

Conflicts, security and marginalisation: institutional change of the pastoral commons in a ‘glocal’ world

T. Haller ^{(1)*} & H. van Dijk ⁽²⁾, in collaboration with members of the Dryland Dialogue: M. Bollig ⁽³⁾, C. Greiner ⁽³⁾, N. Schareika ⁽⁴⁾ & C. Gabbert ⁽⁵⁾

(1) Institute of Social Anthropology, University of Bern, Lerchenweg 36, 3000 Bern 9, Switzerland

(2) African Studies Centre Leiden and University of Wageningen, P.O. Box 9555, 2300 RB Leiden, The Netherlands

(3) University of Cologne, Albertus-Magnus-Platz, 50923 Cologne, Germany

(4) University of Göttingen, Wilhelmsplatz 1, 37073 Göttingen, Germany

(5) Max Planck Institute for Social Anthropology, Advokatenweg 36, 06114 Halle (Saale), Germany, and Lands of the Future Research Network (LOF)

*Corresponding author: haller@anthro.unibe.ch

Summary

This paper argues that pastoral commons are under increasing pressure not just from overuse by pastoralists themselves, but from land management policies. Since colonial times, these have been based on a persistent misconception of the nature of pastoral economies and combined with increasing land alienation and fragmentation through government policies and covert privatisation of pastures. The paper focuses especially on pastoral populations in African drylands and is based on long-term research by independent researchers summarising some of their experiences in western, eastern and southern Africa. Most of them are organised in the African Drylands Dialogue, trying to shed some light on the developments in these areas. Before discussing the actual situation of African pastoralists, the authors focus on basic institutional features of the political and economic management of common grazing lands. This is followed by an overview of land alienation processes in colonial times, which serves as a basis for understanding the current land alienation constellations. The paper then moves on to explain how and why pastoralists are framed by the national discourses as the ‘other’ and the ‘troublemaker’, even being labelled as terrorists in nation state contexts. This goes hand in hand with a new wave of land alienation in the form of large-scale land acquisitions or ‘land grabbing’ (including water grabbing and ‘green grabbing’ processes). The paper then outlines different coping and adaptation strategies adopted by pastoral groups in a context in which a range of different global and local political, economic and ecological situations interrelate (‘glocal’). Finally, the paper discusses the way in which pastoralism could be reframed in a participatory way in the future.

Keywords

Contraband – Harmful policy – Land grabbing – Land reform – Myth – Pastoralism.

Common property institutions for the management of common-pool resources in African drylands

Social anthropologists and human geographers have been challenging the image of nomadic peoples in African

dryland contexts as the cause of the ‘tragedy of the commons’. This literature has often not been recognised in wider scientific and policy communities despite the fact that Elinor Ostrom won the Nobel prize by showing the counter argument, i.e. that throughout the world, institutions have emerged to manage the commons in a sustainable way. As a result, mobile pastoralists are either perceived as an exotic remnant of the past and part of the tourism landscape (e.g. Maasai in Kenya) or fierce warriors, rebels and, today, even extremist terrorists (e.g. Tuareg groups in Mali and Niger). Mobile pastoralists are depicted as being responsible for

environmental degradation, said to pursue economic interests by increasing the size of their herds (maximisation) or described as following irrational, 'culturally driven' goals (high numbers of livestock for cultural and political reasons). They are accused of increasing their livestock numbers to a point where carrying capacity is exceeded to such an extent that these drylands will degrade under the impact of grazing, trampling, and subsequent soil erosion. Such an argument is still applied in the context of conservation and used as a basis to evict pastoralists from protected areas, as Brockington shows (1, 2). Nomadic pastoralists are labelled as being bound in a vicious cycle of pasture overuse, because herds are privately owned and pastures are common property, causing the tragedy of the commons (3, 4, 5). Others, however, have argued that there is no scientific proof of overuse and that rainfall variability in drylands causes droughts to occur that keep livestock numbers in check, thus preventing overgrazing (1, 6, 7, 8). According to them, it would also be very irrational for nomadic pastoralists to overgraze their pastures, because it would jeopardise the productivity of their stock and reduce the production of their main source of survival, namely the milk, blood or meat from their animals; high numbers of livestock sustain their livelihood, acting as an insurance mechanism, so they are unlikely to do anything that would limit productivity. The more animals they have, the higher the chance that a sufficient number will survive if drought occurs, ensuring the survival of the pastoral household (8, 9, 10, 11). In fact, several inter- and trans-disciplinary projects have concluded that pastoralists do not routinely overstock animals and that grasslands are not degraded because of them (see 8 as an example). If degradation does occur in areas used extensively by pastoralists, it is more likely to have been caused by the incursion of agriculture and overstocking by cattle traders than by pastoralist activity (see 12). In addition, the very notion of overstocking is subject to debate. Seasonal changes, for example, might lead conservationists to perceive an area as overgrazed, while local people will argue that pasture will regrow during the rainy season, based on local knowledge and management institutions. These different perceptions mirror divergent views on notions of variability and stability in the drylands (13).

The relation between pastoralism and environmental degradation has never been proven conclusively (good summaries of the debate are 14 & 15). Droughts may cause enormous changes in the vegetation of drylands. For example, in the African Sahel zone, large tracts of forest land dried up during the drought of the 1980s (16). Attributing this present state of apparent degradation to anthropogenic factors, such as overexploitation of natural resources by mobile pastoralists, is too short-sighted. For example, there was great alarm over land degradation after the great Sahel droughts of the 1980s, but evidence showed that the vegetation re-established itself in pastoral areas in

subsequent years (17). The areas where grassland recovery was most significant were found in the northern Sahel, where grazing dominates over cropping. Hiernaux and Gérard found that the vegetation dynamics of woody areas, called tiger bush, in the Sahel, were largely dependent on rainfall, with massive dying of trees in 1984 and subsequent re-establishment of trees afterwards. They found no influence of grazing except for small corridors (100 m wide) along major trekking routes (18). A model study of desertification in Sudan over a 150-year period showed that it is difficult to create irreversible degradation through human influence (16).

Focusing on institutional change in pastoral systems, research in the Sahel, the Horn of Africa, and in East and Central Africa shows much more complex interaction between nomadic economies, political and institutional structures and emic worldviews (epistemologies) of how landscapes and related resources are perceived by nomadic groups. Their mobility patterns and ways of obtaining access to crop and pasture land change following short- and long-term rainfall patterns (see, for example, 11, 19, 20, 21, 22, 23, 24, 25).

Most of the regions where research cited in this paper was carried out are classified as drylands. Some of them have wetlands (floodplains and swamps) within the dry areas, which render them very important for transhumance. All the groups living in such areas attached great importance to the notions of lineage, clan and territorial identity and had specific political systems to organise the use of pastures, which they adapted to seasonal cycles of rainfall (e.g. adapting to floods in the floodplains), and implemented in interaction with other peasant and pastoral groups. In these drylands, survival was only possible through mobility, which often did not mean free access, but controlled and coordinated access in specific spaces under specific time frames, subject to specific property and access institutions. These institutions, regulating access to rangelands and related resources such as water, game and fisheries, had two important features: *i*) membership of the group, not individual property rights, was the distinctive criterion allowing access to resources; and *ii*) the notion of fine-tuned seasonal access, which could include reciprocal rights to the commons between groups or be linked to sharing cattle with other groups or with richer households, who left some of their cattle with poorer households (8, 12, 25). This increased flexibility reduced risk for pastoral households and thus strengthened their resilience, thereby securing production of milk and meat (8, 12, 25). Following Ostrom (26), these pastoral institutions for managing the commons cut transaction costs, as they provided systems of monitoring and sanctioning and conflict resolution mechanisms. They also provided local arenas in which to change the pasture-management rules which individual pastoral households were unable to bear (see 27, 28). These case studies also

showed that boundaries existed, but research (especially research in floodplain areas within drylands [11]) indicates that, contrary to Ostrom's design principle number one (clear boundaries), boundaries are not fixed but permeable. This means that based on the rule of reciprocity, as well as on seasonal or inter-seasonal needs, access options for flexible use increase resilience for most pastoral groups. In resource-rich areas there are clear transhumance systems regulated by institutions that define the timing and range of mobility (25, 29), while in areas with scarcer and more erratic resources more flexible movements are possible (30, 31, 32), thus reducing overuse. These institutional designs – crafted to reduce risk in an erratic environment and not with the intention of using resources sustainably – have been totally ignored in government land use policies. Such strategies were labelled 'customary', 'traditionalist' and 'outdated' by policy makers, who tried to get rid of and even destroy them in favour of 'rational' pasture management. Policy makers did not realise that these strategies were part of risk reduction and coordination strategies in complex and unstable social–ecological systems (10, 25, 33, 34).

To begin with, it is worth noting that the groups referred to in this paper did not just establish access rules for pastureland, they also crafted rules for the use and management of other, related common-pool resources such as water, wildlife, fisheries and veldt products. In addition, pastoralists are also traders, moving goods with their animals from places of plenty to places of demand (see for example groups in the Sahel zone [10, 19]). It has also been shown that systems of social and political ordering (marriage, patrilineal descent reckoning, inter-clan relationships) include rules that organise access to and use of pastoral resources without necessarily addressing these issues explicitly. Furthermore, institutions of environmental governance (13, 35) show that variability and the adaptive techniques of livestock and crop producers in drylands should be understood as assets for future food production. As stability cannot be expected or achieved in times of climate change, resilient and flexible approaches are needed in the use of drylands. If integrated positively into development policies, mobile, productive pastoral economies, combining resource management and socio-cultural fallback structures, can play a significant role in ensuring economic, ecological and political security in drylands and beyond (25, 36).

Another central issue is that having rights to cattle has often been equated solely with owning cattle. However, there are multiple ways in which families can obtain rights to cattle, e.g. cattle are sometimes lent to poorer households in order to spread risk (not only over people, but also in space) and they are allowed to keep the calves that are born while the cattle are in their care (8, 10, 24, 25). In addition, within family groups, lineages and clans, complex multiple ownership and redistribution institutions existed related to the birth, marriage and death of individuals, enhancing

resilience of households under conditions of high economic stress (10, 24). Studies show that it is not only the rights to the animals themselves that count, but also who can benefit from their milk, blood and meat. These products can be shared through ritual meat consumption or allocation of milking rights.

Most of these institutions had the effect of spreading cattle and other livestock over a certain area, which led to sustainable use of the land, regulated interaction between pastoral and agro-pastoral groups and helped to lessen the impacts of drought and disaster on their economy. The authors refer to these benefits not to paint a rosy picture of pre-colonial nomadism, but to highlight risk reduction strategies among these groups that seem to have a positive effect on the sustainable use of pasture commons. Many scholars also point out that the ecosystems one encounters in pastoral areas are not to be labelled 'pure nature', as they are the result of having been used by pastoralists. Thus, rather than describe them this way, they define a cultural landscape ecosystem as one in which the composition of grasses, bushes and other vegetation occurs naturally, while soil quality and fauna are changed by human groups, such as pastoralist societies (for an overview on this argument see 37).

It is also important to keep in mind that in most pastoral societies there are often asymmetries in power and wealth between members. It would thus be wrong to label pastoral societies as egalitarian. Nevertheless, there were rules to buffer differences and in order to understand the impact of external challenges during and after colonial times these rules need to be understood. The main argument outlined in this paper is that it is necessary to be aware that these societies also developed institutions to solve some problems. The contemporary, often very difficult, challenges that most of their members face today are not due to their incapacity for change, but instead are related to institutional changes that take place without pastoralists being able to influence them – although in some circumstances certain elites are able to exercise some influence (see next sections). Most members of pastoralist groups try to develop innovations to deal with these challenges (see last section).

Institutional change in colonial times

In order to understand the contemporary problems of pastoral peoples, it is necessary to go back to colonial history, because no longer are pastoral problems related to local contexts but to 'glocal' realities. Since colonial times pastoral people, like other groups, have faced a context in which global and local political, economic and ecological considerations interrelate; they are globally and locally

influenced and thus 'glocal'. Colonial times are starting points and their institutional legacy in making states the dominant governance structures and introducing related changes in property rights institutions is still palpable today. At the beginning of this period there were different forms of locally combined notions of private and common property, but by the end of the period the idea that all resources should be the property of the state had become the dominant discourse. The colonial state, by its laws, claimed ultimate authority over the land (in British colonies land and related resources became the property of the Crown, in the French colonies all land became the domain of the State) (11). The drylands of many African colonies, which were of no great interest to the colonial powers, were generally left to be governed by local authorities, but always within the limits set by the colonial laws and colonial administrators. This was also the case for other resources, e.g. protected areas (reserves), land for settlers, and common-pool resources, including wildlife and forests. While excluded from the first two, local authorities were allowed to govern the common-pool resources, but always under the ultimate control of the colonial power, and only as long as they were of no concrete interest to the colonial government. Many of the groups studied in the literature cited in this paper lost large parts of their territory to settlers and other groups, as well as to protected areas (see 25, 38).

Some areas that colonial powers were not particularly interested in continued to be governed directly by the colonial government, but others were governed indirectly through the establishment of colonially labelled 'customary land', i.e. areas controlled by local groups. Colonial powers were then using what they claimed to be local leaders, but in fact they often brought in new leaders and created new elites (such as chiefs in southern Africa), and where they did retain the previous rulers, they transformed their roles. Parts of the traditional institutions remained in place, but were not legally recognised. They became contingent upon and subject to the ultimate authority of the colonial state – and just like the land-related common-pool resources, i.e. water, pasture, wildlife, fisheries, and forestry, they were the property of the colonial state. In addition, as Peters highlights, the colonial powers never saw customary tenure as conferring any real rights to property and, therefore, land held in this way was subject to state alienation as soon as the interest of the colonial state was awoken (39), which, as some authors have pointed out, often occurred after changes in relative prices for land or other land-related resources (40). This situation enabled and justified later alienation of land in colonial and post-colonial times by the state.

Here, the focus is mainly on early German and then British as well as French systems. This formal institutional change was immediately adopted in areas handed over to white settlers. In other areas, the loss of sovereignty over land and related common-pool resources resulting from locally

transformed cultural landscape ecosystems did not always have immediate consequences, but had repercussions later on. Most of the time this was due to new interests from outside users and from the state, responding to a rise in relative prices for wildlife conservation, tourism or land for large-scale agriculture. This attracted powerful interest groups linked to (colonial and post-colonial) nation states and to the elites controlling them (11).

Another institutional change took place in the form of fragmentation of cultural landscape ecosystems. In pre-colonial times some land areas had been used for both agriculture and pastoralism (agricultural land became pasture after the harvest), but in colonial times this flexibility was lost and land used for agriculture and land used for pastoralism were designated separate resources. This fragmentation of cultural landscape ecosystems was exacerbated by the invention of a discourse of 'pure nature' and 'not owned nature' (37). This entailed not only the introduction of new forms of property rights institutions in the form of state and private property, but also the dividing up of governance responsibilities of physically, biologically and chemically interrelated common-pool resources into different state institutions. The issues of wildlife, fisheries, land, water and forestry, as well as veterinary matters and the related topics of rangeland management and agriculture, were now managed by separate state departments with their own institutional regimes. These separate entities often did not coordinate their activities (see 41), and were sometimes even in competition with each other. This resource fragmentation is in complete opposition to a more territorial, reciprocal and relational approach based on the local knowledge of pastoral communities and their neighbours. These complex relations were increasingly disturbed by fragmented state institutions (see 41 for southern Africa, 24 for Zambia and 11 for western and eastern Africa). Little by little, decision-making authority was curtailed, which gradually disabled adaptation mechanisms and destroyed the capacity of pastoralists to adjust to seasonal and inter-seasonal changes within and between communities. With this fragmentation, adaptive flexibility and thus resilience of pastoral systems was reduced (see 1, 25, 38).

The creation of protected areas and the issue of pest control were also colonial state-driven means to reduce access to pasture and thus prevent people from engaging in pastoralism. Limiting the availability of pastureland was a way to control pastoral people by leaving them with little choice but to turn to agriculture. Forestry codes and guards were introduced to protect trees and forests from local populations and curtailed the use of trees for browsing and domestic needs. Pastoral land was privatised and controlled pasture management was introduced (25), and pastoralists were either removed from protected areas (see 11, 25, 33, 42) or, later on, became involved in new co-management arrangements of their own land around wildlife conservation

entities (29, 43, 44, 45, 46). Notions of the pastoralists as the enemy of the state and of modernity have their roots in this history (see 42).

Not all countries are affected to the same degree by the issue of protected areas. For example, it is more important in West Africa's Sahel zone than in eastern Africa. Similarly, issues of mobility reduction are more of a concern in some areas than in others: it is more important in drylands than in humid areas, since mobility in the latter is on a smaller scale, especially in wetlands within drylands (11). These areas are of central importance for mobile pastoralists in dryland areas because the wetlands (swamps or floodplains) act as important seasonal and inter-seasonal buffer zones (see 25). Large-scale migration routes have become increasingly difficult to access since these times, particularly in western African drylands, with Tuareg and Arab Choa now much more restricted in their operations as traders (see also older work, e.g. 19, 20). Finally, the issue of military control of pastoral groups starting in these times has to be mentioned, as it forms the core of repertoires of submission in the Sahel and in the Horn of Africa (36, 47).

As a result, pastoral systems have experienced a long and ongoing loss of control over pastures, including a loss of rights to the associated common-pool resources. The local institutions for the governance of these resources have been rendered powerless by the gradual intrusion of the state into natural resource management. Rather than labelling this a 'tragedy of the commons', it is better to describe it as a 'tragedy of the commoners' because a central consequence of colonisation and the fragmentation of resource rights is that pastoral mobility, and thus sustainable use of pastures, is severely hampered, which in turn limits the capacity of pastoralists to manage their own pastures and restricts their access to related common-pool resources. It has to be noted, however, that colonial rule, 'pacification', and development opened up pastoral space for some mobile pastoralists, sometimes to the disadvantage of others (e.g. in Niger, the evicted Tubu made space for Fulani mobile pastoralists [see 48]). The 'tragedy' lies in the fact that negative environmental outcomes – perceived as such by state administrators and non-governmental organisations (NGOs) working in the arena of conservation (see summaries in 25 & 44) – are blamed on pastoralist behaviour. Overuse is, however, an outcome of institutional changes, recurrent droughts, gradual privatisation and agricultural encroachment on their land and not induced by pastoral communities.

This discourse in turn reinforces the developmental claim that pastoralism should be 'modernised' and at the same time it is used by post-colonial states to legitimise more restriction, control and sedentarisation (33, 36, 44). The ideology of 'pure nature', linked to a narrative of the pastoralist as resource-degrader and to a discourse of the need to bring development (i.e. sedentary lifestyle), is a means to depoliticise the debate (cf. 49). At the same

time it hides the fact that we are actually dealing with the expropriation of cultural landscapes, which were managed by local institutions that often produced resilient livelihoods. In addition, pastoralist groups deliver important goods, such as proteins in the form of milk and meat, not only for themselves but for wider society (for a summary see 10). It is important to remember at this point that it is not dairy farms and cattle ranges that provide the bulk of these resources in African contexts, but local nomadic producers (10).

The nation state and pastoralism: mobile pastoralists as misfits

The institutional setting of the colonial state provided the blueprint for the independent African states. Alternative ways have been thought of and in some of the countries mentioned in this paper – for example Ethiopia, Tanzania and Zambia – alternative socialist development paths were implemented, but they became untenable during the economic crisis of the late 1980s. All African states maintained state ownership of land resources (sometimes disguised with phrases such as, 'the land belongs to the people and the state will act as its custodian') and provided the basis for private ownership of land (freehold and leasehold titles for those who could afford them). Later on, these forms of 'ownership' were heavily promoted by organisations such as the World Bank on the basis of the false premise that private ownership would improve tenure security and promote agricultural development through investment (see 2 & 44). In addition to state boundaries, internal boundaries were put in place in the form of district boundaries, tribal trust land and wildlife conservation areas, which further hindered mobility of pastoral groups (19, 20, 29, 50). Nomadic pastoralists, by definition mobile, found themselves confronted with a system of territorial control based on an idea of attachment to place.

Not surprisingly, in many of these states, medium to large-scale (armed) conflicts developed between nomadic groups and between nomadic and sedentary groups (for example Niger and Mali, see 20). The Horn of Africa as well as eastern Africa saw much political unrest and instability (some of which persists today), with nomadic groups being the ones suffering most (36, 51, 52). Nomadic pastoralists did not feel represented or recognised by ruling elites composed of non-pastoralists of other ethnic origins.

Resource fragmentation continued as well, in the form of rangeland grabbing. While white private ownership was reduced in many African countries, rich local people and the political elites were looking for control over resources and livestock previously owned by pastoral peoples (see,

for example, 52, 53, 54, 55). At the same time, state control and market systems developed very unevenly in the different areas and the studies cited in this paper indicate that market access and resources were allocated in a very unequal way between groups, often marginalising pastoralists further. In addition, veterinary services offered by the state after independence have since been eroded due to lack of funds (24, 56).

However, state failures have to be considered within the wider economic context. Many African countries were, and still are, suffering a debt crisis which limited the state's ability to provide services. In such conditions, international organisations such as the International Monetary Fund and World Bank demanded the downsizing of the state apparatus, creating a neo-liberal order through the privatisation of land via land reforms (11, 57). These reforms did not include the option of common property in the sense that would have benefited pastoral communities, but rather reduced their mobility and increased the potential for 'resource grabbing' again (11, 41). At the same time, local institutions started to deteriorate as well. The reforms created de facto open access to resources in general and to pastures specifically, especially in wetland areas in drylands (such as floodplains, see 11 for cases in Mali, Cameroon, Tanzania, Zambia and Botswana), leading to more pressure on the land by less mobile herds.

New business options also triggered investment in cattle and the creation of absentee herd owners who leave their cattle in the care of employees from pastoral groups. These herd owners are interested in a quick turnover in pastoral areas, which are perceived as state property and, therefore, since the state is not present, as open access (see 11 on the paradox of the state that is present and absent at the same time, which is labelled the 'present absence of the state'). Similarly, privatisation of cattle property took place. New family laws and gender-sensitive regulations set up to increase the bargaining power of women led to adverse effects, as some individual household members claimed the family's cattle as their own private property and decided to sell the animals. This was despite the fact that, traditionally, in many societies, cattle was the common good of the extended family, a good to which all members had access and decisions to sell were not taken by any single individual (see 11). But the state administration's push for legal individual ownership of cattle led to quick sales. However, once cattle are sold – a loss of a crucial livelihood asset – use rights to cattle for members of a group are lost as well (see 24). This leads to the marginalisation of poorer pastoralists who cannot rely on reciprocating rules, i.e. on the old institutional option to get cattle in exchange for herding. This, in turn, leads to a situation in which some households have too many animals and others have too few. On the other hand, as the value of land as an investment increases, state administrators and development planners begin to

view pastoral people as troublemakers and as a hindrance to development (see research in Tanzania, Kenya, Niger and Mali as well as the Horn of Africa [11, 47, 58]). This line of reasoning in turn has consequences: first of all it leads to a discourse which legitimises forced settlements and development schemes by characterising them as rational methods of managing pastures (see e.g. 59); secondly, it legitimises large-scale 'land-grabbing' processes in the name of the state (see 36). Conservation and development policies therefore go hand in hand with narratives of destructive forces in areas which are already degraded and for which mobile pastoralists are held responsible (60, 61). This again provides economic opportunities for urban elites and state elites to alienate land and related common-pool resources. Moreover, labelling pastoralists as poor and 'food insecure' serves as justification for the 'development' of their territories, e.g. through industrialisation with 'win-win' promises.

This simplified view disregards pastoral communities who are not food insecure and make best use of their territories. Moreover, we also have to bear in mind that, depending on the investment schemes, generalised economic development projects might have the opposite effect and actually lead to demonstrable impoverishment of local populations (36) and to food insecurity and the related health effects. (See 62 for a discussion of the role of property rights in ensuring food security; a combined One Health [people and animals] approach could be another way of minimising the risk of food insecurity [63]).

A continued land grab and pastoralists' adaptations

We can therefore see a continuous process of large-scale land acquisitions or 'land grabbing', repeating tactics that were employed long before the term was ever used. Since the worldwide financial crisis in 2008 and the food price hike of 2007–2008, and owing to increasing demand from emerging economies such as India and China, the demand for land has gone up rapidly and investors have been on the lookout for cheap land, particularly in Africa (see 64, 65). This tendency can be observed in most of the countries referred to in this paper, and combined with the transformations in the institutional arrangements for the management of land and related resources, it further strengthens previous alienation processes and the opening up of the pastoral commons. Companies now invest in large areas of land, which is not 'idle land' (*terra nullius*), but already cultivated, and into what is labelled rangeland or wasteland on which pastoral people are focusing (see 65, 66). In this context it is not just land that is being grabbed but water and protected

areas as well (see 67 on water grabbing and 68 on green grabbing).

This process, again, is only possible because of the appropriation of land by the colonial states and the subsequent fragmentation of common-pool resources and the opening up of claims for commercial purposes under decentralisation and neo-liberalisation schemes. Contrary to other areas of the world, such as Latin America and some parts of Asia/Oceania, the legal protections for the rights of pastoral people in Africa are very weak. Hardly any of the African countries have ratified international legal agreements, such as Convention 169 of the International Labour Organization (Indigenous and Tribal Peoples Convention), or has national rights for minorities by which peoples differing from the mainstream – and nomadic peoples clearly belong to this definition – can be protected. We can therefore examine two broad strategies employed by the nomadic groups themselves, as follows.

The first strategy is to adapt to the privatisation and resource-grabbing scheme and try to expand and to establish individualised forms of property (see 24, 38, 53, 55) by, for example, investing in cattle and becoming absentee herd owners (12, 16), erecting fences, and establishing more and more ethnic boundaries. These measures can increase cattle rustling, land grabbing and violent conflicts between nomadic groups themselves and between them and agriculturalists (see 36, 54, 55, 69). The other strategy is to push for alternative ways of development as part of newly emerging alternative political systems, which is what happened in Libya under Gaddafi and is continuing to occur with radical Islamist movements such as the so-called Islamic State.

The main issue in this second option is the fact that pastoralists, especially young men, see no other viable option but to be part of these movements, which are actually a large threat to them. Within these movements, which are led by outsiders, young pastoralists will again be marginalised or even killed as enemies later on.

These strategies stigmatise pastoralists as troublemakers and even terrorists, as can be seen with the Somali (36) and the Tuareg (47). Once such a label is attached and the associated discourse is set in motion, it is extremely difficult to change it and this hampers all efforts at self-determination in regard to adaptation and development. Here, we need to mention that nomadic groups often oppose large-scale investments by agricultural and mining companies, because the environmental degradation which occurs following the intensive use of chemicals in large plantations leads to further contamination of water, soil and pasture. In Niger, for example, the rangelands of the Tuareg are contaminated by radiation due to uranium mining by a French company (47, 70).

Reframing mobile pastoralism: the opportunity of pastoralism and new avenues for institution building

This rather negative picture of the situation that the bulk of pastoralist groups are in should not detract from some of the positive developments, which show conditions under which nomadism could still survive while adapting institutionally to the challenges. It is clear that once a certain point of terrorism-labelling is reached, particularly when important political and/or economic interests are at stake (e.g. 'land grab' projects, mining), opportunities are extremely limited. However, counter-movements can emerge out of conflicts. To prevent further political fragmentation regarding the use of drylands, but also to find ways of ensuring sustainable use of resources, we must pay much closer attention to pastoralist knowledge about variable geophysical and socioeconomic conditions. In times of climate change and increasing geopolitical challenges, this knowledge should not be misunderstood as traditionalism, but as a valuable source of information for innovation and resilience – crucial elements in managing pastoral lands. This well of information can only be tapped into through repeated efforts and direct communication between pastoralists and their ever-changing neighbours (e.g. investors, oil companies, conservation agencies, etc.) and their counterparts in a globalising world (see 58).

Examples of this can be seen in less conflict-ridden contexts where experiments with participatory bottom-up institution building have taken place. Only two examples are mentioned in this paper. The first relates to an agrarian community called the Warufiji in the Rufiji floodplain area in Tanzania (61). Barabaig pastoral groups moved into the Rufiji floodplain area after being pushed off their own land by the developments described above. In one case study, Meroka (50, 61) describes how local Warufiji were interested in setting up new institutions with the incoming Barabaig in order to let them access the pastures the sedentary people did not use in exchange for milk and meat, goods which were very rare in the area. In this case, the legal framework of the Village Land Act enabled what it prevented in others: the possibility of direct negotiations between local actors for the purpose of establishing an institution to govern the use of pastureland as common property (see also 71). Another example is based on the research of Benjamin (72) in Mali, where a US NGO supported local sedentary and pastoral people in trying to protect palm forests. During the process facilitated by the NGO, which provided a neutral platform for local discussions, it became clear that the forests were a part of interlinked common-pool resources and items of exchange with other villages that had fisheries and pastoral

zones but no forests. Local actors set up a new locally crafted institution (convention) in which the management of not just the forest, but of all interlinked common-pool resources, including pastures and fisheries, were integrated.

In both cases, people had a sense of ownership in the institution-building process (in one case, an NGO did nothing else but provide the platform to ensure fairness in the process). This is what the authors refer to as 'constitutionality', i.e. since all local actors have a sense of ownership in the institution-building process they also have a sense of ownership of the institution itself. These are processes that partially resemble methodologies based on transdisciplinary participatory stakeholder processes (see 73). However, this is not governmentality (see Foucault) or environmentalism (74), because there is a self-conscious process related to the ownership of institution building established by a local kind of constitution belonging to local actors. As these often have different power configuration processes, constitutionality refers to situations where stakeholders with different levels of bargaining power have

the chance to be involved and to participate. Heterogeneous actors can therefore start the process, get other actors involved and external actors to help in fostering the local perception of fairness so that no 'othering' can take place. As space for more details is limited, the reader is referred to new literature in which this vision is further discussed (see 71). The combination of these processes and respect for locally driven resource rights recognised by the state could create the right set of circumstances for good governance to develop. Academia could play the role of helping to inform and helping to facilitate communication between state, donor and pastoralist communities and internal factions. Similar processes could be implemented in many dryland areas in order to prevent further deterioration of pastoral drylands and ensure that they do not turn into wastelands. The future of pastoralism therefore lies in the twofold process of *i*) recognising its social, ecological and economic merits and *ii*) helping to create space for emancipation and for interaction in which all actors, regardless of their level of power, have an equal say. ■

Conflits, sécurité et marginalisation : le changement institutionnel des terres collectives pastorales dans un monde « glocal »

T. Haller & H. van Dijk, avec la collaboration de membres du Dryland Dialogue :
M. Bollig, C. Greiner, N. Schareika & C. Gabbert

Résumé

Les auteurs de cet article soutiennent que la pression foncière croissante exercée sur les terres collectives pastorales n'est pas seulement imputable à la surexploitation par les pasteurs eux-mêmes mais résulte surtout des politiques de gestion des terres. Depuis le temps des colonies, ces politiques ont reposé sur une perception erronée et tenace de la nature même des économies pastorales, à laquelle se sont greffées l'aliénation croissante des terres et leur fragmentation impulsée par les politiques gouvernementales et par la privatisation dissimulée des prairies. Les auteurs s'intéressent particulièrement aux populations pastorales des régions arides d'Afrique et exposent les conclusions d'une étude conduite sur une longue durée par une équipe indépendante de chercheurs, résumant l'essentiel de leurs observations en Afrique de l'Ouest, de l'Est et australe. La plupart d'entre eux œuvrent sous les auspices d'African Drylands Dialogue et tentent de faire la lumière sur les évolutions constatées dans ces régions. Avant de se pencher sur la situation des pasteurs africains aujourd'hui, les auteurs décrivent les principales caractéristiques institutionnelles de la gestion politique et économique des terres collectives dédiées au pâturage. Ils retracent ensuite les processus d'aliénation des terres opérés durant l'époque coloniale, qui servent de grille de lecture pour mieux comprendre les constellations actuelles de terres aliénées. Puis les auteurs expliquent comment et pourquoi les discours nationaux désignent les pasteurs comme « l'autre » et le « fauteur de troubles », quand ils ne les dépeignent pas comme des terroristes dans les contextes d'états-nations. Ces accusations sont indissociables d'une nouvelle vague d'aliénation

des terres, qui prend la forme d'acquisitions à grande échelle ou de réquisitions (y compris les processus d'appropriation des cours d'eau ou d'écosystèmes [*green grabbing*]). Les auteurs détaillent les stratégies mises en œuvre par les groupes pastoraux pour faire face à cette évolution et s'y adapter, dans un contexte de forte interaction entre de nombreuses situations politiques, économiques et écologiques de portée tant mondiale que locale (niveau dit « glocal »). Enfin, les auteurs examinent les perspectives d'avenir du pastoralisme à travers un nouveau cadre de type participatif.

Mots-clés

Appropriation des terres – Contrebande – Mythe – Pastoralisme – Politique nocive – Réforme foncière.



Conflictos, seguridad y marginación: cambio institucional del patrimonio común del pastoreo en un mundo «glocal»

T. Haller & H. van Dijk, en colaboración con miembros del *Dryland Dialogue*:

M. Bollig, C. Greiner, N. Schareika & C. Gabbert

Resumen

Los autores postulan que el patrimonio pastoral común se encuentra sometido a presiones crecientes, no solo a resultas de su explotación excesiva por parte de los propios pastores, sino también a consecuencia de las políticas de ordenación del territorio. Desde los tiempos coloniales, estas se basan en un equívoco pertinaz acerca del carácter de las economías pastorales, a lo que se suma un nivel creciente de enajenación y fragmentación de las tierras a resultas de las políticas públicas y la privatización encubierta de los pastos. Los autores prestan especial atención a las poblaciones pastorales de las tierras áridas africanas, basándose en investigaciones de larga duración realizadas por investigadores independientes y resumiendo parte de su experiencia en el África occidental, oriental y meridional. La mayoría de ellos están adscritos al *African Drylands Dialogue* [diálogo sobre las tierras áridas africanas] y tratan por esta vía de arrojar luz sobre la evolución de esas zonas. Antes de presentar la situación real de las sociedades de pastores africanas, los autores se detienen en una serie de rasgos institucionales básicos de la gestión política y económica de los pastizales de propiedad común. A continuación exponen a grandes líneas los procesos de enajenación de las tierras en la época colonial, que encierran elementos básicos para comprender la actual constelación de tierras enajenadas. Después pasan a explicar cómo y por qué en el discurso de ciertos países las sociedades de pastores han acabado representando la alteridad, percibida además como «agitadora», hasta llegar a ser etiquetadas de «terroristas» en algunos estados-nación, paralelamente a una nueva oleada de enajenación de tierras en forma de adquisiciones a gran escala o «acaparamiento de tierras» (lo que incluye procesos de acaparamiento del agua y «acaparamiento ecológico»). Tras exponer diferentes estrategias de respuesta y adaptación adoptadas por los grupos pastorales en un contexto marcado por la imbricación entre diversas realidades políticas, económicas y ecológicas («glocal»), los autores concluyen reflexionando sobre el modo en que en el futuro sería posible reestructurar el pastoreo pasando por métodos participativos.

Palabras clave

Acaparamiento de tierras – Contrabando – Mito – Pastoreo – Política perjudicial – Reforma agraria.



References

1. Brockington D. (2002). – Fortress conservation: the preservation of the Mkomazi Game Reserve, Tanzania. James Currey, London.
2. Brockington D., Duffy R. & Igoe J. (2008). – Nature unbound: the past, present and future of protected areas. Earthscan, London.
3. Hardin G. (1968). – The tragedy of the commons. *Science*, **162** (3859), 1243–1248. doi:10.1126/science.162.3859.1243.
4. Lamprey H.F. (1983). – Pastoralism yesterday and today: the overgrazing controversy. In *Tropical savannas* (F. Bourlière, ed.). *Ecosystems of the world*, Vol. 13. Elsevier, Amsterdam, 643–666.
5. Sinclair A.R.E. & Fryxell J.M. (1985). – The Sahel of Africa: ecology of a disaster. *Can. J. Zool.*, **63** (5), 987–994. doi:10.1139/z85-147.
6. Scoones I. (1999). – New ecology and the social sciences: what prospects for a fruitful engagement? *Annu. Rev. Anthropol.*, **28**, 479–507. doi:10.1146/annurev.anthro.28.1.479.
7. Ellis J.E. & Swift D.M. (1988). – Stability of African pastoral ecosystems: alternate paradigms and implications for development. *J. Range Manag.*, **41** (6), 450–459. doi:10.2307/3899515.
8. McCabe T. (1990). – Turkana pastoralism: a case against the tragedy of the commons. *Hum. Ecol.*, **18** (1), 81–103. doi:10.1007/BF00889073.
9. Ingold T. (1980). – Hunters, pastoralists and ranchers: reindeer economies and their transformations. Cambridge University Press, Cambridge. doi:10.1017/CBO9780511558047.
10. Homewood K. (2008). – Ecology of African pastoralist societies. James Currey, Oxford.
11. Haller T. (ed.) (2010). – Disputing the floodplains: institutional change and the politics of resource management in African wetlands. Brill, Leiden. doi:10.1163/ej.9789004185326.i-454.
12. Little P.D. (1985). – Absentee herd owners and part-time pastoralists: the political economy of resource use in northern Kenya. *Hum. Ecol.*, **13** (2), 131–151. doi:10.1007/BF01531093.
13. Krätli S., Kaufmann B., Roba H., Hiernaux P., Li W., Easdale M. & Hülsebusch C. (2015). – A house full of trap doors: identifying barriers to resilient drylands in the toolbox of pastoral development. IIED Discussion Paper. International Institute for Environment and Development (IIED), London. Available at: <http://pubs.iied.org/pdfs/10112IIED.pdf>.
14. Reynolds J.F. & Stafford Smith D.F. (2002). – Global desertification: do humans create deserts? Dahlem University Press, Berlin.
15. Vetter S. (2005). – Rangelands at equilibrium and non-equilibrium: recent developments in the debate. *J. Arid Environ.*, **62** (2), 321–341. doi:10.1016/j.jaridenv.2004.11.015.
16. Helldén U. (2008). – A coupled human–environment model for desertification simulation and impact studies. *Global Planet. Change*, **64** (3-4), 158–168. doi:10.1016/j.gloplacha.2008.09.004.
17. Helldén U. (1991). – Desertification: time for an assessment? *Ambio*, **20** (8), 372–383.
18. Hiernaux P. & Gérard B. (1999). – The influence of vegetation pattern on the productivity, diversity, and stability of vegetation: the case of ‘brousse tigrée’ in the Sahel. *Acta Oecol.*, **20** (3), 147–158. doi:10.1016/S1146-609X(99)80028-9.
19. Spittler G. (1989). – Dürren, Krieg und Hungerkrisen bei den Kel Ewey (1900–1985). Franz Steiner, Stuttgart.
20. Krings T. (1995). – Marginalisation and revolt among the Tuareg in Mali and Niger. *GeoJournal*, **36** (1), 57–63. doi:10.1007/bf00812527.
21. De Bruijn M. & van Dijk H. (1995). – Arid ways: cultural understandings of insecurity in Fulbe Society, Central Mali. Thela Publishers, Amsterdam.
22. Van Dijk H. (1996). – Land tenure, territoriality, and ecological instability: a Sahelian case study. In *The role of law in natural resource management* (J. Spiertz & M. Wiber, eds). VUGA, the Hague, 17–45.
23. Haller T. (2010). – Common-pool resources, legal pluralism and governance from a new institutionalist perspective: lessons from the African Floodplain Wetlands Research Project (AFWeP). In *Negotiating local governance. Natural resources management at the interface of communities and the State* (I. Eguavoen & W. Laube, eds). ZEF Development Studies. LIT, Munich/London/New York.
24. Haller T. (2013). – The contested floodplain. Institutional change of the commons in the Kafue Flats, Zambia. Lexington, Rowman & Littlefield, Lanham, Maryland.
25. Haller T., Fokou G., Mbeyale G. & Meroka P. (2013). – How fit turns into misfit and back: institutional transformations of pastoral commons in African floodplains. *Ecol. Soc.*, **18** (1), 34. doi:10.5751/ES-05510-180134.
26. Ostrom E. (1990). – *Governing the commons. The evolution of institutions for collective action*. Cambridge University Press, Cambridge. doi:10.1017/cbo9780511807763.
27. Haller T. (2007). – Understanding institutions and their links to resource management from the perspective of new institutionalism. NCCR North–South Dialogue, No. 2. NCCR North–South, Bern.

28. Haller T. (2010). – Institutional change, power and conflicts in the management of common pool resources in African floodplain ecosystems. In *Disputing the floodplains: institutional change and the politics of resource management in African floodplains* (T. Haller, ed.). Brill, Leiden, 1–76. doi:10.1163/ej.9789004185326.i-454.8.
29. Fokou G. (2010). – Tax payments, democracy and rent seeking administrators: common-pool resource management, power relations and conflicts among the Kotoko, Musgum, Fulbe and Arab Choa in the Waza Logone floodplain (Cameroon). In *Disputing the floodplains: institutional change and the politics of resource management in African floodplains* (T. Haller, ed.). Brill, Leiden, 121–169. doi:10.1163/ej.9789004185326.i-454.33.
30. Moritz M., Scholte P., Hamilton I.M. & Kari S. (2013). – Open access, open systems: pastoral management of common-pool resources in the Chad Basin. *Hum. Ecol.*, **41** (3), 351–365. doi:10.1007/s10745-012-9550-z.
31. Schareika N. (2001). – Environmental knowledge and pastoral migration among the Wodaabe of south-eastern Niger. *Nomad. Peoples*, **5** (1), 65–88. doi:10.3167/082279401782310934.
32. Schareika N. (2003). – Westlich der Kälberleine. Nomadische Tierhaltung und naturkundliches Wissen bei den Wodaabe Sudostnigers. Lit-Verlag, Berlin, Münster.
33. De Bruijn M. & van Dijk H. (1999). – Insecurity and pastoral development in the Sahel. *Dev. Change*, **30** (1), 115–139. doi:10.1111/1467-7660.00109.
34. Lesorogol C.K. (2003). – Transforming institutions among pastoralists: inequality and land privatization. *Am. Anthropol.*, **105** (3), 531–542. doi:10.1525/aa.2003.105.3.531.
35. Schareika N. (2010). – Pulaaku in action: words at work in Wodaabe clan politics. *Ethnology*, **49** (3), 207–227.
36. Abbink J., Askew K., Dori D.F., Fratkin E., Gabbert E.C., Galaty J., LaTosky S., Lydall J., Mahmoud A.H., Markakis J., Schlee G., Strecker I. & Turton D. (2014). – Lands of the future: transforming pastoral lands and livelihoods in Eastern Africa. Working Paper No. 154. Max Planck Institute for Social Anthropology, Halle, Germany.
37. Haller T. (2007). – Is there a culture of sustainability? What social and cultural anthropology has to offer 15 years after Rio. In *15 Jahre nach Rio – Der Nachhaltigkeitsdiskurs in den Geistes- und Sozialwissenschaften: Perspektiven – Leistungen – Defizite* (P. Burger & R. Kaufmann-Hayoz, eds). Schweizerische Akademie der Geistes und Sozialwissenschaften, Bern, 329–356.
38. Rutten M. (1992). – Selling wealth to buy poverty: the process of the individualization of landownership among the Maasai pastoralists of Kajiado district, Kenya, 1890–1990. Nijmegen Interdisciplinary Centre for Development and Cultural Change, Nijmegen, the Netherlands.
39. Peters P. (2013). – Conflicts over land and threats to customary tenure in Africa. *Afr. Aff. (Lond)*, **112** (449), 543–562. doi:10.1093/afraf/adt047.
40. Ensminger J. (1992). – Making a market. The institutional transformation of an African society. Cambridge University Press, Cambridge.
41. Hara M., Turner S., Haller T. & Matose F. (2009). – Governance of the commons in southern Africa: knowledge, political economy and power. *Dev. South. Afr.*, **26** (4), 521–538. doi:10.1080/03768350903181324.
42. Haller T. & Galvin M. (2008). – Introduction: the problem of participatory conservation. In *People, protected areas and global change: participatory conservation in Latin America, Africa, Asia and Europe* (M. Galvin & T. Haller, eds). Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Geographica Bernensia, Bern, 13–34. doi:10.4337/9781848445048.00008.
43. Goldman M. (2003). – Partitioned nature, privileged knowledge: community based conservation in Tanzania. *Dev. Change*, **34** (5), 833–862. doi:10.1111/j.1467-7660.2003.00331.x.
44. Galvin M. & Haller T. (eds) (2008). – People, protected areas and global change: participatory conservation in Latin America, Africa, Asia and Europe. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Geographica Bernensia Bern.
45. Haller T. & Merten S. (2010). – ‘We had cattle and did not fish and hunt anyhow!’ Institutional change and contested commons in the Kafue Flats floodplain (Zambia). In *Disputing the floodplains: institutional change and the politics of resource management in African floodplains* (T. Haller, ed.). Brill, Leiden, 301–360. doi:10.1163/ej.9789004185326.i-454.86.
46. Chabwela H.N. & Haller T. (2010). – Governance issues, potentials and failures of participative collective action in the Kafue Flats, Zambia. *Int. J. Commons*, **4** (2), 621–642. doi:10.18352/ijc.189.
47. Oxby C. & Walentowitz S. (2016). – Uranium mining in Niger: undermining pastoralist lifeworlds. In *The open cut: mining, transnational corporations and local populations* (T. Niederberger, T. Haller, H. Gambon, M. Kobi & I. Wenk, eds). LIT, Berlin, 155–186.
48. Schareika N. (2004). – Bush for beasts: Lake Chad from the Nomadic Wodaabe point of view. In *Living with the lake. Perspectives on history, culture and economy of Lake Chad* (M. Krings & E. Platte, eds). Rüdiger Köppe Verlag, Cologne, 171–190.
49. Ferguson J. (1994). – The anti-politics machine: ‘development’, depoliticization and bureaucratic power in Lesotho. Cambridge University Press, Cambridge.

50. Meroka P. (2010). – Ujamaa policies, open access and differential collective action: common-pool resource management, institutional change and conflicts in the Rufiji floodplain (Tanzania). In *Disputing the floodplains: institutional change and the politics of resource management in African floodplains* (T. Haller, ed.). Brill, Leiden, 245–300. doi:10.1163/ej.9789004185326.i-454.73.
51. Hagmann T. & Mulugeta A. (2008). – Pastoral conflicts and State-building in the Ethiopian lowlands. *Afrika Spectrum*, **43** (1), 19–37.
52. Bollig M., Wotzka H.-P. & Schnegg M. (eds) (2014). – African pastoralism – past, present and future. Berghahn, New York.
53. Lesorogol C.K. (2008). – Contesting the commons. Privatizing pastoral lands in Kenya. University of Michigan Press, Ann Arbor.
54. Greiner C. (2013). – Guns, land and votes: cattle rustling and the politics of boundary (re)making in northern Kenya. *Afr. Aff.*, **112** (447), 216–237. doi:10.1093/afraf/adt003.
55. Haller T. (2010). – Between open access, privatisation and collective action: a comparative analysis of institutional change governing use of common pool resources in African floodplains. In *Disputing the floodplains: institutional change and the politics of resource management in African floodplains* (T. Haller, ed.). Brill, Leiden, 413–444. doi:10.1163/ej.9789004185326.i-454.112.
56. Sen A. & Chandler M. (2003). – Privatization of veterinary services in developing countries: a review. *Trop. Anim. Hlth Prod.*, **35** (3), 223–236. doi:10.1023/A:1023343429498.
57. McAuslan P. (2013). – Land law reform in Eastern Africa: traditional or transformative? A critical review of 50 years of land law reform in Eastern Africa 1961–2011. Routledge, London.
58. Gabbert E.C. (2014). – The global neighbourhood concept. A chance for cooperative development or Festina Lente. In *A delicate balance. Land use, minority rights and social stability in the Horn of Africa* (G.B. Mulugeta, ed.). Institute for Peace and Security Studies, Addis Ababa University, 14–37.
59. Van Dijk H. & de Bruijn M.E. (1995). – Pastoralists, chiefs and bureaucrats, a grazing scheme in Central Mali. In *Local resource management in Africa* (J.P.M. van den Breemer, C.A. Drijver & B. Venema, eds). John Wiley, London, 77–95.
60. Mbeyale G. & Songorwa A. (2008). – Conservation for whose benefit? Challenges and opportunities for management of Mkomazi Game Reserve, Tanzania (M. Galvin & T. Haller, eds). Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Geographica Bernensia, Bern, 221–251.
61. Meroka P. & Haller T. (2008). – Government wildlife, unfulfilled promises and business: lessons from participatory conservation in the Selous Game Reserve, Tanzania. In *People, protected areas and global change: participatory conservation in Latin America, Africa, Asia and Europe* (M. Galvin & T. Haller, eds). Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Geographica Bernensia, Bern, 177–219.
62. Merten S. & Haller T. (2008). – Property rights, food security and child growth: dynamics of insecurity in the Kafue Flats of Zambia. *Food Policy*, **33** (5), 434–443. doi:10.1016/j.foodpol.2008.01.004.
63. Zinsstag J., Schelling E., Waltner-Toews D. & Tanner M. (2011). – From ‘one medicine’ to ‘one health’ and systemic approaches to health and well-being. *Prev. Vet. Med.*, **101** (3), 148–156. doi:10.1016/j.prevetmed.2010.07.003.
64. Cotula L. (2012). – The international political economy of the global land rush: a critical appraisal of trends, scale, geography and drivers. *J. Peasant Stud.*, **39** (3–4), 649–680. doi:10.1080/03066150.2012.674940.
65. Schoneveld G. (2011). – The anatomy of large-scale land acquisitions in sub-Saharan Africa. CIFOR Working Paper No. 85. Center for International Forestry Research (CIFOR), Bogor, Indonesia.
66. Toulmin C. (2009). – Securing land and property rights in sub-Saharan Africa: the role of local institutions. *Land Use Policy*, **26** (1), 10–19. doi:10.1016/j.landusepol.2008.07.006.
67. Niederberger T., Haller T., Gambon H., Kobi M. & Wenk I. (eds) (2016). – The open cut: mining, transnational corporations and local populations. LIT, Berlin.
68. Fairhead J., Leach M. & Scoones I. (2012). – Green grabbing: a new appropriation of nature? *J. Peasant Stud.*, **39** (2), 237–261. doi:10.1080/03066150.2012.671770.
69. Bollig M., Greiner C. & Österle M. (2014). – Inscribing identity and agency on the landscape: of pathways, places, and the transition of the public sphere in East Pokot, Kenya. *Afr. Stud. Rev.*, **57** (3), 55–78. doi:10.1017/asr.2014.92.
70. Granvaud R. (2012). – AREVA en Afrique. Une face cachée du nucléaire français. Dossier Nories, 24. AGONE, Marseille.
71. Haller T., Acciaioli G. & Rist S. (2016). – Constitutionality: conditions for crafting local ownership of institution-building processes. *Soc. Nat. Resour.*, **29** (1), 1–20. doi:10.1080/08941920.2015.1041661.
72. Benjamin C.E. (2008). – Legal pluralism and decentralization: natural resource management in Mali. *World Dev.*, **36** (11), 2255–2276. doi:10.1016/j.worlddev.2008.03.005.
73. Schelling E., Wyss K., Diguimbaye C., Béchir M., Taleb M.O., Bonfoh B. & Zinsstag J. (2008). – Towards integrated and adapted health services for nomadic pastoralists and their animals: a north–south partnership. In *Handbook of transdisciplinary research*. Springer, Dordrecht, 277–291. doi:10.1007/978-1-4020-6699-3_17.
74. Agrawal A. (2005). – Environmentality: technologies of government and the making of subjects. Duke University Press, Durham, North Carolina. doi:10.1086/427122.