



Mobile livelihoods, patchy resources & shifting rights: approaching pastoral territories¹

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0 - INTRODUCTION

Pastoral groups inhabit areas where constraining soil, rainfall and temperature conditions provide limited effective and sustainable options for land use, other than mobile livestock rearing. Agro-ecological conditions and physical characteristics of range resources are critical in shaping the socio-economic livelihood patterns of pastoral communities, as they are characterized by highly variable and unpredictable resource endowment. As a result there are strong communalities in livelihood strategies of pastoral groups inhabiting and exploiting distant and diverse drylands or highlands of the world (from Sub-Saharan African dry lowlands to cold Asian plateaux, from the tropical savanna to the cold northern steppe) – a feature that is much less evident among other population groups across the globe.

For a long while an unchallenged and biased approach has provided the theoretical frame that has ‘commonised’/homogenised external perceptions of pastoralism, from colonial states to post-colonial bureaucracies, from UN agencies to concerned NGOs. Most of the literature during the last century regarded pastoralism as a fading and doomed lifestyle, condemned by its inability to produce efficiently, to protect and regenerate its natural resource base, and even the incapacity to maintain social order and peace. As has occurred in many other so-called indigenous cultures, pastoralists were considered as irrational, so their resource management system and lifestyle were to be re-built within a modern framework for development. External encroachment on range resources and misconceptions of pastoral livelihood strategies, in time, led to erroneous interventions that contributed to undermining the sustainability of local resource management, thus increasing the vulnerability of herding communities.

Adequate resource access determines the sustainability of pastoralism as form of production and a way of life; yet land was a factor over which pastoralists had no control. It has in fact taken a long time for new paradigms and innovative approaches focused on the rights of herding communities to land as a primary element for pastoral development and rangeland management. While these rights are being increasingly acknowledged, related policies, investments and laws often fail to meet expectations

¹ This paper has been prepared by Michele Nori for the International Land Coalition

for coping with the needs of pastoral mobility and flexibility in resource use. A new approach that builds upon institutional theories and new rangeland ecology thinking has recently developed to support appropriate decision-making concerning pastoral land rights.

1 - Global Pastoralism

Pastoral systems are important to the wider society as they support herders' subsistence, provide for large quantities of food and non-food products which play a major role in ensuring local food security, and contribute to the national economies of poor countries. These contributions materialize on marginal lands where other uses have shown to be ineffective. As indicative examples, livestock sector (in countries where pastoral production is a main component) contributes 20% of the GDP in Mauritania, 16% of Ethiopia GDP, with 8% of its export value, 32% GDP of Mongolia, with 32% of its export value. There is also a renewed interest in pastoral production systems in the Mediterranean and central Asian regions.

Extensive pastoral production occurs in some 25 percent of the global land area, from the drylands of Africa (66% of the total continent land area) and the Arabian Peninsula, to the highlands of Asia and Latin America. It provides ten percent of the world's meat production, and supports some 200 million pastoral households and herds of nearly a billion head of camel, cattle and smaller livestock (FAO, 2001)². While the demise of pastoral livelihoods has been regularly predicted, there is evidence that in many areas of the world pastoralism represents the most important livelihood strategy of a growing number of households³. Not only is the number of pastoralists increasing globally, but more sedentary societies are increasingly drawing upon pastoral concepts and ideas.

Although herders are scattered globally, critical trends threatening their sustainable development are similar in the different regions they inhabit. Pastoral land tenure and management systems are increasingly challenged by encroaching interests, spanning from the advance of the agricultural frontier, to oil and mineral extraction, or tourism-driven conservation policies, to Western notions of private property and resource ownership. Changes in land tenure by central governments combined with related uncertainties regarding resource access have been major sources of deprivation, vulnerability and insecurity, as they affect both the availability and access to the natural pastoral resource⁴. It is not surprising that the issue of land rights is the main concern of pastoralists the world over (as evident in the conclusions of the Global Pastoralists Gathering held in Turmi, Ethiopia, in 2005).

BOX 1 – A note from the first Global Pastoralists Gathering (Ethiopia - Turmi, 2005)

As raised and discussed at the Global Pastoralists Gathering in Turmi (2005), it is clearly unsurprising that the main concern for all pastoralists relates to the rights and

² Global statistics need nevertheless careful handling and sceptical reasoning, as pointed out by Dobie (2001).

³ In fact indications are in that in many countries overall livestock numbers have actually decreased since the last century, while pastoral populations have increased, thus reducing the economic viability of pastoral systems (refer to Niamir-Fuller, 1999). The shrinking of rangelands and the worsening of their quality are other major factors adding to this picture.

⁴ Nori et al., 2005

encroachment of their lands, perpetuated by external, non-pastoral groups and interests. While an interesting article from van der Brink et al. (1995) relates this problem to as far back as Cain and Abel, in Turmi we listened to Masaai herders recalling the ways in which British colonizers pushed them out of the highlands; we learnt how the Alpacas had to move to the mountains when the Spanish ‘conquistadores’ took control of coastal areas; and we were told of the dispossessed Bedouins in the Holy Land. Any effort to properly address and support pastoral livelihoods has to start from this crucial factor; access to land (better said lands – as they change seasonally) is critical to ensure pastoralists’ subsistence and sustainable development⁵.

Pastoralists are those communities which rely on *mobile livestock rearing* as a livelihood⁶ strategy for human survival and socio-economic development upon marginal arid and semi-arid lands. Pastoral and agro-pastoral communities differentiate from other rural groups by the specific relevance of livestock-based activities and mobility patterns for their livelihoods. In contrast to sedentary farmers and breeders, herds and flocks (and often households), pastoralists move through places and seasons, and their livestock forage is natural as opposed to cultivated fodders and pastures. Pastoral resource management is based on a complex set of temporary or semi permanent claims on pasture, water and other resources, as well as on the underlying principles of flexibility and reciprocity. The resource base of pastoralists – land – is therefore not a fixed individually owned capital, but rather a flexible asset with specific uses and access mechanisms⁷.

With the exception of few countries (Somalia, Mongolia, Mauritania and Chad, among others), pastoralists normally represent a minority of the national population in most countries, claiming vast areas of land in states where the peasant majority is often threatened by land shortages⁸. This is the outcome of a process which divided and relocated pastoral territories among different countries; herding groups carrying the highest brunt in the definition of national frontiers and boundaries during the colonial scramble. In those times, pastoral territories were perceived and classified as ‘unoccupied’ or ‘unproductive’ lands (as to the *mise en valeur* concept in French colonies), and were divided without consulting the local users. Wherever there is straight line on a map, be sure that it is a pastoral area, with the same people living on and moving across the two sides (such as the Saharawi and the Twareg in the Sahara, the Bedouin communities and the Kurds in the near East, and the Somalis and the Karimajong in the Horn of Africa).

This international redefinition of pastoral territories carries an amount of jurisdictional and political issues; inter-state disputes often involve pastoral lands and people because of the frontier location. As an exemple, it is reported that in the latest confrontation with Ethiopian army and militia, about 70% of the Eritrean national

⁵ Author’s note to the first Global Pastoralists Gathering event organized by UNOCHA-Pastoralists Communication Initiative and UNDP, Turmi, Ethiopia. January 2005. More references at: <http://www.ids.ac.uk/ids/news/Pastoralists.html>

⁶ We refer to livelihoods as “the capabilities, assets (including both social and material assets) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future while not undermining the natural resource base” (Carney, 1999).

⁷ Sandford & Habtu, 2000; Thebaud & Batterbury, 2001; Nori et al., 2005

⁸ Salzman, 1994; Markakis, 2004

herd was raided, at the expense of bordering pastoral groups (DFID, 2000). The same applies to conflict-related refugee fluxes, which often move through, locate upon, and make intense use of, fragile and contested rangelands.

2 - Mobile Livelihoods

Rangelands resources are heterogeneous and dispersed (patchy), tied with seasonal patterns (temporary), differing through time (variable) and characterized by overall erratic climatic patterns (unpredictable). The net productivity of dryland ranges is low and the animal and plant populations that it can sustain fluctuate unpredictably, depending on a number of variables, among which rainfall patterns play a major role. Similar dynamics characterize highland ranges – in e.g. Central Asia and South America - where low temperatures and prolonged snowfalls, have a marked impact on land use. As an average, there is an extensive climatic extreme every decade in most pastoral areas of Sub-Saharan Africa (prolonged drought) and Central Asia (prolonged frost). Other relevant bio-physical variables affecting the spatial heterogeneity and temporal variability of resource endowment include: soil quality, vegetation composition, fire events, disease outbreaks, etc.⁹. Access to different eco-zones across rangelands is vital to ensure continuous productivity for pastoralists. The interdependence of arid lands with other external or adjacent ecosystems (such as wetlands) creates opportunities for resource extraction across several different and complementary ecological niches. The same applies for exchanges with other land user groups (farmers, urban dwellers, etc..

Mobile **livestock**, able to convert range grasslands into quality and nutritious (food) products, results in the most economically-viable and environmentally-sound option to exploit range resources. Livestock represents the vital 'technology' that interfaces between range resources and people's livelihood, enabling storage and transportation of food through places and seasons. Herd *diversification* – a mix of large and small ruminants, grazers and/or browsers – is important to minimize risk exposure while serving subsistence needs through optimal utilization of available resources. Herd *divisibility* is also important for the same reason. Splitting animals across a number of widely dispersed herds spreads risk, while different functional sub-herds (e.g. milking and fattening ones) allows for the manipulation of different animals' ecological potentials, according to capacities and needs.

Pastoral **mobility** is the way pastoralists have historically managed uncertainty and risk on arid lands¹⁰. For pastoralists, seasonal movements are essential, as rainfall and temperature patterns result in marked spatial and temporal variations in livestock grazing resources. Mobility depends on temporarily utilized lands, knowledge of ecosystem productivity potentials, and constraints, and capacity to negotiate or enforce access to key rangeland resources, primarily pasture, water sources and migratory corridors.

Mobility can be vertical, in mountainous areas, with different seasonal altitudinal areas, or horizontal, through different zones, often linked to water access – such as the north-south transhumant movements in the Sahelian zone. A distinction can also be made between 'normal' movements and emergency movements during critical

⁹ Behnke, 1992; Swift, 2004

¹⁰ Scoones, 1995

times, due to drought, conflict or other reasons. Patterns of mobility range from pure nomadism (opportunistic, no fixed base), through various forms of transhumance (set migratory routes on seasonal basis), to degrees of agro-pastoralism (seasonal crop production); each demanding different involvement of household and herd members. In the Maghreb alone, more than a dozen systems of pastoral land use are reported¹¹.

Mobility is therefore both an ecological and economic necessity for herders as it allows coping with low net primary productivity, high resources variability and the unpredictability that characterizes arid and semi-arid environments. It hinges critically upon technical as well as socio-political factors, as both human and social capitals are critical in ensuring mobility for pastoral communities.

- The pastoral *human capital* is characterized by an in-depth knowledge of complex rangeland agro-ecological dynamics, critical in detecting resource *availability* to ensure livelihood strategies and coping mechanisms. Pastoralists' Indigenous Technical Knowledge includes familiarity with patchy range resources and understanding erratic climatic patterns; both relevant in tracking environmental conditions.

- Pastoralists' *social capital* includes cultural and religious mores and values, social norms, duties and responsibilities to kinship bonds, and conflict management mechanisms. Through the principle of reciprocity¹² in user rights, these factors play a critical role in ensuring *access* to different range resources in times of need as well as resolving disputes during periods of stress.

These two levels are closely intertwined, as local socio-political institutions provide the framework through which Indigenous Technical Knowledge is translated into collective action¹³.

BOX 2 - The Dana Declaration on Mobile Peoples, 2002

(Source: <http://www.iucn.org/themes/ceesp/dana.htm>)

(...) The linked pressures of human population dynamics, unsustainable consumption patterns, climate change and global and national economic forces threaten both the conservation of biological resources and the livelihoods of many indigenous and traditional peoples. In particular, mobile peoples now find themselves constrained by forces beyond their control, putting them at a special disadvantage. Mobile peoples are discriminated against. Their rights, including rights of access to natural resources, are often denied and conventional conservation practices insufficiently address their concerns. These factors, together with the pace of global change, undermine their lifestyles, reduce their ability to live in harmony with nature and threaten their very existence as distinct peoples.

3 - Patchy Resources

¹¹ Bourbouze, 1999

¹² *Reciprocity* is the medium through which interdependence among individuals and groups is established and maintained so to spur informal negotiation rather than war and mechanisms exist as well as incentives not to violate rules (e.g. revenge) (Niamir-Fuller, 1999).

¹³ Niamir-Fuller, 1999

Structures regulating resource access, social organization and governance systems depend to a large extent on the local natural resource endowment. Examples from northern and southern sub-Saharan areas illustrate that social structures accompanying the shift from nomadic herding to rainfed agricultural systems, vary with the degree of aridity (and related unpredictability), as authority and hierarchical structures become tighter where resources are more abundant and geographically-concentrated. In the drier ecosystem, there is more incentive to manage the natural resource communally, as **communal property regimes**, providing the best framework to share risk and spread the burden of such agro-ecological conditions, so to reduce levels of vulnerability¹⁴.

Pastoral herds can exist throughout most of the year on drylands, but they need wetter areas to survive during the dry seasons; access to water enables the use of surrounding grazing areas during droughts; access to salty soils, medicinal plants and wild fruits is important in certain times of the year; routes to access urban area, markets or other groups are relevant in contingency planning. Mechanisms regulating access to resources must therefore be flexible enough to provide space for the necessary negotiations and arrangements among different user groups, depending on needs. Taking into account these factors implies a degree of complexity that accommodates for different and often overlapping rights:

- over different resources the relevance of which might change through seasons (dry and wet pastures, water points, forest zones, river banks, transhumance routes, buffer zones, cropping areas, etc...) and
- related to different user groups (individual household, residential communities, clan groupings, ethnic confederation, etc...).

As a result most rangelands are **mosaics** of diverse and dynamic sets of mechanisms regulating access to resources - from more private (corporate) forms (such as those for non-natural water points), to communal areas, to open-access systems. Different options are applied and continuously renegotiated among the institutions that define the local political system, with the aim of allowing quick reaction or the 'tracking' of unpredictable short-term fluctuations in feed supply, while applying a longer term strategy that maintains environmental reproduction and viable socio-political relationships.¹⁵ What is of relevance to herders is therefore the option to access specific land resources at different times of need, rather than the formal control over a sporadically productive piece of land, while critically accounting for the conditions of the resources (which change through time), a major concern is here allocated to the user, as rangeland use patterns have to adapt to herds' needs.

A number of institutional systems have developed locally over time to cope with the variability, uncertainties and risks of non-equilibrium environments. Processes of integration within the wider global frame and the encroachment of outsiders' interests, as well as ideologies, have added further elements that contributed to reshaping pastoral patterns of resource management and the related institutional setting. The current situation is often one of an onion-peeled effect, where different systems contribute to reshaping the ways in which different social actors access, use and

¹⁴ Denéve, 1995; Swift, 1996; Niamir-Fuller, 1999

¹⁵ Behnke, 1994; Niamir-Fuller, 1999; Leach et al., 1996b

derive well-being from environmental resources and services¹⁶. These systems include local cultural norms and colonially imposed rules; formal and informal institutions; customary and modern frames; influences from religious dictates¹⁷, geo-political dynamics (e.g. land policies developed under the Western or the Soviet model); and degrees of integration within the wider global frame (e.g. the growing market-integration of pastoral economies and the increasing competition on their resources). The situation on the ground is consequently very fragmented and diversified, as ecological variability is reflected in heterogeneous socio-cultural patterns. As an example, the movement of north-African pastoralists in and out of the Sahara desert towards more northern plains, is still a major livelihood strategy in Morocco, of minor relevance in Algeria and are no longer exist in Tunisia¹⁸. Furthermore, practices are further influenced by the specific interests, skills and capacities of different social actors, as well as by contingent events in the economy and society.

4 - Shifting Rights

Despite the diversities which have existed in cultural backgrounds and ideological perspectives, there seems to have been little difference in the ways range management and pastoral development have been perceived and approached by encroaching outsiders over time¹⁹. As opposed to previous forms of contact and exchange, western colonialists were not satisfied with the profits from trading in livestock and other pastoral products: they targeted rangelands as a whole. A common feature between different colonial experiences was that lands not continuously occupied and ‘properly’ exploited, in farming terms (*mise en valeur*), were assumed as having no-owner and classified as State or Crown property. This approach meant that grazing lands and migratory corridors could be foreclosed without consulting, or even informing, local communities.

Garret Hardin’s *‘tragedy of the commons’* exposure in 1968 merely provided a theoretical frame for an already existing and accepted discourse among western politicians, academics and developers, as it pointed out in a Malthusian way the economic irrationality of pastoralists fighting over resources and pillaging the natural environment. The argument is that there will be no incentive for a herder to limit the number of animals he puts on the commons whilst other herders may increase the number of animals. This theory provided a relevant benchmark in the creation of a distorted vision about pastoralism, as customary institutions regulating communal access and utilization of natural resources were overlooked and pastoral resource tenure systems mislabelled as open access. By constructing the negative myths of overstocking, desertification and insecurity, the way was paved to define pastoralism as economically inefficient, environmentally degrading and socially conflicting²⁰. Extreme drought events in the Sahel and the Horn of Africa during the 1970s and 1980s and increasing conflictive trends in pastoral regions further supported this vision.

¹⁶ Leach et al., 1996b

¹⁷ e.g. the Sharia influences in Mauritania – refer to Lane, 1998

¹⁸ Bourbouze, 1999

¹⁹ Lane, 1998

²⁰ Swift, 1996; 2004

This discourse developed along two major lines that addressed the social and natural dimensions of pastoral livelihoods:

- pastoral production systems are not economically efficient, and
- rangelands are degrading as a result of unregulated access and use.

Within this frame mobile livelihood patterns and communal resource tenure adopted by pastoralists were identified as major obstacles to pastoralists' socio-economic development, supposedly hampering options for private investments and sustainable resource management²¹. By building upon the western land managerial patterns (such as the ranching model) the development framework for pastoral areas hinged upon two major aspects:

- sedentarization of pastoral communities within defined boundaries and villages, and
- relocation of land tenure rights through nationalization and/or privatization schemes.

Colonial systems of governance and natural resource management have eroded and weakened the basis of traditional pastoral livelihood systems leading to profound changes in power and control structures. Differences and contrasts between diverse groups were also instrumentally exploited by colonial administrations through 'divide and rule' strategies in order to better control local people and resources. The result was to undermine the material foundations of the pastoralist economy and to damage the fabric of their society. Faced with growing external interference and a rising pressure on rich-but-fragile environments, pastoral organizations and institutions became increasingly unable to retain control over resources²². While colonial governance set the route for such discourse, post-colonial experiences, inspired by different ideologies, simply continued reproducing policies that aimed at grabbing pastoralists' resources while ignoring their basic subsistence rights. *'If the colonizers were guilty of ignoring customary rights generally, the indigenous African officialdom is similarly guilty of ignoring pastoral tenure with the same air of prejudice, indifference, ethnic chauvinism and discrimination'*²³.

The state played a major role in this process, by either nationalizing pastoral lands, or by indirectly supporting the interests of non-pastoral actors and groups, through food and land policies favouring settled farmers, urban consumers or market entrepreneurs at the expense of rangelands inhabitants. The marginalization of pastoral interests in national policies has been a common feature in most countries, and managerial systems applied to rangelands aimed at enhancing livestock productivity for the domestic and export markets, largely ignoring the needs of the herding people. As an example, countries such as Mali and Kenya have witnessed only recently the establishment of a Ministry of Livestock with a specific mandate for herding areas, whereas previously there was only the Ministry of Agriculture, with a traditionally major focus on farm production. The Soviet and Chinese experiences did not escape this fate, as their development policies (from intensive farming to industrial developments) were deeply embedded in Western paradigms. Soviet states sought to

²¹ Rwabahungu, 2001

²² Swift, 1994; Lane & Moorehead, 1994; Lane, 1998

²³ Tenga, 2004

monopolize and control land rights of the extensive ranges that characterize central Asia.. With the breakdown of the Union the system was rapidly liberalized into individual tenure within a market framework. A similar fate occurred to pastoral territories under Chinese control.

Box 3 - Hectic reforms on the Tibetan plateau (from ASIA, 2003).

The institutional environment of Tibetan herders offers an eloquent example of how policy trends can adversely affect pastoral societies. Traditional Tibetan land tenure and herd management systems were placed under siege in the 1950s when Mao Zedong's army entered the country and subjected it to Chinese rule. The Collectivization period (*Gonshe*) that followed provoked great changes to Tibetan herder societies because while land management had traditionally been communal, livestock were in fact household property. In the early 1980s, as part of the loosening of the communist economy, herds were decollectivized under the Household Responsibility System, making them individual property once more. Ten years later, seasonal grazing lands were also reallocated on individual basis, once again throwing pastoral systems into turmoil.

Despite being based on a number of shallow, and often unproved, assumptions, for a long time Hardin's approach has shaped the discourse on pastoralism (in the Foucaultian sense, thus embodying and hiding relations of power).. In a USAID discussion paper on pastoral development projects in Africa's Sahel, Horowitz wrote: *So many documents, officials, and even scientists repeat the assertion of pastoral responsibility for environmental degradation that the accusation has achieved the status of a fundamental truth, so self evident a case that marshaling evidence in its behalf is superfluous if not in fact absurd, like trying to satisfy a skeptic that the earth is round or the sun rises in the East*²⁴. Range resources were at stake and the argument of pastoralists being inefficient and incapable of properly managing the ecosystems they insist upon, has been instrumental in legitimizing encroachment of external agents that would have made a better use of such resources²⁵. Possibly because it supported a number of economic and political interests, this cultural paradigm legitimized 'modernizing' policy practices for pastoral environments, which easily translated from western colonizing societies to those of southern continents, to international development agencies.

BOX 4 – UN approach to rangelands

It took many decades for the International Community to readdress the problems of pastoral areas, by acknowledging the capacity of local communities to effectively provide for an effective management of marginal lands. The UN vision towards pastoralists and rangelands represents a clear example. The first Convention on Desertification (UN COD, Nairobi 1977) identified in pastoral land use the main cause of environmental degradation in marginal lands. This position was reiterated in the UNEP 1984 Governing Council. It was during the 1990s that the United Nations Conference on Environment and Development (UN CED) legitimized the relevance of local communities' knowledge, rights and capacities towards what had been defined as 'sustainable development'. Agenda 21 strongly advocates a combination of

²⁴ Horowitz 1979: 27 – quoted in Ellis, 1994

²⁵ Leach and Mearns, 1996

government decentralization, devolution to local communities of responsibility for natural resources held as commons, and community participation. In 1994 the UN Convention to Combat Desertification (UN CCD) placed a major emphasis on improving the livelihoods of dryland inhabitants as a main measure to achieve its goal²⁶.

Overall the ‘modernization’ of pastoral management patterns and tenure rights has fuelled rather than resolved development problems of pastoral communities, whose vulnerability has increased while their social and ecological fabrics have been undermined and degraded. On one side, the *nationalization* process has separated the ownership of land from its use and has *de facto* created a situation of ‘open access’, thus legitimizing control by others, whether pastoral or non pastoral²⁷. On the other side, schemes aimed at *privatizing* rangelands have created a number of problems that have surpassed those they tried to solve. Failures in group ranching and individualization of common herding lands, created problems of social inequality and exploitation, and exclusions (e.g. the Maasai experience in Kenya).

The ‘tragedy’ misdiagnoses have resulted in true tragedies of the commons that contribute to increase pastoral ecological and economic vulnerability by inspiring inappropriate policies and misguided decisions. Land degradation occurring in pastoral regions is more often the result of modernizing policies and interventions that undermined the basis of pastoral resource access and utilization, rather than the outcome of endogenous pastoral developments. Serious land degradation and desertification are evident around permanent settlements and water points, where livestock mobility is reduced, but much less so in open rangelands under extensive production systems²⁸.

The tendency to evaluate the economic and biological productivity of pastoral systems based on the European humid temperate biases, has led to an underestimation of the economic contribution of pastoral systems, and an over zealous attempt to change their way of life²⁹. The large degree of failures and negative impacts of such a development approach induced major rethinking of rangelands management. More integrated rural development approaches were developed the main focus shifting away from livestock production towards a major consideration of overall range resources management and local livelihoods.

BOX 5 - No tragedy of the commons in highland Bolivia (From: Swift, 2004)

Until the 1970s, rights to pasture in highland Bolivia were corporately held by large clusters of communities traditionally known as *ayllus* with strict rules of entry and resource management. The Bolivian agricultural reform that had followed the nationalist revolution of the 1950s was the last in a series of blows to highland pastoral community structure. One of main goals of the reform was to provide peasants with individual title to land, a policy that herders had opposed for decades. Their advocacy to maintain corporate tenure of pastures was invariably seen by the government as an irrational resistance to modernization, or a stubborn attachment to

²⁶ Swift 1996; Leach et al., 1996a

²⁷ Leach and Mearns, 1996a; Lane, 1998; Niamir-Fuller, 1999

²⁸ Bromley and Cernea, 1989; Swift, 1996; 2004

²⁹ Niamir-Fuller, 1999: 25; Swift, 1991

'primitive' and 'dysfunctional' ways of life. As a result of these policies, in the 1970s herders and the state finally compromised by subdividing the *ayllus* into smaller units (hamlets comprising a group of families), each of which received a land title. Within this structure, the basic laws of indigenous pastoral production remain what they have always been. Land tenure, rules of entry to social groupings, collaborative practices, customary laws, residence patterns are all regulated to ensure that the balance is kept between demographic constraints and the distribution of scarce resources. Culture as such is not so much at stake in the Aymara herders' desire to preserve corporate land tenure as is the need to protect the only instruments that made pastoral production a relevant investment in the harsh mountain environment.

5 - Development Approaches

An economic critique to Hardin's reasoning came through the **Property Rights (PR)** approach, based upon the theories of the Swedish sociologist E. Boserup, stating that that natural resource management patterns develop according to population pressures and related resource scarcity, as the value of property determines the nature of the rights that pertain to it³⁰. Increased population and resource scarcity induce socio-political innovations that reflect a shift to more exclusive forms of access, as the higher value justifies the 'transaction costs' related to administering and controlling the resource use – what Demsetz (1967) defines as the costs of 'policing'. This approach calls for increased formal tenure security as a way to enhance a more efficient use of resources. Efforts in this direction included experiences in land titling campaigns, land use planning in East and South Africa and the *gestion de terroirs villageois* in West Africa.

BOX 6 – The costs of pastoral administration

The costs involved in policing land tenure in pastoral areas represent an important component of the debate. As net primary range productivity is low, so must be the costs of administering its resources. Efforts to impose centralized and uniform control systems have often clashed with the resources needed to enforce them. Colonial authorities, as well as post-colonial states, have often entered into conflict with pastoral communities as the latter were requested to support (through taxation) the costs of a service that worked against them. As countries inhabited by pastoralists at large rank often among the low-income ones, the inappropriateness of centralized control, associated with its high costs, represented a (major) cause of the collapse of their state (from Afghanistan to Somalia).

Exception is made in pastoral-inhabited countries where oil-generated revenues provided central state coffers/treasury with extensive budgets to pay for the institutional services and physical infrastructures needed to bring pastoral territories under some degree of control - as it is the case in some Near East/West Asia and Northern Africa countries. In other areas disputes over the utilization of oil-based income further triggered already existing conflicts (e.g. south Sudan and cases in central Asian region).

Despite the fact that after two decades of experience, this approach has enjoyed only partial success in building local level institutions for natural resource management, it

³⁰ Demsetz, 1967; Lane & Moorehead, 1994

has indeed brought a fundamental shift in the relations between local land users and the state by redefining local communities' rights and duties in relation to land³¹. Overall criticism to the PR approach points to the fact that it holds a too simplistic and static vision that results embedded in a kind of linear progression track that sees in the slow-but-inevitable privatization of rangelands the key for their future sustainability.

Two major areas of concern have been addressed with this respect:

- By focusing more on the structure rather than on the function of management regimes, this approach is unable to deal with the spatial heterogeneity and temporal variability of resource endowment in pastoral environments (i.e. different value resources exist in contiguous areas and their value might change seasonally and inter-annually, which constitutes the basis for herders' mobility).
- Stressing the importance of defined group and territorial boundaries as a critical ingredient to the success of collective resource management³²; this approach cannot cope with the degree of adjustment and fluidity vital to ensuring pastoral livelihoods. Inclusiveness (or porosity) of resource boundaries and user grouping, rather than their exclusivity, constitutes a major factor in local tenure arrangements.

Furthermore little consideration is given to the longer-term impacting trends (such as climate change and globalization) and the political processes (urbanization, transport and communication developments) that are continuously remolding pastoral environments and societies.

Further developments in these lines of thought developed into the so-called **co-management systems**, which argues that where resources are scarce and variable and income streams uncertain, communal property systems are the most efficient as the relatively low returns from the arid resource do not warrant the costs of organizing and enforcing more exclusive forms of tenure. This approach sees in local customs, rules and conventions the tools to articulate common interests as they promote voluntary cooperative behaviour that ensures local livelihood in the long term, as those insisting on an area and belonging to a community share the same resources, needs and interests and are all concerned for what is defined as the 'assurance problem'. An appropriate sharing of responsibility for natural resource management between national and local governments, civic organizations and local communities, is pivotal to ensuring sustainable resource utilization³³. Within this frame groups and associations of herders must be put in the position to regenerate and apply their resource management rules and mechanisms, the erosion and undermining of which is the result of wider social, economic and political processes³⁴.

A more ecological criticism to Hardin's approach developed through the **new range ecology**, addressed the functioning of arid and semi-arid ecosystems in order to provide a more appropriate understanding of the socio-political structures and processes governing pastoral systems. Range ecologists showed that arid and semiarid

³¹ Lane, 1998; Niamir-Fuller, 1999

³² refer to Ostrom, 1990; Feder and Feeny, 1993; Niamir-Fuller, 1999

³³ Leach et al., 1996a; 1996b

³⁴ Runge, 1986; Bromley & Cernea, 1989

environments are inherently unpredictable, and may or may not tend towards an ecological equilibrium. High and unpredictable climate determines complex ecosystem dynamics; livestock and vegetation do not always control each other, and external shocks (e.g. drought) rather than endogenous processes (e.g. low calving rates caused by malnutrition) determine livestock numbers and the state of vegetation³⁵. Change in non-equilibrium environments does not occur gradually, does not follow successional models and does not illustrate the classical feedback regulatory mechanisms; In this perspective drought and desertification trends are more the results of long-term climatic oscillations/patterns rather than of detrimental land use patterns/human activities and the concept of ‘carrying capacity’ fails to recognize the variability and patchiness of arid lands ecology³⁶.

The new directions that Behnke suggest for range management policy in African environments involves:

- devolution of management authority to local herders, which are more able than centralized system to balance community needs and range capacities;
- tenure systems that provide secure access to a range of ecological zones and allow for rapid negotiation and decision-making mechanisms to make the best use of variable and unpredictable range resources.

More recent developments of this thinking have moved towards an increasing interest for the social dynamics that regulate natural resource management. The analytical concern has shifted towards a more thorough understanding of the mechanisms regulating the human-environment relationships. Management of livestock mobility involve continuously contested claims and rights, and requires multiple institutions working at multiple spatial scales, authorities and functions. Rather than framing these dynamics simply in terms of aggregate population pressure on a limited natural-resource base, a more disaggregated ‘entitlements approach’ considers the role of diverse institutions³⁷ in mediating the relationships between different social actors, and different components of local ecologies³⁸.

6 - Herders’ Footsteps

While acknowledging herd mobility as a critical factor for pastoral livelihoods, major components of this approach (as also defined in the UN CCD operational frame) are that:

1. pastoralists’ rights to land must be secured to reduce their vulnerability;
2. authority to administer natural resources must be decentralized;
3. investments have to be made to (re)build local socio-political capitals.

Within this **mobility paradigm**, while moving away from trying to directly control range management, the national state still needs to play a major role in ensuring that appropriate policies, legal mechanisms and support systems are in place, in order to allow self evolution of pastoralism towards an economically, socially and

³⁵ Scoones, 1994; Ellis, 1994; Sandford, 1994

³⁶ Behnke 1994, Behnke & Scoones 1992, Behnke et al. 1993, Coughenour et al. 1985, Ellis & Swift 1988, Homewood & Rodgers 1991

³⁷ Moving away from the simplistic community-based organization conceptualisation, institutions are here defined as regularised patterns of behaviour between individuals and groups in society, thus as mediators of people-environment relations (Leach et al., 1996b).

³⁸ Leach et al., 1996b; Niamir-Fuller, 1999

environmentally sustainable livelihood system³⁹. This enabling environment should define the operational framework for resource access, use and management to take place, so to comprehensively address the diverse claims and enable the different local institutions to work towards fair negotiation and brokerage of different interests, to avoid conflict and resource degradation.

Pastoralists' rights to land must be secured to reduce their vulnerability - An appropriate framework for *enhanced land security* for pastoral communities is needed to:

- halt process of land eviction from pastoral communities, and
- reverse current policy decision-making towards appropriate investments in herding areas.

Through substantive and procedural laws at both the national and local levels, the state must ensure that the boundaries of management regimes, however fluid, will be protected against expropriation and violation⁴⁰.

While efforts are needed in securing pastoral land rights, it must be recalled that pastoral tenure regimes exhibit levels of complexity and internal variability which are virtually impossible to simplify into legal formulae and codes⁴¹. It is in fact arduous to codify and formalize oral agreements that are fluid, dynamic and open to negotiation by nature. The absence of uniform and rigid rules imposed by an authority and the reliance on *ad hoc* decisions through negotiation at local level, allow a fine-tuning and adjustment of stocking rate to the ecosystem's variability⁴². There is thus a risk that by formally acknowledging and codifying local informal institutions, these might become too static and rigid and show inapplicable or box-in pastoralists thus contributing further to their vulnerability.

Authority to administer natural resources must be decentralized - It is increasingly acknowledged that state policies, laws and institutions aimed at providing a centralized and uniform control system over pastoral rangelands, have proven to be largely ineffective, costly and unmanageable. Through the principle of subsidiarity⁴³ central governments must relinquish *de jure control over rangeland resources*; control which is in any case is effectively beyond their grasp⁴⁴. Local users must be given legal rights to control the resources on which they depend, in order to enhance responsibility and achieve sustainability, as appropriate utilization of human and social capitals at local level allows keeping the transaction costs in pastoral administration low⁴⁵.

While current participatory and decentralization policies are aimed at rebalancing power structures in favour of local communities, a major recognized problem is that these processes normally concern power devolution to formal (state descending) institutions rather than strengthening and empowering customary ones, which would

³⁹ Niamir-Fuller, 1999

⁴⁰ Niamir-Fuller, 1999

⁴¹ Behnke, 1994; Lane, 1996

⁴² Niamir-Fuller, 1999

⁴³ Subsidiarity here means that administrative tasks should be carried out as near to the level of actual users of resources or beneficiaries of administration as is compatible with efficiency and accountability, as to Swift, 1994.

⁴⁴ Behnke, 1994

⁴⁵ Behnke et al., 1993; Swift, 2004

be more responsive and accountable to pastoral communities⁴⁶. As many PRSP exercises are coming to recognize, ongoing process of decentralization and devolution of power to local governments represents an opportunity for rebalancing the relationships between pastoral and non-pastoral populations. But the likelihood that this might happen depends on the extent to which traditional governance structures for decision-making on land and resource management are taken into account.⁴⁷ Moreover decentralization often means the atomization of resources rights among individuals and small groups, thus creating further divisions on existing territories and allowing for 'land grabbing' by local government officials (IIED, 2003). At the GPG meeting in Turmi (2005) pastoralists from West Africa reported that implementation of decentralized policies is creating new borders and boundaries within the same country, which are further complicating pastoralists' movements and resource access patterns⁴⁸.

The central function of the state within this frame becomes one of arbitration of conflict, rather than of direct imposition. *Conflict management* involves prevention and resolution of possible disputes arising over resource access and competing users and claims, which are fairly constant in such environments characterized by variable and unpredictable resource endowment. Focal Point Management⁴⁹ is a possible way to operationalize external (national or international) involvement in resource management and related conflict resolution, by concentrating intervention efforts (and often scarce financial resources) on a particular category of resources, the relevance of which is critical for local livelihoods (such as the Niger delta or Lake Chad in West Africa).

Investments have to be made to (re)build local socio-political capitals – Supporting *pastoral socio-political capacity* represents an important task in the process of local decision-making empowerment in order to (re) build and develop the capacity of local actors to enforce a right or to make a claim. It is in fact believed that recent social, economic and political processes have so deeply undermined traditional pastoral governance system to the extent that in a number of cases pastoral societies seem incapable of organizing themselves sufficiently to ensure sustainable land use under current conditions⁵⁰.

Group-binding⁵¹ ties are an important asset among pastoralists, but close ties within homogenous groups often imply limited capacity to relate to and interlink with external groups or forces in the wider societal frame (such as other land users or the State) – and represent a major reason for their political marginalization. How to extend and improve the bridging and networking capacities⁵² of pastoral social capital towards a fairer integration into the wider societal frame represents the concern of a growing number of community-based and non-governmental organizations in pastoral regions. In this context the contribution of the *civil society* might play a crucial role in establishing a political voice for pastoral groups, and in sharing experience between

⁴⁶ Swift, 1994

⁴⁷ ILO, 2005. An ethnic audit of selected PRS Papers. ILO, Geneva

⁴⁸ Author's note.

⁴⁹ refer to Behnke, 1994

⁵⁰ Lane & Moorehead, 1994; Lane, 1998

⁵¹ We refer here to the definitions of the different forms of social capital (binding, bridging and networking) as defined by Woodcock and Narayan, 2000.

⁵² Ibidem

groups and regions. In Kenya, local NGOs have helped mediate conflict resolution processes between pastoralist groups and with farmers – often supported by international NGOs⁵³. National and regional pastoral associations play a crucial role in the political empowerment of these communities. The ‘*Association pour la Redynamisation de l’Elevage au Niger*’ (AREN), for example, was established in 1990 to represent Nigerien pastoral communities in local, national and international debates, and defend their rights. It has focused primarily on resolving territorial disputes between herders and farmers, and on building a shared voice for pastoral groups.

7 - CONCLUSIONS

... land belongs to a vast family of which many are dead, few are living and countless members are still unborn

Nigerian herder⁵⁴

Territories inhabited by pastoralists have traditionally been considered **‘frontier’ lands** as they represent:

- agro-ecological environments that do not support continuous crop cultivation and cannot sustain large population numbers⁵⁵;
- unoccupied territories with over or under utilized resources and thus open to outsider appropriation⁵⁶;
- geo-political borders between different societies, civilizations and states (e.g. mountains or deserts);
- areas remote from mainstream central State and/or market rules, forces and dynamics.

Nowadays rangelands represent arenas where many interests and agents interact and conflict. Encroaching economic interests, state regulations and human population growth are posing serious challenges to the sustainable management of rich-but-fragile rangelands, by challenging traditional resource access rights. Shrinking frontiers, declining productivity and degrading quality of rangelands represent serious concerns for pastoral livelihoods which critically rely and depend upon the access to and conditions of the natural resource base. Unsurprisingly, adequate land rights represent the issue of major concern for pastoralists globally. The problem and the options for development nevertheless change from one context to another, and in the same context under different conditions. Diverse experiences resulted in different outcomes and no generalization can be made, although some lessons have been learnt.

Mechanisms regulating resource access are critical to ensuring the sustainability of pastoral livelihoods. The problem is particularly prominent in Sub-Saharan Africa, where there is a rising wave of landlessness, insecure tenancy, eviction and violent conflicts. In Central Asia, land privatization reforms are currently shifting land rights from pastoral cooperatives to wealthy individuals and groups, and crowding out the poorest population strata. The outcomes of state investments and administrative measures in North Africa and the Near East/West Asia have been quite mixed and

⁵³ e.g. ITDG, Oxfam UK

⁵⁴ Reported in Lane, 1998.

⁵⁵ Markakis, 2004

⁵⁶ Galaty et al., 1994

often depend on the amount of (oil-derived) resources injected in the process. All over the world mobile herding populations have shown the strong resistance they can generate in response to externally imposed political structures, resource disenfranchisement and forced settlement efforts⁵⁷.

Development policies and investments in pastoral areas have followed a linear path that slowly moved from addressing the commodities pastoralists produce (livestock), to a wider approach targeting the management of natural resources (rangelands), to a comprehensive interest for the livelihood of pastoral groups (users) and their social structures and processes (institutions). While recognizing pastoralists' rights to access vital resources to sustain their herds, represents a fundamental step towards sustainable development, studies in different parts of the world have established the important contribution of local political institutions and indigenous knowledge to defining patterns of sustainable resource management in arid lands⁵⁸.

BOX 7 – The experience of Pastoral Codes in West Africa

In the process of establishing mechanisms allowing pastoralists to move and access different resources, some countries have sought to implement a pastoral code that would systematize pastoral land use rights within a system of legal protection. The West African countries of Mauritania, Niger, and Mali have each established a 'Code Pastorale' that defends the right of pastoralists to move with their animals within and between countries.

By formalizing traditional herder-farmer negotiation mechanisms (on access to grazing resource, wetlands and migratory routes) the Code seeks to regulate traditional forms of open access to rangeland resources while also taking into account modern legislative measures to protect individual and group-specific land rights. In the example of Mauritania, the Code stipulates that local conventions regarding land use are to be negotiated between all land users: sedentary farmers, local government bodies, and nomadic herders.

Future efforts are needed to comprehensively translate these principles into operational approaches that will favour the sustainable integration of pastoral livelihoods within the wider societal setting. Important principles to recall in this processes aimed are that:

- Pastoral communities critically depend on the access to and the conditions of their natural resource base and are indeed the first one to track land degradation and suffer from its consequences;
- An ecosystem that functions according through non-equilibrium dynamics requires a management style different to an one that follow equilibrium ones;
- Patterns of mobility and resource access negotiation are critical to cope with such agro-ecological conditions, and are therefore vital to minimize risks in pastoral livelihoods;
- In pastoral tenure systems a major emphasis is put on the user (needs, rights, claims, entitlements), rather than on the resource *per se* and land rights are characterized more by inclusiveness rather that exclusivity;
- What matters is not the system of land tenure *per se*, but the provisions it makes for extensive use of land by pastoralists;

⁵⁷ Nori et al., 2005

⁵⁸ Evers, 1995

- Room has to provided for effective decision-making mechanisms at local space and time scales;
- Regional and trans-boundary approaches to rangelands resource management are needed.

While similarities exist among pastoral societies and groups, and indeed their common traits are instrumental to define pastoralists' land rights (mobility, insecurity, marginalisation), for operational purposes it is more relevant to acknowledge the heterogeneity that characterizes pastoral groups throughout the world vis-à-vis patterns of access to and management of land resources. This heterogeneity does not only relate to the different environments they inhabit, or to their ethnic diversities, but it is also due to the dynamics existing within the same group at different levels (social, gender, generational) and might indeed manifest differently at different times. Shifting the attention from community-based organizations towards the socio-political dynamics that regulate their rights and claims (institutions) implies a serious consideration of the dynamics of power relations among the different social actors involved in regulating the access to and the management of a resource.

Globalizing processes involving structural adjustments, policy modernization and economic liberalization, provide opportunities and threats for pastoralists' land rights and governance systems. Within this frame a major concern for land use rights addresses the specific and increasing problems of poorer population strata, minority groups, younger generations, and specifically **pastoral women**. While the roles of men and women are distinct and complementary in pastoral societies, women's traditional rights are usufruct ones, while ultimate control of resources is invested in men.

BOX 8 – The challenge of pastoral women

Many recent changes in the economic and socio-political conditions affecting pastoral peoples have contributed to an erosion of women's rights. Intensified competition for resources has led to women becoming increasingly excluded from access to productive assets while their social and economic responsibilities are growing⁵⁹. Processes that affect either the access to or the conditions of range resource particularly affect pastoral women as they impact on livestock productivity but also on access to resources such as fuel wood, traditional wild foods and medicines. Land degradation, resulting from land shortages and expropriation for cultivation and other uses, drought, settlement, etc, has increased women's workload in terms of water, fuel wood and feed/forage collection. Poor women have been particularly affected as they rely almost solely on common lands⁶⁰.

While it is acknowledged that there is a serious lack of adequate information about the relationship between pastoral women and land⁶¹, policies aiming to protect the rights of pastoral communities should recognize the specific dependence of women and their hardships when land resources are degraded or scarce.

Ironically, pastoralists' capacities and rights to administer rangelands are being recognized at a time when investments in pastoral areas are decreasing consistently.

⁵⁹ Pointing, 1995; Nori, 2003

⁶⁰ Niamir-Fuller, 1994

⁶¹ Gritli, 1997

Pastoralists' low population density, remoteness and political marginality make their programs the prime targets for state retrenchment under Structural Adjustment Programs, wherein public expenditure curtailment forces the dismantling of public services. Under pressure from the World Bank and the International Monetary Fund governments are forced to privatize land in order to create an 'enabling environment' for investment within an economically liberalized setting. It goes without saying that these measures aim at 'Poverty Reduction' at a large scale.

BOX 9 - Bank-inspired Land reforms in the Horn of Africa (source: Markakis, 2004).

Obligated by dire economic need and compelled by international donor conditionality, in the 1990s the states in eastern Africa and the Horn have embraced economic liberalization and the accompanying free market prescriptions. So far Ethiopia, Tanzania and Uganda have resisted pressure for the wholesale 'liberalization' of land tenure – in accordance with the World Bank 'security of property' paradigm. However, all three found it necessary to move in that direction in order to foster an 'enabling environment'. Tanzania and Uganda enacted new land laws for this purpose, while Ethiopia modified its land policy. Somalia has no government to implement such measures.

Furthermore within the larger downscaling of national and international assistance, intervention efforts in pastoral areas have become less proactive and more reactive, emerging only when the scale of drought, famine and lack of security become too large to ignore⁶², with army interventions, refugee camp establishment and food aid among the leading forms of support. The 'disaster and emergency' discourse has been replacing in time the 'modernization through sedentarization' one and currently seems the most powerful intervention approach in pastoral areas. Resources allocated to caring for the symptoms of affecting problems are undoubtedly larger than those directed towards addressing their root causes, amongst which land rights insecurity is an outstanding one.

⁶² Helland, 2000

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A number of International initiatives are also relevant within this frame as they contribute in raising the concern over pastoral land rights:

UNDP Dryland Centre - <http://www.undp.org/drylands/>

IIED Dryland Programme - <http://www.iied.org/drylands/index.html>

World Initiative for Sustainable Pastoralism -

IISD Pastoralism and Conflict Initiative -

<http://www.iisd.org/natres/security/pastoralism.asp>

IFPRI Collective Action and Property Rights – www.capri.cgiar.org

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