



# Green economy, degradation narratives, and land-use conflicts in Tanzania

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## ABSTRACT

The implementation of the green economy in Tanzania is currently re-arranging space in significant ways. The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) has been presented by the government as well as investors and aid donors as a model for the green economy in Africa combining investments in large-scale farming with environmental conservation. The Kilombero valley is centrally situated within SAGCOT and has become a national hotspot of land-use conflicts. The valley is dominated by an expanding sector of agricultural capital investments combined with a substantial increase in areas under environmental conservation. While some smallholder farmers are dispossessed through these expansions, others are contracted as outgrowers. Pastoralists are, however, only in the way, and are also thought to cause widespread environmental degradation. This is a long-held view, which also plays a key role in the implementation of SAGCOT. It has led to a series of pastoral evictions in the country. In 2012, 'Operation Save Kilombero' was implemented consisting of violent evictions of all pastoralists from the valley. This eviction had been planned to conserve the wetland ecosystem that was seen by the government and aid donors to be threatened by pastoral overstocking. The arrival of the green economy in Kilombero re-enforced the perceived need to clear the valley of livestock and pastoralists to conserve the environment and make space for investments in agriculture. The pastoral eviction in Kilombero in 2012 was also only one in a series; every eviction leading to the spill-over of pastoralists to other areas creating new farmer-herder conflicts as well as conservation conflicts. While land-use conflicts in Africa are commonly thought to be caused by natural resource scarcity and environmental degradation mainly resulting from population growth, we demonstrate how degradation narratives may themselves be a key driver of conflicts, in this case to legitimize and pave the way for agricultural investments and environmental conservation under a 'green economy'.

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## 1. Introduction

At the Rio + 20 meeting in June 2012, Tanzania's Minister of Environment, Tereza Huvisa, introduced the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) as a major new tool for greening the country's economy. The Minister was speaking at a side-event about investing in natural capital, organized by the World Wildlife Fund (WWF) and the Africa Development Bank. She noted that SAGCOT was planned as an 'investment blueprint'

focusing on profitable agricultural investments, infrastructural development, and value-chains and human capital development, combined with the safeguarding of ecosystem services and natural capital more generally (Bergius, Benjaminsen, & Widgren, 2018).

Six months earlier in Tanzania, Minister Huvisa had announced that all pastoralists within the Kilombero Valley Ramsar Site<sup>1</sup> had to leave the area by August 30, 2012. This new conservation area covers almost 600,000 acres of the central wetlands in the Kilombero valley, which again is one of the core areas of SAGCOT. While the Ramsar site had been officially established in 2002, its implementa-

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<sup>1</sup> Ramsar is an intergovernmental treaty for the conservation and wise use of wetlands and their resources. The Kilombero Valley Ramsar Site includes approximately 8000km<sup>2</sup> set aside for this purpose.

tion only started in 2012 in parallel to the launching of SAGCOT. Indeed, evicting pastoralists from the valley was seen by government and SAGCOT officials as an important measure to prepare for the implementation of this new investment corridor. On October 30, 2012, 'Operation Save Kilombero' started, involving the use of about 400 police officers, national park rangers, soldiers, and prison and district officers to forcefully evict about 5,000 pastoralists and small-scale farmers (IWGIA, 2016).

The Regional Commissioner, Joel Bandera, led the operation and told the Tanzanian press that "we will not stop until all livestock keepers and their animals are flushed out from their hiding", otherwise Morogoro region would not attain its state-assigned goal of becoming the national grain reserve through the SAGCOT initiative (PINGOs Forum, 2013, p. 33)

The implementation of the green economy in Tanzania has in fact become a tool for the government, international aid donors and businesses to continue to pursue and further strengthen a policy to 'modernize' agriculture through a focus on large-scale investments (Bergius et al., 2018; Buseth, 2017). Within the framework of the green economy, such agricultural investments are promoted in tandem with measures to conserve the environment through the protection of biodiversity and ecosystem services. In this paper, we show how this approach in practice has led to dispossessions of smallholder farmers and pastoralists, how these evictions lead to the spill-over of land-use conflicts to other areas, and how they are being legitimized through the continued reproduction of unsubstantiated degradation narratives.<sup>2</sup>

The paper draws on several short fieldwork stays in Kilombero between 2014 and 2018 as well as a longer stay by the first author for one year in 2016–17. In addition to interviews with government officials at national and district levels, land and human rights activists, conservationists, pastoralists and small-scale farmers, agricultural investors and aid donors, we also collected data about land-use conflicts at the district land tribunal and local police as well as historical data in the Tanzanian National Archives.

While land-use conflicts in Africa are often believed to be caused by natural resource scarcity and environmental degradation (e.g. Homer-Dixon, 1999, 2007), we demonstrate how land-use conflicts in Kilombero and connected spaces are instead to a large extent driven by narratives of degradation, associated with livestock keeping in particular. This means in practice that degradation narratives continue to serve to legitimize evictions for the promotion and creation of green economy spaces.

To contextualize and support this argument, the paper proceeds with a general discussion of the links between degradation narratives, dispossession and conflicts. We then introduce the relevant policy context in Tanzania. Thereafter, we provide a historical account of investments, conservation and land-use conflicts in Kilombero, followed by an evaluation of 'Operation Save Kilombero'. We end the paper by reflecting on how degradation and scarcity narratives gloss over political and historical factors in land-use conflicts.

## 2. Degradation narratives, dispossession, and conflicts

Competition and conflicts over land in Africa have generally been increasing during the last few decades (Berry, 2002; Bob, 2010; Peters, 2004, 2009, 2013). Conflicts increase especially in *peri*-urban areas, on high-potential agricultural land such as wetlands, and in 'frontier' areas recently opened up for development of various kinds (Kröger, 2016; Rasmussen & Lund, 2018). New

<sup>2</sup> In this article the term 'smallholder' refers to both small-scale farmers and pastoralists. One should note that sometimes the difference between pastoralists and farmers is not so clear-cut as many 'pastoralists' are actually agro-pastoralists (meaning they also farm).

conflicts over land and natural resources may have multiple causes associated with increasing population pressure due to both natural population growth and mobility of people, rent-seeking and speculation, the dispossession of small-scale farmers and pastoralists to establish, for instance, plantations, forest reserves, national parks, tourism areas, mines, dams, and residential areas (Peters, 2013;) as well as processes of formalization to clarify ambiguous legal right regimes (Benjaminsen, Holden, Lund, & Sjaastad, 2009, Pedersen, 2016). This variety of parallel and ongoing processes contribute to what Bluwstein et al. (2018) refer to as the interlocking nature of land alienation. Sometimes, these processes lead to conflicts, violent or not, over who has formal or moral rights to manage land.

However, while contestations over who should control land may have a number of possible causes, governments and international institutions tend to subscribe to the idea of dwindling resources as a fundamental driver of social conflict. This long-standing, largely neo-Malthusian, view has been articulated in the scholarly literature seeing resource scarcities as emerging from three complementary processes: increasing demand, typically due to population growth; decreasing supply as a result of resource depletion and environmental degradation; and unequal distribution of, and access to, resources (Homer-Dixon, 1999). This widespread conception tends to treat scarcity as a constant variable, while obscuring more laden questions of power, politics and history (Mehta, 2010). Such questions may reveal the multiple ways in which scarcity is constructed by paying attention to the politics of access and control over natural resources, including their historical dimension (Ribot & Peluso, 2003; Peluso & Lund, 2011). Indeed, as Mehta (2010) observes, too simplistic cause and effect explanations contributes in diverting attention from more systemic causes that may compromise the interests of the relatively more powerful.

More recently, the scarcity narrative has been energized by a widespread proposition that global warming increases environmental scarcities that again drive conflicts (Hoegh-Guldberg, Jacob, Taylor, Bindi, Brown, Camilloni, & Zhou, 2018). The international attention to this securitization of climate change is found in particular among policy, military and NGO actors, while relatively few researchers advocate this proposed link (Selby & Hoffmann, 2014).

In a historical perspective, this may be seen as a new form of 'climate reductionism', giving climate the role as the main variable predicting social change, compared to the 'climate determinism' of the 19th and early 20th century (Hulme, 2011; Raleigh, Linke, & O'Loughlin, 2014). As in the heydays of climate reductionism, when the agency of colonial subjects was reduced to being a product of African climates, there is also a special focus on Africa in today's climate reductionism where there is an assumed toxic mix between population growth, climate change and violent conflicts over land and natural resources (Kahl, 2006; Homer-Dixon, 2007).

However, despite the prominence of such thinking within policy and practice, there is little systematic evidence to date that climate change-induced resource scarcity, in itself, is an important, general cause of conflict (Buhaug et al., 2014; Salehyan, 2014; Theisen, 2017). A number of African case studies investigating this link has also concluded on a more prominent role of other causes, such as the politics of access to resources (Bassett, 1988; Peluso & Watts, 2001), including rent-seeking by state officials leading to the marginalization of pastoralists and small-scale farmers (Benjaminsen, Alinon, Buhaug, & Buseth, 2012; Moritz, 2006; Turner, 2004). Some studies also discuss how large-scale land investments may exacerbate land-use conflicts (Ndi & Batterbury, 2017; Peters, 2013; Verhoeven, 2011).

Even so, a simple comparison of regions with a marginal resource base with regions characterized by endemic political

violence would reveal a substantial degree of spatial overlap (e.g., Busby, Smith, White, & Strange, 2013) – hence the confusion over the causal connection between scarcity and conflict. The main reasons for this overlap are two-fold. On the one hand, scarcity, much like conflict, is often a product of adverse political processes and poor governance that contribute to escalating social inequalities and facilitating unsustainable resource use (Benjaminsen, Maganga, & Abdallah, 2009; Turner, 2004). In that sense, the correlation between scarcity and conflict can be considered partly spurious. On the other hand, prevalent poverty and poor resource management are often reinforced by political instability and conflict, resulting in a vicious and endogenous cycle of marginalization and conflict (Collier et al., 2003; Gates, Hegre, Mokleiv, & Strand, 2012).

While there is little evidence from both quantitative large-N studies and qualitative case studies that environmental degradation and emerging natural resource scarcities drive conflicts, the idea itself has created a powerful policy narrative that tends to resist empirical evidence and alternative storylines (Roe, 1999). In fact, degradation narratives may serve to legitimize elite capture and the dispossession of smallholders through forms of accumulation by dispossession (Benjaminsen, 2015).<sup>3</sup>

In development studies, and political ecology in particular, there has been a renewed interest in the interplay between dispossession and capital accumulation (Benjaminsen & Bryceson, 2012; Büscher, 2009; Corson, 2011; Glassman, 2006; Kelly, 2011; Li, 2010; Roberts, 2008; Shivji, 2008; Sneddon, 2007; Veuthey & Gerber, 2012). While part of this scholarship focuses on agricultural investments, other contributions show how biodiversity conservation in Africa, including in Tanzania, plays a key role in facilitating and legitimizing dispossession and capital accumulation. Dispossession may be resisted in various ways (Cavanagh & Benjaminsen, 2015; Hall et al., 2015; Mariki, Svarstad, & Benjaminsen, 2015), including both open and covert resistance as well as violence, and resistance may again encourage further violence from 'above'. In addition, many interactions and struggles over natural resources may not necessarily involve resistance in its various forms, but rather everyday practices of compliance and adaptation to unequal distribution systems (Cleaver, 2018).

The next section introduces the contemporary Tanzanian policy context and how it considers the relationship between smallholder producers, questions of productivity and environmental degradation.

### 3. The policy context in Tanzania

Since achieving independence in 1961 development policy in Tanzania has gradually changed from a state-centered towards a more market-based approach. Still, an important continuity in most development policy has been the persistent subscription to an overall discourse of modernization. This continues in strong force today and is particularly evident in the interlinked policy areas of agriculture, land and pastoralism.

#### 3.1. Agriculture

Tanzania's long-term vision for development is articulated in its Vision 2025 (URT, 1999c), which was intended to complement and underpin the structural adjustment programs that Tanzania

negotiated from 1986 onwards (Hydén & Karlström, 1993; Ponte, 2002). This policy document envisions that by 2025, the Tanzanian economy will have been "transformed from a low productivity agricultural economy to a semi-industrialized one, led by modernized and highly productive agricultural activities which are effectively integrated and buttressed by supportive industrial and service activities in the rural and urban areas" (URT, 1999c). The small-scale agricultural sector is described as backward. To help modernize this sector, the Agricultural Sector Development Program (ASDP), launched first in 2006, stakes out the path towards "a green revolution in Tanzania" according to former president Kikwete (SAGCOT, 2011, p. 4).

Alongside the ASDP, a new strategy – Kilimo Kwanza ('agriculture first') – was launched in 2009. While the ASDP has been criticized for weakly emphasizing the private sector, the same cannot be said of Kilimo Kwanza. Largely formulated by the Tanzania Business Council, the strategy is described by Cooksey (2013) to promote the interests of large-scale farmers and represents a break from the more state-centered and small-scale-focused ASDP. This was in line with global trends as the financial crisis from 2007 and high food prices prompted new interest in agricultural investments (Borras, Hall, Scoones, White, & Wolford, 2011).

Kilimo Kwanza was launched with an aim to modernize and commercialize the agricultural sector and boost private sector investments, especially via public-private partnerships. Its 'ten pillar' road map seeks to exploit synergies between the government and the private sector in areas such as markets and trade, finance and agriculture-related infrastructure (TNBC, 2009).

A key initiative geared towards implementing Kilimo Kwanza is the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) (See figure 1). Initiated first by president Kikwete at the World Economic Forum Africa Summit in 2010, SAGCOT is described as a public-private partnership that seeks to mobilize private investments across the agricultural value-chain and develop commercially successful and sustainable agriculture in the southern third of Tanzania. A central component is to integrate (some) smallholder farmers into agribusiness value-chains, in particular through various forms of contract farming (SAGCOT, 2011). Still, such rhetoric of inclusion runs parallel to longer term notions of 'land mobility': a process by which land 'moves' to supposedly more efficient, sustainable, and business-oriented producers, while reducing the overall number of people involved in agriculture (Bergius & Buseth, 2019; The Guardian, 2017). Of course, the mobile component here is not the land itself, but rather the people working it.

By clustering agribusiness actors from both sides of production in highly fertile areas along key backbone infrastructure, SAGCOT is expected to deliver development with benefits for food security, poverty reduction and the environment. For this reason, the government as well as investors and donors have endorsed SAGCOT as a model for the green economy in Africa, combining commercial farming operations with environmental conservation (Bergius et al., 2018; Milder, Buck, Hart, Scherr, & Shames, 2013).<sup>4</sup>

#### 3.2. Land regulation

A central premise underpinning Kilimo Kwanza and its implementation via SAGCOT is that Tanzania is 'gifted' with 'underutilized' land that can be put under more productive use. However, there are justified concerns to what extent this land is actually

<sup>3</sup> Harvey (2003, p. 149) defined "accumulation by dispossession" as enclosing land "and expelling a resident population to create a landless proletariat, and then releasing the land into the privatized mainstream of capital accumulation."

<sup>4</sup> A key component of this approach (green growth in agriculture) is the 'sustainable intensification' of agricultural production. See for example Bergius and Buseth (2019).

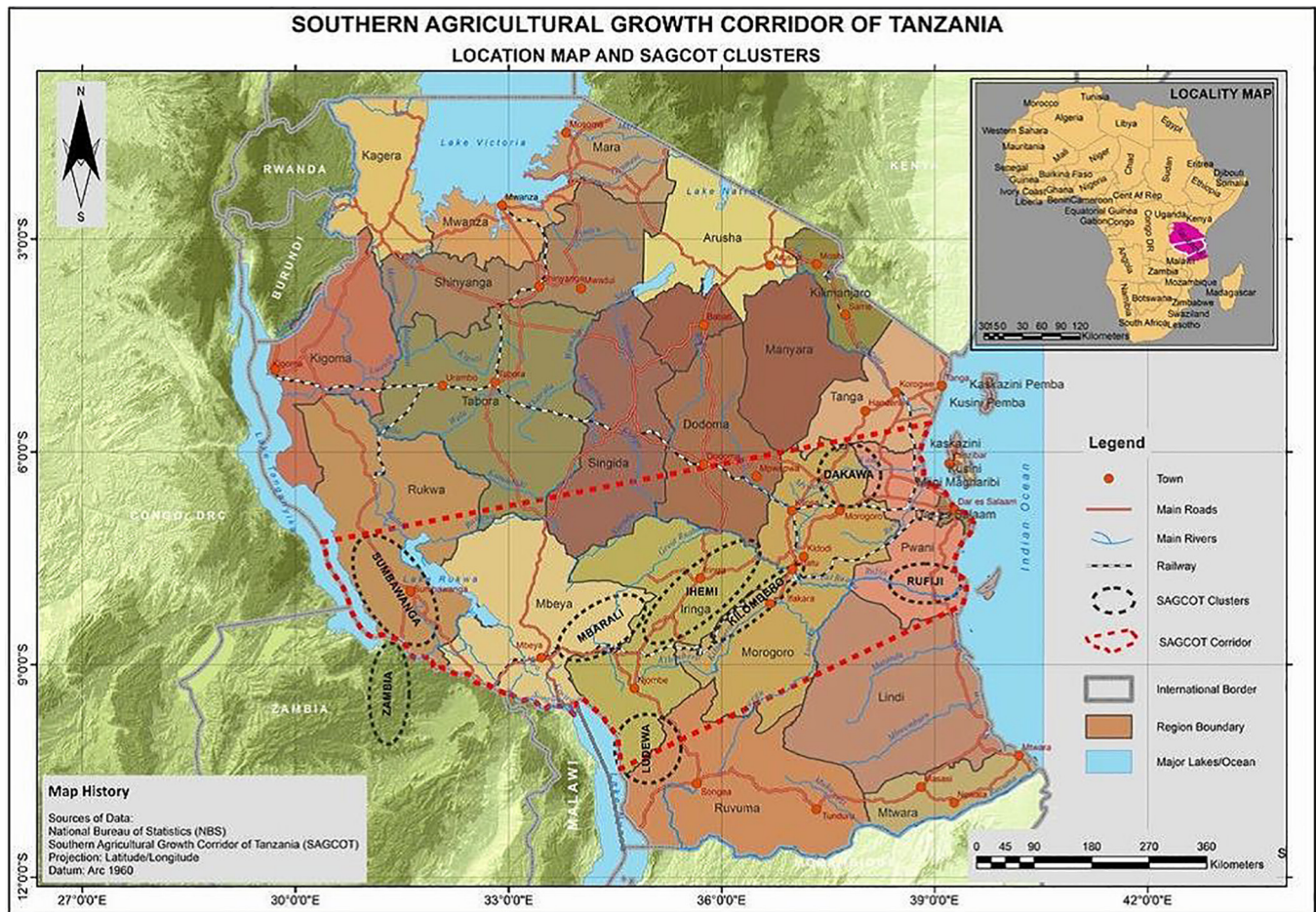


Fig. 1. The Southern Agricultural Growth Corridor of Tanzania (URT, 2013).

available, or through which measures it will be made so, to future investors (Bergius et al., 2018; Boudreaux, 2012; Exner et al., 2015; Tenga & Kironde, 2012).

The Land Act and Village Land Act of 1999 regulate land tenure in Tanzania, and were formulated in the wake of widespread land conflicts, rural discontent and confusion with the land policy amid the neo-liberalization in the 1980s and 90s. The emerging contradictions between the socialist past and the neoliberal future eventually led to the appointment of a Presidential Commission of Enquiry into Land Matters in 1991.

The commission published its report in 1994 and is regarded as the most comprehensive resource on land tenure in Tanzania (URT, 1994). The report provided a detailed historical, legal and institutional analysis of the escalating land conflicts and general discontent around land tenure in the country. The Commission proposed a number of radical recommendations to democratize land tenure, including divesting the ultimate land title from the state. Fearing that this would erode state control over land matters and turn the President into a "beggar for land" (URT, 1993 in Sundet, 1997, p. 217), neither the subsequent land policy of 1997 nor the contemporary land acts of 1999 included this recommendation (Nzioki, 2006; Sundet, 2005).

Hence, the legislation retains the President as the ultimate titleholder of all land. It further categorizes land in three different classes: Village Land (land found within demarcated or agreed boundaries of villages and under the administration of Village Councils), General Land (land administered by central government

such as urban areas and government controlled estates), and Reserved Land (such as national parks, game reserves and forest reserves).<sup>5</sup> Of these, General Land, which is the only category of land accessible to investors, makes up about 2% of the total land area in Tanzania as well as within SAGCOT (Tenga & Kironde, 2012; URT, 1999a, 1999b).<sup>6</sup>

There have been sustained calls from within the government to increase the amount of General Land by transferring land from the Village Land category (Boudreaux, 2012).<sup>7</sup> Once land has been identified for commercial investment through village land use planning exercises, the land undergoes a legal shift out of Village Land to General Land status, which is under central government jurisdiction. Villagers may consent to such transfers in the expectation that future investments will bring development benefits via infrastructure or

<sup>5</sup> Village councils have to administer land in accordance with customary law. According to the legislation, pastoralists are supposed to stay within Village Land boundaries. However, the degree to which this is actually implemented varies and is in many cases practically unsuitable relative to pastoralists need for mobility. Moreover, communal land rights are poorly recognized as users of such areas are not entitled to compensation when their land is expropriated.

<sup>6</sup> It is important to emphasize, however, that the percentage wise distribution of the different land categories is highly political and controversial. See for example Bluwstein et al. (2018).

<sup>7</sup> Such views were also provided by the acting director of the Rufiji Basin Development Authority (Rubada) (a government institution) who complained that villages have too much power over village land areas, thus making it more difficult and time consuming to implement investment projects (interview with acting Director of Rubada, December 12, 2016).

employment opportunities.<sup>8</sup> The government, via the Tanzania Investment Center (TIC), can in turn sublease the land to investors for up to 99 years.<sup>9</sup> Consequently, power over land control shifts from village to TIC (central government) and investors, and it remains in these hands even if the investment does not materialize (Bluwstein et al., 2018).

### 3.3. Pastoralism

The tendency in development policy to prioritize capital investors over Tanzanian farmers and pastoralists is associated with negative views of smallholder producers. As noted by Scoones, Smalley, Hall, and Tsikata (2014): “African agriculture is often depicted as stagnant, underproductive, and a cause of land degradation, in need of revival through integration with large-scale, commercial operations”. The negative views of smallholders are even stronger when relating to pastoralists.

Since the colonial period, pastoralists’ need for mobility has been considered a nuisance by the state, making them particularly difficult subjects for political control. The main solution proposed to make pastoralism controllable and taxable – and thus ‘legible’ (Scott, 1998) – has been through projects of sedentarization, often justified by a combination of environmental and economic concerns (Benjaminsen et al., 2009). Contemporary Tanzanian policy discourse on pastoralism is an illustrative example of such views that are in fact representative of how states tend to see pastoralists (Scott, 1998).

The following quote from former President Kikwete can stand as an illustration of dominant views of pastoralists among policy-makers in Tanzania: “We are producing little milk, export very little beef, and our livestock keepers roam throughout the country with their animals in search for grazing grounds. We have to do away with archaic ways of livestock farming” (Mattee & Shem, 2006, p. 4). Guided by such modernization ideology, many development programs have since independence focused on settling pastoralists as the way to bring them improved services and economic opportunities (Ndagala, 1990).

The main large-scale program to modernize pastoralism in Tanzania was the ‘Operation Imparnati’ from the late 1970s, which was based on the idea that the Maasai were leading a nomadic life and that they should be settled (Ndagala, 1982). It formed part of the nationwide villagization program (*Operation Vijiji*), implemented from the late 1960s, that aimed at the modernization of traditional agriculture through the resettlement of the rural population in concentrated *Ujamaa* villages (Hodgson, 2001; Kikula, 1997; Scott, 1998).

A good illustration of the official bias against pastoralists in Tanzania was demonstrated by the way herders were blamed for the power crisis in the country in 2006. The government claimed that overgrazing in the catchment area of the Mtera dam was the main cause of the water shortage, while the main cause, according to Walsh (2012), was mismanagement of the reservoir by the national energy company TANESCO. A full-scale military operation was launched on 18 May 2006 to evict pastoralists from the Usangu Plains. A heavily armed combined contingent of regular police, anti-poaching units and game wardens cleared the Ihefu Wetland of thousands of pastoralists with up to 300,000 cattle.

The National Livestock Policy of 2006 also reflects this negative view on pastoralism and aims to ‘modernize’ the livestock sector. It

seeks to ensure that by 2025 Tanzania has a “modern, commercialized and sustainable livestock sector with improved income and ensured food security” (URT, 2006, p. 10).

The bias against pastoralists in these policy discourses is legitimized by subscription to long-standing ideas about sustainability and a conceived mismatch between carrying capacity and livestock numbers. This ostensible mismatch is underscored by a conception of sustainable ecosystems as being in a state of equilibrium; namely, that there are fixed, acceptable, livestock to pasture ratios that should not be exceeded to avoid degradation and reduced productivity. For instance, an environmental and social assessment produced by SAGCOT estimates that the carrying capacity of livestock in Kilombero will be reached in 2020 (URT, 2013).<sup>10</sup>

In general terms, the concept of carrying capacity is based on the assumption that plants and animals are or may be in a state of balance or equilibrium. Two different notions can be identified (Behnke, Scoones and Kerven 1993; Benjaminsen, Rohde, Sjaastad, Wisborg, & Lebert, 2006). An ecological carrying capacity is reached “when the production of forage equals the rate of its consumption by animals, and the livestock population ceases to grow because limited feed supplies produce death rates equal to birth rates” (Behnke et al. 1993, p. 4). On the other hand, an economic carrying capacity sets a theoretical limit, which marks the number of livestock units pastoral resources in a certain area can support in order to attain a certain management objective (usually related to meat or milk production).

Such calculations are based on the assumption that appropriate stocking rates will result in a balance between grazing pressure and vegetation succession, which may be a suitable assumption for stable environments where conditions of plant growth and reproduction are reliable. However, such stable equilibria seldom occur in African rangelands, which tend to be in non-equilibrium where abiotic factors (rainfall, soils) determine vegetation composition and cover, more than livestock numbers (Behnke et al. 1993; Scoones, 1994).

The estimate by SAGCOT above lies closer to the definition of economic carrying capacity as it is clearly based on average feed requirements of livestock in the area combined with estimates of available grass per hectare in Kilombero, and not detailed assessments of plant ecological dynamics. Therefore, it cannot be inferred that exceeding this estimated capacity will lead to degradation.

In addition, ‘degradation’ also remains an elusive concept. One often gets the impression that degradation can be measured through scientific methods. But as famously pointed out by Blaikie and Brookfield (1987), ‘degradation’ is a perceptual term and there will be a number of definitions in any situation. These different definitions originate from conflicting views on how the land should be used and what the landscape should look like. Any discussion about whether or not an area is degraded inevitably involves actors’ interests, values, and power dimensions (Benjaminsen, 2015).

Moreover, the negative policy bias towards pastoralists also tends to undervalue the substantial contribution pastoralism makes to livelihoods and the national economy. This is why governments, such as in Tanzania, try to change pastoral systems towards ranching or zero-grazing, which is believed to yield higher productivity (Benjaminsen et al., 2009). However, this disregards the fact that pastoralists aim to maximize production per unit area, rather than per animal, as a livelihood strategy in marginal and variable environments. Research has shown that African pastoral

<sup>8</sup> It is important to note here that the legislation stipulates that villagers, through village assemblies, only have an advisory role in land transfers that exceeds 250 ha. In transfers of less than 250 ha villagers can reject or approve the transfer. In other words, the power to influence land matters decreases with the land size.

<sup>9</sup> There are ongoing discussions about reducing the maximum duration to 33 years (Bluwstein et al., 2018)

<sup>10</sup> This is also reflected in an announcement from the Morogoro Regional Commissioner from 2016 which orders district authorities to “stop arbitrary influx of livestock” into the region to stay within the set carrying capacity (Announcement by Stephen Kebwe, Morogoro Regional Commissioner, titled “Tamko la uingizaji holela wa mifugo mkoani Morogoro”, May 20, 2016).

systems can be up to ten times more productive per unit area compared to ranching (Grandin, 1987). Moreover, Behnke (2008), for example, notes that governments often take inaccurate account of the ways in which pastoralism contributes to national economies. In addition to producing meat for the market, pastoralism contributes by providing farming inputs as well as being a vital source of capital and savings (Behnke, 2008).

Tanzania ranks third in Africa after Sudan and Ethiopia in terms of livestock production and the livestock sector has a better growth elasticity than cereal and cash-crop production, according to Engida, Guthiga, and Karugia (2015). MacGregor and Hesse (2013), however, point out that data on pastoral production in East Africa are unreliable, but based on available data they estimate the contribution of livestock to GDP at about 30%. They also argue that pastoral production systems in East Africa are very cost effective compared to other livestock-based systems (ranching and zero-grazing), using low cost family labor and natural pastures as inputs.

The Kilombero Valley has been singled out as one of the core areas for SAGCOT related interventions. Its high fertility soil combined with rich biological diversity have made it a sought-after location for both agribusiness and conservation interests as well as smallholder producers. However, this is not only a recent trend. The next section provides some historical context to the growing squeeze between different land use interests that over time have turned Kilombero into a national 'hotspot' for land conflicts.

#### 4. Kilombero: investments, conservation and conflicts

The Kilombero valley's vast river system, seasonal flooding and fertile alluvial soils have contributed to the perception of the valley as being enriched with high potential for agricultural development. Colonial travelers passing through the valley in the 19th century described the local agricultural systems as highly productive and diverse (Kjekshus, 1996). Kilombero and its surroundings, considered Thomson (1881),

... is one of the most fertile spots in Africa. All the cereals of the coast, such as rice (the favourite food), millet, and maize, are grown extensively. So also are such vegetables as sweet potatoes, yams, ground-nuts, melons, pumpkins and cucumbers, and many other excellent articles of food. Tobacco is grown very abundantly. The sugar-cane, the castor oil plant, and cotton, are also cultivated (p. 189).

##### 4.1. Colonial development plans

The assumed latent wealth of the Kilombero flood plains enthused both the German and British colonial administrations. Several surveys were conducted under both administrations that evaluated the prospects of opening up the valley via railway construction and agricultural projects. The report of the German Rufiji-Nyassa Expedition acclaimed the potential of establishing a large-scale irrigation system, asserting that "if fully utilized", the Kilombero lowlands could "supply rice for the whole protectorate".<sup>11</sup> Subsequent British proposals were more restrictive as to the actual agronomic potential and economic viability of large-scale projects due to concerns about soil fertility in the central parts of the valley around the Kilombero River (Telford, 1929). Still, in the 1950s, the Colonial Development Corporation (CDC) explored opportunities for large-scale mechanical cultivation of rice and sugar in the interior parts of Kilombero.<sup>12</sup> Also in the 1950s, an FAO recon-

naissance survey of the Rufiji Basin proposed – in line with the previous German plans – large-scale irrigation and flood control development over 824,000 acres on the Kilombero plains (Jätzold, 1968).

Despite the number of investigations, few large projects materialized. In a context of international economic uncertainty, explained by the two world wars and the 1930s recession, the risks associated with the significant capital investments needed to transform the valley and accommodate the objectives of the colonial powers were found to be too large (Larson, 1976; Monson, 1991). A notable exception were the outer parts of the valley, where links to transportation infrastructure were more developed. With funds from among others CDC, the International Finance Corporation (IFC) and Standard Bank of South Africa Ltd, construction of the Kilombero Sugar Company (KSC) started in 1960 on about 25,000 acres of land acquired by the company (Jätzold, 1968).

KSC was nationalized after independence, and later privatized under South-African based Illovo Sugar in 1998 (Sulle & Smalley, 2015). From the outset, the company supplemented its plantation farming with an out-grower program linking surrounding small- and medium cane growers to KSC's processing facilities.

##### 4.2. Migration and forced resettlement in Kilombero

The prospects of wage labor at KSC were a significant pull factor for in-migration to Kilombero. The workers hired by KSC came primarily from the highland regions surrounding the valley. They were attracted not only by the wage labor opportunities at the company, but also by the possibility to establish farms and settle down in the area (Martiniello, 2016, Monson, 2011). The lack of communication infrastructure left the more interior parts of the valley relatively disconnected from these changes. However, this changed with the construction of the Tanzania Zambia Railway Authority (Tazara) system in the 1970s. The Tazara had a transformative influence on mobility and settlement throughout the valley and opened up access to areas of fertile farmland that had previously been difficult to reach (Monson, 2011).

The completion of Tazara in 1974 coincided with the socialist government's villagization campaign. Villagization in the Tazara corridor was enacted through 'Kando Kando ya Reli' (Operation Alongside the Railway), which formally established new villages alongside the railway. People who were resettled were to be "educated in a modern and economic fashion", while at the same time ensuring the railway's security (Monson, 2011, p. 73).

Resettlement was not new to the people of Kilombero. The villagization campaign was just one in a longer sequence of resettlement programs carried out both before and after independence. The British set out to resettle people in concentrated villages under the close administration of tribal chiefs to facilitate more effective colonial administration and tax collection. Many families were relocated by force, and a number of homes of the families that refused to resettle into designated villages were set on fire. In the 1940s close to 40,000 people were relocated to new settlements, formally as part of attempts to control sleeping sickness (Monson, 1991, 2011). In 1962, a new scheme sought to clear towns of undesirable 'surplus populations' by resettling them in Kilombero to take up sugar cane farming as out-growers connected to KSC. Hence, as Monson (2011, p.77) writes, many people in Kilombero viewed villagization in the 1970s not "as something new and modern, but as something old and familiar."

Under 'Kando Kando ya Reli' people were resettled from dispersed settlements on the plains alongside the tributaries of the Kilombero River to new plots near the railway. The operation was subject to the use of strong force and while many eventually

<sup>11</sup> Tanzania National Archives. File 13304 "Development of Kilombero Area".

<sup>12</sup> Tanzania National Archives. File 40511/12 "CDC Projects – Kilombero Valley Agricultural Development 1950"

built houses in the new settlements they continued with farming activities on the plains.<sup>13</sup> The forceful removal of people from the plains also opened up opportunities for in-migrating newcomers to make use of the ‘abandoned’ farming plots on the plains, thus prompting land conflicts upon the return of the previous owners.<sup>14</sup>

The new mobility enabled by the railway line facilitated new demands for farming land towards the inner areas of Kilombero. The rapid land conversion to sugar cane production around KSC made plots for food production to be in short supply. This – combined with the valley’s encirclement by two wildlife reserves putting further strains on available farming space (Monson, 2011; Neumann, 2001) – prompted sugar cane out-growers, wage laborers and others to travel by railway to more distant areas for food production. Indeed, this form of ‘commuter farming’ remains widespread in the valley today (Smalley, 2014).

Tanzania’s neo-liberalization in the 1990s also contributed to this migration pattern. Increasing land pressures combined with the withdrawal of various agricultural support measures pushed poorer farmers out of crop production in the southern highland areas. The lowland areas of Kilombero accommodated many of these farmers as the fertile alluvial soils were able to support diverse crop production without significant investments of capital (Monson, 2011).

#### 4.3. Agribusiness investments

The railway’s presence also gave new impetus to the long-standing plans of developing large-scale agricultural enterprises in Kilombero. In the mid-1980s, the North-Korean and Tanzanian governments started a joint venture – Korea Tanzania Company (Kotaco) that envisioned developing 15,000 ha of irrigated rice plantations (Kotaco, 1986). However, lack of financial resources combined with the fact that some of the projected areas were already heavily populated prompted the company to concentrate on developing in excess of 5,000 ha in Mngeta (Mngeta Farm). Of these, only about half were cleared and planted before the company left in 1993 (Kotaco, 1994).

The same year, Kilombero Valley Teak Company (KVTC) planted its first 24 ha of what today amounts to 7,500 ha of teak plantations. KVTC holds an additional 20,000 ha intended to be used for sustainable off-take (e.g. fuelwood collection and charcoal production) or conservation of evergreen habitat (Bonnington, Weaver, & Fanning, 2009; Johansson & Isgren, 2017).

With its strategic location along the Tazara, Kilombero represents today one of the six priority agribusiness investment areas – the SAGCOT clusters – that have been targeted for commercial development by the government and the private sector (SAGCOT, n.d.). Under SAGCOT, a number of new large-scale investments are planned in Kilombero. One of SAGCOT’s flagship projects is the UK based company Agric, which acquired the defunct Mngeta Farm in 2007 and was later incorporated as a SAGCOT partner (Bergius et al., 2018). The re-development of this rice plantation has led to significant conflicts and dispossession of smallholder farmers and pastoralists, who utilized the land both before and after its initial establishment in 1986 (Bergius et al., 2018; Greco, 2016). Attempts to incorporate some of these and other surrounding farmers into an out-grower scheme have been largely unsuccessful. Participating rice farmers complained of disagreements over paddy prices as well as severe logistical issues surrounding the timing of production loans and input distribution,<sup>15</sup> while com-

pany documents indicate that many out-growers struggled to repay their loans (Bergius et al., 2018; KPL, 2015).<sup>16</sup>

#### 4.4. Conservation

In addition to an expanding sector of agribusiness investments, Kilombero is also considered to be of high biodiversity value as Tanzania’s ‘ecological bank’ (Liganga, 2017). British colonialists tended to see locally adapted practices of minimum tillage and shifting cultivation – alongside other local economic uses of land and forests – as a threat to the ecological integrity of the valley. Combined with commercial timber interests, this prompted the colonial government to legislate soil conservation rules and erect forest reserves to combat the ostensible “dangerous evil” of shifting cultivation and intrinsic “forest-destroying propensities” of local tribes (Monson, 1991, p. 346 and 356). In some cases, local resource users were charged royalties for the felling of large trees – which they used for the construction of canoes – to “instill in the native mind that this timber is valuable and the supplies not inexhaustible” (Morogoro Forest Department, 1937 in Monson, 1991, p. 344). These policies can be seen to represent the colonial version of the contemporary introduction of ‘green economy’ in the area.

Furthermore, the entire Udzungwa escarpment to the north and west of the valley was declared a forest reserve in 1929. The colonial forest conservation policies led to dispossession and less flexible fallow systems, while increasing pressures on land outside the areas of ‘conservation’. In many instances, as Monson (1991) notes, the exclusionary forest policies were also subject to contestation from local resource users who either ignored or refused to comply with the new regulations.

The Udzungwa forest reserve was incorporated into the Udzungwa Mountains National Park (UMNP) in 1992. The park stretches across four administrative districts and covers approximately 1990 km<sup>2</sup> (URT, 2016). Its establishment prompted resettlement of farming populations from the mountain areas to the Kilombero floodplains (Mung’ong’o & Kayonko, 2009).<sup>17</sup> Today, the UMNP and other protected areas, such as the Selous Game Reserve, the Kilombero Game Controlled Area and various forest reserves, comprise around 50% of the total land area of Kilombero (URT, 2016; Wilson, McInnes, Mbagi, & Ouedraogo, 2017).<sup>18</sup> In addition, after joining the Ramsar convention in 2002, the Tanzanian government has designated approximately 8,000 km<sup>2</sup> to “conserve and promote wise use” of the Kilombero wetlands “towards achieving sustainable development” (Wilson et al., 2017, p. 1).

With donor support, the implementation of the Kilombero Valley Ramsar Site (KVRS) started in 2012 and falls within an institutional complex that includes all three land categories described by the Tanzanian land legislation. While the outer KVRS zone comprises predominantly Village Land areas and some General Land (including agribusiness plantations), the inner zone – also defined as KVRS’s core area –<sup>19</sup> intersects with the Kilombero Game Controlled Area (KGCA), which is regulated as Reserve Land under the Wildlife Conservation Act of 2009 (see Fig. 2). However, the exact

<sup>13</sup> Interviews with village elders in Mchombe and Lukolongo villages, 2016 and 2017; See also Monson, 2011.

<sup>14</sup> Interview with village elder, Mchombe Village, June 20, 2017.

<sup>15</sup> Interviews with smallholder associations in Mchombe, Lukolongo, Mkangawalu, Udagaji and Njagi villages, February and March 2017.

<sup>16</sup> As of today, there are no out-growers linked with the Mngeta Farm. The future of the plantation itself is also uncertain with the operating firm – Agric – on the brink of bankruptcy and looking for buyers.

<sup>17</sup> Some of these people were allocated new land within the planned operation area of the Mngeta Farm. The redevelopment of the farm since 2007 has led to a new eviction and resettlement round for these people, aptly illustrating the intensifying agribusiness-conservation squeeze in the district (Mung’ong’o & Kayonko, 2009).

<sup>18</sup> When the Selous Game Reserve – the largest of its kind in the world – was established in the 1930s around 40 000 people were evicted (Kjekshus, 1996). Rooke Johnston, the provincial commissioner of the Southern Province who was in charge of the evictions, “held that development depended on the eradication of all human rights and interests in the areas” (Kjekshus, 1996, p. 178).

<sup>19</sup> Interview with Kilombero Ramsar Site project manager in Ifakara, May 12, 2017.

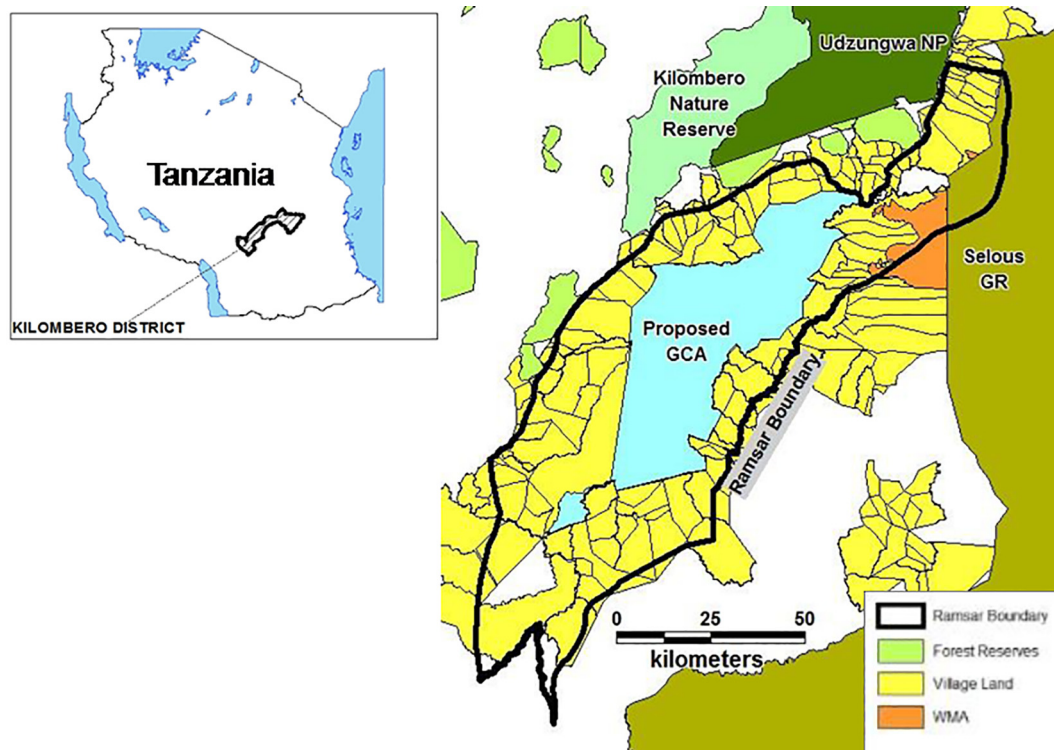


Fig. 2. Study area (to the left) and the Kilombero Valley Ramsar Site Map (KILORWEMP, 2017c). The WMA signature in the legend refers to Wildlife Management Areas.

boundaries between villages and KGCA/KVRS – hereinafter Ramsar core zone – are under negotiation and subject to strong contestation from local resource users as the proposed boundary realignment reduces the size of Village Land areas.

Before 2009, there were no direct provisions in the legislation (Wildlife Conservation Act of 1974) that denied access or use of land within game-controlled areas or wetlands. However, the new Wildlife Conservation Act of 2009 outlaws cultivation and severely restricts grazing activities within game-controlled areas. In addition, the new act explicitly prohibits grazing within wetland reserves, such as the core Ramsar zone in Kilombero. According to the Director of Wildlife Utilization and Business Services in Tanzania Wildlife Authority (TAWA), who was part of the group authoring the new act, “Kilombero was a key reason for why the Wildlife Conservation Act of 2009 revised the management of game controlled areas.”<sup>20</sup> Possibly due to pressure from conservation interests, who have complained of “lots of human use and very little conservation” within game-controlled areas in the past (KILORWEMP, 2017c, p. 63), the new act was used to restrict access rights for farmers and pastoralists to the wetland without compensation. This, in combination with the proposed boundary realignment, has resulted in a dispute involving the Ministry of Natural Resources and Tourism and more than hundred villages that have part of their village land within the core Ramsar zone. With assistance from the Legal and Human Rights Centre (LHRC) the villages have brought the dispute to the land division of the High Court.<sup>21</sup>

#### 4.5. Kilombero: agribusiness, conservation and a ‘hotspot’ for land conflicts

The combination and expansion of agricultural capital investments and conservation, alongside in-migration, have contributed to growing land pressures in Kilombero in recent years. This leaves smallholder farmers and pastoralists in a tight squeeze between different powerful national and international agribusiness and conservation interests that have turned Kilombero into a national ‘hotspot’ for land conflicts (Mhegera, 2012).

Figure 3 shows the number of land-use conflicts reported to the police in Kilombero as criminal offences since 2000, meaning that there has been use of violence. These conflicts are diverse – including among farmers, between farmers and pastoralists and between villagers and conservation authorities – and symptomize a growing instance of relative land scarcity in the region. Note, in particular, the increase in reported conflicts between villagers and conservation areas in recent years. These are likely linked to the legislative changes and realignment of the core Ramsar zone boundary.

A recent land use analysis asserts that about 40% of the land within the core Ramsar area was under cultivation in 2016 (KILORWEMP, 2017a). This suggests that in a context of relative land scarcity smallholders are inclined to resist via non-compliance to the regulative changes concerning wetland areas.

Violation of the core Ramsar zone boundary is partly also a direct result of dispossession and resettlement resulting from agribusiness investments associated with SAGCOT. Many of the smallholders who were dispossessed by Agrica’s re-development of the Mngeta Farm, for instance, received compensation land within the core Ramsar conservation area.<sup>22</sup> As a result, many of these were evicted a second time by what they referred to as “Ramsar people” and were left either landless or forced to rent land from

<sup>20</sup> Interview with Director of Wildlife Utilization and Business Services in TAWA, Imai R. Nkuwi. October 3, 2017.

<sup>21</sup> On February 22, 2018, the local representative of the Legal and Human Rights Center, Godfrey Lwena, who represented the villagers in court was brutally killed outside of his home in Kilombero by a group of masked men armed with machetes. The general opinion in Kilombero is that Lwena was killed due to his active involvement and resistance against cases of dispossession.

<sup>22</sup> In addition, due to yearly floods the compensation land is in most years not usable.



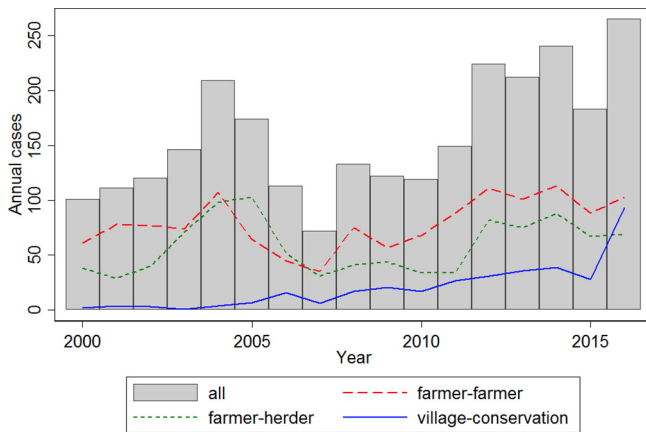


Fig. 3. Number of land-use conflicts as criminal offence. Source: Ifakara Police Station.

neighbors or the new investor.<sup>23</sup> Consistent with the police records visualized in Fig. 2, data from the local land tribunal show that the number of conflicts between farmers in this area has increased substantially since 2007.<sup>24</sup> This corroborates Greco (2016, p. 32) observation that there has been an “escalation of land disputes” in the villages surrounding the plantation since the new investor arrived.

The contemporary cycle of material expansion in international capital investments (Kröger, 2013, 2016) – driven in part by the green economy<sup>25</sup> – has reinforced old and created new contentious encounters between intertwined conservation and agribusiness interests and local resource users in Kilombero. Indeed, capital intensive agro-investments, alongside increasing areas under conservation, lie at the crux of the green growth approach to agriculture (Bergius & Buset, 2019; Milder et al., 2013; WEF, 2011). This approach operates according to an ontology that tends to treat landscapes of production as mutually exclusive to landscapes of biodiversity conservation. Resource users deemed not to fit to this vision of development face exclusion in attempts to purify space for the green economy. In this space, pastoralists, in particular, are considered disturbing elements.

## 5. Pastoralists and Evictions: ‘Operation save Kilombero’

There are divergent historical accounts of cattle herding in Kilombero Valley. After travelling through the area in the late 19th century, Stolowsky (1903 in Kjekshus, 1996), for example, reported that Kilombero “offer such good conditions for stock-breeding that they could hardly be imagined to be more favourable”. In the valleys’ South-Western parts, Stolowsky wrote, the local ruler “possesses a splendid looking herd of cattle which thrives marvellously (in the area)” (p. 60). In sharp contrast, von Prince (1897 in Monson, 1991) reported from his journey that there were no cattle at all in the valley, while Telford (1929) asserted that cattle keeping “is generally impossible because of tsetse fly”. As Monson (1991) notes, these diverging accounts are likely rooted in the fact that overall cattle numbers in the valley have remained quite low due to a variety of ecological risks, and, in part, colonial policies that restricted flexibility and mobility of herders (see also Neumann, 2001).

<sup>23</sup> Interviews with villagers in Kichangani hamlet, Isago village, February 2017.

<sup>24</sup> The Mchombe Ward Land Tribunal was established in 2005.

<sup>25</sup> As evidenced particularly by new ‘climate-smart’ investment opportunities in minerals (Dunlap, 2018), forests (Beymer-Farris & Bassett, 2012; Kröger, 2014), or agriculture (Bergius et al., 2018; Newell & Taylor, 2018).

Yet, historical evidence suggests that cattle herding has been present to various extent since mid- to late 19th century (Jätzold, 1968; Monson, 1991). Jätzold (1968) reports that early immigrants (Wabena) from the surrounding highlands brought an unknown number of livestock to the Kilombero plains around 1910. According to the International Work Group for Indigenous Affairs (IWGIA) (2016), Parakuyo-Maasai pastoralists have been present in Kilombero since around the same time. In 1965, Jätzold (1968) notes, the stock of cattle in Kilombero Valley was thought to be around 2,000, however, “if anything”... these figures were “too low rather than too high” (p. 67). Alienated from their lands by large-scale farming projects, Datoga (Barabaig) pastoralists are said to have arrived in Kilombero from Hanang in the 1970s, while Sukuma and Maasai (other than Parakuyo) pastoralists arrived more recently, in the 1990s, in search of pastures and farm land (IWGIA, 2016; KILORWEMP, 2017b).

Recent in-migration of pastoralists to Kilombero is also linked to a series of evictions in southern Tanzania since the turn of the millennium (Benjaminsen et al., 2009; IWGIA, 2016; KILORWEMP, 2017b; Walsh, 2012). This includes, in particular, the aforementioned ‘National Anti-Livestock Operation’ that was carried out in 2006 and 2007 to evict pastoralists from the Usangu/Ihefu wetlands in Mbeya Region. Although accurate figures are lacking, livestock development officers at the Kilombero District claim that a vast proportion of ‘new’ pastoralists in the valley came from Usangu/Ihefu.<sup>26</sup> Combined, the series of eviction operations in recent decades have reinforced conflicts over land and resources in Kilombero between pastoralists and farmers, agribusiness investors and conservation interests (KILORWEMP, 2017b; Wilson et al., 2017).

In Kilombero, such conflicts coincide with seasonal climatic variations. Farmer-herder conflicts, for example, intensify during wet season, when large parts of the plains are flooded and pastoralists move cattle out of the plains to where most farming activities take place. Likewise, conflicts between pastoralists and the Ramsar conservation area intensify during the dry season, when access to water and grazing pastures on the plains is more significant (KILORWEMP, 2017b).

According to the dominant narrative, in-migrating pastoralists are the ones who have the main responsibility for inciting such conflicts. They are thought to be ‘invaders’ whose livelihood activities are believed to cause widespread environmental degradation and thus not fitting to a ‘modern’ and land intensive green economy (IWGIA, 2016; Milder, Hart & Buck, 2013; Wilson et al., 2017). The severity of the issue is buttressed by government officials constructing alarmist future scenarios, in which “almost all unique natural resources [in the Kilombero Valley] are destined to disappear within years if action is not taken (PINGOs Forum, 2013, p. 8–9). The national media actively proliferate this reasoning: “...efforts to conserve the Kilombero valley flood plains are being frustrated by the invasion of the valley by livestock keepers where their volume of cattle has exceeded the carrying capacity of the area” (Liganga, 2017). Although this environmental degradation narrative is unsubstantiated and not supported by scientific research or evidence, it has become the most commonly used justification for evicting pastoralists.

In 2012, alongside the implementation and realignment of the core Ramsar zone, the government initiated a major operation to evict pastoralists from Kilombero. Epitomized by the language of environmental degradation, ‘Operation Save Kilombero Valley’ was launched on October 30, officially to save the wetland ecosystem from pastoral overstocking, but also to align with the state-assigned goal of making the region a national grain hub via

<sup>26</sup> Interview with Livestock Officer, Kilombero District, May 11, 2017.

SAGCOT (PINGOs Forum, 2013). The operation was overseen by 41 police officers, six prison officers, 37 militias, 30 village wildlife officers and 16 game officers (The Guardian, 2013). The day after the operation was launched, pastoralists from 51 villages in the Kilombero Valley filed a case in the Land Division of the High Court to contest the eviction order and its implementation. In response, the High Court issued an injunction order to stop government officials from continuing the exercise until the case was determined by the court.

However, the operation continued in spite of the court's injunction. After having removed an alleged 280,000 out of 320,000 cattle from Kilombero, government authorities in January 2013 declared the eviction exercise a success (The Guardian, 2013). In contrast, pastoralists and civil society organizations held that the operation was "accompanied by massive extortion, corruption and dispossession of pastoralists' livestock assets, as well as extensive violation of human rights, including arbitrary arrests and killings" of pastoralists by military and police forces (IWGIA, 2016, p. 24). According to IWGIA (2016), 5,000 pastoralists were evicted with no compensation or alternative options provided. Moreover, the same organization claims that the operation was a money-making exercise for those carrying it out as pastoralists reported being fined multiple times for different reasons. An estimated US\$ 427,000 were said to be levied in fines, while only US\$ 6000 were formally declared (IWGIA, 2016). Indeed, this illustrates the potential vested interests of some state actors in upholding and proliferating degradation narratives as part of a rent-seeking strategy.

In spite of the eviction exercise, pastoralists have maintained a strong presence in Kilombero. After eviction, many pastoralists have returned with their livestock. When asked about possible reasons for this, the Kilombero District Livestock Officer explained it was because "Kilombero is very productive". While the Livestock Officer also repeated the overgrazing narrative, she admitted that claims of overgrazing were only based on "a visual assessment" without any research or monitoring.<sup>27</sup> Moreover, a continued strong presence of pastoralists in the valley would be impossible if overgrazing in an ecological sense was an issue. Nevertheless, in 2016, the Morogoro Regional Commissioner ordered district authorities to again evict "invading" smallholders from the wetland areas on ecological grounds to "ensure that the valley which is among major elements of the national heritage is protected" (The Guardian, 2016).

The Kilombero evictions, alongside recent and similar anti-pastoral operations elsewhere, have resulted in the spill-over of pastoralists to new areas (IWGIA, 2016; PINGOs Forum, 2013; Walsh, 2012). Although pastoralists are told to leave, they are seldom told where to go, signifying the severe lack of foresight on behalf of the state in the way these operations are managed. A large share has migrated with their livestock to districts in the Coast Region (PINGOs Forum, 2013; Walwa, 2017). At the backdrop of 'Operation Save Kilombero' Tanzanian media reported that villagers in Kisarawe District, were "up in arms against livestock keepers...flocking" to the area from Kilombero Valley (PINGOs Forum, 2013, p. 24). Meanwhile, many ward and district leaders issued strict warnings to pastoralists coming from the Morogoro Region that they were not welcome to their constituencies (PINGOs Forum, 2013).

The spill-over of pastoralists has reinforced conflicts over land and resources in these areas, in particular between farmers and herders (Walwa, 2019).<sup>28</sup> These conflicts are intensified not only by in-migrating pastoralists in search of pastures, but also by parallel processes of land investment preparation (Bélair, 2018; Walwa,

2017). The Coast Region falls within the geographical zone of SAGCOT and is attractive to agribusiness investors due to its fertile land, rivers and relative proximity to markets (SAGCOT, 2011). In Kisarawe and Rufiji districts, for example, village land use planning has been an important tool utilized by the government to identify and prepare land for investments. According to Walwa (2017), land use plans in these districts have themselves become sources of conflict in the way capital investments appear to be prioritized over tenure security for smallholder farmers and pastoralists. Considerable tracts of land have been identified and allocated for investments, thereby pushing relative land scarcity and intensifying farmer-herder conflicts, sometimes with deadly outcomes (Bélair, 2018; Walwa, 2019). The combination of such parallel processes signifies the interlocking nature of land conflicts and alienation in Tanzania (Bluwstein et al., 2018).

As such conflicts intensify, partly as a result of pastoralist spill-over from elsewhere, the environmental degradation narratives linked to pastoralism are again reproduced (Walwa, 2019). This adds new momentum to the continuous cycle of evictions, conflicts and migration Tanzanian pastoralists are imbricated in. The arrival of the green economy to areas such as Kilombero can thus be seen to amplify this historical pattern.

## 6. Concluding remarks

In this contribution we have illustrated the real, material link that exists between narratives of environmental degradation and scarcity and their concrete effects on land and natural resource struggles. Such struggles and conflicts are legitimized and largely driven by long-standing and powerful policy narratives about resource scarcities that are unsubstantiated and poorly documented empirically and often blind to historical processes of dispossession and injustice.

As Scoones, Smalley, Hall, and Tsikata (2018) have recently pointed out in the context of 'the global land rush', scarcity narratives are not merely descriptive storylines, but are constructed, proliferated and adopted with a purpose. They are used actively to legitimize concrete interventions in natural resource management in which certain resource users and future pathways are prioritized over others. Inevitably, policy narratives yield concrete and material outcomes with clear winners and losers.

In the context of our discussion on these matters in Kilombero, the power of dominant policy narratives on degradation and scarcity relative to alternative storylines, portrays smallholders (pastoralists in particular) as the antagonists to sustainable development: Their productivity is low and their methods of production are depicted as a major cause of environmental degradation and emerging resource scarcities. This has, ultimately, prompted evictions, dispossession and increased instances of land-use conflicts. Moreover, the spill-over of pastoralists from such evictions to new areas has led to new land-use conflicts, while reproducing the policy narratives that contributed to them in the first place.

These narratives of degradation and scarcity often co-exist alongside narratives of natural resource abundance (Scoones et al., 2018). In contemporary mainstream green economy visions these seemingly contrasting positions are mutually reinforced through an ontological divide between production and conservation landscapes.. Said differently, to conserve remaining nature, while meeting growing demands for food and agricultural production, human land use needs to intensify. In this equation, smallholder farmers and pastoralists are deemed lacking in terms of knowledge, technology and capital. Removing some of these disturbing elements via military style 'operations' is thus considered vital to render land both investable (Li, 2017) and conservable in a green economy.

<sup>27</sup> Interview with Livestock Officer, Kilombero District, October 6, 2017.

<sup>28</sup> Interview with Director General, National Land Use Planning Commission, October 9, 2017.

Over time, the combined existence of such narratives has prompted growing sectors of both conservation and agribusiness capital investments. With the arrival of the green economy to Kilombero, this agribusiness-conservation 'squeeze' smallholder farmers and pastoralists find themselves entangled in risks intensifying even further. This signifies the way in which perceptions of degradation and scarcity are manufactured (Mehta, 2001) as part of a knowledge politics to suit and justify powerful national and international interests. This political-ness of scarcity is systematically downplayed, thereby masking how distribution of access and control over natural resources is imbricated in historical processes of exploitation and injustice.

The apparent 'scarcity' of politics and history denotes the wider discourse of modernization that undergirds the green economy and contemporary development policy in Africa.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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