoration in Jordanian rangelands

An initiative to restore governance of Bedouin rangelands in the Zarqa Basin of Jordan has led to some remarkable outcomes, measured in terms of ecosystem services. The low-cost approach to restoring rights, through multistakeholder dialogue and participatory planning, generated several environmental and economic benefits. Based on the benefits from small-scale restoration, an assessment was carried out to evaluate the cost and benefit of scaling up restoration. Large-scale adoption of improved governance on 100 000 hectares of degraded rangelands in the Zarqa Basin, through revival of the locally-known and respected Hima system, could deliver between 203 and 408 million US$ worth of net benefits to Jordanian society over a 25 year period. This includes up to US$34.6 million in value of avoided fodder purchase, US$369 million in present value of additional groundwater infiltration and US$14.7 million in present value benefit of avoided reservoir sedimentation. Most notable is that the benefit of groundwater recharge dwarfed the value of improved fodder provision by ten times (Westerberg and Myint, 2014).

Environmental benefits from improved or secure governance of tenure

Sustainably managed rangelands provide many high-value environmental services that are enjoyed not only by pastoralists but by neighbouring communities, national populations and even global society at large. Local environmental benefits can include maintaining productive rangeland biodiversity, such as pastures and shrubs, and protecting land from degradation. Neighbouring communities benefit when pastoralism protects watersheds from land-use change, improving infiltration of rainwater, boosting the recharge of aquifers, and reducing the risk of downstream flooding. The global population benefits when pastoralism captures and stores large amounts of carbon in rangeland soils, contributing to mitigation of climate change (McGahey *et al.*, 2014). The biodiversity on which pastoralism depends is also valued by others and pastoralists have many opportunities to capture some of these benefit, including through tourism and through public payments. Pastoralists in several

Conservation of biodiversity through effective pasture governance in Morocco

Agdals are natural areas that are conserved by Moroccan pastoral communities, typically as a pasture reserve for their livestock. Seasonal prohibition forbids access to these resources to allow them a rest period during their most sensitive period of growth (for example, during spring in the case of high mountain pastures). Decisions over establishing and enforcing rules and regulations over Agdals are the responsibility of the tribal assembly (Jmaa). These community conserved areas are found in large numbers in the Atlas mountains of Morocco.

The Agdal regulations found in the High Atlas have led to higher forest vegetation cover and biodiversity levels than those found in non-Agdal areas. They have remained protected while surrounding areas have been overexploited and deforested. Formally recognized protected areas, like national parks, benefit from this large mosaic of biodiversity-friendly tenure systems existing around them (Dominguez, 2014).

African countries, for example, currently receive significant income from ecotourism on their lands, which supplements their income from livestock production and which further incentivizes sustainable management of their land (McGahey *et al.*, 2014).

Secure land tenure is a fundamental requirement to enable pastoralists to manage their land in a way that captures these environmental benefits. The frequent mismatch between land tenure needs and legal frameworks often leads to environmental degradation, but evidence shows that establishing more appropriate tenure can quickly lead to positive environmental outcomes. Secure tenure combined with appropriate markets are essential to enable pastoralists to internalize some of the external environmental benefits and thereby incentivize sustainable management. It is increasingly advocated that governments treat pastoralism as much more than a livestock production system and, in countries where pastoralism is doing comparatively well, it is considered to be a dual system of economic production and environmental protection (McGahey *et al.*, 2014).

Benefits of tenure in conflict management

The nature of pastoral production creates many opportunities for conflict with different actors with whom pastoralists interact. As land tenure for settled populations is secured, so tenure for pastoralists can become weaker and customary practices of resource sharing become undermined. Many of the pressures outlined above can fuel conflict between pastoralists and non-pastoralists, or between two different groups of pastoralists. Traditional mechanisms for conflict management may have been well developed in some societies, but when governance is weakened these mechanisms deteriorate.

Strengthening governance of tenure invariably includes strengthening capacities for conflict management, as discussed in Section 2. As a result, securing land tenure brings a major dividend in terms of conflict reduction. Stronger governance of tenure helps to clarify the rules and regulations over resource use and management and it strengthens the ownership of pastoralists over the relevant decision-making processes. It also provides opportunities for pastoralists to address disputes peacefully, both through internal mechanisms of dispute resolution and through improved rule of law.

Abandonment of contested lands

In Ethiopia, the Halidege plain, which extends over 75 000 hectares of good grazing land, is disputed territory between the Afar and Issa pastoralist tribes. Much of this land has been abandoned, or is accessed only in times of extreme hardship and requires a huge collective security effort by the pastoralists. Similar conflicts between the Borana and the Somali and between other pastoral groups in the Horn of Africa have left significant grazing areas underused.

Where pastoralists are unable to graze pasture lands, bush encroachment — a form of degradation — often follows. In Kenya during the 1970s, a region called Simbol was rendered inaccessible to Pokot pastoralists due to the risk of cattle raiding. The result was infestation of the land with thorny acacia shrubs over a period of about six years and eventual loss of as much as 80 000 hectares of productive land (IUCN, 2008b).

Risks associated with strengthening governance of pastoralist tenure

Attributing legal title to land that was formerly held under customary tenure is frequently seen as a way to secure the land, under the assumption that the legal document will help defend the land against other potential users. However, the allocation of rights that can be sold or transmitted often has a contradictory result: poverty may lead to inappropriate sales or local elites may abuse legal title for personal benefit. In some cases, individuals with no prior link to an area have registered title to the most valuable land by manipulating the registration and demarcation process. There are also risks in establishing a finite or fixed user group over communal resources. New or updated land rights systems can negatively affect some land user groups. Sometimes these groups are left out of participation processes (e.g. travelling nomads, women and other marginalized or hidden groups) so their needs or claims may be poorly addressed.

Changes in tenure that destabilize the allocation of rights between different groups of users are a source of potential conflict; for example, when one group of pastoralists perceives that their claim over a resource is weakened when a neighbouring group establishes more secure tenure. Governance of water can be particularly problematic as it is an essential resource for both crop farmers

Risk implicit in defining pasture user groups
(McCarthy *et al.*, 2000; Archambault, 2014)

In Kenya, the conversion of large areas of Maasai land to a form of group tenure called "group ranches" has led, in a number of cases, to break up of the land and individualization of tenure rights. This has led to a reduction in livestock mobility and a lower quality of pasture available to grazing households. Group ranch privatization and settlement of individual households has severely altered the social dynamics of those groups (e.g. decision-making processes and social networks), and limited access to water and pasture. Many pastoralists have sold their entitlements in order to start new initiatives, concentrating land in fewer hands, including non-pastoralist outside investors. However, while the focus has often been on outside acquisitions (e.g. by land speculators, national elites or foreign entities) privatization also gives rise to a much more intimate form of exclusion when young Maasai pastoralists are left out of decision-making over tenure and other matters. Some youths fear that their parents will sell off their inheritance so they fight with their siblings over their shares. These new conflicts and risks go largely unrecognized in debates over rangeland privatization.

and pastoralists. Expansion of crop farming in pastoral lands invariably encroaches on seasonal grazing reserves limiting access to water resources. Unless adequate agreements are reached between user groups, farmers may suffer crop damage from untimely grazing, while access to this key dry season resource is compromised for pastoralists.

The winding road to assign appropriate land rights for pastoral communities

The effort to strengthen governance of tenure in pastoral lands takes place in widely varying contexts with highly divergent starting points. In all cases, governance has changed historically due to political and societal changes, and, in many cases, this includes a period of colonization followed by independence. Add to this the complexity of rapidly changing expectations of pastoralists in relation to citizenship, market activity and broader livelihood goals and the challenge of establishing appropriate tenure becomes overwhelming.

In some parts of the world it is common to find that customary tenure systems remain functional, albeit compromised and only partially effective. This is the case in many African pastoral societies where state power has eroded customary tenure in many cases, but has seldom completely replaced it. In other parts of the world, most notably in Central Asia, the state has largely eradicated customary pastoral institutions and efforts are underway to revive them or to create new but analogous institutions. In yet other countries the barriers to livestock mobility and pasture access by smaller livestock owners are both administrative and economic. In the United States of America, however, smaller land holders have seen the advantage of communal management systems despite having no strong history of such collective action. They show that it is still possible to find innovative solutions to enable communal practices.

Rangeland governance in an open system: protecting transhumance corridors in the far north province of Cameroon

In the far north of Cameroon, NGOs and governments have used ordinances and administrative procedures to protect pastoral resources and transhumance corridors that connect seasonal grazing lands. Pastoralists in this area use the open system of resource allocation. The pastoralists exploit common-pool grazing resources across the region using transhumance corridors to move between areas with lower population densities, including the key resource area of the Logone floodplain. However, in recent decades there has been increasing pressure on grazing lands as well as on the corridors linking the seasonal grazing areas due to demographic pressures and economic development.

NGOs have used the decree for settling agropastoral conflicts (nº 78-263) to delimit and protect the pastoral infrastructure in the far north region of Cameroon. Pastoral and agricultural zones have been designated and transhumance corridors have been delimited to enable pastoralists to enter the Logone floodplain at the beginning of the dry season. The critical step in this process has been motivating and organizing the different stakeholders including pastoralists, crop farmers, and both traditional and governmental authorities, to delimit and protect (through consensus) transhumance corridors, overnight campsites and pastoral zones (Moritz *et al.*, 2014).

A neat distinction between individualized and common property rights cannot always be made. Common tenure systems may develop inequities and conflicts while some forms of individualized tenure may promote shared access systems to allow seasonal grazing in multiple ecological zones. In some European cases there is a close relationship between communal rangeland rights and individual rights over adjacent parcels of land; for example, communal summer pastures and private winter pastures. The use of suitable planning tools may boost the synergies between both models, combining the capacity for sustainable investment generated by delimited rights with the risk insurance provided by commonly managed lands.

Emergence of a global movement to strengthen pastoralist voices

In recent years, there has been a growth in the global organization and voice of pastoralists, particularly under the banner of "mobile indigenous peoples". In 2007, pastoralist representatives from over 60 countries worldwide gathered in Segovia, Spain, and released the Segovia Declaration of Nomadic and Transhumant Pastoralists (Spain, 14 September 2007). This declaration calls on governments and international organizations to "seek prior and informed consent before all private and public initiatives that may affect the integrity of mobile indigenous peoples' customary territories, resource management systems and nature".[6] The Mera Declaration (India, 21 November 2010) was prepared by pastoralist women's representatives from over 40 countries and makes explicit reference to women pastoralists' rights, calling on governments and others to "ensure and defend pastoral access to resources, including … traditional grazing lands" and to "respect traditional grazing territories and migratory patterns … in consultation with pastoralist women".[7]

In a similar vein, pastoralists from 50 countries released the Kiserian Pastoralist Statement (Kenya, 15 December, 2013) calling for "protection of pasture and grazing land strictly for the practice of pastoralism; ensuring land rights, grazing rights and livestock keepers' rights; protection of migratory routes; ensuring a mechanism that promotes participation in politics, decision-making and policy formulation and; empowerment of pastoral organizations and pastoralist communities/societies through institutional strengthening and capacity building."[8]

Priority challenges to pastoralist tenure[9]

Challenge 1: Reconciling relationships between states and pastoralist communities

In many countries pastoralist communities have a weak relationship with the state and this can lead to top-down interventions from government that are harmful to pastoralist rights and livelihoods. Many states still see pastoralism as backwards and favour crop production on pastoral lands, enacting policies to acquire the necessary land. This approach may also be entwined with the vested interests of political elites, or may be influenced by ideological policy reforms or by ethnic differences.

[6] http://www.danadeclaration.org/pdf/SegoviaDeclaration.pdf

[7] http://www.iucn.org/wisp/resources/publications/good_practice_studies_/gender/?10816/MERA-Declaration

[8] https://cmsdata.iucn.org/downloads/the_kiserian_pastoralists_statement.pdf

[9] These priorities were agreed at a meeting of the technical board supervising this technical guide.

The challenge is to bring together two sides that have a long history of mutual contempt that, in some cases, borders on, or actually manifests, conflict. Governments have to be convinced of the value of pastoralism as a land-use system and to see it as a development priority compared with the perceived benefits and potential short-term gain of alternative land uses. Pastoral communities also have to be convinced of the legitimacy and value of the state and, in some cases, need to develop a sense of civic responsibility and citizenship. At the heart of this challenge is the need to build trust, capacity and participation, which can be time-consuming and demanding of specialist skills, and which sometimes requires outside mediation.

Challenge 2: Managing conflicting interests and claims for lands and other resources

Competing users often hotly contest pastoral lands. Part of the reason behind the competition for pastoral land is that they are seen to be weakly tenured, lacking in political support and, often, are only seasonally utilized. Alternative land uses are frequently considered by government to be more economically viable than pastoralism, even when evidence clearly shows the opposite. Some pastoralists, feeling threatened, accept disadvantageous allocations of rights and give up some of their land in an effort to secure at least a portion of their resources to guarantee their survival. The result is abandonment, discouragement of investment and depletion of productivity.

The challenge is for states and lower-level government to establish truly participatory negotiating frameworks that can clarify the different claims over land. More equitable processes are needed to negotiate changes in land use and these processes need to be informed by a better understanding of the full value of land and other resources for sustainable pastoralism. In some countries, specific and urgent attention may be required to address the legacy of conflicting interests and long-running disputes.

Challenge 3: Improving consultation and participation mechanisms for pastoralists, recognizing them as citizens with legitimate rights

The conflict between legitimacy of customary tenure systems and legality of state institutions can only be resolved through the participation and involvement of multiple actors. Pastoralists frequently lack the skills and tools for lobbying and legal negotiation to make their voices heard and to secure their land rights. This becomes particularly obvious when defending their interests against well-resourced and effective corporations and state agents. Unless supported by external agents (e.g.

NGOs) in legal and technical matters, pastoralists are left in a vulnerable position because of their poor access to education and their political marginality.

The challenge is to strengthen pastoralist participation and responsive, accountable representation in decision-making arenas and processes related to their lands. This demands both adequate regulations securing participation and a serious commitment to develop the keystones for responsive governance, including proper voice and representation of pastoralists in decision-making bodies, gender-equity as a basic consideration, capacity building among pastoralist communities and empowerment of communities to stand up for their rights.

Challenge 4: Specific legal requirements for pastoralism

Pastoralists require security not only of grazing lands but also of the corridors and tracks they use to navigate their landscapes sustainably and of many other natural resources that are essential for the smooth operation of their system. The challenge of establishing suitable legal arrangements for pastoral lands is complex, given the uncertain, nested and multilayered issues that pastoralist legal frameworks need to address. It is difficult to strike a balance between the necessary flexibility and fuzziness of pastoralist governance and the potentially rigid formal demarcation of rights involved in securing legal title.

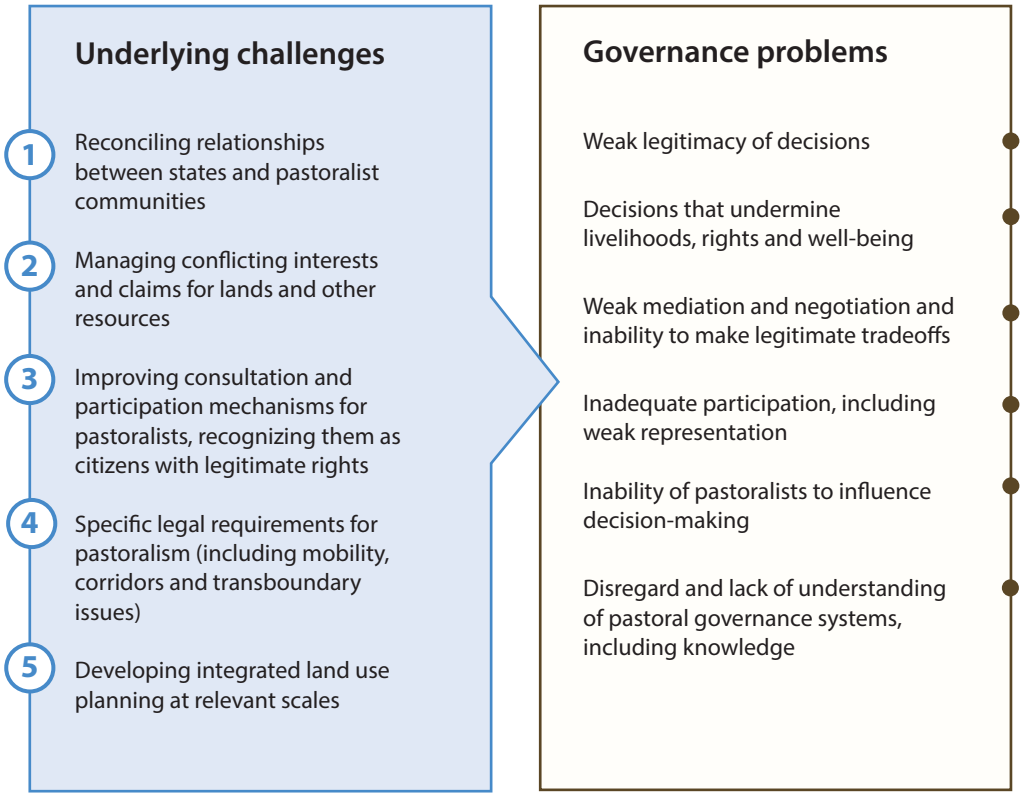
However, there are an increasing number of initiatives where both states and pastoralists are coping with these barriers and developing better tenure frameworks. Statutes can be developed to establish flexible rules by being more process- and institution-oriented. Policy-makers and pastoralists need to be supported through appropriate processes to be comfortable with negotiated solutions that may be highly innovative and, therefore, unfamiliar. The challenge is to guarantee fair treatment of pastoral issues, dealing with them through an inclusive, negotiated and flexible framework.

Challenge 5: Developing integrated land-use planning at relevant scales

Most countries in the world lack land-use plans that guide their strategy at national or regional levels and when such plans exist, pastoralism tends to be practically absent. Pastoralism is usually seen as a subsector of agriculture and its role in environmental management and conservation is generally overlooked in planning. Moreover, current land planning tools are inadequate for addressing the specific issues of pastoralism. Mobility and flexibility are poorly addressed by static maps and in addition to the misrepresentation of pastoralists and the scarce pastoralist participation in design and monitoring, land planning may commonly neglect the territorial role of pastoralism.

Incorporating pastoralism in land-use planning at all territorial levels is important in strengthening pastoral land rights for long-term sustainability. The challenge is for states to develop national land-use plans that consider pastoralism and other land uses jointly at a strategic level, establishing a balance between them. Those plans also should define the needs, goals and outcomes expected for pastoral land policies and should create a national framework for their development.

FIGURE 5:
Linking underlying challenges to common governance problems



Other challenges to take into consideration

Numerous other challenges can impact on governance of pastoral tenure. Social, economic and political processes in pastoral communities or the wider society can have repercussions for the relationship between people and land, while affecting the way customary tenure systems operate. The relative importance of these "drivers of change" varies substantially across continents, countries and regions and even the implications of similar changes for different land tenure contexts are variable. Table 1 summarizes some of those challenges, many of which are addressed indirectly in subsequent sections.

TABLE 1:
Additional challenges to securing tenure

Poverty and destitution	• Competing investment priorities as a result of repeated crises • Ambiguity over the rights of former pastoralists over access to natural resources
Population change and growth	• Adapting coping strategies for pastoralists • Dealing with increasing risk derived from population growth • Avoiding rangeland degradation induced by population change • Maintaining pastoralists' power and influence in increasing population scenarios
Urbanization and expansion of cities	• Improving pastoralist access to resources in new urban areas • Dealing with urban expansion related problems, like privatization or sprawl • Exploiting new market opportunities for pastoralists linked to urban growth
Evolving institutions	• Opportunities and threats of government decentralization • Emerging pastoral organizations as alternative power bases
Gender challenges in land rights	• Overcoming gender-related constraints to tenure rights • Improving women's opportunities to develop and manage livestock activities • Promoting women's rights and entitlements over land, water and markets • Adapting inheritance and marriage rules to respect the rights of women
Weak sense of citizenship	• Respecting pastoralists as legitimate citizens and addressing marginalization • Raising civic awareness and participation of pastoralists • Strengthening access to government services (administrative, education etc.)
Decline of local knowledge	• Strengthening adaptation of local knowledge to change • Improving ways to capture, store and transmit unwritten pastoralist knowledge
Investment in water	• Informed and negotiated decision-making in water infrastructure development • Building pastoralist capacities for managing water and other resources • Using water management to manage rangelands rationally
Insecurity related challenges	• Satisfying basic rights to security of person and property • Developing suitable alternative conflict-management systems
Climate change	• Adapting land (and risk) management to changing distribution of resources • Increasing competition for resources • Greater demand for risk management strategies

SECTION

2

Improving governance and strengthening human capabilities

Section 2: Improving governance and strengthening human capabilities

Making responsible pastoral tenure real

Tenure governance is about (1) how resources (land and related resources such as grasslands), benefits, opportunities, and responsibilities are distributed in society and (2) how different actors have their say in decision-making and management of these resources. The willingness of all actors to learn and be open to dialogue with each other, accountability of government and other decision-makers to pastoralists and more effective representation of pastoralists, are essential for hearing these voices and for the ability of pastoralists to secure the benefits created through governance reforms. Governance is not only a matter of law, but also of policy, processes, relationships and power, and must be built on an understanding of the lived reality of pastoral communities. The ability of pastoralists to use these governance improvements is based on the capabilities they have. Strengthening capabilities and capacities is a prerequisite for pastoralists to use governance developments effectively in ways that enhance pastoral rights.

The Guidelines set out five key obligations to ensure responsible tenure governance, many of which are still poorly enjoyed in pastoral systems. These obligations fall on both state and non-state actors (paragraph 3.2 of the Guidelines).

Responsible tenure in pastoral lands

Paragraph 3A of the Guidelines sets out five general principles for responsible tenure. Each of these is important to pastoral communities. When successfully applied, pastoral communities will enjoy:

1. **Legitimate pastoral tenure systems** that are recognized and respected. Pastoralists attain the right to manage these resources in line with their customs and to protect their livelihoods. This is consistent with the voluntary commitments made under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and reiterated in paragraphs 9 and 10.2 of the Guidelines.
2. **Safeguards against threats and infringements** that are established in law and policy, and used. These safeguards could protect pastoralist land and corridors from infringement or from being extinguished through investments (the Guidelines' paragraphs 12.4, 12.6 and 12.7). Where safeguards are complemented by strategies for strengthening the capacity of pastoralists to safeguard their own rights, the Guidelines become real. Options include strengthening participation and representation in decision-making, and planning and supporting local organizations.
3. **Legitimate tenure rights** that are facilitated and promoted by state and non-state actors. Actions to strengthen the ability of pastoralists to enjoy these rights include better representation, more secure livelihoods including the ability to access water and grazing, improved personal security and good social relations. The enjoyment of rights is indivisible and as the Guidelines recommend, include strengthening of civil and political rights.
4. **Access to justice** to deal with infringements of legitimate tenure rights. This goes beyond legal provisions to better and equal access with other citizens to information, ensuring cultural appropriateness and providing support to use legal structures.
5. **Avoidance and resolution of conflict, tenure disputes and corruption.** This includes setting up institutions for conflict resolution and recognizing customary conflict resolution. Conflict-sensitive planning and decision-making processes are created and supported through active strategies for learning and listening among actors. These are complemented by integrated conflict-sensitive assessment and management systems.

Section 2 sets out seven interlinked action areas for addressing the five priority challenges in Section 1, as shown in Figure 6. In most cases there are not neat individual action areas that respond to each individual challenge. Most of the action areas address multiple challenges and each challenge requires multiple action areas. Figure 6 illustrates that tenure security and responsible tenure governance are not just about legal arrangements but also about relationships, processes, capabilities and resources for governance. This includes attention to rights, the ecosystems that underpin sustainable land use and sustainable food production systems, and the ability to use the solutions available and to respond to change.

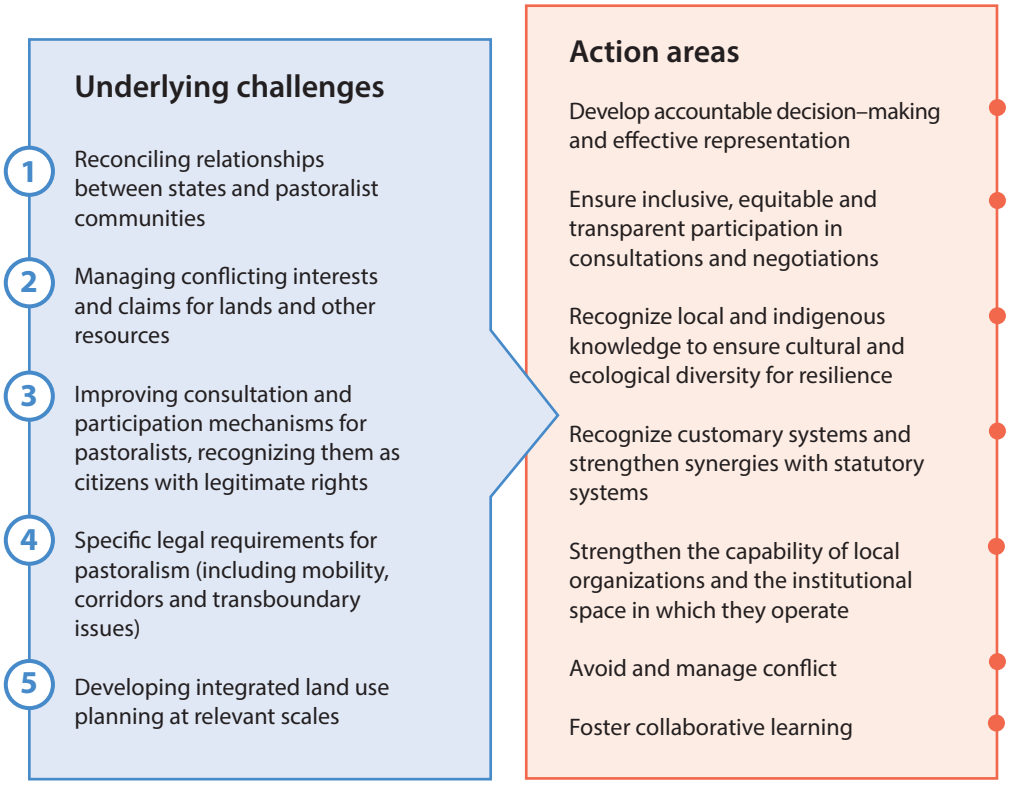


FIGURE 6:
Underlying challenges to pastoral tenure and proposed action areas

Action area 1: Develop accountable decision-making and effective representation

Objective: Governance is essentially the process by which decisions are made and the fundamental goal is to ensure a decision-making process that leads to the best decisions in a way that ensures acceptance and respect for those decisions. The objective of this action area is to establish the conditions through which agreement can be reached on pastoral tenure issues. This includes particular attention to the unique challenges of pastoralist representation and accountability.

Why is this important?

As discussed in Section 1, pastoral communities face specific challenges in the context of contemporary economic development and conservation frameworks. Challenges include: ensuring representation and accountability in terms of how pastoralists have

their say; ensuring that land-use planning recognizes the rights, needs and realities of pastoralists and other users, and works towards agreed trade-offs and compromises that meet the Guidelines' principles and are consistent with human rights; protecting transhumance activities including corridors and respecting the spatial and temporal use of resources; and reconciling pastoral tenure rights with national systems that favour private individual title and in which intensive agriculture and extractive industries are rapidly expanding.

How decisions are made has important ramifications for pastoralists and pastoralism. For example, decisions related to land use, economic development and expansion (including industrial scale agriculture, mining and mineral extraction, major infrastructural developments and related investments) affect land tenure of pastoralists (Zoomers, 2010; Herrera, Davies and Manzano Baena, 2014) and can reduce their ability to participate in society and maintain their way of life. Displacement leads to political, economic and cultural marginalization of pastoral societies (Dong *et al.*, 2011), with impacts on overall well-being and resilience.

Assessment of the impacts of pastoral policies in Niger (Zakara and Abarchi, 2007)

Niger has a number of laws supporting pastoralist rights and mobility. These policies are based on some common principles:

- recognition of a zone dedicated essentially to pastoralism;
- recognition of the multifunctional nature of the resource areas dedicated to maintaining livestock/agriculture integration;
- affirmation of the principle of willingness to secure the land tenure of rural production;
- existence of a legal system for rural hydraulics, taking into consideration pastoralists' needs;
- Niger's contribution to the subregion's recognition of the need for and usefulness of mobility (international transhumance) in the Economic Community of West African States (ECOWAS) zone.

Asserting these principles would assure pastoralists recognition of their activity, their way of life, and their specific rights across an important portion of the national territory. This remains a work-in-progress and resources are needed for full implementation of these policies.

General guidance on decision-making

The relationships among different actors are key in how decisions are made. Facilitating appropriate decision-making requires support for changes at multiple levels, from mindsets and assumptions, at the core, to changing rules and changing parameters, at the periphery. Requirements for strengthening decision-making processes include the following:

- training of facilitators in process-oriented approaches and sensitivity to different knowledge and understandings;
- institution building rather than the one-time production of land-use plans;
- providing suitably long-time horizons for dialogue;
- ensuring participation of all relevant actors and authorities including at local level;

- ensuring effective representation of pastoralists;
- meeting human rights obligations, especially those set out in the Guidelines, and recognizing pastoralist rights.

Many of the examples that are cited in boxes within this technical guide have benefited from national processes of decentralization or devolution of power. Decentralization or devolution of decision-making can provide opportunities to improve consultations with pastoralists over their land rights, to strengthen participation and to improve accountability. It has been cited as one of the common elements in recent successes in strengthening pastoral land rights around the world (Herrera, Davies and Manzano Baena, 2014). This technical guide does not discuss decentralization or devolution in further detail as the subject is complex and far-reaching and has implications for much more than governance of tenure.

Key steps in decision-making

The key steps in decision-making emphasize strengthening relationships in order to increase the opportunity for making agreed and widely accepted trade-offs.

1. **Ensure representation and accountability** so that the diverse actors have a meaningful say in decisions that affect their rights, well-being and livelihoods.
2. **Agree to procedural principles and related steps (including conflict resolution and trust building)** to create a legitimate process and place limitations on power, using existing substantive rights, including human rights, as a guide.
3. **Establish agreed principles** in order to provide a benchmark for decision-making and to strengthen empathy and solidarity, following international human rights law and principles.
4. **Share different knowledge and perspectives:** to strengthen mutual understanding; to build empathy, solidarity, and respect for local knowledge and customary systems; and to ensure learning as a component of creative and innovative problem solving (see action area 7).
5. **Build trust and resolve conflict, and set up processes for conflict avoidance** (action area 6).
6. **Negotiate decisions and trade-offs,** ensuring compromises are accepted, examining whether the outcomes measure up to the agreed principles and clarifying the expected impacts.
7. **Provide public scrutiny and accountability mechanisms** to ensure legitimacy and credibility, including creating opportunity for questioning and for social sanctions.
8. **Revise decisions** to ensure relevance, legitimacy, accountability and credibility, identifying objections, how these relate to existing rights commitments and the implications for pastoralists.

Key elements in improving decision-making for specific pastoral tenure solutions

Decision-making processes are neither strictly linear nor completely rational. Although there is increasing agreement that knowledge must underpin sound decision-making, the reality of decision-making is infinitely more complex. Knowledge and its use are closely linked to the nature of societies, their priorities, worldviews and relative influence and power. What is considered credible or legitimate knowledge by one party is often contested by another. Consequently, which knowledge is recognized and included in decision-making is itself a question of power. Democratic systems typically try to constrain the impact of power disparities on decision-making through the judiciary, political channels via the legislature, periodic elections, legal procedural measures and the setting of standards. Procedural measures include participation, transparency, accountability and FPIC. A wide range of human rights has also been adopted to limit adverse impacts on the less powerful.

It is not possible to prescribe specific individual tenure solutions that are globally, or even nationally, applicable. Solutions must evolve from the national context as well as the pastoral ecological and cultural contexts. Many countries have numerous pastoralist ethnic groups with distinct cultures who are living in distinct ecologies, and therefore require a suitable process through which the most locally-appropriate solutions can be identified. Strengthening decision-making processes and relationships among the different actors can provide an opportunity for dealing with the nested and multilayered tenure that characterizes pastoralism. Key steps in decision-making are outlined below in this action area, most of which are addressed in other sections of this technical guide. This action area also emphasizes the following vital points that are not addressed elsewhere:

1. Agreeing to key values and setting limitations;
2. Effective representation;
3. Accountability;
4. Planning at scale;
5. Planning for mobility.

1. Agreeing to key values and setting limitations

Establishing a barometer based on shared values can help in sifting out decisions that do not meet the desired standard. In this sense, a barometer can help to ensure decision-making contributes to the realization of agreed values and priorities. An advantage of using human rights as the barometer is that there is already extensive formal commitment to human rights, including in the Guidelines. These standards can be set through representative and inclusive processes that build consensus at the appropriate scale. Values and principles that can be used to guide decision-

making can be taken from international law, human rights law, from the principles and objectives of the Guidelines, and from respecting and recognizing pastoralism.

Using rights from international law can help government decision-makers focus on how decisions impact on pastoral tenure, livelihoods, right to food, well-being and food security. One positive outcome of a rights-based approach to decision-making is that it can shift attention away from broad claims about well-being (as represented in GDP) to understanding how specific people in specific contexts are affected by decisions. This is particularly important where difficult trade-offs have to be made; for example, in deciding whether to maintain land as pastoral rangeland or to convert it to industrial cultivation or wildlife conservation. Decisions that seem to have positive outcomes nationally can have adverse local consequences. The Guidelines recognize various rights (see Introduction) including the right to food; it is suggested that decisions should at the very least be consistent with this right.

The right to food

The International Covenant on Economic, Social and Cultural Rights (hereafter, the International Covenant) defined the right to food in 1999. The right to adequate food is realized: "when every man, woman, and child, alone or in community with others, [has] physical and economic access at all times to adequate food or means for its procurement." This implies the "availability of food in a quantity and [of a] quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture" and the "accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights." In a pastoral context, this would include tenure rights needed to ensure ongoing productive systems, and may include access to pastoral corridors and grazing, and the right/ability to exclude others.

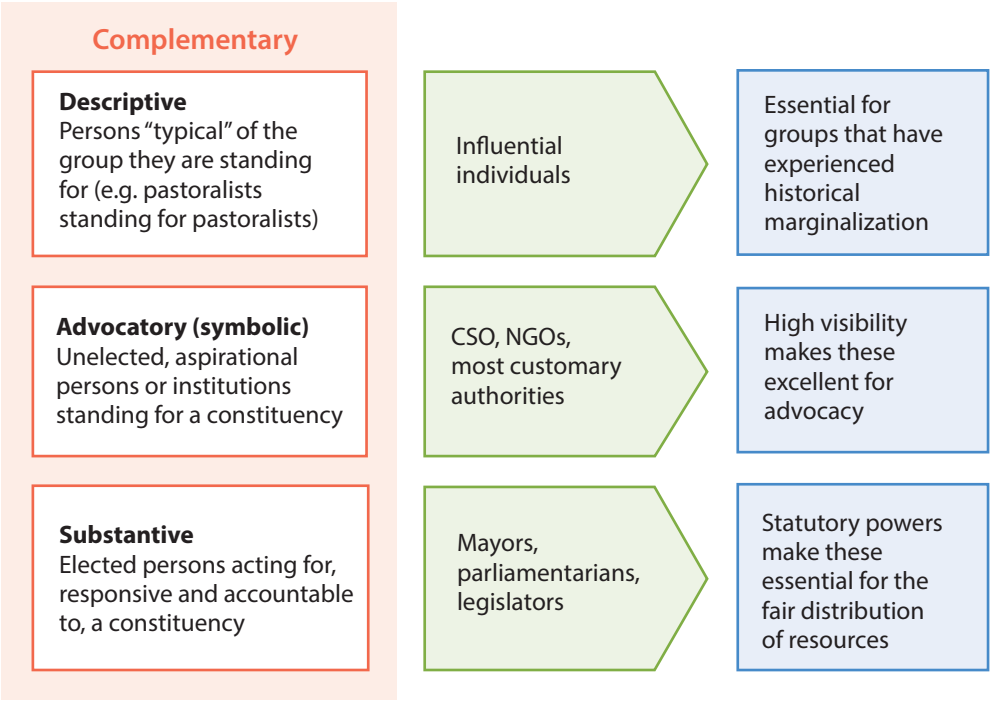
The International Covenant has three types of obligation emanating from the right to food. States must respect, protect and fulfil that right. This means that states should:

- not adopt measures that could ultimately prevent access to adequate food;
- adopt measures to ensure that no individuals are deprived of their access to adequate food; and
- engage proactively in activities to strengthen people's access to and use of resources, including means to ensure their livelihood and food security.

2. Effective representation

Three common types of representation can be identified: 'descriptive', 'advocatory' and 'substantive' representation of pastoral people and their interests in decision-making. When pastoral people speak up for themselves, this is descriptive representation; when they are spoken for by persons or institutions who share their aspirations, this is advocatory representation; when their freely chosen political representatives stand for and act on their behalf in decision-making arenas, this is substantive representation.

FIGURE 7:
Forms of representation in decision-making



Pastoralists face a number of challenges to effective representation. Pastoralists manage large landscapes and share resources over large areas and large populations, creating barriers to inclusion in specific political representative fora. Mobility can also be a factor since segments of pastoral communities — in some cases entire households — may be absent on seasonal migrations when key consultations are held in a given area. Additionally, in several countries pastoralists have not been strongly integrated in national societies and their substantive representation by elected leaders (e.g. parliamentarians and councillors) can be weak.

Participatory approaches (a type of descriptive representation) are commonly used by NGOs, the development sector and, sometimes, government as a form of representation. These approaches can have shortcomings, since they usually look at participation at the village level and are not always adapted to the scale of participation required in pastoral lands. The outcome is often that self-authorized, instead of group-authorized, actors are identified to represent pastoralists in decision-making, which can lead at best to inappropriate decisions, and at worse can aggravate conflict, resource grabbing and marginalization. For these reasons, the issue of pastoralist representation takes on major significance. Pastoralists, of course, have their own systems of representation based on wide-scale dialogue that are highly adapted to the scale of resource use and relationships that they manage. A prime example is the Cure Salee, or salt cure, in the Niger where thousands of

pastoralists from the Tuareg and Wodaabe peoples gather each year to take advantage of the salt flats, creating an opportunity for dialogue on a vast scale.

All three forms of representation can enhance attention to pastoral issues and add to the voice that pastoral peoples have in governance of tenure in rangelands ecosystems, but it is important to understand the opportunities and limitations of each. Effective representation is only achievable where there is substantive accountability.

The role of parliamentarians as pastoralist representatives in Ethiopia

Several African countries, including Ethiopia and Kenya, have established committees of elected pastoralist representatives whose role is to give voice to pastoralist concerns in the legislative branch of government. An example is the Ethiopian Pastoralist Parliamentary Committee, which plays a representative role in broader society and is often called on by civil society to represent pastoralists. Although some questions have been raised about the nature of representation and the fact that non-pastoralists also vote in the parliamentarian's constituency, the committee has achieved notable successes:

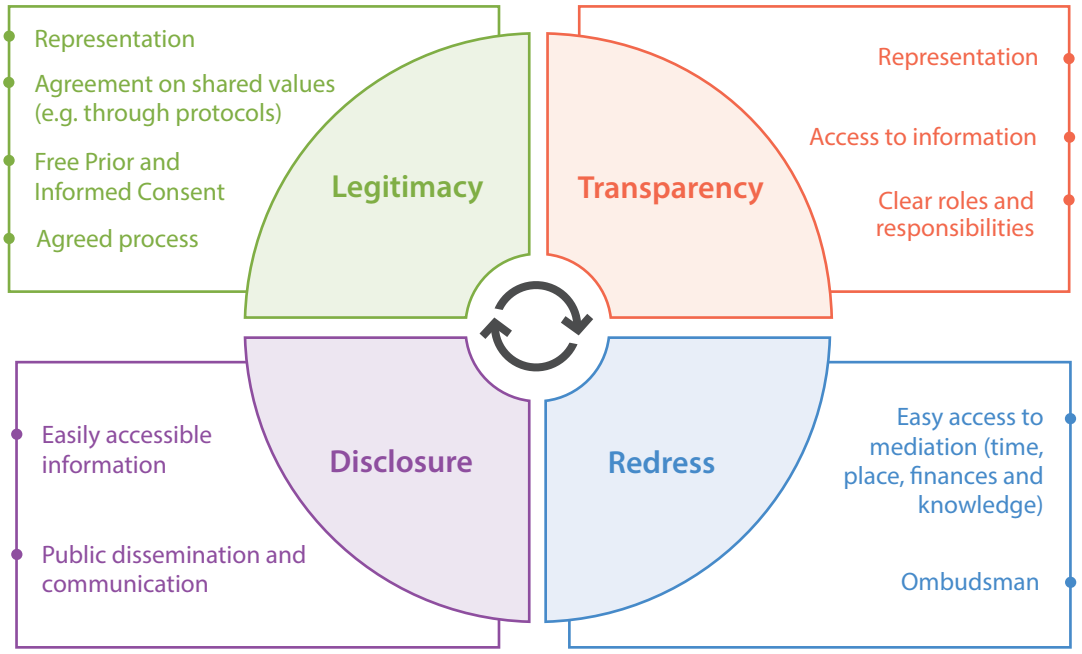
- the creation of several government departments dealing explicitly with pastoral issues;
- awareness creation of pastoral issues in parliament and across government (Mussa, 2004).

3. Accountability

Participatory and representative processes are only as effective as the ability of participants to hold decision-makers to account. Participatory and representative processes are meaningful and effective when participants are able to know how the decision-maker has taken the inputs of participants into account. This is recognized in many administrative law systems as a "right to be heard". It includes an obligation on the part of the decision-maker to consider the opinion or views given by participants, to provide reasons for whatever decisions are made and to explain how participant views were taken into account. Ensuring that this information is shared promptly with pastoral representatives is important.

Clarifying the roles and responsibilities of different actors in a process and ensuring these are well understood can make it easier for pastoralists to hold government and other decision-makers to account. This must be complemented by information about processes (i.e. who is included and how) and decision-making (i.e. were there limitations or constraints; what information was considered/taken into account?) and communication of the decision. Where stakeholders feel that processes lacked accountability, they must have the opportunity of redress. Four aspects of accountability can be identified, as shown in Figure 8.

FIGURE 8:
Key components of accountability



Well-established accountable processes include democratic practice that emphasizes group-authorized representation (participation is not necessarily representation). Other accountability mechanisms can include FPIC, which focuses on concepts, verification of decisions and watchdog mechanisms. Accountability mechanisms can also include legal recourse through courts and other tribunals, accountability to voters or taxpayers, independent or third-party monitoring, public discussion and downward reporting. These mechanisms are dependent on freedom of speech, citizens' knowledge of their rights and the powers and obligations of their representatives, transparency, disclosure and sufficient resources (e.g. time, money and information). Identifying locally and culturally appropriate accountability is often key for pastoral communities; having their own organizations has proved to be a successful way of holding representatives and decision-makers to account.

4. Planning land and resource use at scale

In many countries land-use planning does not take place formally at the national scale, but localized planning initiatives do take place, through project-led initiatives as well as through decentralized decision-making processes. Typical project planning that focuses on village-level resources can be ineffective in a pastoralist context, where resources can be spread over huge areas, many users and multiple administrative locations (Kitchell, Turner and McPeak, 2014). Where land-use planning does take place, pastoralists may be excluded from

consultations for a number of reasons already discussed. Developing appropriate plans for management of pastoral lands and resources at an adequate scale requires modification of existing planning approaches and supportive institutional arrangements, including cooperation across domestic and sometimes international boundaries.

Consultation at the appropriate scale is required to negotiate trade-offs and to maintain flexibility in resource use and governance as well as security of tenure, particularly access and use. This may require agreement on nationwide goals while ensuring that individual and community rights are not infringed without FPIC. It may also involve assessing the quality and availability of land and natural resources, and agreeing to frameworks, which set priorities and strategies to guide interstate, regional, district and local land activities and actions that impact on land use and governance.

Land-use planning at national level should provide government agencies with the appropriate tools to balance the competing demands for land among different sectors of the economy (e.g. food production, export crops, tourism, wildlife conservation, housing and public amenities, roads or industry). These tools will vary from one place to another. It requires coordination among sectoral agencies involved in land use and collaborative decisions on legislation and fiscal measures. Planning processes need to take into account existing policy and law. The following steps are recommended:

- **Map the network of tenure niches** and the overlapping nested rights, including those that apply to pastoral infrastructure (corridors, grazing, watering points), taking transboundary resources into account.
- **Describe and account for the customary and statutory systems** governing pastoralism, including laws, rules and norms as well as the complex relationships that govern pastoralism and ensure they are properly considered in the plan.
- **Include pastoralism as a legitimate and effective land-use system** that contributes to national and local economies. Cost-benefit analysis of pastoralism and other land use systems can be carried out to determine the most appropriate use of land, taking into account indirect as well as direct values of different land uses.
- **Ensure that plans support specific aspects of pastoralism.** For example, in relation to mobility this can include developing indicators for mobility (livestock tracks and other pastoral infrastructure) and mapping of access to water resources and grazing along livestock corridors.

It is critical to take additional steps to ensure that land-use plans do not adversely affect pastoralism. Appropriate safeguards and measures should ensure that future overlapping uses will not affect the spatial structure and dynamics supporting pastoralism or their rights to food and water, or otherwise increase vulnerability. This can be achieved by establishing planning restrictions in the general law that favour pastoral communities. Using scenario planning that includes social, economic and environmental factors can help assess likely impacts on pastoralism. Building specific pastoralist-friendly future scenarios and testing these scenarios against other land development scenarios can help in making trade-offs.

Multiscale planning processes may be required to adequately address pastoral issues, including:

- **negotiation and planning at local, village and district levels,** to resolve local land-use conflicts and tenure issues (including corridors);
- **higher-level national planning** and support of appropriate state authorities to reach agreement on how a country's resources can be shared most effectively between different land uses and to ensure coordination with respect to transhumance corridors that cross multiple jurisdictions;
- **adequate pastoralist representation (including participation) and accountability measures** at all levels, ensuring that final plans are subject to checks and agreement with pastoral representatives;
- **inclusive, multistakeholder monitoring** to continuously and systematically monitor the implementation of plans against social, development and environmental standards.

5. Planning for mobility

Supporting pastoral mobility and its adaptation or evolution requires understanding the rationale for transhumance (see Section 1). This includes many of the push and pull factors, including seasonal access to high-value resources, seasonal demand for markets and services, and the periodic need to evade disease vectors or other risks. It is also necessary to understand risks to mobility, the nature and extent of tenure related to corridors and access routes, understanding of mobility among different actors and perceptions of pastoral tenure rights in relation to mobility (e.g. seasonal rights, access rights). In addition, understanding existing perceived value in maintaining mobility is important. In some contexts this includes the role of demarcated corridors or other established routes in managing conflict between sedentary farmers and mobile pastoralists.

Planning for mobility often requires efforts to protect use rights in geographically distinct resource areas, such as wet and dry season pastures, mountain and valley pastures, drought reserves, and natural and artificial water points. It also involves protection of use rights to special resources such as specific trees, salt pans and more. Mobility may be constrained when one or other key resource is made inaccessible or when access routes are cut. Mobility has also sometimes been restricted when pastoralists fear losing their land once they vacate it. This has even led to cases of pastoralists harming their environment; for example, by cutting down trees in an effort to demonstrate their residency and hence their rights.

Enabling mobility through strategic water development in Kenya

In Isiolo county of Northern Kenya, Boran pastoralists have elaborate rules governing the use of land and water resources. However, a recent history of emergency interventions has led to the installation of a large number of water points without consulting pastoralists, leading to rangeland degradation and conflicts between different communities that sometimes become violent, especially when droughts emerge. Consultations with communities over water development led to the decision to install a few strategically located subsurface dams, providing only a small increase in water, and to decommission a number of other facilities that were disrupting livestock movements. Communities are now able to stay in the wet season grazing pastures for one to two months longer and, therefore, are able to adequately utilize that pasture while the overall livestock movement patterns have not been disrupted (Roba, 2014).

Most pastoralists have well-defined routes for livestock movement, which rely on strategically positioned resources (fodder and water) to enable herds to be moved. These resources can be small and may be used very transiently — perhaps for a few days per year — but without them large areas of rangeland become inaccessible. Whether or not livestock routes need to be formally protected by law and the extent and content of that protection are dependent on several factors. These include (Kitchell, Turner and McPeak, 2014):

- the extent to which customary governance, including regulation and accommodation of pastoralism with other customary systems, is still functioning;
- the extent to which good social relations exist between user groups within a district or a section of the corridor, including the extent of social recognition of mobility and corridor use, the level of contestation over corridor sections and whether or not the corridor has been taken into account in the allocation of land and land-use planning;
- the existence of a shared understanding over tenure in corridors including how their purpose is understood and how livestock corridors are linked with requirements/ entitlements to forage and water;
- the level and kinds of land-use pressure, including both internal (the extent to which corridors are seen and accepted as a long-standing feature of local production systems) and external pressures from agricultural, conservation and extractive industry expansion or encroachment;
- the relationship between tenure in the corridors and settled areas, including how penalties for crop damage are defined and the regulation of related resources (tree browse in forests, water supplies at village wells and boreholes);
- the value that these corridors hold for communities along the corridor, such as their role in avoiding conflict and maintaining good social relations.

Where there are high levels of social cohesion, affinity, good relations and few external risks, formal legal protection might not be necessary. However, where there are trends of expanding land-use change, external conservation interventions, infrastructure development, extractive industries and so on, a stronger approach is needed for governance and management of corridors. However, migratory routes are not always static and corridor mapping is best approached as part of an ongoing process of negotiated land-use planning rather than as an end in itself. Mapping migratory routes can be a good step in enabling coordination across competing institutions.

Supporting mobility and food security in the Chad Basin

Central governments in the Chad Basin have been supportive of pastoral mobility, guaranteeing their open access to common pool resources. Seasonal mobility is driven by variations in rainfall. Once the water in Logone floodplain recedes, pastoralists from Cameroon, the Niger and Nigeria move with more than 200 000 cattle into the floodplain. Current laws:

- support open access to common-pool resources;
- allow pastoralists to move between seasonal grazing areas in the Chad Basin.

This system recognizes the customary systems of pastoralists, which are based on an ethos of open access to all pastoralists who, regardless of class, ethnicity or nationality, have free access to common property regimes. Given the ungrazable reserves created by seasonal flooding of these wetland pastures, there is no "tragedy of the commons" (Moritz *et al.*, 2014).

Action area 2: Ensure inclusive, equitable and transparent participation in consultations and negotiations

Objective: The objective of this action area is to ensure inclusive participation in the pastoralist context, in which stakeholders may be widely dispersed and poorly represented in conventional terms. Stronger participation by pastoralists will allow them to influence decision-making related to their lands and will enable problem-solving to generate legitimate, adaptive and resilient solutions. Participation will strengthen both the effectiveness and the acceptability of public decision-making and will contribute to overall pastoralist empowerment. Participation can also help pastoralists to assume greater responsibility over their land and other natural resources.

Why is participation important?

Participation is more than a safeguard or the right to say no to development, as provided under FPIC. A right to participation (as a component of effective representation) is well established in international law (Convention on Biological Diversity (CBD), Aarhus Convention), human rights law (International Covenant on Civil and Political Rights) and soft law commitments in UNDRIP and in the Guidelines. Participation is also important for developing a common vision and a feeling of ownership by pastoralists over processes and decisions. Participation not only helps to achieve better decisions but also helps ensure that decisions are more likely to be implemented and enforced by all actors.

Increasing participation also recognizes the role of pastoralists as stewards of their natural resources and their responsibility for effectively governing and managing those resources. This could include the responsibility to re-establish and protect governance regimes and to ensure fairness and equitable sharing of benefits from pastoral land within the community.

In the context of the Guidelines and securing responsible governance of pastoral lands, representation and participation have the purpose of addressing large imbalances in power in which pastoral voices and concerns are largely invisible, building supportive social and institutional relationships that improve pastoral livelihood opportunities and well-being and minimize conflict. Participation reinforces the legitimacy of development paths and helps to guarantee that specific pastoral problems are addressed, securing respect for human rights, to ensure not only just process but outcomes that do not diminish rights to food, water, education etc.

Elements for ensuring full, meaningful and effective participation

Effective participatory approaches should be full, meaningful and effective and these three core elements can be used to evaluate the effectiveness of participation (see Figure 9). Appropriate forms for participation and their incorporation into regulation will vary from context to context. Participation is an ongoing process rather than a one-off event and should be initiated as early as possible in any effort to strengthen governance of tenure. Various methodologies and strategies can be used to support effective and meaningful participation including social learning, mapping techniques and strengthening of pastoral organizations. Participation can benefit from the development of complementary institutions and capacities, including working across distinct boundaries, and these can be considered as critical outputs. The following key steps should be addressed in developing a strategy for participation:

1. Preparing the ground;
2. Setting the framework;
3. Participatory situational analysis;
4. Deliberation process;
5. Learning from the process and improving commitment to participation (evaluation).

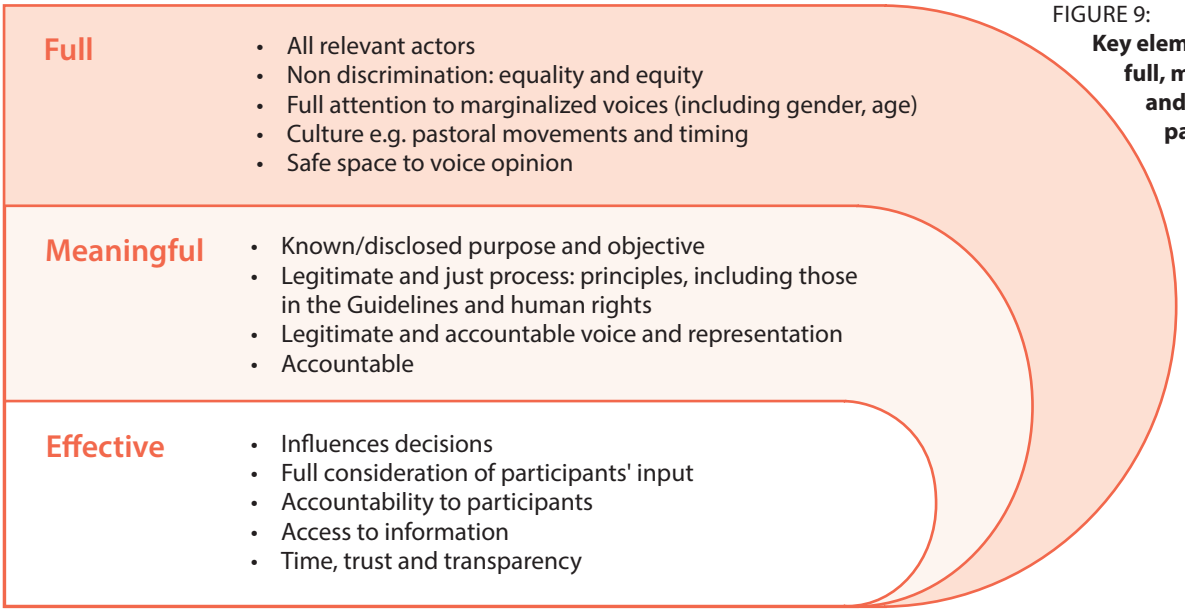


FIGURE 9:
Key elements of full, meaningful and effective participation

1. Preparing the ground

Identify clear objectives

All rights holders and key stakeholders should participate in objective setting. Objectives should be specific and achievable within a defined period of time. All objectives need to be identified and communicated concisely and free of jargon.

Identify who is included and how

The success of participation is dependent on including the relevant actors, which should be guided by the objectives and purposes and might include different pastoral group representatives, administrative bodies, agricultural sectors and conservation actors. This includes addressing discrimination and inequality, and ensuring women and other marginalized groups are included. In the case of pastoralists it also may mean adjusting the decision-making process to the practical realities of pastoralists, and, in particular, their seasonal location. Careful planning is required to ensure that decision-making and public consultations take place when pastoralists are available to participate, or when provisions are made for the participation of pastoralists who have temporarily relocated.

Women pastoralists as paralegals (Flintan, 2008)

To address the formalization and privatization of land tenure, NGOs in Kenya and Mali have trained women paralegals whose role is to inform pastoralist women on rights and roles in land tenure. Paralegals have facilitated the formation of Community Land Ownership Associations and have supported pastoralists to take land rights cases to court. They may also play a role in advocating on behalf of pastoralists' land rights in dialogue with government.

In Mali, the NGO Sahel ECO trains women and men paralegals to conduct information sessions in their communities on subjects such as conflict prevention and resolution, land tenure, the roles and responsibilities of a village chief and general civic education. They have also provided information on emerging agricultural and pastoral legislation and other topical matters.

The Kenyan Maasai rights NGO, Mainyoito Pastoralist Integrated Development Organisation (MPIDO) supports pastoralists to take cases of injustice through the courts. MPIDO has conducted awareness raising on land rights for women and has trained women paralegals from within the Maasai community. These paralegals facilitate the formation of Community Land Ownership Associations, create awareness on rights issues, lobby government over local community challenges, and advocate for administration of justice on issues of human rights, natural resource ownership and management. They have also set up a community-based resource centre that has information on a variety of land, environmental and indigenous issues.

Ideas about what constitutes "having a say" have shifted considerably over the last two decades. There is now the recognition that mere presence does not meet the criteria of meaningful participation. A recent publication noted that "ten years ago the challenge was to identify and promote any voice on pastoralism, but now the space has been won the focus needs to be on the true legitimacy of that voice"(de Jode, 2014). Due to a legacy of political marginalization, however, pastoralists face particular challenges of effective representation. Participation often relies on either bringing a wide range of pastoralists directly into decision-making, or identifying individuals or institutions who are believed to share the aspirations of pastoralists and who can advocate on their behalf.

Respecting free, prior and informed consent (FPIC)[10]

To fully respect the human rights of pastoral peoples, governments and international organizations must avoid decisions that affect the lands of pastoral people, without their FPIC. FPIC recognizes the right of a community to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use. FPIC implies informed, non-coercive negotiations between investors, companies or governments, NGOs and indigenous pastoral peoples prior to the development, establishment or expansion of agricultural enterprises, industry, conservation or tourism initiatives on their customary lands. This principle means that those who wish to use the customary lands belonging to indigenous communities and local communities must enter into negotiations with them. It is the communities who have the right to decide whether they will agree to the project or not once they have a full and accurate understanding of the implications of the project on them and their customary land. It is recommended to read the technical guide in this series that addresses FPIC.

2. Setting the framework

Clarity and openness at this early stage is critical for ensuring the process is considered legitimate, is meaningful for participants and will be effective. It is necessary to agree with participants on the process to be followed, including the objectives and purpose, the principles to guide the process, how the process will be structured, how participants will be able to hold government and other decision-makers to account, and how to learn from the process. In some cases, this will require an effort to build confidence in order to establish a working relationship between pastoralists and authorities (see "Building Trust" under action area 4).

Establishing an adequate participatory process in a pastoral context includes making sure participants feel safe and secure. Establishing this safety and security requires an understanding of actor relationships and dynamics, including entrenched interests and inequality. In practice, this requires understanding gender, age and other aspects of inequality and guiding against adverse repercussions to pastoral rights and interests and, in particular, as related to land tenure. The process will need to be culturally sensitive; for example, taking into account pastoral mobility and availability to participate, language and respect for indigenous knowledge. Agreeing to a process will require sufficient time and skill to build trust. A good process should be sufficiently clear to ensure participants engage from the premise that the process will be fair, transparent and just.

3. Building understanding: participatory situational analysis

Participatory decision-making needs to be informed by an appropriate situation analysis and this should also be conducted with full representation of pastoralists. Various participatory methodologies can be used to support this situational analysis including rights-mapping techniques and the use of multiactor platforms or dialogues.

[10] See *Respecting free, prior and informed consent,* http://www.fao.org/3/a-i3496e.pdf

Participatory mapping includes a range of techniques that allow communities to represent their territories, spatial experiences and knowledge from their own perspective and usually in their own languages. Rights mapping is used to refer to participatory spatial representation of the different (although overlapping) entitlements to land and natural resources various stakeholders hold at the community, national or regional levels. Elements of a participatory situation analysis include:

1. **Characterization of pastoralist communities and pastoralist resource use** including identification of pastoralist communities using the target territory; description of pastoralist land management systems with special attention to their specificities; mapping of pastoralist-related geographical events (acknowledging the changing and flexible nature of pastoralism land use); identification of the layers and complexities of social units and how resources are accessed, used or protected; social issues (gender, poverty, equity and equality) and economic issues (production systems, external constraints, income, markets);
2. **Revealing the real extent and importance of pastoralist systems** including: issues related to governance and decision-making; distribution of land rights (equity, gender, transmission, exercise of power, marginalized groups, nested and overlapping rights); governing institutions and decision-making mechanisms; methods of negotiation, mediation and reaching agreements; values and principles underpinning governance; conflict-avoidance and resolution; specifics of pastoral governance (mobility, commonality of land, extension of land, flexibility and negotiation); networks of relationships between pastoralist systems;
3. **External economic, political, legal and other interactions with pastoral customary governance systems** including: statutory rules impacting on customary systems; relationships between the states and pastoralists; other land use and economic systems impacting pastoral systems; development policies and investment codes; conflicts, representation and engagement with national systems; relationships between pastoralists and other stakeholders;
4. **Risks and risk management assumed by customary pastoral systems** including specific economic practices that directly impact on customary rights and resource allocations (e.g. resource sharing and reciprocity);
5. **Diagnosis of customary pastoral systems,** including strengths, weaknesses, opportunities, threats (SWOT) analysis, trends and expected developments.

Securing communal rangelands in Jordan (Haddad, 2014)

In Zarqa Governorate, in the Jordanian Badia, Bedouin pastoralists have begun the process of reviving customary rules and regulations for sustainable management of rangelands. The process was initiated through a process called "multistakeholder dialogue for concerted action" and hinged on a participatory approach that brought men and women pastoralists together with other land users and multiple government departments, convened by the Ministry of Agriculture. Stakeholder mapping and participatory resource mapping were key tools to initiate a structured dialogue for problem solving. Engaging with different government sectors was necessary to ensure multisectoral support and sanctioning of the transfer of land management rights. The methodology has led to rapid recovery of rangeland ecosystems, increases in groundwater recharge and return of native species. The approach was low cost but demanding of patience, time and facilitation skills.

4. Deliberation processes

The process of deliberation must be facilitated to ensure that actors go beyond established interests and address inequity and power within the group of participants to ensure that powerful interests or actors do not dominate. This can be particularly challenging if pastoralists are unaccustomed to speaking out in front of government representatives and where government representatives have deeply entrenched misunderstandings of or prejudices towards pastoralists. The skill of the facilitator is critical to the achievement of a satisfactory outcome, but the process overall must be established to provide time, transparency and trust. Time is often in short supply due to project demands or other constraining factors, but it can be harmful to force the pace of trust-building and a rushed process can entirely undermine participation. Transparency is equally essential and includes providing adequate information and full disclosure about the goals of participation. Trust is discussed in action area 4 and is required to build meaningful understanding, legitimacy and collaboration.

5. Learning from the process and improving commitment to participation (evaluation)

As participation is motivated by both process and outcome (improvements in pastoral tenure, responsible governance), success should be evaluated with both these objectives in mind (this broad idea is reflected in Figure 10). Developing a framework for assessing participation should include developing indicators related to each key element and the overall characterization of participation as full, meaningful and effective. Key aspects of evaluation would include whether the process has been able to overcome current limitations, creating new or developing existing institutions (rules and organizations) to support processes, shifting organizational culture and ensuring representation is equitable, legitimate and accountable.

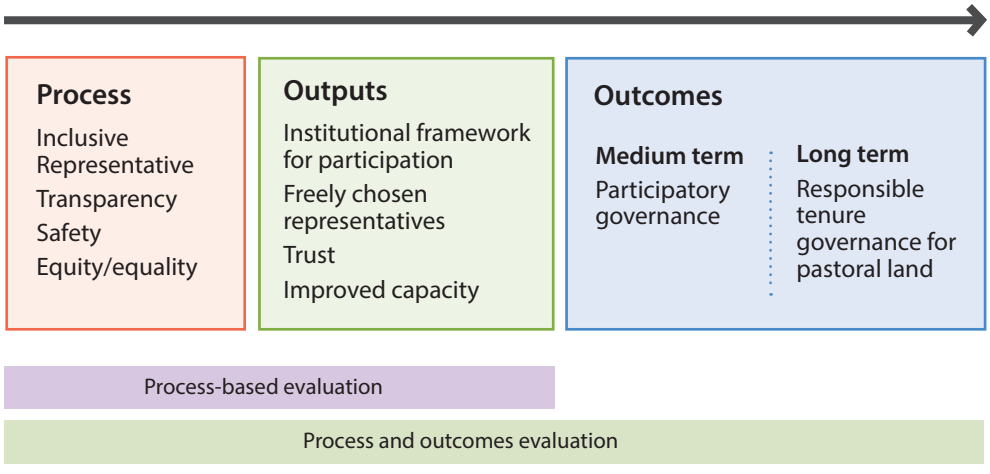


FIGURE 10:
Differentiated process and outcome evaluation, with examples
(Brown, 2014)

Action area 3: Recognize local and indigenous knowledge to ensure cultural and ecological diversity for resilience

Objective: This action area encourages governments, other state and non-state actors including donors and conservation and development organizations to recognize local and indigenous knowledge as a critical component of the ecological-social interactions in sustainable pastoralism and suggests ways to strengthen its use.

Why does indigenous knowledge matter for responsible tenure governance?

In all societies, knowledge underpins ways of being – including management of the resources available and the governance of their use. Pastoral societies are no different. Every pastoral community, from private ranchers in the United States of America to shepherds in the Mediterranean to Sahelian nomads, has specific local knowledge that has contributed to their social-ecological resilience. Consequently, no sustainable solutions for pastoralism can be arrived at without respect, maintenance and transmission of local knowledge.

Pastoralist organization for resource rights in Nepal (Dong, 2007)

Pastoralists in Nepal have developed effective rangeland management systems that manage grazing and conservation practices through well-organized local institutional arrangements and efficient traditional use rights and tenure systems. Governance is determined by two sets of local organizations: community committees at community level and civil associations at group level. These grassroots organizations are more socially embedded than external administrative and political organizations. A community committee is normally made of 11 or 12 elected community members sharing common interests or a common pool of resources. Subcommittees are usually established under the community committee for each association, whose representatives are elected as members (five to seven people). Both men and women normally serve in these local organizations for rangeland management, but women usually make decisions about pasture management as many men are away for most of the year for trading or labouring purposes.

Usually, the community committee is responsible for regulating access to pasture and fodder resources through enforcement of well-defined and mutually agreed upon rights and rules, backed by various social controls and sanctions. They enforce primary rules and regulations concerning rangeland resource use regarding when and how long the livestock are grazed, and when and where hay may be cut for winter feed. The association of users can establish rotational grazing rules, regulate herd movement and make other decisions specific to rangeland resource use through negotiation and discussion. It also can mitigate conflicts arising over rangeland use within the same group or among different groups with support from the community committee. The coordination and cooperation among the different associations of users, such as a livestock association, crop association, forestry association and lodging (tourism) association can ensure the integrated use of different resources related to rangeland management.

Indigenous, traditional and local knowledge systems provide a fundamental link between social and environmental systems and contribute to the maintenance of ecological diversity and biodiversity, which underpins food security. Local and indigenous systems of knowledge are held in and defined by both cultural systems and environmental contexts. Consequently, environmental sustainability and appropriate cultural systems of knowledge generation and transmission have emerged within landscapes governed through customary tenure (Crawhall, 2014). Cultural and ecosystem resilience depends on the mechanisms societies have for maintaining and transferring knowledge (Adger *et al.*, 2014) and may be embedded in land governance systems that are based on common property regimes. Local knowledge is part of the system memory vital for the resilience of ecosystems and

long-term survival of human communities inhabiting the ecosystem (Leslie and McCabe, 2013). Respecting local knowledge also fosters social learning and solidarity, which builds trust between pastoral groups and their development partners and, in due course, enhances resilience (Blair, Lovecraft and Kofinas, 2014).

Inclusion of indigenous and traditional knowledge systems in governance

Recognizing and including indigenous and traditional knowledge in governance systems requires a number of elements including:

1. Recognizing the knowledge holder;
2. Developing protocols for knowledge sharing, research, co-production and use (action area 7);
3. Understanding and recognizing the extent and value of indigenous and traditional knowledge;
4. Supporting the co-production of knowledge and solutions.

1. Recognizing the knowledge holder

Pastoral knowledge does not exist in isolation from those who develop and use it, and the knowledge is in constant development. This includes knowledge of managing ecosystem variability that is critical for adaptation to changing circumstances. In the words of a Somali elder:

"a rangeland cannot be a rangeland without pastoralists [knowledge] and a pastoralist cannot [practice pastoralism] ... without rangelands – the two are mutually interrelated"(Oba, 2012).

Recognizing and supporting indigenous knowledge is consequently not about recording, replicating and upscaling indigenous practice, but about empowering land users to engage in ongoing knowledge development. Without the recognition of customary land tenure this production of knowledge is not possible. Where customary land tenure is recognized, indigenous and customary knowledge play important roles in maintaining the ecological resilience for food security.

2. Develop protocols for knowledge sharing, research, co-creation and use

Agreeing on how knowledge is shared, researched (independently or co-created) and used is a prerequisite for the recognition of indigenous knowledge and the rights of custodians. The principle of FPIC sets the basis for such agreement (see the technical guide *Respecting free, prior and informed consent*). This is discussed extensively in action area 7.

3. Understand and recognize the extent and value of indigenous and traditional knowledge in management and governance

A camel is a better judge of soils than a pastoralist (Oba, 2012)

Identifying and using indicator types can support decision-making by pastoralists and policy-makers. A study of three distinct customary systems in the Horn of Africa – those of the Afar in Ethiopia, the Orma in Kenya and the Karimojong in Uganda – demonstrated the usefulness of indigenous knowledge for rangeland assessment. Pastoralists used key plant species to assess landscape grazing suitability and soils to assess landscape grazing potential. The latter is critical for evaluating potential stocking densities that each landscape could support during the wet or dry grazing seasons. Pastoralists relied on close observation of animal behaviour to indicate the quality of rangelands using indicators like milk yield, body hair condition, weight gain and mating frequency to assess livestock production performances. Pastoralist scouts assessed rangeland degradation and trends using historical knowledge of the landscapes. The findings confirmed that knowledge systems among the three pastoral communities are comparable, that they could be used to rapidly gather information needed by policy-makers and that they are vital for the sustainable management of pastoral lands.

Over time, pastoralists have evolved in-depth knowledge about their environments, which includes understanding of human-nature interactions. This knowledge pertains to management interventions as well as to complex governance issues. The technical contribution of these knowledge systems, particularly related to environmental sensitivity, has growing recognition, but less attention has been given to indigenous governance knowledge.[11]

Technical knowledge may be used to support landscape classification, management, and monitoring and evaluation. Land classification includes the use of diverse environmental features such as topography, soil and the dominant vegetation. In some systems, landscapes have identities describing the physical topography, soils, vegetation or historical events, or a combination of these. Knowledge and governance are entangled. The development of knowledge is, in itself, a reflection of who has access to land resources and how they engage with those resources. There are individuals within pastoral societies who are particularly important knowledge holders and who play a critical role in determining how and when resources are used. Governance systems and knowledge are also based on this technical use as illustrated in Figure 11.

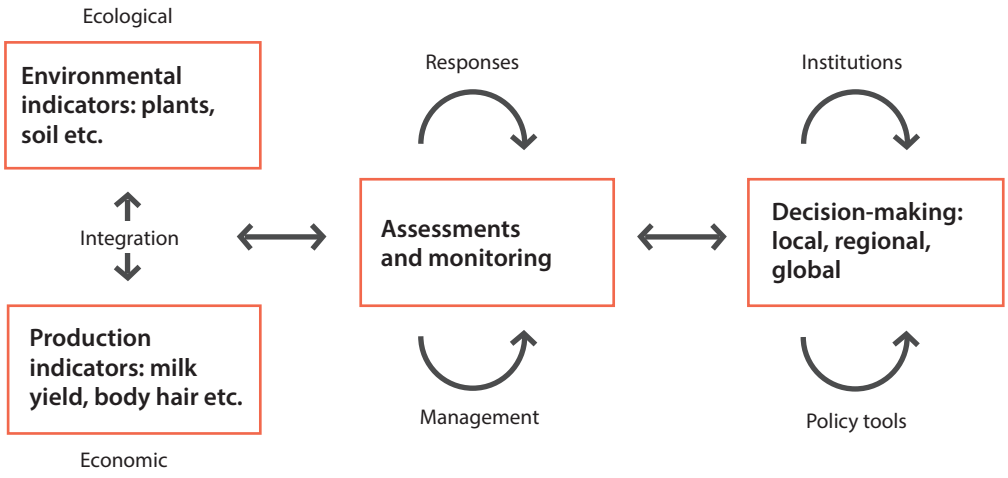


FIGURE 11: **Linking local and scientific knowledge in decision-making** (Oba, 2012)

[11] Crawhall, 2014

The complex governance systems developed by pastoralists for managing natural resources in climates with high levels of variability include rules linking use to expertise, principles for sharing and exclusion. Centralized planning and related changes in governance arrangements can disrupt the availability of cultural and natural resources on which pastoral livelihoods rely. In these circumstances food production and security may be threatened from ecosystem degradation and the loss of local capacity to respond.

Fire management on pastoral rangelands

FAO's fire management voluntary guidelines state that fire can be good for habitats, for resources, for reducing threats and for maintaining cultural values. Some sectors that use fire as a tool to enhance output and facilitate land use are agriculture, forest resources management and pastoral and wildlife management. Fire has been and continues to be part of agricultural practices used by societies for millennia (FAO, 2006).

Indigenous and local knowledge plays a central role in management of pastoral rangelands. The rationale behind local management practices is often poorly understood by outsiders and has often been portrayed as irrational or backwards. Mobility is a good example: a practice with a strong rationale that nevertheless continues to be suppressed by many governments in the name of modernization. Fire management provides another example that continues to be controversial. Pastoralists use fire as a tool for modifying rangelands, including to remove unused pastures and promote fresh growth, and also to control disease vectors. Many countries have prohibited such practices and this has imposed costs on pastoralism, or has left pastoralists with little choice but to break the law. The Guidelines explicitly address the rights to manage as well as to use land and this should include the right to the responsible use of fire as a management tool.

4. Support the co-creation of knowledge and solutions

Bringing holders of knowledge into decision-making and policy dialogue may help to validate traditional and indigenous knowledge. It can facilitate participation of customary resource management institutions and can help improve decision-making; for example, during times of extreme weather shocks or threshold crises of natural resource systems (Crawhall, 2014).

Participatory and locally-based methodologies may include multiactor dialogues and other collaborative learning techniques, including participatory mapping (Aijazi, Mohamed-Katerere and Crawhall, 2014). Mapping can be used to support sharing of knowledge and for the collaborative design of solutions with other knowledge holders, including in state agencies. Participatory mapping, using a range of techniques, allows communities to represent their territories, spatial experiences and knowledge from their own perspective and usually in their own languages (FAO, 2005; Crawhall, 2014).

Action area 4: Recognize customary systems and strengthen synergies with statutory systems

Objective: This action area guides and supports states, governments, government departments and agencies, and non-state actors such as donors, development and conservation organizations to (1) recognize pastoralist customary systems and (2) strengthen synergies with statutory systems, with a view to: strengthen respect for and acknowledgement of pastoral ways of living; provide a basis for effective and equitable governance; recognize pastoralists' governance institutions as important partners in the design and implementation of national policy; and provide a basis for conflict avoidance and resolution.

Why is recognition of customary systems important?

Recognizing customary institutions provides a basis for developing trust and respect, which creates the foundation for collaboration. Where trust and respect are established it is possible to develop locally appropriate and legitimate solutions that are resilient, socially and ecologically sustainable, adaptive, culturally acceptable and conflict sensitive – and, importantly, are supported and implemented at local levels. This can contribute to identifying synergies with development priorities, such as the Sustainable Development Goals, at global, national and local scales. Ultimately, it can also identify improved synergies with statutory systems.

Recognizing customary systems can also empower pastoralists to safeguard their tenure rights against outsiders, including other communities and investors. It has the added value of allowing space for local ecological and social knowledge to flourish, and provides the basis for responding to change and addressing conflict. It sets the basis for improving representation and participation. Customary systems have evolved over hundreds of years to manage and protect pastoral resources effectively and they require respect and value for this achievement. This recognition should be a starting point for agreements on how they can be protected and adapted to remain effective in the future.

Governance of transhumance in Spain

Many European states still show the remains of ancient pastoralist systems, deeply embedded in their culture and laws. The Spanish Consejo de la Mesta, a council that controlled transhumance, pastoralism and the wool industry for five centuries left a deep footprint in the Spanish landscape and land use. Their most significant remains are a dense network of 120 000 km of livestock tracks, currently protected by law under the Livestock Tracks Act, and a collection of traditional management systems resisting abandonment.

Legal recognition of historical governance in Romania

Other European countries such as Romania hold large areas of both forest and pasture commons. Those commons are consigned in three main administrative models. Two of them, the Composesorat and the Obst, are historic community organizations. Obst date back several centuries while the Composesorat were originally established in the early nineteeth century. These systems run communal resources by traditional institutions while the rest of the commons are publicly owned and administered by town councils.

Key elements of legitimate, appropriate and rights-based recognition of pastoral tenure

A good understanding of pastoral customary governance systems, including the values and principles underpinning decision-making systems and the sharing of resources, is needed to ensure these systems are adequately recognized in planning, decision-making and implementation. This includes land policies and land-use plans. Such understanding can also help build respect for these systems. Building recognition and respect requires the following measures:

1. Building trust;
2. Establishing adequate participatory processes (addressed comprehensively in action area 2);
3. Creating legal recognition of pastoralist customary systems;
4. Generating awareness of the inherent risks in strengthening synergies with statutory systems;
5. Learning from success and failure (see action area 7).

Indigenous peoples' rights to self-determination

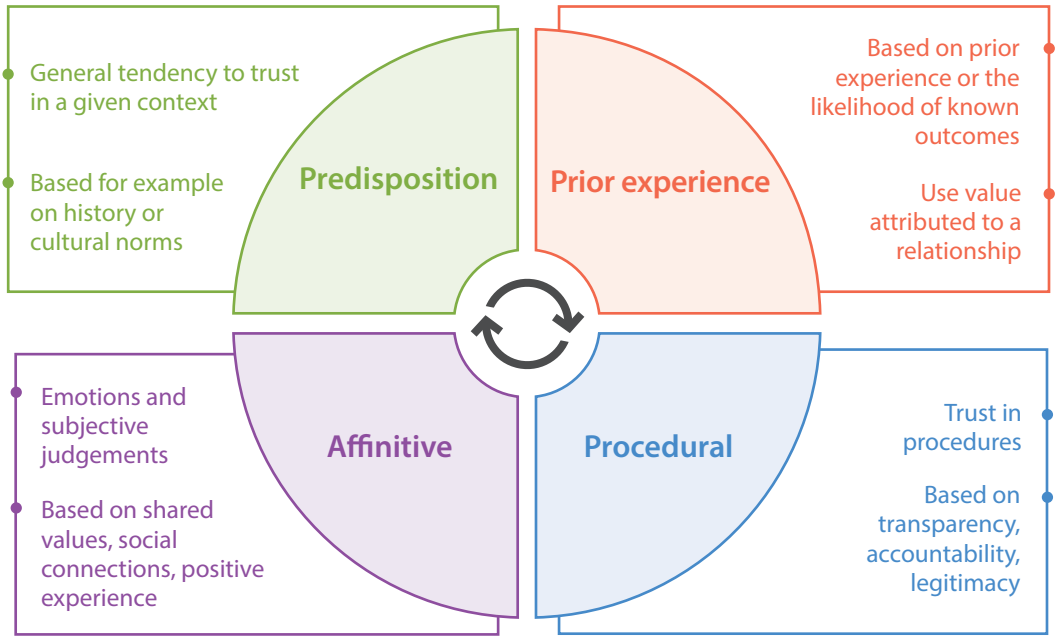
In 2008, the United Nations Permanent Forum on Indigenous Issues (UNPFII) officially recognized pastoralists as "Mobile Indigenous Peoples". Indigenous peoples' representatives often argue that mobility is a cultural right, which is not only of practical importance for enabling effective pastoralism, but also has intrinsic value and is central to the identity of pastoral peoples. It should be noted that not all pastoralists assert a claim to status as indigenous peoples.

Indigenous peoples have rights of ownership and possession over their territories (The International Labour Organization (ILO) Convention No. 169 of 1989 on Indigenous and Tribal Peoples' Rights) as well as the right to manage them in accordance with their own values (the right of self-determination). These rights extend to lands over which indigenous peoples no longer have exclusive control. These and other rights are elaborated in the 2007 United Nations Declaration on the Rights of Indigenous Peoples.

1. Building trust

Establishing trust among pastoral communities and with different actors is a requirement for building meaningful understanding, legitimacy and collaboration. Trust-building processes must respect pastoralists' rights, including their right to decline engagement. For example, pastoral communities also have a right not to share their knowledge or to ask that the sharing of information take place in the context of relationship building. Building trust is a process that involves both commitment to people (solidarity) and time. It requires taking action to help improve the four aspects of trust as set out in Figure 12.

FIGURE 12:
Key components in trust
(Modified from M. J. Stern and Coleman, 2014)



Humility and expertise are important aspects of trust building and changing experience of interventions. They can contribute to the ease with which collaborative work can be undertaken. External teams facilitating the knowledge sharing and information gathering processes require both technical and social skills, including:

1. Understanding indigenous cultures and their ways of knowing, understanding pastoralist management systems and understanding governance;
2. The ability to listen actively and learn from and with pastoral citizens in designing and implementing participatory processes (see action area 7 on collaborative learning);
3. The seeking of FPIC for the gathering and use of information;
4. The skill to contrast the results and to manage conflicting information through facilitated group discussions and other methodologies.

2. Creating legal recognition of pastoralist customary systems

The incorporation of customary systems in national legal frameworks, as well as bilateral and regional agreements, can be a key step towards the full recognition of pastoral customary systems. Where states are supportive of pastoral customary systems these populations are more capable of securing their livelihoods and food security. Legal acknowledgement provides a foundation for recognition and respect of pastoral land tenure by:

1. Recognizing pastoralism as a viable land-management system;
2. Acknowledging the historical disadvantage experienced by pastoralists;

3. Supporting multinational initiatives to support pastoral livelihoods;
4. Acknowledging the recognition of the custodians as governance actors and rights holders.

Legal acknowledgement demonstrates the intention of the state to recognize customary systems and incorporate them into practice and decision-making. Legal recognition can also be shown as a real commitment and progress in the development of the process, empowering people to get more involved. It is important for governments to acknowledge the historical disadvantage experienced by pastoralists. For example, section 260 of the 2010 Kenyan Constitution recognizes pastoral persons and communities, whether nomadic or sedentary, as a marginalized group (Kenyan *law reports,* 2010). The Government acknowledged that pastoralists have been discriminated against through national legislation, with adverse consequences for the natural resources on which pastoral people depend for their livelihood and well-being. By making pastoralists visible in the Kenyan constitution and acknowledging that customs and traditions of pastoral communities can contribute positively to land-use management, the Government increased its legitimacy at the local level.

Recognition is needed at the highest national level and in specific legislation frameworks, making sure that provisions are in the substantive and legally enforceable (justiciable) parts of law and not only in the preamble. Preambles in relevant laws can provide the framework and address the importance of pastoralism in the country and develop some key issues about its consideration, while the articles should recognize the existence of customary systems and institutions giving them credit as active actors in land policies.

The forms that recognition take will vary across regions and among and within nations, taking into account diverse rights and interests. It is important that legal recognition is spatially appropriate and takes into account existing rights including, for example, the rights of indigenous peoples. Forms of legal recognition include recognition of the rights of self-determination and/or legal recognition of customary systems. This includes recognition that customary systems are the basis of governance of pastoral lands and that states, government agencies and non-state actors respect and comply with the decisions made under these systems. This would follow the intent of Section 9 of the Guidelines for indigenous communities including the recognition of customary institutions.

Where states claim ownership of common lands they should recognize pastoralists' rights to access and use of land and related natural resources. This can be supported

Strengthening pastoral community governance in Morocco (Boutaleb and Firmian, 2014)

Historically, pastoral tribes following customary arrangements have collectively managed Morocco's rangelands. This management has declined due to the establishment of administrative divisions and a trend towards individualization of land. Establishment of Pastoral Improvement Perimeters (PIPs) by the Moroccan Government in the 1970s and 1980s was intended to improve rangeland management, but these institutions ignored existing tribal management systems and contributed instead to widespread rangeland degradation and decline in livelihoods.

To tackle this challenge the Government established Community-Based Range Management (CBRM) cooperatives, which are legally recognized in Moroccan law. These cooperatives benefit from decentralization policies of the 1980s and the reorganization of rural areas into communes, which were defined on the basis of tribal lands. Cooperatives are based on customary institutions and tribal affiliation and promote consensus-based decision-making. They provide basic services to herders, including veterinary inputs and livestock feed. They manage infrastructure installed by the government and they are responsible for negotiations with other cooperatives over pasture management and mobility. Cooperative managers are trained and supervised by government services and members purchase shares in the cooperatives in order to access services and pastures. Anchoring these 'hybrid' institutions in tribal institutions has been the key to their success in developing rangeland regulations and adapting to new knowledge and opportunities.

through various managerial forms including co-management of those lands between the state and customary institutions or nested models. Co-management can be implemented through a variety of arrangements including:

- recognizing local/customary rules and principles, incorporating them into the legal framework and creating new, appropriate institutions;
- creating new mixed bodies incorporating 'updated' customary institutions to exercise decision-making over land management.

Statutory recognition of customary tenure in Niger

Niger has a long history of addressing pastoral land tenure.

- Niger's 1961 law setting the northern agricultural farming boundaries recognized traditional boundaries separating the pastoral zones in the northern part of the country from the agricultural zones. In the pastoral zones farming was forbidden.
- In 1987, decree N° 87-077 went further to grant pastoralists a seasonal right to graze their cattle in the agricultural zones in December–January after the harvest period.
- In 1993, ordinance N° 93-15 referred to as the 'Rural Code', recognized:
  - that all of Niger's people, including pastoral communities, have equal access to the country's natural resources;
  - that customary rights thereby strengthen the claims of pastoralists in Niger to their traditional grazing lands and the migration corridors between them.

While these efforts have contributed to protecting the pastoral sector in Niger and making Niger a model in West Africa, financial and technical constraints have contributed to weak implementation of the rural code (International Fund for Agricultural Development (IFAD), 2006).

3. Generating awareness of the inherent risks in strengthening synergies with statutory systems

It is important to recognize that there are inherent risks in trying to integrate two distinct legal frameworks – statutory and customary. In general, statutory law, being codified, lacks the flexibility and responsiveness of pastoral systems. When legal rights are created or imposed without taking customary systems into account, or if those rights fail to embrace legal pluralism in appropriate ways, social and ecological disruptions can occur. Another danger is that as tenure institutions become more rigid, pastoralists will be less able to respond to the social-ecological challenges. Developing appropriate legal regimes needs to ensure complementarity between these different legal systems across spatial levels (from transnational to local) and within levels.

Statutory recognition of rights does not necessarily imply formally delimiting and registering the rights of users. An alternative to approaches based on delimiting rights is to focus on strengthening processes, including collaborative learning (action area 7) and collective determination of solutions to allow for ongoing flexibility. This may allow for greater recognition of fuzzy (including overlapping and nested) rights managed

in a flexible way through negotiation and agreements. Any efforts to incorporate customary practices into formal legal systems need to be based on strong systems of accountability and adequate measures (legal and otherwise) to ensure access to justice and respect for rights (action area 1).

4. Learning from success and failure

Governance processes and outcomes are difficult to monitor; however, this is essential for ensuring improvements in tenure governance and the progressive realization of the objectives and goals of the Guidelines, particularly as related to food, livelihoods and poverty. In Part 7, the Guidelines promote the development and implementation of monitoring and evaluation systems. Multistakeholder platforms are earmarked as a way to monitor and evaluate implementation and impact. Some requirements for these processes are identified including that they are participatory, gender sensitive, implementable, cost effective and sustainable (paragraph 26.2). Learning is addressed in detail in action area 7.

Action area 5: Strengthen the capability of local organizations, social networks and the institutional space in which they operate

Objective: The capabilities of local organizations and social networks determine how pastoralists operate collectively to address governance challenges. This action area has two aims: to increase the opportunity for pastoral institutions to strengthen governance of tenure, and to enable those institutions to take greater advantage of such opportunities. This includes roles for both customary and state institutions to strengthen interactions, to build trust and to take practical measures for defending tenure.

Why is the capability of local organizations and social networks important?

The governance capabilities of both community and state organizations at the local level are key to effectively strengthening land tenure of pastoral communities. This includes the ability of organizations and individuals to interact and collaborate in ways that support responsible governance of tenure, avoid and resolve tenure conflicts, learn and solve problems, and define new and creative responses. Social networks underpin the ability of any society to respond to challenges and crisis, often providing access to needed resources or support in difficult times. Social networks can be

based on communities and social movements. On the other hand, governments can intervene creating social services and support to avoid a breakdown in relations that lead to conflict.

Action area 5 outlines ways of strengthening local governance capabilities, focusing specifically on pastoralist organizations, social networks and 'supporting' state organizations, but recognizing that capabilities are affected by organizations and institutions at multiple levels.

WHAT ARE CAPABILITIES?	DIFFERENTIATING BETWEEN INSTITUTIONS AND ORGANIZATIONS
• Governance capabilities refer to the ability to influence decision-making. Capabilities of organizations, in this context, mean their ability to carry out their functions, according to the Guidelines principles. • Capabilities are distinguished from capacity, which is sometimes used narrowly to refer to the ability to carry out a particular task, such as the capacity needed to design a governance tool.	• 'Institutions' and organizations are differentiated in this chapter. • 'Institutions' refer to rights, rules, and decision-making procedures.[12] In practice, however, institutions and organizations are intertwined as part of a complex set of human responses to governing and managing societies.[13]

The multiple capabilities that organizations and the individuals within them need to carry out their role in relation to strengthening governance of tenure can be clustered around the ability to:

1. **Interact and engage with multiple actors** with diverse viewpoints, knowledge and skills in:
   - decision-making;
   - learning, innovating, and developing transformative solutions, changing mindsets;
   - developing new institutional policy.
2. **Coordinate activities of multiple actors** (including government agencies) to enhance complementarity in actions of multiple actors towards a common goal.
3. **Strengthen trust** as a basis for working together to achieve agreed solutions.
4. **Defend** (and claim) **tenure rights.**
5. **Recognize and consider the linkages** between ecosystems and social sustainability.
6. **Learn and respond** to risks, pressures and threats.
7. **Function as an effective entity.**

[12] Young, 2003

[13] Stern and Coleman, 2015; Lebel, 2015

Capability 1: Interact and engage with multiple actors

Strengthening the capability of government agencies, pastoral communities and local farmers to engage more effectively with each other often requires repairing relations, enhancing learning and addressing related institutional challenges. This engagement is both the desired end goal and part of the process for improving interaction. It provides a basis for building mutual respect through the recognition of customs and traditions (knowledge, law and practice) and self-governing capacity that is embedded in local and indigenous institutions (Ravera, Tarrason and Simelton, 2011).

Strengthening these capabilities may require addressing inequities in the governance process, such as those around gender in institutions at all levels, including law. Local leaders are often identified by pastoralists as central to negotiating resource rights and may be seen as the most legitimate interlocutors, although this is changing as political representatives (such as local councils) develop. Stronger capabilities may be needed to resolve latent conflict and perceived historical injustice over resource sharing. Stronger capabilities may also be needed to negotiate reparations; for example, where pastoral lands have been lost to public development or to protected areas.

Identifying key motivators for dialogue can strengthen capabilities. Finding commonalities in interests or objectives among different groups can provide a basis for dialogue. In northern Nigeria, for example, the health and husbandry of livestock is integral to the daily life of Fulani pastoralists and was a key motivator for successful self-governance (Okello *et al.*, 2014). Developing new social networks that foster interaction among pastoralists and other actors can lead to partnerships to address the growing large-scale challenges, such as loss of tenure, the risks associated with globalized markets and regional scale catchment management that lose sight of specific water needs (Ravera, Tarrason and Simelton, 2011).

Pastoral participation in the Ancares Leoneses Biosphere Reserve

Ancares Leoneses is a mountainous area in the northwest of Spain, recognized as a Biosphere Reserve in 2006. The reserve is managed by a number of municipalities in the province of León along with the CIUDEN Foundation. Participatory planning and management have become established approaches for improved management of the Biosphere Reserve and have strengthened consultations over strategic plans for it. A "Council of Participation" has been established based on agreed rules and composition, which leads the decision-making process of the reserve. The Council represents the local population in dialogue as well as being involved in the management and specific actions of the Biosphere Reserve and is in partnership with a scientific committee of the reserve.

Success in the Ancares Leoneses Biosphere Reserve has been made possible by strengthening the social fabric of the rural community. This has been accomplished through development of local pastoralist networks as a way to improve their influence and visibility and their active role in land planning. This strategy, however, requires pastoralists to take a prominent role in management of the reserve, which requires higher levels of knowledge and capacity, and the deployment of better human and financial resources. Pastoralists in Spain benefit from growing public awareness and support, particularly due to growing awareness of their role in environmental management. Nevertheless, efforts are continuing to strengthen their capacity to lobby, to raise their visibility and to secure supporting legal frameworks for their participation (Herrera, 2014).

Capability 2: Coordinate activities of multiple actors

In general, two types of coordination problems arise for pastoral institutions. The first is the need for agreement across institutions. As the number of institutions that act as veto points increases, so does the difficulty of reaching agreement (Tsebelis, 1995). This is particularly true for pastoral governance, as pastoralism crosses district and international boundaries. At this level, the organizations involved – with veto authority – can hold different policy priorities and concerns. This increases the risk of joint decision-making traps, which can lead to suboptimal outcomes (Scharpf, 1988). Such situations may reflect learning deficits and the lack of institutional "nesting" (Ostrom, Gardner and Walker, 1994).

A second set of coordination problems "arise when institutions at various levels fail to acknowledge each other, so that actions taken within the context of one institution compete with actions and decisions taken within the context of other institutions"(Poteete, 2012). In pastoral governance, this is most pronounced in the conflicts and governance challenges that arise in relation to the large-scale development of agriculture. In this context, pastoralists and their food production systems are in the "blind spot" of organizations pursuing large-scale agricultural development as a solution to food insecurity and a lack of economic growth. Other key blind spots relate to competition for resources or conflicts around authority as is evident in many contacts between traditional authorities and organizations of government (Lund, 2006).

New approaches to recognizing local governance

Grassroots governance has emerged in parts of the United States of America as a way to strengthen the ability of ranchers to benefit from rangelands. The need for a collaborative effort has proven effective in Texas, where Wildlife Management Associations help ranchers to market hunting opportunities, manage game and qualify for tax relief. A government agency, the Texas Parks and Wildlife Department, is a critical facilitator that sets guidelines through wildlife management plans. As a result, ranchers can improve their benefits from smart use of a resource, which is usually underutilized, thus obtaining an economic incentive to maintain their large estates together, rather than fragmenting and selling them.

The Malpai Borderland group is a non-profit organization with the ability to hold conservation easements in Arizona. Those easements are contracts between landowners and other organizations that confer specific rights to enhance environmental services provided by the ranch. The result is a collective action for restoring and conserving a healthy, unfragmented landscape with increased values in terms of biodiversity and natural processes (Huntsinger, Sayre and Macaulay, 2014).

Increasing the ability to coordinate requires attention to the following:

1. **Establish mechanisms for coordination** through connecting multiple centres of governance: sometimes referred to as nested or polycentric governance. Institutional arrangements should respect and allow for: a) many autonomous units formally independent of one another; b) choosing to act in ways that take others into account; and c) processes of cooperation, competition, conflict and conflict resolution (Ostrom, Gardner and Walker, 1994).
2. **Reduce the transaction costs** of cooperation in the context of the complex and diffuse problems associated with pastoralism. This is discussed in capability 1 and the solution on social learning (action area 7).
3. **Strengthen pastoral institutions and community organizations** as key facilitators of coordination between public institutions. State institutions can benefit from the rich knowledge and flexibility of pastoral institutions by formally engaging with and respecting them, which, in turn, can help foster reciprocal respect for state organizations.

Capability 3: Strengthen trust

Relations between the organizations engaging in or impacting on pastoral tenure governance are typified by both collaboration and contention over the right to govern resource access, use and distribution. Distrust among actors has an adverse impact on governance. This includes stalemates in planning, lawsuits that hold up management actions, noncompliance with regulations, public protests and even violent conflict as well as reduction in the potential for learning and experimentation. Conversely, greater trust within tenure organizations may encourage re-examination of assumptions and can promote working together more effectively (Stern and Baird, 2015).

Strengthening trust often means repairing existing relations, increasing positive exchange and reducing negative effects in both institutional arrangements and interactions (Dirks, Lewicki and Zaheer, 2009). Components of trust building can include accountability mechanisms, effective recognition and inclusion, stronger representation, and respect for traditional management, governance and knowledge systems. These aspects are addressed elsewhere in this technical guide. Additional strategies include:

1. **Create the space for strong and effective community organizations and social networks** to emerge as well as better mechanisms for their voices to be heard and included. This can include the strengthening of traditional organizations and institutions.
2. **Recognize traditional authorities** in order to restore trust. The choice of who should be recognized as the pastoral voice is a decision that must be made by pastoralists. It is possible that multiple forms of representation will need to be addressed (action area 1).
3. **Develop networks of information,** including access to information about initiatives/actions affecting pastoralism and pastoral tenure. Information networks can improve transparency and can also support pastoralists to respond more effectively to pressures and threats. Information needs to be appropriately communicated, including through oral communication.
4. **Strengthen mechanisms for accountability and representation** (see discussion in action area 1).

Capability 4: Defend (and claim) tenure rights

Many governments are undertaking processes of tenure reform; however, pastoral communities have largely been unable to contribute to how these rights are defined and implemented. The following strategies can contribute to this community-based capability.

1. **Develop and strengthen community organizations and social networks.** As discussed in capability 3, supporting stronger pastoral organizations and social networks is critical for enhancing the capabilities of pastoralists, including defending their rights. These organizations provide a platform for information sharing and awareness raising of the rights and responsibilities of land managers, including existing legal options and also innovations in securing rights made

by other pastoralist communities. Social networks can play a particularly significant role in empowering women and enabling them to engage in dialogue on land and governance.

2. **Resolve ambiguity about where responsibility for the allocation of land rights lies.** Tensions within the state between different ministries as well as between the state and traditional organizations around land allocations, can be exploited by those seeking intervention from the authority it perceives as most likely to support its own interests (Ribot and Peluso, 2009). Ambiguities may lie in the overlap between state organizations that can sanction different uses of pastoralist resources, particularly where those resources are not under clear ownership. Resolution of such ambiguities may require both a review of laws as well as dialogue between organizations with overlapping claims and interests.
3. **Strengthen locally-accessible, unbiased institutional processes for resolving land tenure issues.** Deciding on appropriate forms and specific powers should be done through participatory processes in decision-making and in conflict resolution (action areas 2 and 6).

Strengthening pastoralist voices

In the last decade, the efforts of organizations such as the World Initiative on Sustainable Pastoralism (WISP), and the World Alliance of Mobile Indigenous Peoples (WAMIP), and more recently the FAO Pastoralist Knowledge Hub, have made significant contributions towards strengthening the voice of pastoralists and improving the governance of rangelands. These initiatives have done so by working with pastoralist groups, civil society organizations, governments and international development organizations. Despite the considerable progress that has been made in the last decade, pastoralists all over the world continue to face uncertainty about their future due to lingering doubts about the commitment of government to respect their human rights and assure their well-being.

Capability 5: Recognize and consider the linkages between ecosystems and social sustainability

As discussed in Section 1, pastoral systems are both social and ecological and they have complex institutions that support resilience in both aspects. When external pressures affect natural resources people also suffer. Enhancing the capability of government and community actors to maintain this fragile balance can be supported by:

1. **Recognizing traditional pastoral systems** including their institutions and knowledge as the primary actor responsible for these areas. See action area 4.
2. **Knowledge exchange about environmental impacts** of external activities on pastoral lands and the economic value of ecosystem services protected by pastoralists. Learning fora can improve understanding of these impacts and this supports diverse actors to choose actions that are both ecologically and socially sustainable (see action area 7).
3. **Recognizing nested institutional systems** in which governance and management of land occurs at the lowest level. Placing land management at the lowest level (i.e. within communities, either through their traditional systems or local state systems) reinforces learning through management and adaptive management approaches.

Capability 6: Learn and respond to risks, pressures and threats

As discussed in action area 7 on collaborative learning, the co-creation of knowledge (new understandings including the ability to use existing information in innovative ways) can strengthen governance capabilities by bringing together different knowledge systems in ways that bring about informed social change (Lebel, Wattana and Talerngsri, 2015). Because this kind of learning is locally and contextually based, the capabilities of both local actors and external actors to engage in this learning are critical. This is discussed in detail in the relevant section.

Capability 7: Functioning as an effective entity

Local organizations play an essential role in strengthening governance of tenure. A common approach to strengthening tenure is to establish hybrid institutions that act as an interface between customary institutions and state institutions, such as pasture management committees or pastoralist associations. While these organizations can be the lynchpin of success, they can also be the point of weakness if they are not themselves well governed and administered. Local organizational development must, therefore, be part of a strategy for strengthening governance of tenure. This can include establishing their legal status, internal governance structures, and basic systems of accountability and organizational effectiveness.

Institution building in Mongolia

In Mongolia, pastoralists have observed political control over their 128 million hectares of grazing lands change hands from Monastery control to the Mongolian secular state in 1921. The state instituted a collectivization programme (the negdel) for pastoralists in the 1950s and then decollectivized the pastoral sector in the early 1990s when it began privatizing state resources. While pasturelands were not privatized, the retreat of the state left a decision-making gap that kin-based institutions in the pastoral rangelands could not fill. Collectivization had weakened the kin-based system; the retreat of the state thus created confusion and conflict among pastoralists. Adding to this confused state of affairs, the state began allocating mining concessions to private entrepreneurs. This had the effect of restricting access to grazing lands and polluting water resources. Mongolian pastoralists faced with these problems began to challenge the state through local social movements, the most popular of which became known as the Ongi River Movement (ORM) formed in 2001. To strengthen the capacity of local groups to manage grazing resources and to contest the decisions of the state with regard to management of pastoral resources, international development organizations including the German Technical Cooperation (GIZ), the United Nations Development Programme (UNDP) and the World Bank began implementing natural resource management programmes in Mongolia. The programmes also sought to build the capacity of government agencies responsible for managing Mongolia's natural resources. The activities of these international development partners and of social movements like the World Alliance of Mobile Indigenous Peoples (WAMIP), have strengthened pastoralists' social movements in Mongolia.

Action area 6: Avoid and manage conflict

Objective: Much of the conflict in pastoral areas revolves around land tenure and related resources, although other factors are also important. Significant conflict can impact on the ability of nations to achieve food security and other development goals. For these reasons, addressing conflict is of critical importance in implementing the Guidelines. This action area is designed to avoid and manage conflict, to ensure that tenure policy and interventions are conflict sensitive (i.e. that they do not contribute to conflict) and to enhance collaboration and cooperation. The section does not address large-scale (state-level) conflicts, although it is recognized that these profoundly influence governance of pastoral tenure in some countries.

Why is conflict a concern?

In some countries, pastoralism is frequently associated with conflict, and while this does not reflect the global state of pastoralism — which is notable for its internal conflict-management mechanisms — there is likely to be a close association between resource conflicts and weak governance of tenure. Furthermore, as efforts are made to strengthen tenure, there are risks of aggravating conflict or generating new conflicts if adequate precautions are not taken. Many pastoral systems and communities are bisected by international or domestic boundaries, which can be a complicating factor and pastoralists are, in some cases, wrapped up in political conflicts on different scales.

Conflict is highly complex and seldom attributable to one or two factors only. Multiple sources of tension or vulnerability may interact, including poverty, religious or ethnic tension, traditions of cattle raiding, increasing availability of firearms, unclear tenure, corruption and patronage, land and population pressure, industrialization and agricultural expansion, underemployment of youth and many more. Conflict "multipliers" include phenomena such as land grabs, foreign land investments and climate change, many of which are aggravated by insecurity of tenure. Conflict further undermines human security, including the ability to achieve food security,[14] with no country in conflict having achieved food security (Sen, 1999).

Despite the many risks of conflict in pastoral societies, the predominant relationships among pastoralists and with others are largely collaborative and synergistic. This is an important consideration as strengthening collaboration and positive relationships, and building on established mechanisms for intercommunity negotiation, can help reduce the extent of conflict.

Key elements of a conflict-sensitive approach to implementing the Guidelines

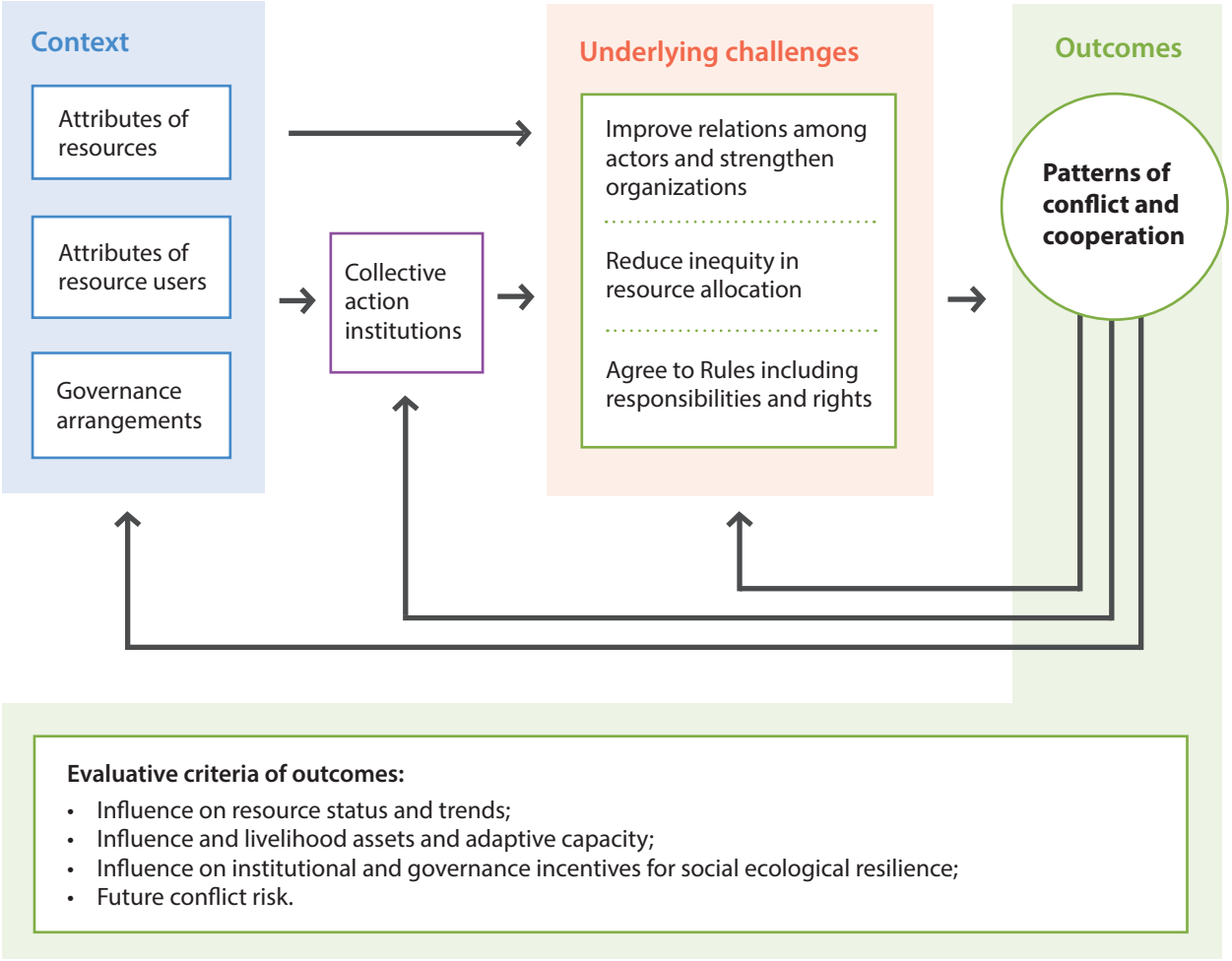
Sustainable and effective responses need to address the root causes of conflict. Conflict most commonly occurs where there are high-levels of inequity and poverty and limited

[14] IFPRI

opportunities. Responses to conflict need to address these root causes and the structural underpinnings, including the lack of access poor people have to material resources such as land. Without long-term, durable and just land tenure solutions it is unlikely that conflict in pastoral communities can be avoided. In addition, other contributing factors to poverty must be addressed, including economic marginalization through the lack of sufficient productive support and the process of squeezing out caused by agricultural expansion.

Meaningful conflict resolution also needs to take into account issues of scale. Where resource conflicts are related to corridors that traverse national boundaries or regional economic policies, the solutions need to be addressed at this level. At a localized level, whether pastoral communities and others adopt conflict or cooperative strategies to resolve the challenges they face depends on their capabilities and motivations.

FIGURE 13:
Conceptual approach to understanding conflict
(Ratner *et al.*, 2013)



One approach to understanding and responding to conflict is to focus on understanding the different dimensions that characterize the context. This includes triggers from the social and economic domains, relationships among actors and their respective opportunities, and governance arrangements. These triggers can, depending on existing capabilities, result in either collaborative responses or in conflict. In the face of shortages (land, water etc.) communities are more likely to cooperate and establish sharing mechanisms, than to fight over these, if they are able to negotiate and dialogue with each other (Kok, Lotze and van Jaarsveld, 2009). Key elements in avoiding and managing conflict include:

1. Understanding conflict triggers and multipliers – conflict analysis;
2. Restoring capability of traditional institutions;
3. Strengthening social cohesion and good social relations;
4. Strengthening environmental management and sustainability;
5. Repairing relationships;
6. Making governance and decision-making processes fairer;
7. Establishing tenure clarity;
8. Strengthening (institutional) capacity to buffer and respond to crisis;
9. Addressing factors underpinning structural inequity.

1. Understanding conflict triggers and multipliers: conflict analysis

Each conflict situation is different. Consequently, undertaking an analysis of conflict triggers and multipliers related to land tenure and pastoral livelihoods is an important first step. It provides a basis for identifying appropriate responses. This analysis should be cross-cutting, examining social, environmental, economic and political factors, including:

1. **Tenure rights:** Changes in land tenure rights and access to natural resources are key conflict triggers as the loss of land can be synonymous with loss of opportunity and increasing vulnerability. Identifying changes in rights and the underlying reasons (possible conflict triggers) for these changes helps in the understanding of key triggers.
2. **Changes in agro-ecological conditions and understanding how these are impacting on livelihoods and vulnerability.** This includes identifying key resources and losses through processes of environmental change including climate change and resource degradation. The former includes rainfall patterns, grassland conditions etc. This helps to identify environmental stressors and related vulnerability. In addition, it provides insight into whether scarcity is increasing.
3. **Efficacy of livelihood approaches and impacts on these.** This includes considering existing safety nets such as kinship and social support, increases in poverty, and loss or changes in herds.

4. **Relationships and networks.** Current and historical relationships with the state should be analysed including the existence of latent conflicts, the state of trust and historic relations with other pastoralists. This analysis reveals how well communities can cope in the context of growing crisis.
5. **Local community organizations including traditional authorities.** Assessment should include the strength of these systems, how legitimate they are perceived to be and the existence of dispute-resolution systems. This provides insight about internal coping mechanisms.
6. **Representation and accountability,** including how pastoralists have their say in the governance of land and related resources and whether pastoralists feel marginalized. This provides an understanding of how pastoralists see themselves in relation to the state.

2. Restore capability of traditional institutions

Recognizing local pastoral governance, and the dispute-resolution systems within them, can be an effective way to resolve local conflicts, even between users from different communities, as there are often sufficient similarities and shared principles. In some pastoral systems, such as the Sudano-Sahelian zone of Africa, local conflicts have historically been negotiated through complex, multistranded social relations that connect different user groups (Kitchell, Turner and McPeak, 2014). In the Sudan, traditional organizations have been able to successfully mediate and resolve conflict with external actors who were attracted to the area after grassland restitution. This approach is most effective in contexts where there are not enormous power differences among actors in conflict.

TABLE 2:
Strengths and limitations of different conflict management mechanisms
(Ratner *et al.*, 2013)

	STRENGTHS	LIMITATIONS
Customary mechanisms	• Encourages community participation and respect of local values and customs • Provides familiarity of past experience • Can be more accessible because of low costs, use of local language, flexibility in scheduling • Decision-making is often based on collaboration, with consensus emerging from wide-ranging discussions, often fostering local reconciliation • Contributes to a process of community self-reliance and empowerment	• Not all people have equal access to customary conflict management practices owing to gender, caste, ethnic or other discrimination • Courts and administrative law have supplanted authorities that lack legal recognition • Communities are becoming more mixed, resulting in weakened authority and social relationships • Often cannot accommodate conflicts among different communities, or between communities and government structures, or external organizations

	STRENGTHS	LIMITATIONS
State systems	• Officially established with supposedly well-defined procedures • Takes national interests, concerns and issues into consideration • Decisions are legally binding	• Often inaccessible to the poor, women, marginalized groups and remote communities because of the cost, distance, language barriers, illiteracy and political discrimination • Judicial and technical specialists often lack expertise, skills or interest in participatory natural resource management
Alternative conflict management	• Promotes conflict management and resolution by building on shared interests and finding points of agreement • Processes resemble those already existing in many conflict management systems • Low cost and flexible • Fosters a sense of ownership in the solution and its process of implementation • Emphasizes building capacity within communities so local people become more effective facilitators and handlers of conflict • May encounter difficulties in getting all stakeholders to the bargaining table	• May not be able to overcome power differences among stakeholders in that some groups remain marginalized • Decisions may not always be legally binding • Some practitioners may try to use methods developed in other countries without adapting them to the local contexts • Lack of instruments to ensure rule of law

3. Strengthening social cohesion and good social relations

In areas where relationships between pastoralists and their neighbours are relatively well established and provide a sufficient basis to facilitate informal negotiation of access, perceptions over the need to formally secure land or corridors are generally weak (Kitchell, Turner and McPeak, 2014). These tended to be localities where transhumant pastoralists spend a significant portion of the year and return in successive years, leading to closer relationships among

groups and diluting understandings of "insider" and "outsider". This suggests that investing in strengthening these relationships can lead to less conflict. Fostering communication, dialogue and other interactions can help strengthen connections among people. This can be as simple as facilitating exchanges around general, non-specific aspirations or as specific as developing common projects.

4. Strengthening environmental management and sustainability

Given that pastoral communities have high levels of exposure and sensitivity to ecosystem change and vulnerability, decline in ecosystem resilience can act as a conflict multiplier or trigger. Restoring and managing ecosystem sustainability may consequently contribute to reducing the potential for conflict. Importantly, ecosystem restoration can stimulate new claims and contestation, and can lead to winners and losers. For this reason, ecological strategies must be complemented by institutional and governance systems. Strengthening livelihoods and improving productivity in the context of environmental stress (or, indeed, any other stressor), can help buffer communities from adverse impacts and decrease the likelihood of the environment becoming a conflict stressor.

5. Repairing relationships

Conflict in many pastoral areas has historical roots or has become endemic. In this context, relationships among the different actors have become extremely hostile. Repairing these relationships, in the first instance, requires creating a willingness to engage. Initial engagement can be used to create understanding between the different factions of the challenges, problems and aspirations. This is an important step in reconciliation. Longer-term processes would need to include building trust and a willingness to engage to find long-term durable solutions. Government agencies may also need to be brought into conflict resolution that is seemingly between local groups since much conflict among different local groups is related to how the state allocates resources (including land, loans, opportunities and social benefits).

6. Making governance and decision-making processes fairer

Often conflicts relate to processes that are considered to be unfair or unjust. This includes circumstances in which decisions that impact on pastoral livelihoods and well-being are made without the representation or participation of pastoral people. Conflicts around processes may also arise where agreed procedures have not been followed. Action area 1 addresses how to improve decision-making processes, including by providing for greater voice and authority of pastoralists in decisions that impact on their livelihoods and well-being.

7. Establishing tenure clarity

At the local level, new schemes and rules around the use of and access to natural resources have increased tenure uncertainties. This includes, for example, growing separation of custodianship and decision-making authority. Examples include co-management regimes that bring in multiple stakeholders with a role in decision-making but with no responsibility for custodianship. Weak tenure rights including the lack of clarity about the access and use entitlements of different stakeholders can create tension. Depending on the overall context, this tension can increase the number of conflict stressors. Despite decentralization many local governments lack the human capacity and investments needed to provide meaningful support to pastoral communities and other communities. Strengthening the capacity of both local government and local organizations to provide safety nets can help lower the risk of crisis degenerating into conflict.

Whose rights count?

In Norway's National Parks, Sami pastoralists noted that increased pressure from hikers in certain areas can impact on pastures for reindeers and increase the vulnerability of an ecosystem if they are not dealt with at an early stage. Non-indigenous local representatives in park management tend to see increased activity and related value creation as positive for the local community because they may allow the economy to grow.

Sami representatives perceive the increased activity as threatening to their industry. A pastoralist explained: "*This land we have used for reindeer herding for generations. Then someone comes to protect this land that we have protected for all these years. The Norwegian people think that their way of protecting is better than ours, but as a reindeer pastoralist, the land becomes more fragile. It is not protection that is the problem; it is all the stakes people have in the protected area. It becomes crowded with people who don't know our livelihood.*" (Risvoll *et al.*, 2014).

8. Strengthening institutional capacity to buffer and respond to crisis

Buffering adverse impacts can be an important strategy for reducing the likelihood of conflict. Early warning systems can provide the basis for identifying where buffering actions are most needed. This includes, for example, addressing food security implications of drought, increasing aridity and soil quality loss.

9. Addressing factors underpinning structural inequity

Ultimately, removing the risk of conflict requires addressing structural inequality and inequity including in land tenure. Structural inequalities include the unequal roles, functions, rights and opportunities that are held as a result of how society functions. Land tenure inequities and historical wrongs are critical for most pastoralists as land underpins their relative opportunities and power. Other structural factors are related to inequality in access to education, finance, social networks etc. Ultimately, supporting pastoralists requires addressing these multiple facets of inequity.

Action area 7: Foster collaborative learning

Objective: Learning is necessary for problem solving and is essential for achieving the changes in mindset needed for transformative change (Figure 14). Action area 7 focuses on learning among different actors, within and among different scales, as a key element of resolving complex problems. The objective is to strengthen collaborative learning in order to improve relations and facilitate cooperation, with a view to achieving responsible tenure governance that takes into account pastoralism and pastoral tenure. Learning is a core element of all proposed action areas.

Why is it important to address learning?

Learning is an important component of responsible governance as it underpins the ability to innovate and develop creative and credible solutions in complex systems. Learning is also essential to adapt to constant changes in the system, or in elements of the system. This is particularly true for pastoralism as it faces multiple challenges to its continued existence, as discussed in Section 1. Addressing these challenges requires breaking with current patterns of governance and taking new approaches to ensuring responsible governance that recognizes the values of pastoralism and respects, protects and fulfils pastoral rights.

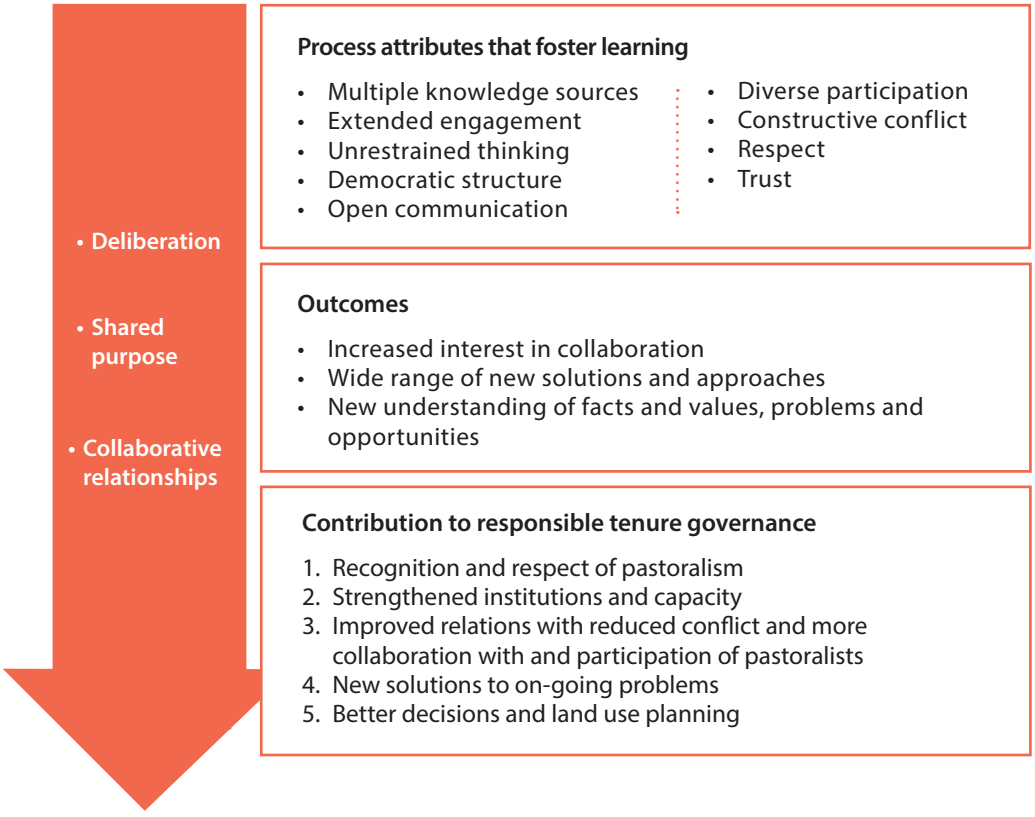


FIGURE 14:
Contributions of social learning to responsible tenure governance that recognizes pastoralism

Learning is widely accepted as being an essential aspect of resilient and adaptive societies (Folke, 2006; Stern and Coleman, 2014). Collaborative, participatory or social learning can contribute to the development of shared vision, interconnectedness, coherence and contextualization of the problems. This supports understanding pastoral challenges in the contexts in which they occur; for example, that protected pastoral corridors are a critical part of the architecture for food security for key sectors of the population. Well-designed social learning processes that bring together different actors can create trust, collaborative learning and shared vision that help resolve conflicts in meaningful ways addressing long-term conflict drivers and further fostering resilience (Tompkins and Hurlston, 2011).

Elements of collaborative learning for responsible tenure governance

Strengthening the ability to learn requires:

1. **Sufficient knowledge among contributors.** This includes sufficient technical, social and cultural knowledge related to the specific issues being considered. For example, governments can learn about options for protecting and formalizing pastoral land tenure systems from their peers in other countries.
2. **Learning between knowledge systems** of different actors, including local and indigenous knowledge and different scientific disciplines. Learning across these boundaries requires sensitivity and respect to share different perceptions of history and of experience. However, learning across such boundaries can also help to build trust and restore relationships.
3. **Identifying and overcoming institutional and political constraints** and recognizing that creating new organizational structures without addressing mistrust and weak relationships may work against effective coproduction of knowledge (Van Kerkhoff and Lebel, 2015).
4. **Addressing disjuncture across scales.** For learning at the local level to impact on policy at 'higher' scales, institutional and organizational constraints must be addressed. Careful planning and consideration of scale in knowledge co-creation has the potential to broaden the reach of local understanding of tenure governance (Van Kerkhoff and Lebel, 2015).
5. **Ensuring sufficient resources for learning.** These resources include financial resources as well as time. Facilitation and mediation capacities may also be required to support iterative processes.

These five aspects of collaborative learning can be clustered around two key issues:

1. Engaging with all relevant knowledge and knowledge holders;
2. Creating a safe space for freedom and choice.

1. Engaging with relevant knowledge and knowledge holders

Participatory learning tools are often used to overcome epistemological differences between knowledge holders. The rigidity and bureaucracy of modern institutions and of science may limit the ability of some actors to admit that they do not have all the solutions (Ross *et al.*, 2011). It is only with that acknowledgement that institutions and individuals become open to different ways of knowing and are able to think outside established boxes.

Learning among different actors can be challenging and requires that these different actors understand different knowledge systems and ways of doing things. However, where these barriers are transcended, engaging all community actors and rights holders actively in discursive and iterative processes with decision-makers can help promote legitimacy and trust in solutions and a common purpose. For learning to support pastoral communities effectively, learning frameworks must provide the conditions that encourage changes and responses within the overall system. Learning across boundaries is possible, as experience in inter-actor learning with pastoralists in Mongolia indicates, where integrated knowledge and application in multiple instances helps to provide meaningful solutions to existing challenges (Baival and Fernández-Giménez, 2012).

Mongolia: Successful engagement among pastoral knowledge holders, donors and external experts

Traditional knowledge is not static, but is continually developing in response to changing circumstances. This can facilitate integrating different knowledge systems if the process is skilfully facilitated. In Mongolia, pastoralists have been receptive to knowledge from donors and other external experts. This experience suggested that key elements in successful integration related to:

- How knowledge is shared: Learning and integration was easier through oral exchange, rather than disseminating briefs, manuals and other documents.
- Adequate time and open process: Pastoralists were more comfortable in gatherings and meetings that were open-ended in terms of time and the number of participants who can speak.
- Appropriate discursive forum: This would include familiar faces, familiar terms and familiar ways of exchanging information as a basis for introducing new information (Baival and Fernández-Giménez, 2012).

Various methodologies and tools, including mapping, dialogues, action learning and other participatory methods have been used to facilitate learning, and particularly understanding of pastoral systems as interlinked socio-ecological systems. Such learning is only effective if it is able to hear the voices of those who are often most marginalized from decision-making, particularly women. Inclusive learning can help create more holistic approaches. This would include, for example, creating a pathway for protecting the rights of pastoral women.

Customary law and other local norms may also limit the space for including women in decision-making. Including women in learning processes as well as knowledge exchanges about how their lack of rights (for example, over livestock) impacts on them can create understanding, empathy and solidarity across gender barriers. It can also foster positive attitudes and norms about inclusion in decision-making.

Social learning to resolve tension between pastoralists and farmers (Crawhall, 2014)

The Indigenous Peoples of Africa Co-ordinating Committee (IPACC) together with the Association des Femmes Peules Autochtones du Tchad (AFPAT) participatory 3D modelling (P3DM) has been used to create a geo-referenced scaled model of the Baïbokoum territory where nomadic pastoralists and farmers were increasingly in tension over water rights. The project demonstrated that geospatially a 'win-win' situation could be achieved by some minor adjustments to access and management of the riverbank by the more dominant farming community. At the same time, the model showed rapid deforestation, which needed joint action by government and communities.

The participatory model-building process increased solidarity between pastoral clans, stimulating dialogue between farmers and pastoralists. Importantly, it also gave policy-makers in that district a much clearer picture of the land-use changes causing conflict and the potential for serious conflict should there be a drought shock. Along with these benefits, women nomads showed themselves capable of leadership and technical skills in participatory knowledge management projects. Pastoralists from Uganda, the United Republic of Tanzania, Kenya and the Niger all noted that they were experiencing similar forms of land-use change, similar forms of potential or real conflict, and that early use of participatory landscape mapping or modelling would be a valuable way to prevent conflict and protect resources.

2. A safe space for freedom and choice

Collaborative learning takes place most effectively in spaces where participants feel able to share knowledge and ideas without fear. Creating a safe space for learning and problem solving is a critical requirement for effective learning. Rigidity created by the legislative and regulatory framework can adversely affect learning in a participatory environment. Learning within a predetermined set of assumptions and norms reinforces existing ways of doing things and is generally insufficient for innovation or transformation. Only peripheral-level types of changes become possible.

Trust is another key requirement for innovative learning. When groups are able to trust each other they may be able to share and examine their assumptions with one another, work together more effectively (Stern and Coleman, 2014) and encourage experimentation. Conversely, distrust may lead to cultures within and across organizations that resist new ideas and change, and thus make it impossible for creative and innovative responses to new conditions (Stern *et al.*, 2014). Low levels of trust may be linked to power disparities, as those with less power may be less able to participate. Addressing inequity and inequality, including gender inequality and established patterns of discrimination, is essential in order for women and other marginalized groups to engage freely. This requires looking at the historical legacy as well as current political-economic factors affecting power.

Creating learning spaces for making rangelands secure[15]

A key component of the International Land Coalition's (ILC) Rangelands Initiative is to create space for learning among and between different actors on how best to make rangelands secure. This includes learning among policy-makers who, as much as anyone, are grappling with the complexities of pastoral tenure systems and struggling to identify how best to protect them. The ILC Rangelands Initiative works closely with national governments to open up learning spaces for them to review and analyse the experiences of other countries, and to learn from their peers, from researchers, development actors, NGO/CSOs and from communities. Such spaces can include international meetings, study tours, learning routes, round tables or one-to-one discussions. In addition, the initiative takes on some of the risk (financial, technical etc.) of piloting new innovations with government. These innovations act as centres of learning for others, as well as a basis for scaling-up if successful. A key success has been the piloting of joint village land-use planning in the United Republic of Tanzania in order to protect shared resources that cross village boundaries – the innovation is now being scaled-up by government and supporting stakeholders.

An important opportunity for collaborative learning can be provided through monitoring cycles. Participatory monitoring, evaluation and learning provide a great opportunity to learn from success and failure. Governance processes and outcomes are difficult to monitor, but it is essential for ensuring improvements in tenure governance and the progressive realization of the objectives and goals of the Guidelines, particularly as related to food, livelihoods and poverty. Part 7 of the Guidelines promotes the development and implementation of monitoring and evaluation systems. Multistakeholder platforms are earmarked as a way to monitor and evaluate implementation and impact. Some requirements for these processes are identified, including that they are participatory, gender sensitive, implementable, cost-effective and sustainable (paragraph 26.2).

[15] www.landcoalition.org

SECTION

3

Developing policy and legal frameworks for pastoralism

Section 3: Developing policy and legal frameworks for pastoralism

Section 2 has presented the main areas where action can be taken to strengthen responsible governance of tenure in pastoral lands. Section 3 provides guidance on developing policy and legal support for pastoral tenure. This section outlines the steps to develop a pastoral land policy and the existing principles that can inspire this achievement. It presents the legal and institutional elements to create or improve legislation related to tenure, which is one of the key tools used to implement policy objectives. Many countries have laws in place that can support progress towards responsible governance of tenure for pastoral lands, but these laws are not always implemented. Pastoral legislation alone does not solve the problem of weak pastoral tenure, but it provides the legal basis for action. In this respect, Sections 2 and 3 are complementary.

Section 3 is consistent with the general principles of the Guidelines in drawing on international and regional instruments that address human rights and tenure rights, including the Sustainable Development Goals.[16] These principles and elements provide guidance on internationally accepted practices for legal systems that deal with the rights to use and control pastoral land. Moreover, they contribute to improving and developing policy, legal and organizational frameworks that regulate a range of tenure rights that exist over pastoral land. They can also strengthen the capacity and operations of implementing agencies, judicial authorities, local government, farmer organizations, cooperatives, and small-scale owners or occupiers of pastoral land.

Responsible governance of tenure and the law: a guide for lawyers and other legal service providers

The technical guide on *Responsible governance of tenure and the law* demonstrates how to use the law to promote responsible governance of tenure of land. Section 3 should be read in conjunction with the technical guide on *Responsible governance of tenure and the law*, which it complements. This technical guide recognizes the law as an important vehicle for translating international standards into real change. For example, the Guidelines provide guidance on features of legal frameworks, on lawmaking processes and on legal assistance for vulnerable groups. The technical guide provides more specific guidance in the following four areas which are directly applicable to pastoral land:

- how to appraise legal frameworks to assess the extent to which they are in line with the Guidelines;

[16] See https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

- how to enact or revise legislation where needed;
- how to ensure that legislation is duly implemented;
- how to use the Guidelines in the context of dispute settlement.

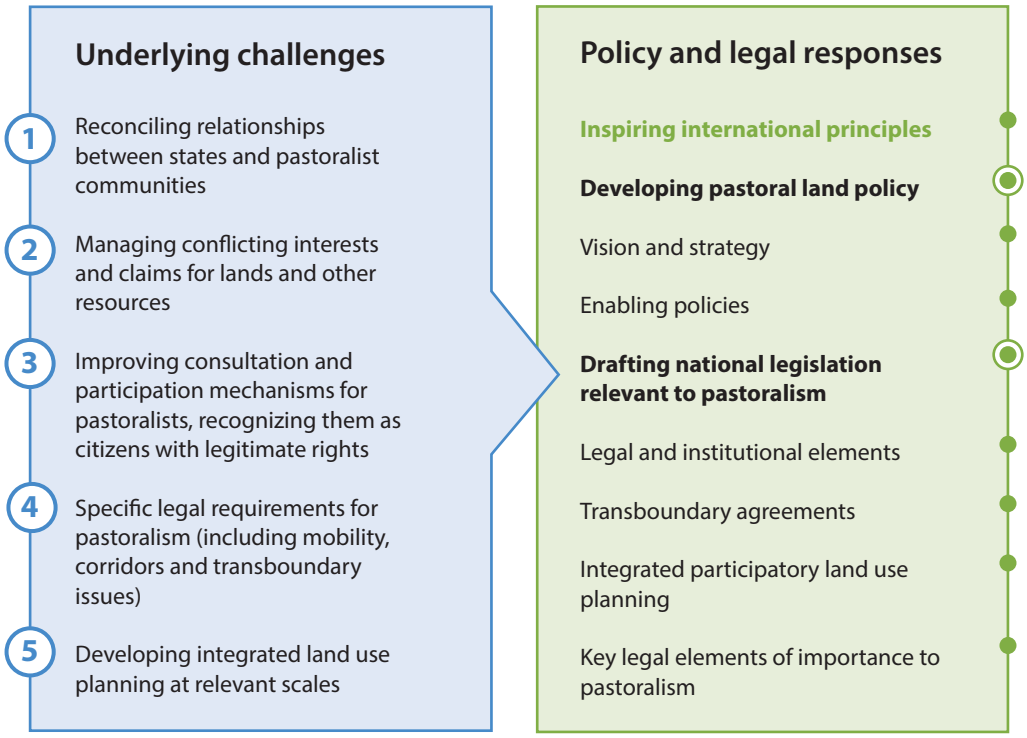
In particular, Section 3A of the Guidelines provides five general principles, which can be used as broad indicators to assess the legal framework of the pastoral land law of a country:

- the legal recognition and allocation of tenure rights;
- the protection of tenure rights against threats and infringements;
- the promotion and facilitation of the enjoyment of legitimate tenure rights;
- access to justice; and
- the prevention of disputes, conflicts and corruption.

These factors have influenced the selection of legal and institutional elements outlined in Section 3.

Establishing national pastoral land policy and law by following the principles and elements set out in Section 3 will contribute to better governance. This may involve introducing new laws, or amending or repealing existing ones, and the implementation through national law of international treaties. The provisions of these treaties would normally need to be implemented through national law and policies before they can impact individuals and groups. Even without formal implementation, these international instruments may stimulate national-level processes and indirectly affect the governance of tenure (FAO, 2016), focusing more specifically on land administration, taxation, transfer of land, allocation of tenure rights, spatial and other land-use planning, resolution of disputes over tenure rights, land trust, customary tenure systems, climate change and resilience to natural disasters. By addressing issues of governance of tenure in a holistic way, the Guidelines provide guidance that can help to advance the implementation of multiple instruments.

FIGURE 15: **Underlying challenges and policy and legal responses**



Inspiring international principles

Considering the requirements of the Guidelines and the United Nations Environment Programme's (UNEP's) *Training manual on international environmental law,* the following international principles have been drawn from a number of sources relevant to the responsible governance of pastoral land tenure. The key sources for the principles and the environmental law concepts of significance are indicated where appropriate. These principles can be used either to reform or to frame national pastoral law (Gillespie, 1997):

1. As a basic underlying policy and ethical position to frame a particular legal and institutional element that will help achieve responsible governance of pastoral tenure arrangements.
2. As a separate, specific state, legal and institutional element, or integrated with another state-level element.

Principle 1: Responsible governance

States have a responsibility to adhere to responsible governance and international human rights principles for the management of pastoral land. This reflects a growing awareness of the importance to sustainable development of transparent, accountable, honest governance, as well as a growing awareness of the corrosive effect of corruption on public morale, economic efficiency, political stability and sustainable development, in general. It implies, among other things, adopting democratic and transparent decision-making procedures and financial accountability, respecting due process in procedures and observing the rule of law more generally, and conducting public procurement in a transparent, non-corrupt manner. States also shall recognize the human rights and the vital role of indigenous and traditional people and their communities and other local communities in the management of pastoral land, especially the benefits of their knowledge of practices in the sustainable use of pastoral land and governance of its tenure.

In order for this principle to be adequately implemented, states should recognize and duly support the identity, culture and interests of indigenous and traditional people, and enable their effective participation and transfer of customary knowledge to achieve the sustainable use of pastoral lands (Licht, Goldschmidt and Schwartz, 2007).[17]

Responsible governance requires non-discrimination and gender equality, which includes the participation of women in all levels of decision-making. Women play a vital role in the management of pastoral land and the governance of land tenure. Their full participation is essential to achieve the sustainable use of the world's pastoral lands. Women and girl pastoralists are among the most disenfranchised people in the world and are increasingly vulnerable to environmental and socio-economic shocks.[18] Pastoral women are agents in livelihood development. They engage in socio-economic and cultural activities, and in the conservation and management of natural resources and maintenance of customary land tenure. Despite the many challenges they face, pastoral

[17] Rio Declaration, Principle 22

[18] See Convention on the Elimination of All Forms of Discrimination against Women adopted in 1979 by the United Nations General Assembly (available at http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm#intro).

women are resourceful in finding ways to ensure that their households' basic needs are met. However, their valuable role is only partially recognized. Pastoral women are particularly disadvantaged by the limitations they face within their own societies; for example, in owning property or participating in decision-making processes. Increasing awareness of women's concerns and the value of their specific inputs is a step towards strengthening women's role in pastoral communities, thus reducing their vulnerability to external shocks. States should ensure that women and girls have equal tenure rights and access to pastoral land independent of their civil and marital status (Flintan, 2008).

Principle 2: Sustainable development, integration and interdependence

Sovereign nations are required to promote healthy and sustainable pastoral land development and the resources within it that will help to improve the quality of people's lives, without compromising future generations. Environmental protection shall constitute an integral part of the development process. This particularly applies to the indigenous and other traditional communities that occupy pastoral lands (United Nations, 1992).

Governance of conservation by pastoralists

Indigenous peoples' and community conserved territories and areas (ICCAs) have been documented as a way to integrate local communities' and indigenous peoples' territorial rights with formal conservation aims. ICCAs are increasingly being promoted by the International Union for Conservation of Nature (IUCN) and within the Convention on Biological Diversity (CBD) process. In 2013, the World Conservation Monitoring Centre issued a toolkit to support conservation by indigenous peoples and local communities. ICCAs can provide a vehicle for strengthening pastoral governance of tenure, bringing together conservation experts and pastoralists: two groups that have often historically been opposed due to competition over land. More attention should be paid to the different models for community conservation in pastoral lands, examining factors in both success and failure (Corrigan and Hay-Edie, 2013).

Pastoral ecosystems interact with the lithosphere, biosphere, hydrosphere and atmosphere. They produce biomass and are a biological habitat and gene reserve. They are critical to the management of the Earth's climate system. The concept of integration demonstrates a commitment to adapt the environmental considerations and objectives to the core of international relations. The interdependence concept included in the Copenhagen Declaration on Social Development, states that "economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development".[19]

Principle 3: Intergenerational and intragenerational equity

Future generations have the right to an adequate heritage that will allow them a quality of life not less than the current generation. Older generations must procure environmental stability for young and future generations that will provide them with the same opportunities for development as they had. This principle has a direct relationship with ethics of environmental order and solidarity.[20]

Leaving aside the argument that the rights for future generations only exist if there

[19] Copenhagen Declaration on Social Development, March 1995 (available at http://www.un-documents.net/cope-dec.htm).

[20] Rio Declaration on Environment and Development, Principle 3. June 1992 (available at http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm).

is a recognized interest to protect, and that current generations have the right to use, enjoy and manage land in search of a better quality of life, these generational rights have to be addressed as collective and not as individual rights, given the fact that these future rights will exist independently of the number of people of every new generation. The United Nations Educational, Scientific and Cultural Organization (UNESCO) Declaration on the Responsibilities of the Present Generation Towards Future Generations (UNESCO, 1997), asserts the necessity for establishing new, equitable and global links of partnership and intragenerational solidarity, and for promoting intergenerational solidarity for the perpetuation of humankind.

Principle 4: Responsibility for transboundary harm

Countries sharing the same pastoral system should make the effort to manage that system as a single ecological unit notwithstanding national boundaries. They should cooperate on the basis of equity and reciprocity; in particular, through bilateral and multilateral agreements, in order to develop harmonized policies and strategies covering the entire system of pastoral land. This involves the mutual exchange of privileges between the states or nations, or at the local level, between districts and communities.

States shall effectively cooperate to discourage or prevent the relocation and transfer to other states of any activities and substances that cause a loss of integrity of pastoral land (Benvenisti, 2002). Where seasonal movements of livestock by pastoral peoples according to customary tenure involve crossing international boundaries, this should be recognized in formal agreements between the respective states.

This responsibility obliges states immediately to notify other states of any natural disasters or other emergencies that are likely to produce sudden harmful effects to the pastoral land of those states. The international community should make every effort to help states afflicted by emergencies. States should provide prior and timely notification and information to potentially affected states on activities that may have a significant adverse transboundary pastoral land effect and they must consult with those states at an early stage and in good faith.[21]

Principle 5: Transparency, public participation and access to information and solutions

This principle is discussed at length in Section 2. It ensures inclusive participation in the pastoralist context, including stronger participation by pastoralists in public decision-making and access to information such as public records, cadastral maps and land registry. This will allow pastoralists to influence decision-making related to their lands and will enable problem-solving to generate legitimate, adaptive and resilient solutions.

[21] Rio Declaration, Principles 7, 18 and 19.

Principle 6: Cooperation and common but differentiated responsibilities

States should cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's pastoral lands. In view of the different contributions to global pastoral degradation, states have common but differentiated responsibilities. Developed countries shall acknowledge the responsibility that they bear in the international pursuit of the sustainable use of pastoral lands in view of the pressures their society places on the global environment, in general, and on pastoral land, in particular, and of the technologies and financial resources they command. The principle of cooperation has become basic in international environmental law.[22]

The world community as well as individual states have the responsibility to protect and conserve pastoral land in a sustainable manner and to preserve its tenure for the benefit of present and future generations (Bosselmann, Engel and Taylor, 2008). In particular, states should take action to prevent dangerous anthropogenic interference with the climate system. They should take measures that aim to enhance the ability of pastoral land ecosystems to adapt to climate change and they should restore or rehabilitate degraded ecosystems.[23]

Principle 7: Precaution

In order to protect the pastoral environment, the precautionary approach should be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage to pastoral land, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent degradation of pastoral land (de Sadeleer, 2002).[24]

This principle is central to the scheme of ecosystem-based environmental management, and is particularly pertinent in the context of pastoral land and management of land tenure, given the risks involved in losing its capability for many generations if inappropriate management regimes are put into place.

Principle 8: Prevention

States should adopt measures directed at prevention of damage to pastoral land. One obligation that flows from the concept of prevention is prior assessment of potentially harmful activities. Since the failure to exercise due diligence to prevent transboundary harm can lead to international responsibility, it may be considered that a properly conducted environmental impact assessment might serve as a standard for determining whether or not due diligence was exercised. Preventive mechanisms also include monitoring, notification and exchange of information, all of which are obligations in almost all recent environmental agreements.

Prevention forms a prudent complement to the international obligation not to cause significant harm and to the polluter-pays principle (PPP); where the latter principle

[22] See Preamble to the Convention on Biological Diversity. See also Sands, 2003, pp. 285–290.
[23] Articles 1(5) and 3(3) of the Climate Change Convention 1992.
[24] As adapted from Principle 15 of the Rio Declaration.

does not necessarily compel polluters to reduce their pollution by requiring them to internalize their costs. Preventive measures should not depend on the appearance of pastoral land ecological problems; they should anticipate damage or, where it has occurred, try to ensure it does not spread (de Sadeleer, 2002).[25]

Stewardship schemes in Ireland's pasturelands

Land trusts and land stewardship are private tools for nature conservation and are widespread in North America and Europe. They are based on free agreements signed between land rights owners and trust entities. Those arrangements deliver social and/or economic benefits for stakeholders in exchange for maintaining nature-friendly land uses or preserving biodiversity. A specific category called agrarian stewardship is intended to promote agricultural activities preserving biodiversity and natural values. Extensive livestock grazing and pastoralism are frequent targets of this kind of agreement in Europe. The Burren Life project,[26] for example, was intended to protect the enormous ecological values of this Irish landscape. Those values are strongly dependent on traditional grazing systems, which have declined due to restructuring of the livestock sector. The project, designed with the collaboration of livestock farmers, established payments in proportion to conservation outcomes.

Habitat maintenance by Spanish pastoralists (Fundacion Biodiversidad, 2015)

The Spanish Cantabrian capercaillie (Wood Grouse) project, commissioned from the farmers' association of the Ancares Leoneses Biosphere Reserve, opens the way for the maintenance, by cattle, of small patches in the forests to improve the habitat of capercaillie. In exchange, cattle owners gain access to some large areas of shrub-free rangelands. The win-win agreement, which is stewarded by the Biosphere Reserve, not only benefits farmers and birdlife but also highlights the crucial role of extensive livestock on landscape preservation. The same kinds of land stewardship agreements are used with other farmers and land users in the area to commit them to biodiversity preservation.

Principle 9: Polluter-pays principle (PPP)

The PPP is taken from the Rio Declaration on internalization of costs. According to the PPP, the environmental costs of economic activities, including the cost of preventing potential harm, should be internalized rather than imposed upon society at large. Anyone whose activities cause or are likely to cause a loss of the ecological integrity of pastoral land should bear the cost of full preventive or restorative measures (de Sadeleer, 2002).[27]

Principle 10: Access and benefit sharing regarding natural resources

Activities in a specific area shall be carried out for the benefit of mankind as a whole, irrespective of the geographical location of states, and taking into particular consideration the interests and needs of developing states and of peoples who have not attained full independence or other self-governing status recognized by the United Nations. The authority shall provide for the equitable sharing of financial and

[25] See Article 14, 1992 Convention on Biological Diversity.

[26] http://burrenlife.com/

[27] The PPP occurs in a binding form in Article 2.5(b) of the 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes (available at http://www.unece.org/fileadmin/DAM/env/water/pdf/watercon.pdf).

other economic benefits derived from activities in the area through any appropriate mechanism on a non-discriminatory basis.

Pastoralists and other local communities shall have the right to access and to benefit in a sustainable manner from the common natural resources in which they rely for their livelihood and existence. The terms and modalities for exercising freedom of transit shall be agreed between the states and transit states concerned through bilateral, subregional or regional agreements. Transit states, in the exercise of their full sovereignty over their territory, shall have the right to take all measures necessary to ensure that the rights and facilities provided shall in no way infringe their legitimate interests (International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), 2009; United Nations Convention on the Law of the Sea (UNCLOS), 1982).

Principle 11: Common heritage and common concern of humankind

This principle is based on the establishment of a common heritage of humankind, which lies behind the existence of a common concern for the protection, preservation and enhancement of the natural environment, proper management of the climate system, biological diversity, fauna and flora of the earth. These elements exceed the particular and immediate individual objectives of states or other actors. It represents the notion that certain global elements, regarded as beneficial to humanity, should not be unilaterally managed by states or their nationals, but for humankind as a whole, sharing responsibilities according to specific international agreements

Non-regression

The Principle of Non-Regression derives from international human rights law and requires that norms already adopted by states are not revised if this implies going "backwards" on the protection of collective and individual rights (Prieur and Garver, 2012). For example, the weakening of human rights standards and international law principles including existing obligations to respect, protect and fulfil these rights/principles would constitute going "backwards". This principle could, therefore, be taken up in environmental law, too.

Regression takes many forms. Internationally, it can take the form of refusing to adhere to universal environmental treaties, boycotting their implementation or, even, denouncing them. National environmental legislation is subject to increasing regression: changing procedures so as to curtail the rights of the public on the pretext of simplification; repealing or amending environmental rules and thus reducing means of protection or rendering them ineffective. In its General Comment 3 of 14 December 1990, the UN Committee for Economic Social and Cultural Rights condemns "any deliberately retrogressive measures".[28]

This principle is applicable to the protection of the human rights of pastoralists, which is strongly dependent on their land and natural resource rights that have been established through customary or statutory law where abolition or changes to these rights would be to the disadvantage of individual pastoralists and pastoral communities.

[28] (Para. 9), UN Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant), 14 December 1990, E/1991/23 (available at http://www.refworld.org/docid/4538838e10.html).

Developing pastoral land policy

Pastoral land policy can take many forms. The procedures, functions or activities under pastoral land legislation can produce various materials that express a strategic or ethical position on particular aspects of pastoral land and how it relates to land tenure. Anything that promotes a course of action to control or manage any aspect of pastoral land use, particularly customary values and land tenure, could generally be considered within the genre of "pastoral land policy" (Herrera, Davies and Manzano Baena, 2014). Some suggested areas for policy development include maintenance of customary and traditional values and practices, involving the community in the management and protection of the pastoral environment, developing ecological standards and how they will be implemented and monitored, and policies on adaptation and mitigation of effects of climate change.

Vision and strategy

The vision for developing specific policy on pastoralism and land tenure, or improving existing legislation, is to promote social inclusion of pastoralists with the legal recognition of their land rights, including customary tenure and community rights. The aim is to achieve a legal distribution of land based on the three basic tenure rights: enjoy, use and manage their land. As Section 2 clearly explains, developing new legislation and policies requires the participation of pastoralist groups, which requires support to strengthen their capabilities; for example, through educational programmes that will allow them to understand and better exercise their rights.

The legal recognition of pastoralists' tenure rights will contribute to increase productivity, to facilitate access to credit and to encourage the development of fair and equitable markets and value chains. This will enable pastoralists to increase their quality of life and work their way out of poverty. Strengthening capabilities and social capital in pastoralist societies can contribute to improved decision-making, improved targeting of credit and investments, improved access to technical assistance, technology transfer and innovation, and improved commercialization of products. Enhancing transparency, participation (from a simple consultation up to the FPIC) and representation between pastoralist groups can help to improve land governance.

More responsible governance of pastoral tenure will help to secure social and environmental sustainability and will protect transhumance, including corridors for mobility and respect for the spatial and temporal use of resources. In particular, the Guidelines provide specifically for the improvement of legal frameworks and policy to manage pastoral land as follows:

5.1 *"States should provide and maintain policy, legal and organizational frameworks that promote responsible governance of tenure of land, fisheries and forests. […]"*

5.3 *"States should ensure that policy, legal and organizational frameworks for tenure governance recognize and respect, in accordance with national laws, legitimate tenure*

rights including legitimate customary tenure rights that are not currently protected by law; and facilitate, promote and protect the exercise of tenure rights. Frameworks should reflect the social, cultural, economic and environmental significance of land, fisheries and forests. States should provide frameworks that are non-discriminatory and promote social equity and gender equality. […]"

5.5 "States should develop relevant policies, laws and procedures through participatory processes involving all affected parties, ensuring that both men and women are included from the outset. Policies, laws and procedures should take into account the capacity to implement. […]"

Van Gujjars and their Land Rights, India

Van Gujjars are transhumant buffalo pastoralists from the State of Uttarakhand in India. They make seasonal movements between different altitudes of the mountain region of the Himalayas, from the lower ranges of Chillarveli in the Shiwaliks during autumn to higher alpine regions in summer and the rainy season. This practice of transhumance has been constrained by the creation of the Rajaji National Park in 1983 and the eviction of the Van Gujjar families by the forest department. India's Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 has made explicit the seasonal rights of Van Gujjars to forest areas that they only use on a periodic basis, providing the legal means by which the pastoralists can uphold their historical use and access rights (IUCN, 2011b).

Developing a national pastoral land strategy

A national pastoral land strategy is a means by which the objectives of pastoral legislation can be achieved. It outlines how a pastoral land institution will manage land tenure arrangements. The strategy should address the purpose and intent of the legislation and express an objective to achieve the sustainable use of pastoral land as a national environmental goal.[29] States should develop relevant policies, laws and procedures through participatory processes involving all affected parties, ensuring that both men and women are included from the outset. Policies and procedures should incorporate gender-sensitive approaches, be clearly expressed in applicable languages, and widely publicized. A state pastoral land strategy could include, for example:

- references to the objectives of national and international development and environmental strategies, policies and treaties and their links to the use of pastoral land and land tenure;[30]
- a duty of care towards the values of indigenous and traditional communities;
- a duty to ensure that the different aspects of land tenure are properly managed;
- a duty of care to manage the effects of climate change;
- commitment to the development of programmes to achieve sustainable pastoral land;
- an outline of the role and benefits of community training programmes for pastoral land.

[29] See UN Convention to Combat Desertification (UNCCD) 10-Year Strategy, Secretariat of the Convention to Combat Desertification, 2007, Report, 8th session, Conference of the Parties, Madrid 3-14 September 2007, ICCD/COP (8)/16/Add.1, 23, October 2007.

[30] Adaptation, Under the Frameworks of the CBD, the UNCCD and the UNFCCC, Joint Liaison Group of the Rio Conventions, 2008: http://www.cbd.int/doc/publications/cc-adaptation-en.pdf

Changing mindsets

A range of factors drives domestic reform in the legal understanding of customary tenure. In some countries it is now possible for customary rights to be registered without being extinguished and replaced with a different form of tenure. In some cases, collectively held properties like pastoral land may also be titled as belonging to a community. One impact of these changes is that customary rights to land are becoming statutory rights of customary ownership. More pervasively, state policies, land scarcity, education and, especially, the commoditization of land and polarization of communities into rich and poor classes through continuing capitalist transformation, have all affected the way in which customary land relations are formed and regulated. Therefore, it is not surprising that notions of what constitutes a customary right to land do seem to move closer to the norms of introduced statutory tenure. A frequent result is a disproportionate appropriation of community land by leaders and stock owners (Alden-Wily, 2012).

From all such factors customary regimes are distinctively malleable. In recent decades, these shifts within the customary sector have been widely visible around Africa (Alden-Wily, 2012) and include:

- declining sanction against the sale of family lands;
- the introduction of written witnessing of transactions;
- a shift of farming usufructs into rights of perpetual and absolute ownership;
- an increase in democratic decision-making in the exercise of customary jurisdiction, and shifts in the centre of gravity of communal domains from tribal territory to clan area to village domain as the population grows;
- a hardening of perimeter boundaries between neighbouring villages;
- a hardening of attitudes to customary access and tenure by outsiders, as the effects of land shortages are felt;
- signs of increased pressure on vulnerable groups within communities, such as women;
- reduced adherence to old norms which dictate that there should be land for every family in the community, along with a polarization of wealth within modern customary communities, and yet a contrary hardening of demands for equity.

Kyrgyz sheep pastoralists face new challenges

The Kyrgyz Constitution of 2010 focused on land reform and privatization issues introducing the principle that all land is state property and that the state could grant rights of possession in the form of leases within a defined period. The implications of this new approach have yet to become fully clear. Responsibility for land management has been given to the Pasture Inspection Service and the implementation of land reform has been placed in the hands of rural committees. Kyrgyz sheep pastoralists face the challenge of defending their interests in interaction with local authorities and the leaders of transformed collectives and state farms (Schillhorn van Veen, 1995).

Enabling policies

Ineffective policies can be partly attributed to poor understanding of pastoral systems by policy-makers, as discussed in Section 1. Many states still see pastoralism as a wasteful use of land and the national priority is often to convert pastoral lands to crop cultivation, enacting policies to acquire the necessary land. The priority challenges to pastoral tenure outlined in Section 1 touch on issues related to policy, such as improving consultation and participation mechanisms for pastoralists, and developing integrated land-use planning at relevant scales.

The action areas for improving governance and strengthening human capabilities presented in Section 2 illustrate that tenure security and responsible tenure governance are not just about legal arrangements but also about relationships, processes, capabilities and resources for governance. They touch on many policy-related issues which have been illustrated by a number of case studies.

This section provides a brief overview of policies to support sustainable rural livelihoods, as outlined by the High Level Panel of Experts (HLPE, 2013). Policies need to be integrated in the sense that each policy supports (rather than hinders) other policies. For example, policies in support of sustainable natural resource management will not necessarily lead to improvements unless other policies are implemented to create new and appropriate markets. Governments would have to adapt these policies to the needs of pastoralists, particularly their need for mobility.

Investment in public goods and services

Investments in basic public goods and services for the rural population including pastoralists are a fundamental requirement for development. Investments are not always directly related to food production or natural resource management, but they are essential for giving rural populations the conditions that empower them to invest in their production systems. Investments that may be required for sustainable development in pastoral lands include roads and communications, electricity, education, health, water and sanitation. Services like health, education and local administration may need to be adapted to the local needs of pastoralists; for example, they may need to adjust to seasonal calendars and mobility patterns or to local language requirements.

Making markets work for pastoralists

Markets must be made to work for sustainable pastoral livelihoods by reducing transaction costs, improving infrastructure, securing key public investment, and addressing price inequities based on gender. In order to create favourable conditions, it may be necessary to develop new markets (such as public procurement schemes) and to regulate existing markets differently. Pastoralism is a dual system of livestock production and environmental management and, in many cases, innovative markets are required to incentivize, compensate and protect the role pastoralists play as environmental stewards and as protectors of ecosystem services as public goods.

Appropriate research and extension systems

Research and extension systems are crucial for designing and promoting appropriate systems and practices adapted to the needs of pastoralists on issues such as rangeland management, processing and technologies that are adapted to mobility needs. Participatory research methodologies, as well as inclusion in upstream decision-making about research goals are keys to ensuring that pastoralists take up the results of research (see Section 2, action area 7 on collaborative learning).

Access to financial services

Pastoralists require financial services adapted to their needs, including their mobility. Financial products need to be adapted to pastoral production conditions, including high rates of return, long repayment periods and high volatility. Novel solutions are needed that reduce financial risks, lower transaction costs and facilitate long-term investments, recognizing the existing role that livestock currently play as capital savings in many pastoral societies. Financial services should also be adapted to address internal inequities, including those experienced by women in pastoral societies.

Defining national legislation relevant to pastoralism

Legal and institutional elements

The legal and institutional elements presented in this section are regarded as "generic" and, collectively, they implement many aspects of the Guidelines regarding responsible governance and land tenure. National law should not only recognize but also protect and promote basic tenure rights. This should include enabling tenure rights holders to secure their rights, even if these are not formalized, and ensuring the availability and accessibility of law enforcement institutions. The elements provide for the basic rights and entitlements of indigenous peoples including participation in negotiation and decision-making, development of institutions that can represent customary rights, and the maintenance and transmission of customary and traditional practices. In this regard, they can form a part of statutory law for pastoral land use.

It may also be appropriate to undertake a legislative assessment of existing national law using the Guidelines as a benchmark and following the procedures set out in the technical guide on *Responsible governance of tenure and the law* (FAO, 2016). Assessing the ability of a country's national legal framework to implement effective pastoral land law in light of the Guidelines can be the first step towards implementation of Section 3.

Legal and policy aspects of rangeland management: Mongolia (Hannam, 2014)

The Government of Mongolia recognizes that the country's 1995 Environmental Protection law is limited in its ability to manage all environmental challenges associated with the use of the country's rangelands. There are challenges to address in terms of structure and procedures, government administration of the rangeland environment, institutional operations and effective community participation. As a result, the Mongolian Government has already taken action to establish a legislative, policy and institutional framework to improve the management of rangelands by drafting the Pastureland Law. As this will become the principal law on managing rangeland it is hoped that it will include a specialized institutional system for pastoral land.

Governments can also use legal and institutional elements to develop priorities for national development and sectoral policies and planning. The assessments may also identify aspects of the legal framework that are not being properly implemented, such as legislation that allows the titling of land tenure rights held by communities that may not have been used. The assessments may provide an opportunity for understanding impediments to implementation, and may pave the way to administrative as well as legislative reform. Assessments pertaining to the Guidelines and the application of the following elements may expose areas of human rights concern (OHCHR, 2011) as well as other relevant matters in environmental law.

The elements outlined in this section can be included in a statutory law system to help protect the rights and values of an indigenous or traditional community in the use of pastoral land. Within both customary and statutory tenure systems, multiple and overlapping rights may govern the use of the same pastoral land resource. Tenure rights over common pastoral land resources, seasonal and otherwise temporary rights of access and use, as well as tenancy and sharecropping rights, can all be legitimate tenure rights.

Relevant institutional framework

Creating a relevant institutional framework for pastoralism must start from the recognition of the state law on the right to private and customary ownership of pastoral lands (individual, communal, cooperative or any form of association), allowing free choice of the model of organization, forms of exploitation and destination within the boundaries and regulations of the law. In this regard, it is necessary to create tools that enable compliance with the government policy formulated for the sector. This may require establishing a government institution responsible for implementing a regulatory land tenure framework to resolve legal insecurity and instability for pastoralists and to procure the enjoyment of their land rights. This institution should be established to monitor property processes and public records, protection of natural resources, acceptable use of pastoral land and equity to access of land. It should have a broad administrative function that responds adequately to the economic development of the country, with the recognition of rights to land tenure as its main purpose. The institution should have the power to regulate and implement actions related to training, promotion and organization of pastoralist lands, in coordination with other governmental institutions.

Legislation can assist a pastoral land institution to make fair and just decisions that are consistent with land tenure arrangements. In addition, relevant legislation should contain powers that enable a pastoral land institution to take action against a person

or a corporation for non-compliance with the legislation. Special provisions should be made with regard to customary and traditional lands. Appropriate powers may provide for the modification or revocation of an authorization or permit, requiring remedial action to restore the pastoral land consistent with the land tenure, or to stop an activity and require compliance with specified conditions or standards.

Pastoral land rights

The Guidelines provide an international framework to guide policy and programmes to protect and enhance the rights of pastoralist communities to lands that have been historically used for social, cultural, spiritual and economic ends. In particular, Part 3 of the Guidelines refer to the importance of "legal recognition and allocation of tenure rights and duties" for protecting the rights of indigenous peoples and other communities with customary tenure. To ensure that good law is implemented, the institutional, political and social factors that contribute to weak tenure security and poor governance must be addressed. Such positive change is dependent upon state officials' commitment to and the establishment of fair, well-functioning and impartial administrative and justice systems along with citizens' ability to access and successfully use these unbiased, equitable systems to protect their tenure rights. "Tenure" is the way that land is held or owned by individuals, families, companies or groups. Tenure claims may be formal, informal, customary or religious in nature and may include ownership, use and management rights. The strength of an individual's, family's or group's tenure rights may hinge on national legal definitions of property rights, local social conventions or other factors. In relation to pastoral land, land tenure rights can be described as a "bundle of rights" that may include the freedom to:

- occupy, develop, enjoy and withdraw benefits from the natural resources in question;
- sell or bequeath natural resources;
- lease or grant use rights to natural resources;
- restrict others' access to the natural resources; and/or
- use and manage natural resources.

Specifically, paragraph 9.5 of the Guidelines notes: "Where indigenous peoples and other communities with customary tenure systems have legitimate tenure rights to the ancestral lands on which they live, States should recognize and protect these rights. Indigenous peoples and other communities with customary tenure systems should not be forcibly evicted from such ancestral lands." Further, paragraph 9.6 specifies that, "States should consider adapting their policy, legal, and organizational frameworks to recognize tenure systems of indigenous peoples and other communities with customary tenure systems."

In this regard, "customary" means according to the customs or usual practices associated with a particular society, place or set of circumstances, where practices are based on custom or tradition rather than written law or contract. In order to recognize, respect and protect customary tenure rights, national legislation should

recognize and protect the full range of tenure rights practices within a country while also setting out restrictions that impose basic human rights standards on customary practices, protect against intracommunity discrimination and ensure consistency with the national constitution (Andersen, 2011).

Traditionally, pastoral land rights consisted of access to the resources required to sustain mobile livestock production such as pastures, watering points and the movement corridors that linked together seasonal grazing areas, pastoral settlements or encampments, and markets. These customary tenure arrangements have mixed aspects of common property and exclusive ownership. A family, clan or entire ethnic group could claim common rights to an area of pastoral land. Pastoral tenure rights are often referred to as 'fuzzy rights' and they allow people to use property belonging to another for specific purposes or limited periods of time. Such arrangements have been common, but they have created complex systems of rights and duties among pastoral users. In these property systems, individuals could have exclusive access to some types of resources, but they held these rights as members of social groups that were capable of defending the territorial integrity of the entire group, not by virtue of a title deed issued by a government authority. However, a variety of factors, including land conversion, privatization, conflict, population pressure and the creation of nature reserves, have all led to a reduction of pastoral land rights in recent times (Behnke and Freudenberger, 2013).

Governing high altitude pastures in Argentina

The Andes region is a mix of pastoralist management systems organized along the altitude gradients of the Andean Cordillera. Pastoralist families from the High Jujuy Province of Argentina have customary rights over houses, orchards and small patches of seeded pastures, together with rangelands composed by "estancias" or patches of land distributed along an altitudinal range. Small stock – typically ruminants – graze under the surveillance of elderly women helped by children (when they are not at school). Larger livestock (llamas, alpacas, cattle and some horses) graze freely, usually under the periodic surveillance of men. The "rodeos" constitute the community territories, which are self-regulated patches embedded inside bigger estates called "fincas". Originally, those fincas were gifted to Spaniards by the Crown during colonization, although many were subsequently integrated into state-owned lands. However, ownership of those lands was not returned to local communities until today, when rodeos are starting to be claimed as Indigenous peoples' and community conserved territories and areas (ICCAs) under the Constitutional Act as amended in 1994. Currently, communities are starting a process of definition of their former lands, recovering customary boundaries and establishing elected authorities to run them (Quiroga Mendiola, 2011).

Legal aspects of customary land tenure

Customary land tenure refers to the systems that communities operate to determine ownership, possession and access, and to regulate use and transfer. State efforts to improve governance of pastoral land and ensure successful implementation of the Guidelines necessarily encompass a variety of commitments. This includes educating both the general public and state officials about laws that promote responsible governance of tenure on pastoral lands. It also involves harmonizing legislation and streamlining legal and administrative procedures to establish accessible and efficient procedures so as to ensure that the principles of the Guidelines are realized in all administrative and judicial institutions at every level of pastoral land governance. There is also the need to ensure that the national judiciary and all officials responsible for adjudicating tenure conflicts properly apply national laws that promote responsible governance of tenure. Culturally-appropriate alternative dispute-resolution bodies need to be created and strengthened to ensure that pastoral land conflicts are resolved in a timely manner.

Unlike introduced landholding systems, the norms of customary tenure derive from and are sustained by the community itself rather than the state or state law (statutory land tenure).[31] Although the rules that a particular local community follow are known as customary law, they are rarely binding beyond that community. Customary land tenure is as much a social system as a legal code and from the former obtains its resilience, continuity and flexibility. Of critical importance to modern customary pastoralists is how far national law supports the land rights it delivers and the norms operated to sustain these (Alden-Wily, 2012). Customary land tenure is a major tenure system on a worldwide scale. It is extensive in pastoral areas of Africa and Asia and also governs lands in some industrial economies, such as rural commons in Spain and territories belonging to indigenous minorities in North America and Australia (Rural Industries Research & Development Corporation (RIRDC), 2014).

Customary domains are rarely homogenous. Parks, mining, timber and agricultural concessions often create sizeable holes in customary areas. When wealthier farmers obtain formal statutory title for their homesteads they extinguish customary title, thereby creating smaller holes in the overall community land area. Customary domains are also "fuzzy" at their edges, especially where they adjoin rapidly expanding cities and towns. Chiefs may sell lands on the urban fringe to developers or have these taken. There are instances where rural communities retain control over urbanized lands. The global land rush is stimulating domestic land grabs of this kind for profit, in turn accelerating concentration and the introduction of market-based norms and placing pressure on common resources. The greater the value of the resources affected, the greater the tension over norms.

Vestigial traditions in Australian pasture governance

In Australia, pastoral lands occupy broad areas of pastoral leases and various forms of Crown lease as well as freehold lands, but there are vestiges of traditional institutions that date back to the early times of European colonization. Agistment, for example, is the trading of grazing rights between pastoral enterprises. This practice consists of temporarily moving livestock from one pastoral enterprise with fodder deficit, to another with surplus. The agistee (landholder) receives a payment for accepting the agistor's livestock. Hence, agistment practices can be considered a coping strategy for the spatial-temporal pattern of forage availability.

Since the late twentieth century, the Australian Law Reform Commission and the Law Reform Commission of Western Australia have written extensive reports investigating the desirability of recognizing the role of customary law in legal situations involving Aboriginal Australians. In the Northern Territory, for example, which is largely pastoral, some statutes and courts make explicit reference to customary law where such law is useful in identifying relationships or social expectations (Northern Territory, 1983). These changes have not been without controversy, especially in cases where customary law is either imprecise or infringes upon human rights.

Securing customary rights

Rather than codifying customary tenure rights, a more strategic approach is to legally recognize that customary rights to land have the same legal value as statutory rights, whether registered or not. The forces against such recognition, however, are as strong today as they were a century ago. They may even be stronger, given the way that interests dovetail with policies that aim to keep as much untitled land as possible under the de facto ownership of governments; this enables them to dispose of their citizens' lands at will, including to domestic and foreign investors. Furthering democratization of land and resource administration is also crucial. Solidarity within and between communities is affected by the absence of enabling institutional mechanisms and powers.

[31] Another term for customary land tenure is "indigenous tenure".

Tenure security policies need to shift focus from farms to commons. Many governments are reluctant to remove customary-sector families from their houses and farms but have no compunction when reallocating their commons to other uses and users. This is because compensation is now normally required when houses and crops are interfered with, even on untitled customary lands, but is rarely extended to commonly held, pastoral land. Yet such unfarmed commons are the major assets of most rural communities. They are often the main or only source of livelihood for the land-poor and landless. With assistance, they have the income-generating potential to raise millions out of poverty (FAO, forthcoming).

It is important to recognize not only the legal security of land rights, but also pastoral perceptions of tenure security as this has significant implications for management. Strengthening governance, for example, through more participatory decision-making, may improve the perception of security without recourse to stronger measures. The converse may also be true and pastoralists may continue to feel insecure despite having achieved a degree of legal security over land. This relates closely to the establishment of trust between communities and government, which is addressed in Section 2.

The relationship between Karakachan transhumance and livestock breeding and land use and land property rights in Bulgaria

Transhumant pastoralism by the Karakachans in Bulgaria is considered a success story of resolving land use and land property rights in the post-Soviet era. Prior to 1992 the Bulgarian government's policy was pastoralist settlement and centralization of livestock management. Livestock were pooled into State herds, destroying the traditional socio-professional structures of Karakachans. Revival of traditional herding practices was achieved through official recognition of the Karakachans' livelihoods systems and the creation of effective tribal organizations.

The revival of the Karakachan system drew on international and national legislation governing the use of pastoral land including the International Labour Organization (ILO) Convention for protection and integration of the indigenous and other populations, Convention 169 concerning indigenous and tribe populations in independent states, the Convention between Bulgaria and Greece (27.11.1919) for the mutual movement of minorities between these two countries, the Decree of the Ministers' Council for Development of Stockbreeding (1952–1954), and the Bulgarian Agricultural Land Ownership and Use Act 2007 (IUCN, 2011b).

Transboundary agreements

The Guidelines establish that states should cooperate, in the framework of appropriate mechanisms and with the participation of affected parties, in addressing tenure issues which traverse national boundaries, ensuring that all actions are consistent with their existing obligations under national and international law.

Transboundary management

As a general principle of international law a state has a responsibility to ensure that any activities within its boundaries do not affect the integrity of pastoral land of another state (Sands, 2003) and there should be appropriate procedures in national pastoral land

legislation to implement the "common boundary" principle. In states where transboundary matters related to tenure rights arise, parties should work together to protect such tenure rights, livelihoods and food security of any migrating populations while on their respective territories. 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. Where a state shares a common boundary with another state or states, it should work together with those states to ensure mobility corridors and seasonal routes remain accessible for pastoralist and traditional communities (Schulz, 2007).[32]

Transboundary agreements negotiated at the national level should be implemented in close cooperation with local authorities and communities. Management of transhumance can be facilitated through close involvement of the local authorities on both sides of an international border.

Obligation to notify other states

Specific bilateral agreements should exist to ensure neighbouring countries:

- notify one another of any natural disasters or other emergencies that are likely to produce harmful effects to the pastoral land of those states;[33]
- discuss with other states any matters relating to observance of the general responsibilities to pastoral land management in the respective jurisdictions;
- provide prior and timely notification and relevant information to a potentially affected state on activities that may have a significant adverse transboundary effect on pastoral land and to consult with those states at an early stage.[34]

Legislation for transboundary transhumance, Economic Community of West African States (ECOWAS)

In 1998, heads of state of the Economic Community of West African States (ECOWAS) adopted Decision A/DEC.5/10/98 regulating transhumance between member states. It states that "the crossing of land borders for the transhumance of cattle, sheep, goats, camels and donkeys according to conditions defined by this Decision is authorized between all the countries of the Community." The Decision is supported by rule C/REG.3/01/03 adopted in 2003 for the implementation of the regulation of transhumance between ECOWAS member states. ECOWAS developed the International Transhumance Certificate (ITC) as a tool for the implementation of this framework. While implementation of this decision and use of the ITC has been inconsistent, this rule provides an example of the concerns that transboundary legislation needs to cover:

- ensure the sanitary conditions of herds;
- inform people in reception areas of the arrival of transhumant animals in time to prepare and respond;
- ensure that the rights of non-resident pastoralists will be respected according to the laws of the receiving country;
- ensure that non-resident pastoralists comply with the national legislation of the host country;
- establish a conflict resolution mechanism (in the case of ECOWAS a Conciliation Commission was created) consisting of pastoralists, farmers, local authorities and other concerned stakeholders.

The ECOWAS experience has been imperfect and further work is required to ensure that migration routes in receiving countries remain open and unoccupied to minimize bureaucracy that can create barriers or delays to movement, and to address illegal taxation of pastoralists.

[32] See Rio Declaration, Principle 2.
[33] Rio Declaration, Principle 18.
[34] Rio Declaration, Principle 19.

Bilateral transhumance agreement between Burkina Faso and Niger

The Economic Community of West African States (ECOWAS) Decision can be tailored to the local context through bilateral transhumance agreements. These agreements commonly include:

- specific documents required to cross the borders such as passports, vaccination and animal health certificates;
- specified time periods for mobility; for example, between November and April, and not exceeding a period of 30 days;
- demarcated entry and exit points and livestock corridors along which animals must travel;
- conflict-resolution measures.

In 2003, Burkina Faso and Niger agreed to an annual meeting of livestock ministers and the establishment of a Joint Technical Committee, to advise on the implementation of a cross-border agreement. The Consultation Framework for this agreement aims to:

- manage transhumance between the two states;
- ensure the proper implementation of the decision A/DEC.5/10/98 of 31 October 1998 on the regulation of transhumance between ECOWAS member states;
- promote dialogue and exchange between the two states in the field of transhumance and the management of natural resources; and
- propose measures to promote and support the definition and implementation of regional policy related to interstate transhumance.

While shortcomings can be identified, the agreement is considered to have contributed to peaceful livestock movements between the two countries.

Resolution of transboundary disputes

International law increasingly prioritizes cooperation and collaboration across boundaries. Nevertheless, states have the right to take action against another state for damage to its pastoral land arising from the transboundary effects of unsustainable land use and lack of good governance of its land tenure. The role of international law is to regulate relations and thus to help contain and avoid disputes in the first place. The substantial part of international law, therefore, does not concern dispute resolution but dispute and conflict avoidance (Blay, Piotrowicz and Tsamenyi, 2005). It is concerned with the rights and duties of states in their relations with each other and with international organizations. The United Nations Charter is principally concerned with the preservation of world peace, including through various methods for resolving disputes peacefully.[35] These methods range from informal, nonbinding, diplomatic methods through to formal and binding judicial settlement, including negotiation, inquiries, mediation and conciliation, arbitration and judicial settlement.

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Where applicable, a state should establish procedures to resolve a dispute through a formal resolution process and to take legal action against another state for damage to its pastoral land arising from the transboundary effects of land use in the latter state (O'Connell, 2015).

[35] See Article 33, United Nations Charter.

Integrated participatory land-use planning

Responsible governance of tenure is key to sustainable social and economic development. National land allocation processes should reflect the centrality of land to eradication of hunger and poverty. Such processes, including for pastureland, while complying with national strategic planning should generally be carried out on the basis of environmental features such as soil characteristics and should take into consideration both statutory as well as customary rights related to land tenure. Including these latter aspects within the land allocation process ensures land tenure certainty and prevents potential land disputes. Consequently, it is important that the mechanism to recognize tenure rights and, more specifically, customary rights is put in place prior to the planning of land use at the national level.

Three principal levels for pastoral land assessment and planning can be identified. At the lower levels it is necessary to recognize shared resource rights with users from further afield and to ensure that participation of stakeholders reflects the diversity and distribution of rights holders.

1. Local level: Management plans at local level might involve one or a few local communities, but the spatial scale of pastoralism and the extent of resource sharing between communities must be kept in mind and should inform the appropriate definition of "local". The requirement to develop a participatory management plan, for example, could be triggered through the identification of a specific environmental problem at a state or subnational level (Government of Australia, 1989).
2. Subnational level: Management plans could be prepared when the ecological integrity of pastoral land is affected at a subnational scale. This level of information would be used for planning specific management projects, such as management of salinity, watershed planning, management of systems of land use or to target an environmentally sensitive area.
3. National level: The objective is to prepare information at a national or subnational scale on the patterns, distribution and condition of pastoral land. This level of information is relevant for broad strategic land-use planning and decision-making and to achieve efficient implementation of land tenure arrangements.

Management plan

A management plan can be prepared for a declared area. In these areas land users should adopt recommended ecological standards to manage pastoral land (Hannam 2000; Government of Australia 1989).These areas can include customary or traditional community areas or other areas. A management plan could, for example, state the tenure of the land, how it is to be managed, the management strategy and costs of implementation, and specify the procedure for assessing the achievement of the plan's objectives. It should also address the social and economic value of the pastoral area including the customary and traditional values, e.g. maintenance of mobility corridors and seasonal grazing areas. Other important features of the plan include the bio-physical aspects of the pastoral land and pastoral land carrying capacity in relation to inter-annual variability.

Relevant legislations should include the specific procedures needed for planning of pastoral lands, with clear linkages with laws on spatial planning. Pastoral Land Assessment (FAO 2002) procedures may include:

- An evaluation of the customary and traditional knowledge of pastoral land
- An evaluation of land tenure
- A technical survey of the pastoral environment and database development (NSW 2003).

Pastoral land planning procedures may include an adoption of customary and traditional values in land planning and show the relationship between a plan and land tenure. Specific provisions can be included in relevant legislations to cover all actions, whether existing or proposed, to be carried out in a manner so as to avoid any adverse effects on the pastoral land.

Where a plan of management has been declared and ecological standards have been prepared, a pastoral land institution could, on the basis of an existing or potentially threatening process, determine whether there should be certain restrictions on the use of the pastoral land and whether there is any conflict with the land tenure arrangements (Government of Australia 1989). It may be necessary, for example, for the institution to prohibit some types of land use activities altogether or to set out circumstances for the determination of a particular land use activity.

Land assessment

The ecological condition of pastoral land should be assessed at the local, sub-national and national levels. Assessments should be participatory to ensure local perceptions of ecological condition, social change and local management objectives are taken into consideration, and to mitigate the risk of vested interests manipulating the results. Information is needed at these levels to effectively plan the protection and management of pastoral land, particularly the security of tenure. Assessment is the application of both customary and scientific techniques to determine the characteristics of pastoral land that could then be used in planning and decision-making activities at each level. Pastoral land legislation should include the procedures that enable planning at each level and the programs to implement the plans and the relationship to land tenure. Assessment is the application of both customary and scientific techniques to determine the characteristics of pastoral land that could then be used in planning and decision-making activities at each level. Pastoral land legislation should include the procedures that enable planning at each level and the programmes to implement the plans and the relationship to land tenure.

Land-use agreements

A pastoral land institution could enter into a land-use agreement with a pastoralist or a pastoral community to achieve specific land-use objectives consistent with land tenure. A pastoral land institution may arrange for land management practices to be implemented to manage or rectify land degradation, maintain biodiversity and adapt to climate change. It may also organize research or investigation into pastoral land problems (Government of Australia, 1989; Maggio, 1997).

Key legal elements of importance to pastoralism

There should be a clear statement of the principal purpose and intent of a legal instrument for the use of pastoral land. It may be expressed as a single purpose or a multipurpose statement. Such a statement can refer to the need for a competent pastoral land institution, the use of particular strategic approaches or mechanisms, the rights and values of pastoralist peoples, the geographic area of interest and the setting of priorities for the management of pastoral land and land tenure (Herrera, Davies and Manzano Baena, 2014).

There should be a group of statements in law that express a policy and strategy that connects customary land tenure with a statutory law for pastoral land. Together, the statements should establish firm goals, targets and standards for the general administration of pastoral land while providing for customary rights and responsibilities. The objectives may be expressed as a single or a multipurpose statement, but could also comprise a number of multipurpose statements; for example, to observe the customary rights of pastoral land and to foster and protect appropriate ecological standards and values, and the knowledge and traditional land-use practices of pastoralist communities.

Developing communal governance strategies in China

In China's Xinjiang province, a Grassland Law was passed in 1989 and other grassland regulations have been established that provide for collective ownership of grasslands, although grazing rights are contracted out to individual households based on grassland use contracts. These contracts are granted for 50 years to provide stability and they detail the different areas of seasonal pasture that have been allocated to each household, the grassland fee and the permitted stocking rates. Up to 94 percent of Xinjiang's useable grassland had been contracted to individual households by 1999. Use rights are inheritable but not saleable and the local animal husbandry bureau administers them. In practice, pastures remain under communal use and management providing pastoralists with resources over large areas with relatively fuzzy boundaries. This arrangement provides a number of benefits: flexibility of herding, and mobility, allowing environmental risk to be ameliorated; the fuzzy boundaries provide an economy of scale in herding labour; households gain access to a wider range of resources; and communal management provides insurance against economic risk (Banks, 2001).

China has followed other countries in implementing policies to settle pastoralists, to restrict livestock mobility and to individualize land holdings. In order to limit the harmful social effects and pasture degradation consequent on such policies, a number of efforts have been made to find alternative routes for pastoralist development. In Gansu Province, the Allied Householders approach has arisen as an attempt to remove the fences and to revive traditions of communal management of land and water, and practices of rotational grazing. The Allied Householders mechanism has shown improved income levels and better pasture status and has been legitimized by the Government (Hua *et al.*, 2015). There are continuing challenges in terms of how pastoral land rights are secured in China and how pastoralists perceive their rights. However, the trend away from sedenterization of herds and privatization of rangelands, and towards legitimizing mobility and communal herding practices, mirrors positive developments in a number of other rapidly industrializing countries.

State and local authority

Pastoral land institution

The term "pastoral land institution" is used as a generic term. It can be taken to mean a single independent specialist pastoral land institution. It may also mean the "equivalent" of responsibilities and functions for the use of pastoral land found in a single specialist institution, but administratively dispersed among a number of different government organizations or institutions including customary institutions with a direct or indirect responsibility to land tenure (e.g. forestry, agriculture and land administration). It is important that the legislation establishes a duty of care and commitment to achieve the sustainable use of pastoral land and preserves the rights and values of pastoralist peoples and their land tenure. This can be facilitated through well-defined responsibilities that can be spread across a number of organizations or legislative instruments. Particular "rights" and "obligations" may be established within an organizational hierarchy and at respective levels of administration, for individuals or for specific classes of officials.

A pastoral land institution should preferably be an independent body with a broad range of functions and a dedicated budget, with the right to manage responsibilities in relation to the customary areas and other non-customary areas of pastoral land.

Governance of reindeer pastoralism, Norway

Norway's Reindeer Herding Act 2007 supports the administration of a dual system for governance of the Sami pastoral lands. The Act supports the administration of two principal subsystems:

1. A co-management system;
2. A corporative system.

The co-management system has four levels: a national co-management board, an area co-management board, a local co-management board and the *siida* (a Sami traditional and flexible management system). The top two levels are political bodies with members appointed by both the Sami parliament and by the Ministry of Agriculture and Food. This system plays a role in regulating reindeer numbers and access to pastures. The Reindeer Herding Act 2007 provides the co-management system with the authority to impose penalties for failure to follow rules and regulations. The corporative system is established to facilitate negotiation between a National Reindeer Pastoralists Association, which represents Norwegian Sami and the Ministry of Agriculture and Food (Ulvevadet and Hausner, 2011).

Coordinating function

The functions under relevant laws should be discharged in a manner having regard to customary values of pastoral land. There should be an obligation on government to ensure that all institutions and organizations that have a role in pastoral land management effectively coordinate with each other in decision-making. The coordinating function should also address the need to avoid overlap between all ministries that are entitled to deliver land related titles (see, for example, New South Wales, 1991).

Distribution of responsibility

The legislative and executive responsibilities to manage pastoral land can be divided between respective pastoral communities and relevant government organizations. Good coordination within and between government ministries is necessary for the effective administration and management of pastoral land. When different pastoral

communities occupy pastoral land there should be an appropriate mechanism in the legislation to ensure cooperation and coordination in the implementation of pastoral land responsibilities. This is especially important as different forms of land tenure may warrant different approaches to administration (see, for example, New South Wales, 2003).

Levels of responsibility

It is appropriate that within a pastoral land institution there is a well-developed administrative system that clearly recognizes the role and application of customary law over pastoral land. This is to ensure that the responsibilities of the pastoral land institution toward the respective pastoralist communities are judiciously applied including the implementation of functions and responsibilities at the appropriate level of administration (Hannam, 2012).

General functions of a pastoral land institution

The general functions of a pastoral land institution should ensure that where customary law applies, all rights and responsibilities of pastoral people can be exercised accordingly and to safeguard their land tenure. The institution should periodically review the effectiveness of pastoral land legislation to ensure that customary law is applied freely and that pastoral land is used sustainably. Other key functions would be to ensure that all sectors of the community can participate in decision-making processes and to establish processes to monitor the condition of pastoral land.

Functional areas of a pastoral land institution

The technical and practical activities of a pastoral land institution would normally be distributed among a number of separate functional areas within the institution. Each functional area would have responsibility for a number of programmes, including in relation to land tenure. Collectively, a pastoral land institution must have the capability to implement the objectives of the legislation particularly in relation to the rights and responsibilities of indigenous peoples. As a guide, the functional area of a pastoral land institution may include, for example, policy development, planning and assessment, technical programmes, training, research and compliance.

The capabilities can include power to implement conservation measures or works to prevent or limit further adverse effects on the ecological integrity of pastoral land, including the power to stop an activity. The procedures should require remedial action to restore the pastoral land consistent with the land tenure.

Monitoring

States have a general obligation to monitor the condition and health of pastoral land and inform the community on a regular basis. Information should be provided to the public on a regular basis on the environmental condition of pastoral land including its relationship with land tenure. The results of monitoring can be used to

Communal pasture governance in Mongolia: pasture user groups (PUGS)

Under the two main laws concerning pastoral management in Mongolia, namely the Land Law 2002 (Art. 52.2) and the Civil Code of Mongolia 2002 (Art. 481), grassland usage can be planned and managed by groups of people for a specific period of time. As a result, pasture user groups or PUGS are free to enter into a "pastureland management contract" or "pasture use agreement" with a local government organization. As a spatial planning tool for grassland management at the local level, the contract is a planning system that provides for a range of objectives and can establish the general management requirements for a defined area of land. The relationship between local government and pastoralists is regulated through a contract on the utilization of pastureland for pasture user groups. Each contract for pasture use is signed by four parties, namely, the governors of the Soum and the respective Bagh, the head of the PUG and the PUG leader.

evaluate the performance of a pastoral land institution systematically, which should also include an evaluation of the implementation of customary and traditional practices, policies, field programmes and research into the condition of pastoral land (Leake, 2012). A monitoring and audit programme could provide for the establishment of indicators of the ecological status of pastoral land, monitoring the relationship between land use and land tenure along with human issues, including poverty and customary land rights.

Participation and information

Community participation in pastoral land-use decision-making

States should facilitate the participation of all sectors of the public in the use, management and decision-making related to pastoral land. In particular, the rights and interests of indigenous and traditional peoples must be considered. Consultation should be undertaken prior to decisions being made and participation should be informed. The existence of opportunities for consultation and participation in decision-making affecting tenure depends on multiple practical issues. However, legal frameworks can also influence those opportunities, for example, through integrating legal requirements for local consultation in tenure decision-making processes. Thus, the law could make it a condition that all affected populations (especially women and youths) be consulted. Public participation can also improve the quality of law, for example, by helping to ensure that legislation is tailored to the local context and to land tenure arrangements. It can increase the perceived legitimacy, the sense of ownership and ultimately the effectiveness of legislation. It is important to recognize that indigenous people are also entitled to FPIC. The provisions of the United Nations Declaration on the Rights of Indigenous People should not be derogated from.

Community participation programmes should be used to enable any person to participate in the management of pastoral land and the application of land tenure, from the local level to the state level. The links between effective participation, representation and accountability (as discussed in Section 2) can provide building blocks for effective participation.

Information for interested persons

Wherever a pastoral land institution proposes to act under its administrative procedures, all interested persons should be informed in a manner and with facts that will enable them to judge whether their rights, freedoms and interests are affected, in particular, those of indigenous communities. Procedures should be included to set out the manner in which the pastoral land institution will inform the public.

Right to information

Any person should have a right of access to information held by the state on matters related to tenure of pastoral land and, in particular, to the condition of pastoral land (Stec, Casey-Lefkowitz and Jendroska, 2000). In order to improve security of tenure rights, the Guidelines call for states to provide systems to record individual and collective tenure rights. Everyone should be able to record their tenure rights and obtain information, and institutions should adopt simplified procedures and locally suitable technology to reduce the costs and time required for delivering services. Information on tenure rights should be easily available. Information on the state of the pastoral land may include data in written, visual, oral, digital or database format, on tenure.

Procedure to obtain information

Legislation should set out the procedures and circumstances under which a pastoral land institution should release information to the public. This is especially true where any existing or proposed action is likely to affect the ecological integrity of pastoral land. Key considerations include circumstances under which certain types of information may be protected or refused.

Pastoral land information and knowledge

A primary responsibility of a pastoral land institution should be to collect, analyse and record general information on pastoral land including land tenure related information, particularly customary and traditional knowledge and values. Through this process a pastoral land institution can acquire knowledge to plan and target land management operations. A pastoral land institution also has a basic responsibility to implement procedures to deter users from undertaking any act that may otherwise be undesirable or, possibly, illegal (Government of Australia, 1989).

Specific legal requirements for pastoralism

Rights and duties to use

In the Guidelines, rights and duties are established as crucial elements for governance of tenure determining if and how people, communities and others are able to acquire rights and associated duties to use and control land. The elements below are of particular importance in legal frameworks for pastoralists:

- recognition, respect and protection of legitimate tenure rights of individuals and communities including customary tenure systems (8.2);
- establishment of safeguards to avoid infringing on or extinguishing tenure right of others when recognizing or allocating tenure rights, including those not currently protected by law (7.1);

- promotion of effective participation and consultation of local communities *inter alia* men, women and youth regarding their tenure systems by local or traditional institutions (9.2);
- legal recognition and allocation of tenure rights and duties that are consistent with their existing obligation under national and international law and with due regard to voluntary commitments under applicable regional and international instruments (7.2);
- insurance that women and men enjoy the same rights in the newly recognized tenure rights, and that those rights are reflected in public records (7.4);
- promotion of and respect for customary tenure systems within communities consistent with their existing obligations, as a means to solving conflicts (9.11).

Legislation for cattle trails in Spain

Spain is dominated by rangelands that are connected throughout the country by an ancient network of cattle trails, called *cañadas*. Some 120 000 km of these tracks exist but many have been encroached upon and closed. By the late twentieth century the majority of transhumance took place by truck and train. However, the end of transhumance by foot had led to a decline in biodiversity as well as a loss of access to critical productive resources: the *cañadas* incorporated pasture and watering zones, and sheep spent up to three months of the year relying on these resources.

In 1995, the Government passed the Vias Pecuarias Act (Ley 3/1995, 23 March 1995) explicitly recognizing the role of transhumance on foot in maintaining pastoral resources, and laying down a legal system for governance of cattle trails. 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. Since its enactment there has been a groundswell of popular support for pastoral mobility, a return to traditional transhumant practices and a resurgence of mountain biodiversity as a result of this ecological connectivity.

Mobility

Mobility as explored in Section 1 remains a critical element for pastoral systems. However, formulating legislation that supports the spatial and temporal dynamism of natural resource use is an important challenge for pastoral land management. To support herd mobility, a state should include procedures to:

- ensure that where customary law applies, that all rights and responsibilities of customary people can be exercised accordingly and to safeguard their land tenure;
- ensure the use of livestock mobility remains an important pastoral land management strategy;
- maintain livestock corridors and associated natural and artificial infrastructure including water points;
- address animal health to prevent obstacles to pastoral mobility, paying particular attention to the effective control of livestock diseases (may be addressed specifically under disease control legislation) to minimize restrictions to livestock movement, bearing in mind the potential risks to mobility and herd management of veterinary cordon fences.

Responsibilities to sustainable pastoral land

Pastoralist communities have various responsibilities in relation to sustainable pastoral land. These can be exercised not only in respect of the administrative acts of a public institution, but also in respect of the action of any person likely to have a significant detrimental effect on the economic, social and ecological integrity of pastoral land.

Key information to help decide type and extent of responsibilities (Dommen, 1998) can include:

- information on existing customary and traditional knowledge;
- solutions that have been adopted by other countries, and provisions and principles occurring within relevant international instruments;
- strategies for the use of pastoral land.

Enforcement

Enforcement can take a variety of approaches to ensure that the relevant law is complied with to a desired level or standard. Special provisions should be made with regard to customary and traditional lands. Compliance may be in the form of a direct obligation or a prescribed standard of behaviour, or through a legal notice or order. Relevant laws can set out the procedures for enforcement and can regulate specific activities that are inconsistent with the land tenure and not beneficial to pastoral land. Enforcement functions may include the investigation of offences, the gathering of evidence, remedial action, confiscation of items and initiation of prosecution proceedings. Legislation would normally set out the range and limits of monetary penalty for offences, as well as appeal provisions (Asian Environmental Compliance and Enforcement Network (AECEN), 2015; Organisation for Economic Cooperation and Development (OECD), 2009).

Remedial actions can include civil liability. The main purpose of civil liability is to seek compensation, which is to restore the balance that existed before the violation occurred. It has a preventive aspect that leads citizens to exercise caution to avoid compromising its responsibility as well as a punitive aspect of private consequences. Any person whose act or omission, voluntary or without malice, unlawfully or against good morals, causes damage to another, is obliged to repair the damage. The liability may be contractual or tort (when the rule infringed is a law). The establishment of liability is to try to ensure the repair of the damage caused to the property, by trying to put things in the state they were in before the damage. For these reasons, the penalty of liability is, in principle, a type of compensation rather than repression.

Access to justice

States need to procure the removal of normative, social and economic obstacles that prevent or limit the possibility of access to justice. It refers to effective judicial and administrative solutions and procedures available to a person (natural or legal) who is aggrieved or likely to be aggrieved by environmental harm. The term includes not only the procedural right of appearing before an appropriate body, but also the substantive right of compensation for harm done.

In many contemporary indigenous communities, dual justice systems exist. One is based on a statutory paradigm of justice, and the other is based on an indigenous paradigm. For many traditional societies, law and justice are part of a whole that prescribes a way of life. Relevant legislation should outline procedures for respective parties in legal proceedings. These should cover (African (Banjul)

Charter on Human and People's Rights (ACHPR), 2003):

- access to relevant information relating to breaches of the legislation, through freedom of information provisions;
- access to information regarding land tenure;
- provision of financial assistance for individuals and groups to bring civil enforcement actions;
- prosecutions for a breach of pastoral land legislation.

In some circumstances, a community service order may be appropriate. Such orders are sometimes used as an alternative to a fine in a variety of jurisdictions. They involve tasks carried out on a periodic basis as a contribution to a community, and are often related to the nature of the offence.

Dispute resolution

In addition to administrative, civil and criminal proceedings, there should be formal procedures in relevant legislations to resolve disputes over access to pastoral land and other land (Markell, 2000). Providing effective and legitimate ways to settle disputes between pastoralists, and those between pastoralists and farmers, is an important factor in protecting legitimate tenure rights and is one of the key functions of the law.

Competition over pastoral land can result in disputes over tenure rights. Disputes can take place within or between families, or between individuals or communities and private companies. They can involve claims against the state and can arise over a number of issues, such as inheritance, boundaries or transactions. States should provide access through impartial and competent judicial and administrative bodies to timely, affordable and effective means of resolving disputes over tenure rights, including alternative means of resolving such disputes. They should provide effective remedies and a right to appeal. States should also make available mechanisms to avoid or resolve potential disputes at the preliminary stage, either within the implementing institution or externally. Moreover, multiple tenure systems may coexist in the same territory, including statutory and customary systems. Alongside formal court systems there may be non-state systems for adjudicating tenure conflicts, including customary systems and alternative dispute resolution mechanisms.

Methods of dispute resolution include negotiation, inquiries, mediation and conciliation, arbitration and judicial settlement. States should also consider introducing specialized tribunals that deal solely with disputes over the use of pastoral land. Where customary or other established forms of dispute settlement exist they should provide for fair, reliable, accessible and non-discriminatory ways of promptly resolving disputes over tenure rights. Mediation can be an alternative to court action to resolve disputes.

Access to justice and promotion of land rights for the Mbororo indigenous pastoralists of the Northwest Province of Cameroon

National legislation in Cameroon governing the use of pastoral land includes the Constitution of Cameroon, adopted in 1972, which provides for the protection of minorities and the preservation of the rights of indigenous populations in accordance with the law. However, a number of laws have been passed to protect grazing land as communal land that cannot be owned by an individual:

- Ordinance No. 74-1-3 of 6 July 1974 establishes rules governing land tenure, grazing lands, state lands and procedures governing expropriation for a public purpose;
- Decree No. 76-165 of 27 April 1976 establishes the conditions for obtaining land certificates, the terms and conditions of management of national lands, and the terms and conditions of management of the private property of the state;
- Decree No. 78/263 of 3 July 1978 establishes the terms and conditions for settling farmer-grazier disputes, creates a local commission headed by the local government administrator and governs mobile graziers who practice traditional grazing methods (Nso Fon and Ndamba, 2008).

Conclusions

Conclusions

Pastoralism is an adaptation to the unique conditions of rangeland landscapes and it requires equally adapted systems of governance and tenure. It is often possible to find solutions to secure pastoral tenure within established national law, but the application of the law may require innovative approaches to adapt to the requirements of pastoralism. This is often difficult when public policy – written or unwritten – is to reallocate pastoral lands to other users or to transform pastoralism into a different land-use system.

This technical guide provides advice on how to strengthen governance of tenure as the platform for sustainable pastoralism, and it broadly assumes a supportive public sector. However, it can also be used by non-governmental actors to strengthen governance as part of the process of generating public support for pastoralism. The first section, therefore, outlines the rationale behind pastoralism, recognizing that misrepresentation of pastoralism and rangeland ecology is frequently used to argue for changes in land use and land ownership.

Optimists can draw inspiration from the slow but steady progress in favour of pastoralism around the world. This progress has been made possible, among other things, by advances in the science of rangeland ecology, by recognition that positions against pastoralism were often breaches of fundamental human rights and by growth in the presence and voice of pastoralist men and women in the public arena. This technical guide on pastoral lands is timely as there are now more opportunities to support pastoralists and their governments to strengthen land and resource rights.

Pessimists will point to the ongoing marginalization of pastoralists in many countries and the fact that pastoral areas continue to be affected by droughts, conflicts and other crises. They will continue to question the viability of pastoralism as a land-use system. Yet it is clear that, in most rangeland environments, no other land-use system can replace pastoralism on a significant scale. The outcome of pessimism is that isolated resource patches are removed from the pastoral system, leaving pastoralists poorer, more vulnerable to drought and in greater competition for the resources that

remain. Strengthening governance of tenure is the route to overcome this cycle of marginalization. Reduction in vulnerability, poverty and conflict are the dividends.

The solutions presented in this technical guide are generic and are tailored to a global audience. It is strongly recommended to use this guide as a framework for developing more locally-specific advice to pastoralists, helping them to secure their land according to the legal, political and social contexts in which they live. Continuation of the global discourse on governance of tenure in pastoral lands should be encouraged in order to continue building solidarity among the world's half a billion pastoral peoples. This discourse will help inspire further action to reinforce pastoral stewardship of some of the world's most cherished and valuable landscapes.

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The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security explicitly mention pastoralists as users of the Guidelines and as targets of capacity building. Despite the historical and often ongoing marginalization of pastoralists, this technical guide has been developed in response to emerging opportunities to support pastoralists and to strengthen their land and resource rights. Essential elements of sustainable pastoralism such as securing customary rights, mobility and effective participation of communities in decision-making processes have been connected to the role pastoralists play in sustainable natural resource management. In some countries, legislation and legal frameworks related to sustainable governance of pastoral land are already in place, but in a rapidly changing environment with emerging issues such as growing population, land degradation, climate change, rising insecurities, land privatization and diminishing resources, the need to strengthen responsible governance of tenure in pastoral land has never been more urgent. It is strongly recommended to use this guide as a framework for developing more locallyspecific advice for pastoralists, helping them to secure their land according to the legal, political and social contexts in which they live. Continuation of the global discourse on governance of tenure in pastoral lands should be encouraged in order to build solidarity among the world's half a billion pastoral peoples.

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