Pastoral Grazing in Tanzania's Village Forest Reserves: Unearthing Extra-ecological Motives for (In-)Compatibility

Benezet M. Rwelengera* & Jumanne M. Abdallah§

Abstract

Narratives and discourses on pastoralism-forestry relations continue to oscillate. This paper examines what shapes the views, and with what broader implications. In this regard, we conducted a qualitative, multi-scalar analysis at village, district, and national levels. We conducted 40 interviews, and 31 focus group discussions, and reviewed 70 documents. The findings revealed that debates about grazing-VLFR incompatibility are not exclusively hinged on ecological sustainability, but are a cocktail of extra-ecological concerns closely connected to dominant ideological and institutional positions. These include the socio-politics of identity and belonging, costs of conservation, peace and security, and economic and scientific epistemes mobilised by different actors in support of, or against the motion. Further, the findings reveal that it is not just about what happens in/or to the forest that is of concern, but who does it. Also, it is not a livestock grazing 'problem' per se, but broadly a pastoralism 'problem'. Hence, the findings highlight the implications of the dominance of technocratic values and scientific principles in reinforcing the notion of incompatibility, and silencing diverse on-ground realities. Overall, broader pastoralism-forestry relations in Tanzania remain in limbo, rendering pastoral livelihoods prone to displacement in the name of conservation and modernisation.

Keywords: extra-ecological concerns, pastoralist-forest relations, incompatibility, village land forest reserves, Tanzania

1. Introduction

This research will help us to control these invaders [i.e., pastoralists]. Please help us understand why they are invading forests. Help us know what is going on ... Your study should help us understand the reasons for going to forests and how we can counter them.

Ranking Official, Uvinza District Commissioner's Office, Uvinza, 12.10.2020

These remarks were made at the beginning of the Livestock in Forests (LIVEFOR) project during a rapid collective enquiry in October 2020. The official described an unsettling image of pastoralist-forest relations in Uvinza

^{*} Department of Food and Resource Economics, University of Copenhagen (Corresponding author: benrwelengera@gmail.com)

[§] Department of Forest and Environmental Economics, College of Forestry, Wildlife and Tourism, Sokoine University of Agriculture

¹ The primary goal of our inquiry was to identify villages with village land forest reserves (VLFRs) where pastoral and agropastoral (PAP) communities graze — whether as a right or practice.

district. In the two-hour discussion, we learned about the contestations with the records of fines, arrests, injuries, and fatalities. Little did we know then that we were to embark on an important journey of discovery; a journey that was to unveil the complexities of grazing in village land forest reserves (VLFRs). We selected VLFRs because they account for 46% of the total forest cover in Tanzania (URT, 2015a), and are a forest category where villagers can ostensibly prescribe uses based on customary practices (URT, 2002). Moving to the five other districts, emotions and views on the topic oscillated. With harmonious coexistence reported in some villages and districts, it was a problematic relationship in others, illustrating deep contestations.

The following year, in 2021, interviews with ranking officials in the Ministry of Natural Resources and Tourism (MNRT) and Livestock and Fisheries Development (MoLF) on whether VLFRs could be conceived as grazing sites revealed differentiated views between and within ministries. What caught our attention was how grazing appeared ideologically and institutionally normalised and compatible with VLFRs in some areas and to some people, but not to others. We thus conducted a multi-scalar analysis to unpack these variations. We were particularly interested in understanding what shapes the diverse positions at different scales, and to illuminate the resulting broader implications for pastoralism-forestry relations in Tanzania.

This analysis is important because the separation of livestock from forests is a product of 18th-century European scientific forestry. This forestry carved out forests from the landscape, creating enclosures and legitimating state control based on certain scientific principles and practices focused on production (Lang & Pye, 2001; Sungusia et al., 2020). In time, through colonialism, such principles spread throughout the colonised world. Pastoralism-forestry relations were naturalised as incompatible. However, recent literature challenges such a naturalisation. Studies highlight positive, negative, or neutral impacts of grazing in forests (cf. Öllerer et al., 2019). Furthermore, political ecology and decolonial studies reinforce the need to investigate the remnants of colonialism (Collins et al., 2021).

The remainder of this paper is organised as follows. First, we contextualise and historicise pastoral grazing in Tanzanian forests, while illuminating the colonial continuities. Next, we describe the new institutional political ecology (NIPE) as the conceptual framework. Then, we describe the context of the study and the methodology used. A presentation of the results and discussion follows. Finally, we present our conclusions and recommendations.

1.1 A Brief History of Grazing in Forests in Tanzania

Grazing in Tanzania's forests, as in many parts of Africa, predates colonialism. It is a history rich in socio-ecological relationships. Scholars --

such as Conte (1999) and Sunseri (2003, 2009) -- have demonstrated this history in Tanganyika (present-day Mainland Tanzania). Conte (1999) reconstructs the pre-colonial forest landscapes, revealing the harmonious socio-ecological relations even with the non-herding 'indigenous' communities in West Usambara. Both Conte and Sunseri illustrate disruptions in such relations after colonialism. Based on this, we connect post-colonial developments with the workings of the colonial state.

However, we are cautious about the limitations of situating our analysis of the grazing history from the colonial period. First, it obscures important long-lasting relations that predate colonialism, thereby affecting analytical thought (Neocosmos, 2012). Second, it subtly reinforces a false—yet widespread—notion that African history began with the advent of colonialism (Davis, 1973). However, while recognising these concerns, we base our analysis on this period since colonialism imposed a 'new' architecture of socio-political and economic organisation, forming the foundation for modern-day life (Ocheni & Nwankwo, 2012) that displaced African philosophies (Mudimbe, 1988). Therefore, regarding pastoral-forest relations, we conceived the workings of the colonial state in five broad areas:

- (a) The carving out of forests from the landscape, thus rendering them off-bounds to pastoralists (Schabel, 1990; Neumann, 1997).
- (b) The othering of pastoralists as irrational, violent, backward, etc., hence the need to be contained (Hill & Moffet, 1955; Ndagala, 1990; Sunseri, 2013).
- (c) The shaping of knowledge in establishing the Olmotonyi Forestry Training Institute in 1937, and the Overseas Food Corporation in the late 1940s.²
- (d) The construction of crisis narratives producing excesses of the state to 'protect' forests (Schabel, 1990).³
- (e) The elevation of sedentary modes of production, while demonising nomadic modes (Mamdani, 2012).

Whereas colonialism discursively constructed and institutionally concretised incompatibility, the post-colonial state did not diverge from this trajectory. Therefore, the post-colonial period could be interpreted as an extension of coloniality (Rwelengera, *forthcoming*). For example, upon Tanganyika gaining independence in 1961, the post-independence state's 1964 amendments to the 1957 Forest Ordinance did not de-criminalize grazing in

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² See https://www.narco.go.tz/pages/history accessed 26th Sept. 2024

³ Crisis narratives are generalised statements that conjure images of threatening events and serious risks thereby effectively shaping public understanding (Spector, 2019).

forests (URT, 1964).⁴ Decades later, the Forest Act of 2002 (URT, 2002) broadly maintained the limits to grazing in forests, save for Section 34(4)(e) which provides some leeway for conceiving grazing in VLFRs.⁵ Furthermore, the present-day envisioning of livestock husbandry remains geared towards ranching, sedentarisation, destocking, and hybridisation. This is particularly evident in key institutional documents, such as the National Livestock Policy (2006), and the Tanzania Livestock Modernisation Initiative of 2015 (URT, 2006; 2015b). In upholding pastoral irrationality, crisis narratives are produced; especially regarding environmental degradation, the spread of social conflicts and diseases, etc., as amplified in the National Livestock Policy (URT, 2006).

1.2 New Institutional Political Ecology: A Conceptual Framework

This section explains the new institutional political ecology (NIPE), and how it was mobilised to examine the divergent positions on grazing in VLFRs. NIPE was preferred because it combines an analysis of (new) institutionalism with power relations to understand broader socio-political and ecological processes. In marrying new institutionalism with political ecology, NIPE provides more "... clarity on the historically driven power relations and institutional changes" that shape behaviour (Haller, 2017: 210). NIPE was useful for unearthing the role of power and ideologies shaping access to, and use of (common pool) resources (Haller, 2017; Haller et al., 2020). We applied NIPE as a conceptual and analytical framework to dissect multiple grazing positions in VLFRs. NIPE informs the analysis of how differently powered actors stake claims to control the forest (Karlsson, 2016). Given the varying levels of power relations between and within the three scales, it was essential to examine how specific arguments about grazing in VLFRs are (il)legitimised. Our analysis focuses on institutions and ideologies because the combined effect of the two produces acceptable sociopolitical behaviour (Debrunner, 2024; Haller, 2019).

Ideologies are "... the basis of social representations shared by (the members of) a group," thus shaping socio-political and ecological landscapes (Dijk, 1995: 115). In *Discourse, Opinions and Ideologies*, Teun van Dijk argues that "... people derive and support their opinions relative to the principles of social attitudes and ideologies of their group, or to the underlying norms and values of society and culture, generally" (ibid: 124). Ideologies are important since they reflect the fundamental values that a group/society upholds (Lindberg, 2017). Therefore, ideologies are vital in explaining the diverse positions that actors hold regarding grazing in VLFRs. In a study on pasturelands in the

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⁴ The Amendment only inserted section 22(a) into Forest Ordinance Cap. 389 of 1957 which focused on forest produce.

⁵ The section grants villages the mandate to prescribe uses per customary rules and practices within the area (URT, 2002)

Southern Province of Zambia, Haller (2019) presented tradition and modernity as key ideological positions on grazing in the commons.

Institutions, on the other hand, are structures that constrain or enable behaviour (Hodgson, 2000). They are 'regulative devices' (Haller, 2002: 8) that shape action, practices, and behaviour (Bartley et al., 2008; Vielba, 2006). While appreciating institutions as multi-layered, Saravanan (2015) presents the relationship between agents and institutions. The author observes that institutions are (re)produced by the differentiated powers of agents as they negotiate and navigate the socio-political landscape (ibid.). On the other hand, Carrigan and Coglianese (2011) highlight the value of institutions in studying the politics of regulation that shape behaviour. In decentralised natural resource governance, Bartley et al. (2008) describe the value of institutions in understanding the complexities of actors navigating decentralised spaces. On grazing in VLFRs, we sought to examine how institutions are instrumentalised at different levels of decision-making.

In mobilising NIPE, we examined ideologies and institutions surrounding pastoralism-forestry relations in general, and grazing in VLFRs specifically. The analysis of ideologies was inspired by Lindberg (2017) who proposes an examination of values (desires), descriptive statements (i.e., narrative accounts or situational analyses), and prescriptive statements (policy suggestions or practical solutions). In each scale, we analysed the values, descriptions and prescriptions regarding grazing in VLFRs; and their totality in defining (in)compatibility. On the other hand, institutions were examined to understand the procedures for legitimizing the values/uses of VLFRs. Rules normally place boundaries for actors and choices of actions (Bixler et al., 2015). In villages, we analysed rules and by-laws defining acceptable practices/rights in VLFRs. In districts and at the national level, we looked into the laws, policies and strategies on the same. At each scale, however, we acknowledged Ostrom's (2006; 2011) position on the distinction between rules-in-use and rules-in-form; with the former reflecting practices that may not necessarily be instituted but are still important in shaping behaviour. Combined, ideologies and institutions guide discussions on, and decisions over, (in)compatibility by shaping patterns of thought and language in use to legitimate actions (Lindberg, 2017).

2. Context and Methods

2.1 Context of the Study

As part of the LIVEFOR project, we began with two rapid surveys—in October 2020, and July and August 2021—covering 12 villages in six districts and five regions (Table 1 and Figure 1). The regions were selected purposefully based on the influx of agro-pastoralists from the mid-2010s (Kigoma and Katavi), the presence of formalised grazing in VLFRs (Manyara and Morogoro), and a new immigration hot-spot for agro-pastoralists (Ruvuma).

Sn	Region	District	Village	Main Herding Community
1	Kigoma	Uvinza	Chakuru*	Agro-pastoralists
			Mwamila*	Agro-pastoralists
			Mgambazi	Agro-pastoralists
2	Katavi	Tanganyika	Vikonge*	Agro-pastoralists
			Mpembe*	Agro-pastoralists
3	Manyara	Kiteto	Sunya*	Pastoralists
			Olkitkit*	Pastoralists
			Ndotoi*	Pastoralists
			Lengatei*	Pastoralists
4	Morogoro	Morogoro	Diguzi	Pastoralists
		Ulanga	Kichangani	Pastoralists & agro-pastoralists
5	Ruvuma	Songea	Ngadinda	Pastoralists & agro-pastoralists

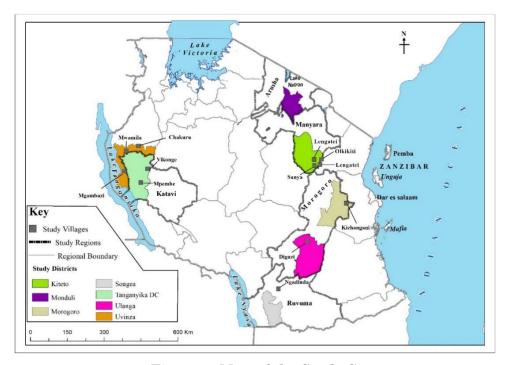


Figure 1: Map of the Study Sites

Based on the data from the rapid enquiry, we used an eight-point matrix to select villages for further in-depth fieldwork (Table 2). With eight villages scoring six points, Diguzi and Kichangani were eliminated based on

accessibility and logistical challenges. Chakuru and Mwamila in Uvinza district were preferred over Vikonge in Tanganyika to permit intra- and interdistrict comparisons. Similarly, two Kiteto villages were selected: Olkitkit was selected based on the score on criteria seven (7); while Lengatei was strategically selected because it has both farming and pastoral households. Sunya, the ward headquarters, was a business and service hub, with relatively less interaction with VLFRs.

Villages Visited Mgambazi **[gadinda** Mwamila MpembeVikonge engate S/N Selection Criteria Presence of VLFRs Pastoralists in VLFRs 2hAgro-pastoralists in VLFRs Grazing as a right Influx of pastoralists (from 2010s) Conflicting/competing uses in VLFRs Presence of VLUPs Unanimous pro-grazing views in VLFR Accessibility and Logistics **Total Scores**

Table 2: Villages Selection Matrix

2.2 Description of Study Sites

This section describes the four villages—Mwamila, Chakuru, Olkitkit and Lengatei—where in-depth data collection was carried out between February 2022 and July 2023. Focusing on these villages permitted a detailed examination of lived experiences, while granting opportunities for comparison with the remaining eight villages.

Both Mwamila and Chakuru are in the Uvinza district. Historically, crop cultivation and fishing have been the most common socio-economic activities in the district. Livestock keeping has largely been on a small scale, and so is common poultry. However, owing to climate-induced displacement, Uvinza has been a hotspot destination for Sukuma agro-pastoralists hailing from the Lake Zone regions of Simiyu, Geita, Shinyanga, and Mwanza, especially since 2014, (Ndesanjo, 2021). The Sukuma are, by far, the largest ethnic group in Tanzania. The district has been home mainly to Burundian refugees since the 1970s. On the other hand, Lengatei and Olkitkit villages are in Kiteto district. Whereas Olkitkit is predominantly made up of Maasai pastoralists, Lengatei

has a notable population of the Nguu, who are mainly farmers. Historically, pastoralism has been the dominant activity in the district. Kiteto is also home to the renowned SULEDO VLFR (Equator Prize winner of 2002), exemplifying the institutionalisation of grazing in the VLFR.⁶

2.3 Data Collection and Analysis

Data collection and analysis began from the villages through districts to the national level. Guided by the NIPE, we analysed the values, descriptions, prescriptions and rules informing views and positions on the topic. In villages, we conducted focus group discussions (FGDs), unstructured interviews, document reviews, and observations. Most data were collected in the first half of 2022. Thirty-one (31) FGDs were conducted with varying composition groups (leaders, natural resources/environmental committees, elders, women, youths, pastoralists, and farmers). Participants in the FGDs were selected with the aid of village leaders, based on the specific needs of each group. Conversely, eight (8) key informant interviews were held. These were with ward councillors, ward executive officers, village executive officers, and elders. We also reviewed village land-use plans, by-laws, meeting minutes, and maps.

At the district and national levels, we conducted unstructured interviews with key informants, and reviewed documents. The twenty-four (24) interviewees in the districts were selected based on four criteria: (i) the overall administrative and executive arms of the districts (the office of the District Commissioner, District Administrative Secretary, and District Executive Director – DED); (ii) officials with direct functions in the forest or livestock sectors in the offices of the District Forest Officer, District Forest Conservator (DFC), District Beekeeping Officer, and District Livestock Officer (DLO); (iii) officials in related departments (District Agricultural Officers, District Natural Resources Officers, and District Surveyor); and (iv) other key stakeholders—with institutional memories—directly affected by, or shaping actions (former members of parliament, land management programme coordinators, and chairperson of the pastoralists association).

At the national level, eight (8) interviews were conducted in the MNRT and MoLF with ranking officials in the Departments of Veterinary Services, Research and Extension Services, and Grazing Land and Animal Feeds Resource Development in the MoLF, and the Forest and Beekeeping Division in the MNRT. We also interviewed non-state officials involved in participatory forestry (i.e., Forestry and Value Chains Development (FORVAC) Program, the

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⁶ SULEDO, a joint VLFR of 13 villages, institutionalised grazing from the mid-1990s. For Prize details, visit https://www.equatorinitiative.org/equator-prize/

⁷ In Kiteto it was possible to conduct forest walks and attend meetings. In Uvinza security concerns limited our ability to explore the VLFRs.

Mpingo Conservation and Development Initiative (MCDI), and grazing rangelands development (Tanzania Natural Resources Forum (TNRF)). Furthermore, we reviewed legislation, policies, programs, plans, strategies, and interventions related to forests, livestock, and the environment.

Data were analysed qualitatively to appreciate the unfolding dynamics of everyday life (Middleton, 2012). Interviews and focus group discussions were transcribed and typed. Using the NVivo 13 software, the transcribed and documentary data were coded deductively, and emergent codes were added in due course while identifying themes and patterns. We carried out a narrative and discourse analysis focusing on values, descriptions, prescriptions, and rules to unpack ideologies and institutions that shape positions on grazing in VLFRs.

3. Results and Discussion

Our analysis revealed that debates about whether to graze in VLFRs extend beyond ecological reasons, to what we broadly refer to as extra-ecological concerns. This section discusses the arguments—for or against—mobilised on grazing in VLFRs and their ramifications.

3.1 Village Socio-politics and Ecological Histories

Grazing in VLFRs in Mwamila and Chakuru was presented as problematic. During FGDs and informant interviews, respondents repeatedly attributed deforestation in VLFRs to the influx of agro-pastoralists. Reference was made to the Chakuru, Kabucheri, Tubira, and Kwanishati forests as sites of evidence. For instance, during FGDs in Mwamila village in October 2020, one participant equated their VLFR to savings that agro-pastoralists had fully expended. Later, in March 2022, such remarks were reiterated in the same village in a joint farmer-pastoralist FGD. "The situation in Tubira forest is very critical; we are down to the last trees," remarked one of the participants. "Tubira is a disaster!" added another one. This description of the state of Tubira Forest was not contested by agro-pastoralists in attendance; and who were largely blamed for the deforestation. The Global Forest Watch (GFW) data for Uvinza district, and specifically for the Tubira VLFR, confirms such concerns by indicating significant forest cover losses from 2021.

However, attributing deforestation broadly to agro-pastoralists masks the complexity of the pastoralism-forestry relations, especially because the respondents did not explicitly mention grazing as a factor. We learned that deforestation in VLFRs in Mwamila and Chakuru was mainly due to agro-pastoralists clearing forests to open farms and establish settlements, charcoal-making, and forest fires. An earlier study, by Ndesanjo (2021), had similar findings on deforestation in Uvinza in the wake of pastoral migration. Despite grazing's limited contribution to deforestation, villagers remained adamant

about prohibiting grazing in VLFRs. Strong anti-grazing sentiments were advanced based on the premise that farming and grazing could not be disentangled from agro-pastoralists relations with forests.

We realised that anti-grazing sentiments were latently anti-pastoralist sentiments connected to the increasing Sukuma population in the villages. The fear of potential 'take-over' was reflected in the labels of 'invaders' or 'strangers' being used to refer to the Sukuma agro-pastoralists, but not to the Tutsi pastoralists hailing from Burundi, because the former can openly own land and engage in local politics. These concerns were echoed in Tanganyika villages, particularly in Mpembe where a village government official remarked: "If we are to conduct a sudden roll call, I wouldn't be surprised if the Sukuma are more than other ethnic groups" (Interview, 14.10.2020). Such views reflect the complexity of the relations and debates on migrating pastoralists and host communities in Southern Tanzania as articulated by Brockington (2001; 2006), who urges careful assessment of the factors. Anti-pastoral rhetoric in Mwamila and Chakuru was connected to the socio-politics of identity, belonging, and social embeddedness.

Our analysis of the Kigoma Region Socio-Economic reports for 1998 and 2016 illuminates a changing socio-economic and demographic landscape (Table 3).

Table 3: Changing Socio-political, Economic and Demographic Landscape

	Kigoma Region Socio-Economic Profiles for 1998 and 2016		
Aspect	1998	2016	
Regional Ethnic Groups	The Waha are listed as the dominant tribe in the region. The Sukuma are mentioned as one of the few ethnic groups	The Sukuma are no longer referred to as few, and they are listed together with Waha as other tribes.	
Regional Socio- Economic Activities	The report states that the Kigoma region's economy is primarily agricultural (90%). There is no mention of livestock keeping as one of the activities.	Whereas the report recognises that agriculture is the main economic activity in the Kigoma Region, employing more than 70% of the population, it acknowledges that livestock also contributes significantly to the regional economy.	
Regional Livestock Population	Cattle - 79,851 Goats - 207,892 Sheep - 43,100	Cattle - 639,988 Goats - 458,573 Sheep - 108,713	
Cattle Distribution in Uvinza	Due to tsetse flies, the report notes that there are no cattle along the Lake, South of Kigoma - Kasulu road and along the railway line in Nguruka and Uvinza villages.	In 2016 Uvinza was ranked second in the region with 255,055 cattle, or 39.9 per cent of the total regional number.	

Apparently, from the table, agro-pastoralists are felt across the landscape. First, the Sukuma population is increasing from one of the minor ethnic groups to one of the major ones. Second, they are making significant contributions to the regional economy from livestock production. Third—and perhaps the most notable—while no cattle were recorded in the present-day Uvinza area in 1998, as of 2016 there were more than 255,000 cattle.

Concerns over the number of agro-pastoralists could be read as a 'siege from extra-local incursions' (Garbutt, 2006: 4). Perhaps Wallin-Fernqvist (2023: 335) describes this best when she notes that there is a village in Uvinza called 'Tabora Ndogo' (Little Tabora), since only the Sukuma live there, many of whom hail from Tabora region. The fears due to the influx of migrating agro-pastoralists are carefully fused with ecological concerns: what Brockington refers to as the 'environmental-conservation complex' (2006: 102). Villagers restate the national ideological framework of conservation and modernisation that denounces pastoralism. In deploying environmental discourses, villagers latently conceal extra-ecological motives while gaining an important ally—the state—who is implicitly tasked to intervene (Brockington, 2001; 2006). Therefore, despite masquerading as solely ecological, socio-political dynamics are central to anti-grazing in VLFR arguments.

Findings from Olkitkit and Lengatei villages revealed a different scenario. There was a unanimous consensus in Olkitkit that pastoral grazing and forestry were compatible. The interviewed elders reminisced about their youthful days in the 1950s and 1960s when they herded in the present-day SULEDO VLFR; and that, historically, the forest has served as a source of pasture during dry seasons. Grazing was a key use of forests before the imposition of scientific forestry. Pastoralists, therefore, have a vested interest in sustaining the VLFR. As Frandy (2018) argues, communities do not sustain resources; but sustain their relationships with resources. This is epitomised by Section 4(iii) of Olkitkit village's forest by-laws (1997) that permitted grazing in the forest reserves before Tanzania's decentralised forest policy of 1998. Perhaps one of the most enduring responses regarding grazing in the VLFR was made in discussions with members of the SULEDO Environment Committee. When asked about the future of the VLFR in 30 years to come, if grazing continued, it was unanimously agreed that the forest sustainability depended on formalised grazing, stressing that herders are the first line of defence against illicit practices. One participant stressed the following:

From the days of our forefathers, the herder is the primary forest guard. They grazed here, and the forest is still here. Most of us are here at this meeting and do not know what is happening in the forest. However, herders are grazing there now. They are the first line of defence. If herders see invaders, they try to apprehend them; if they cannot, they call us (Participant, FGD, Sunya Village, 27.06.2022).



Photo 1: Livestock Grazing in SULEDO - VLFR

Source: Fieldwork, March 2022

Despite the acknowledgement of the role of pastoralists in forest conservation, non-pastoral respondents, especially in Lengatei village, argued for the prohibition of grazing in VLFRs. These respondents relied mainly on crop cultivation. The main concern was that farming communities were the only ones unequally bearing conservation costs since the VLFR limited their ability to expand their farmland, while pastoralists continued to benefit from grazing in the VLFR. An elder in Lengatei stressed that "... there is favouritism and double standards because others are allowed to graze in the forest, but we are not allowed to cultivate" (FGD with Elders, Lengatei Village, 14 March 2022). Farmland expansion was therefore futile because of the VLFRs. Li (2007) uncovers the politics in contention and the challenge of balancing conservation and livelihood goals, especially when pastoralists and farmers see the VLFR differently. Whereas forest conservation constrains the expansion of farmlands, it grants pastoralists disproportionate grazing benefits. Anti-grazing sentiments in this case rest on such contentions.

3.2 Securing Peace and Revenues

In the different districts, security, ecological, and economic concerns shaped the grazing-VLFR debate. Anti-grazing arguments were based on pastoralists' disregard for the rule of law, leading to conflicts and deforestation. The quote at the beginning of this paper reflects the concerns in Uvinza District. In that

interview, the official informed us that the district "... shall take decisive measures to evict the agro-pastoralists from forests after the General Elections" (Interview, 12.10.2020). A TFS official in Uvinza reiterated the viewpoint stressing that "... agro-pastoralists are a menace to communities, forests, the police and government generally (Interview, 10.10.2020)." Later, we discovered that this position was connected to recurring agro-pastoralists-related confrontations. This delicate state of relations has also been shown by Ndesanjo (2021) and Wallin-Fernqvist (2023).

Specific reference was made to the Mwanduhubandu case, where three police officers were killed in the line of duty in October 2018 allegedly because agropastoralists resisted eviction from an area in Mpeta village slotted for ranching. In mid-2022, the district's commitment to evict pastoralists from Chakuru materialised. Unfortunately, a few months later, it led to three fatalities and four injuries of Uvinza forest officials in the line of duty. The history and memory of such altercations and losses inform the urgency of addressing the pastoral 'problem'. We use 'problem' with caution based on the dominant discursive construction of pastoralism as a liability to be replaced instead of being developed (cf. Johnsen et al., 2019; Odhiambo, 2021). Furthermore, district authorities were concerned about the disruptions caused by changes in land use due to the establishment of farms and settlements in VLFRs. This formed the basis for ecological concerns, as highlighted by an official in Uvinza DED's office:

The state of forests is alarming. I wish to clarify that it is not just grazing; these Sukuma, when they go to the forest, do more than one thing (pauses and smiles). They farm, establish settlements, graze, and produce charcoal (Official, Office of the DED-Uvinza, 12.10.2020).

While acknowledging the ecological and security concerns as legitimate, forest and livestock-keeping officials in Uvinza endorsed regulated grazing in VLFRs. Such a position was unexpected, especially for foresters, given the educational predisposition that produces officials positioned to distinguish acceptable forest values from crimes, with grazing being regarded as the latter (Sungusia et al., 2020). The ideological shift could be attributed to the closer and more regular handling of VLFR-related conflicts and contestations than their counterparts at the national level in corresponding portfolios. Accessing VLFRs is presented as a means towards functional peace.

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⁸ The General Elections were on the 28th of October 2020, roughly two weeks after our interview on the

⁹ See https://thrdc.or.tz/PressReleasefiles//PRESS_RELEASE_TO_CONDEMN_THE_KILLING_OF.pdf accessed 20th July 2024

The three officials met their untimely demise on the 31st of January, 2023 while patrolling the Chakuru forest reserve https://www.mwananchi.co.tz/mw/habari/kitaifa/wanaodaiwa-kuuawa-na-wafugaji-kigoma-watambuliwa-4109176 accessed 6th August 2024

Furthermore, an official from the District Livestock Office provided ecological arguments for exclusive grazing given its minimal impact on the forest. The official, referring to the Malagarasi River, 11 hinted that the side exclusively grazed by Tutsi pastoralists fairs better than the side grazed by Sukuma agro-pastoralists. This brings to the fore the value of regulated exclusive grazing. An official in the Uvinza Forest Office submitted four potential benefits of formalised grazing:

I agree that grazing in VLFRs is a good idea. It is a potential source of revenue if we put a payment mechanism for access; it will reduce the current corrupt practices from the patrols; it will improve forest health as grazing will be regulated unlike now; and it will lead to a reduction in conflicts and deaths (Official, District Forest Office Uvinza, 28.03.2022).

In Kiteto, district officials were more accommodative of pastoral grazing in VLFRs. Our analysis unearthed that grazing in VLFRs was presented as an antidote to ecological and security concerns. The district, we were informed, recorded minimal adverse impacts from grazing in forests. For instance, the district's beekeeping office reported that grazing does not affect herb generation or nectar production. Moreover, a senior official at the Kiteto TFS office insisted that expanding farmlands, and not grazing, as the major threat to forests in the district, since grazed areas still have trees, unlike the farmed ones.

I have been here for six years. Without actual mapping, there has been a decline in forest area. Each year, new farms are opened ... Grazing has little impact on forest loss because herders do not cut trees. Perhaps the trampling affects seedlings. Unlike in the grazed area, you rarely find any trees in areas continuously farmed for the last five years (TFS Official, Kiteto, 22.01.2022).

Grazing in VLFRs was therefore submitted as the 'lesser evil' given the comparatively less adverse impact. Such a position is supported by Doggart et al. (2020) who extended that agriculture—through the conversion of forests to agricultural land—is the main driver of forest degradation in Tanzania. There was, therefore, tolerance in the district for grazing; but not farming in forests. Beyond ecological arguments, Kiteto's district revenue stream highlighted the significant contribution of the livestock sector. Between 2017/18 and 2022/23, the livestock sector contributed an average of close to 30% of the district's revenue (Figure 2). This contribution of pastoralism highlights the need for enshrining harmony. This could explain the district's non-confrontational approach towards pastoralism. This pro-grazing and mobility stance is revealed in the district's commitment to designate over 150,000 hectares to protect shared grazing land. 12

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¹¹ The Malagarasi River beginning near the Burundian border, is 475 km long and has the largest watershed of all the rivers flowing into Lake Tanganyika (Piel et al., 2013).

¹² See https://www.fao.org/land-water/land/land-governance/land-resources-planning-toolbox/ category/ details/es/c/1236459/, accessed January 6, 2025

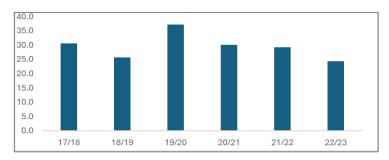


Figure 2: Percentage Contribution of the Livestock Sector in Kiteto District (2006–2023)

Source: Kiteto District Council

3.3 Sticking with Principles

At the national level, depending on who you spoke with, consensus remained elusive. We recorded a significant divergence in ideologies at the MoLF. The position of the MNRT was clear: VLFRs are essentially not different from other forest reserves, and grazing is not a forest activity. Broadly, incompatibility narratives were anchored around the impacts on the forest and the livestock. On the other hand, affirmative arguments were grounded on the need to see VLFRs as potential grazing sites, thereby guaranteeing access to pasture.

The incompatibility argument was centred around the adverse biophysical impacts from grazing in forest reserves. Although the study focused on grazing in VLFRs, respondents made little distinction, if any, between the categories of forest reserves. For example, after briefing a ranking official in the Forest and Beekeeping Division (FBD) at the MNRT, he asked us: "Why only [focus on] VLFRs and not on other forests? This is a national problem and not a village one only" (Interview, 23.06.2022). The remarks reflect an ideological position that forests should be livestock-free, thereby problematising grazing across all forested landscapes. This rationality, coupled with the institutions in place, has been shown by Rwelengera (forthcoming) to naturalise incompatibility in Tanzania. Our reading of key forest institutions—the policy, acts and regulations (URT, 1998a; 2002; 2004)—revealed the ideology-institution marriage in presenting the limits to seeing grazing in VLFRs. For example, Forest Regulation 14(4) (a) stipulates that: "No licence for grazing or cultivation shall be issued in any natural forest" (URT, 2004: 13). This presents a blanket prohibition based on how forests are seen: biophysically. Remarks by a senior official in the FBD reflect this position:

Our take within the government is to restrict grazing for fear of adverse effects on the biophysical aspects of the forests... If you prove beyond reasonable doubt that the biophysical aspects and that **my** bees will be ok – (laughs) then I will be okay (Senior Official, FBD, 23.06.2022).

The use of the possessive determiner 'my' reflects the dominance of scientific forestry. It reveals, at least theoretically, the carving out of forests from the landscape (Sungusia et al., 2020). By claiming authority and ownership over VLFRs, the state mobilises strategies to implement forestry principles across the board, thereby imposing national-level ideology onto lower levels. Local contexts and histories are made invisible when defining what is acceptable in forests. As Staddon (2021: 14) argues, it epitomises the degree to which foresters' knowledge "... lacks genuine engagement with the knowledge and practices of forest-dependent communities." Comments by a senior official in the MCDI reiterate Staddon's observation. The official was unwavering in his professional opinion that "... grazing is not part of forest activity" (Interview, 26.04.2022). By marshalling tenets of scientific forestry, national-level rhetoric illuminates the limits of approved practices in VLFRs.

In the MoLF, grazing in VLFRs was presented as not being in the livestock sector's best interest. It was argued that allowing grazing in VLFRs sustains pastoral mobilities, which is discouraged within the grand pastoral modernisation schema as highlighted in Tanzania's Livestock Modernisation Initiative (URT, 2015b). The dominant ideology in the initiative counters pastoral mobilities, while envisioning pastoral sedentarisation and hybridisation (ibid.). This was echoed by an official in the Division of Research and Extension at the MoLF, who stressed: "Mobility was viable in the past [and that] it is no longer practical [since] traditional grazing poses various challenges" (Interview, 31.01.2022, Dodoma). Fundamentally, this is a restrictive ideology of governing pastoralism by containment (FAO, 2022). Thus, it was repeatedly stated that the current pastoralism trajectory cannot be sustained given the available landmass in the country; and that scientific and animal husbandry principles do not condone grazing in VLFRs.

One cow needs 2.5 hectares annually. Tanzania's landmass would not be enough for the 34 million cattle that we have. If we take cattle, sheep, and goats, we must take the whole of Tanzania and Kenya. I strongly discourage the idea of taking livestock to the forests. ... I think we should stick with principles (Official, Division of Veterinary Services, MoLF, Dodoma, 01.02.2022).

Further, grazing in VLFRs was presented as a health risk to livestock and humans. In sticking with the principles—ideologically and institutionally—grazing in VLFRs is concretised as incompatible. It is advanced that livestock are at risk of contracting different diseases like Ebola, anthrax, avian flu, and rabies should they graze in VLFRs; diseases that could later be transmitted to humans and other livestock. The financial burden and the limitations of tapping into the international meat trade were the two main concerns. We were informed that in the Ngorongoro Conservation Area Authority (NCAA) alone, the MoLF spends significant funds on vaccination and disease control. The official went on to dismiss any considerations for grazing in VLFRs:

The government spends millions of shillings to control livestock diseases in Ngorongoro. If you ask me to take livestock to the forests, I will automatically say 'No!' I would not want my livestock to be taken there (Official, Division of Veterinary Services, MoLF, Dodoma, 01.02.2022).

Again, the possessive determiner 'my' indicates custodianship over all livestock. The determiner reveals the underlying ideology and institutions of authority at the national level dictating what should happen in lower levels. Even though the NCAA is neither a VLFR nor a forest category, but a (wildlife) conservation area, the argument was crystalised around wild spaces. In this regard, VLFRs were presented as wild spaces and, thus, off limits for livestock. The wildlife-forests union is amplified in the revised Wildlife Conservation Act No. 5 of 2009 (R.E 2022), which carefully fuses the wildlife, forest and bee ecosystems. Forests, therefore, as wild spaces, are potential reservoirs for pathogens and parasites. Braam et al. (2023), however, contend that the topic is under-researched and the evidence remains inconclusive. The dangers of contracting diseases in forests, however, are instrumentalised; thereby amplifying crisis narratives on pastoralism-forestry relations.

Within the MoLF, nevertheless, there were arguments supporting grazing in VLFRs. An official in the Grazing Land and Animal Feeds Resource Development Department acknowledged that grazing in VLFRs is a proposal worth considering. "We are trying to provide what they are looking for," the official stated; further adding that "... grazing in forests could give evidence to our fellows – so that we use the forest to save animal life while sustaining forests and contributing to national income" (Interview, 31.01.2022). By 'our fellows,' the official meant those working in the MNRT, where more resistance was expected, possibly unaware of the resistance within the MoLF. Implicitly, the official connected grazing in VLFRs with the greater livestock modernisation initiative to reduce the distance travelled by pastoralists in search of water and pasture. This would, therefore, complement a smooth transition to a sedentarised pastoral system.

3.4 A Problem! To Whom, Where, and Why?

Grazing in VLFRs was indeed a 'problem', but not to all. When and where it was a concern, it was largely based on extra-ecological reasons. Importantly, we make two main contributions. First, at the lower levels, it is not just about what happens in or to the forest, but who does it. Secondly, at the higher levels, it is not a livestock grazing 'problem' per se, but a larger pastoralism 'problem'. The power of national-level technocrats weighs heavily on shaping what happens in VLFRs. In all three levels, it was apparent that the diverse actors were not reading the same conclusions from the same landscapes. It appears that the dominant ideologies and institutions advocate for separating livestock from forests. The predominance of national-level technocrats reproduces

colonial rationalities (Ojha, 2006), overriding and downplaying district and village-level experiences. The unchallenged national position contradicts onground realities, creating perfect conditions for tensions in thinking and practice; and clashes between what people need, the workings of district officials, and national directives. In a tribute to the Uvinza District Forest Officer that was killed in 2023, allegedly by agro-pastoralists, Wallin-Fernqivst best explains this anatomy of the conflicts. She writes that, in unpacking the dilemma, official staff find themselves in the:

... thesis [that] is written from the perspective of local people's experiences. This sometimes makes it appear as if the people working in official positions are the villains in this story, but this is, of course, not the whole truth. While the clash between local people's wishes and the official discourse within these institutions is genuine, the individual officers employed are also only people – people who work in an extremely difficult and many times dangerous environment; people who constantly have to navigate between doing what is right for people and what is in their job description (Wallin-Fernqivst, 2023: vi).

4. Conclusion and Recommendations

This study was guided by two key questions: (i) what shapes the diverse positions on grazing in VLFRs at different scales in Tanzania; and (ii) with what broader implications on pastoralism-forestry relations? Generally, whether to graze in VLFRs remains a contested subject. From the village to the national level, the results reveal that it is neither about the forest per se, nor the grazing of livestock. It is a heavy concoction of extra-ecological factors, carefully meshed with ecological concerns to define what should happen in the VLFRs and the broader landscape. Building upon diverse concerns (security, deforestation, and fears of extra-local take-over), actors (latently) mobilise discourses on environmentalism and modernity to render grazing in VLFRs untenable and worrisome. Conversely, building upon historical relations, economic gains, and peace strategy, grazing in VLFRs is presented as compatible and a necessary ingredient for forest sustainability. The appeal to scientific principles, mainly at the national level, regulates practices (pastoralism and forestry) and defines people (pastoralists). Ultimately, grazing in VLFRs is upheld as an anomaly in the ideology-institutions framework.

The main recommendations from the study are two-fold. Firstly, it is essential to appreciate the mesh-up of diverse factors that shape the grazing-VLFR relations. Striking a balance between the ecological and extra-ecological concerns is therefore tricky and requires an intricate peeling off the multi-layered construction of (in)compatibility. Secondly, it is essential to revisit and rewrite situated forest histories while appreciating the resilience of the pastoral and forest communities. Such a re-examination shall accommodate the varied contextual and historical specificities in villages, thereby re-connecting policy to

practice. A blanket prohibition invisibilises cases where grazing-VLFR relations are relatively balanced, and fuels anti-pastoral rhetoric epitomised in the excesses of the state sanctioning grazing in forest reserves.

The broader implications of the dominance of national-level ideologies and institutions reinforce tensions in theory and practice, i.e., tensions between acceptable forest values and uses, and thereby, correspondingly, defining forest crimes and criminals. On the other hand, the entrenchment of the anti-pastoral logic exposes pastoralists to displacement in the name of modernity and conservation leading to resource-based pressures and conflicts, further fuelling crisis narratives. Like a vicious cycle, the dominant ideologies and institutions remain at odds with specific on-the-ground realities where relations are harmonious. This begs the question: why don't we, as a people, take a pause and assess how policies, strategies, and popular rhetoric reinforce incompatibility with what pastoral communities co-exited with in the realm of landscapes with trees before the imposition of the new norm?

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