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Environmental Economies, Survival Ecologies, and Economic Interests in Pastoral Uganda: The Justice Question in the Socio-environmental Governance of Pastoral Resources of Karamoja

Kabiito, Bendicto[1]

Abstract: This paper presents a departure from the historical cataloguing of scarcity and poverty, as definitive frames of Karamoja sub-region of Uganda; a narrative that purports to portray the duo as natural, permanent and insurmountable features of the sub-region. This study demonstrates that these were both created in and projected onto the sub-region. The study provides evidence to the fact that; 1. Externally-driven pre-colonial, colonial and post-colonial undertakings (which are underrated in many analyses on Karamoja) are the building blocks of the protracted conflicts, insecurities and ecological damages that ravaged Karamoja; 2. The sub-region offers more potentials than limitations as studies on Karamoja tend to portray. This research report is an invitation to both inward and outward looking (of Karamoja) for diagnosis and solutions. Inspired by critical realism and environmental justice theories, the study interrogates policies, mentalities, actions and inactions that fostered economic and ecological exploitation of Karamoja; endangering environmental and social ecologies of the sub-region. Attention is paid to how these jeopardised the environment-based economy of the sub-region's population, while highlighting the human, ecological and economic potentials that need and deserve collective action for social and environmental re-address.

Key words: Karimojong, Colonial legacy, Pastoral communities, Environment based-economies, Insecurities

Economies environementales, écologies de survie, et intêrets economiques dans l'Ouganda pastoral: La question de justice dans la gouvernance socio-environementale de resources pastorales de Karamoja

Sommaire: Cet article se distingue du récit d'un catalogue historique de pénurie et pauvreté comme charactéristiques définitives de la sous-région ougandaise de Karamoja; le récit qui suppose projeter les deux characteristiques comme étant des faits naturels, permanents et insurmontables de la sous-région. Cette étude démontre que ces deux charactéristiques—pénurie et pauvreté—ont été créées et projetées sur

[1] Uganda Martyrs University, bkabiito@umu.ac.ug

la sous-région. L'étude met en evidence le fait que (i) les activités pre-coloniales, colonials et post-coloniales causées de l'extérieur (très moins soulignées dans nombreuses analyses sur Karamoja) constituent les points de base de conflits perennes, insécurités, et dégats écologiques qui ravagent Karamoja et que (ii) La sous-région contient plus de potentiels que de limites comme tant d'études sur Karamoja n'en projetent. Ce rapport de recherche est une invitation à un regard aussi intérieur qu'extérieur sur Karamoja pour la diagnostique ainsi que les solutions. Inspirée par les théories du réalisme critique et de justice environementale, cette étude interroge les politiques, mentalités, actions et inactions qui ont pérpetuées l'exploitation économique et écologique de Karamoja, ainsi donc mettre en danger les écologies sociales et environementales de la sous-région. L'attention s'attarde sur comment ces faits endommagent l'économie basée sur l'environement de la population de la sous-région, et en même temps souligner les potentiels humaines, écologiques et économiques qui ont besoin et méritent une action collective pour redressement social et environemental.

Mots clé: Karimonjong; l'héritage colonial; communautés pastorales; économies basées sur l'environement; insécurités.

Introduction

Karamoja[2] sub-region has continued to hang on the negative side of publicity, since the dawn of the British East Africa colonial rule. In 1962, Barber described Karamoja as "a barrier between the abundance of Uganda and the sparseness of the desert and semi-desert….", and Karimojong[3] as the problem of Uganda (Barber 1962, p. 111). Until recently, Karamoja is reported to have the worst performance in all important indicators of development and social wellbeing in Uganda. Particularly, it remains with the lowest welfare indicators on health, food security, poverty and literacy levels (Okiror 2015; OCHA-Uganda 2009). Karamoja is experiencing unprecedented biophysical changes (environmental degradation), social stresses and climate change impacts (Muganda 2010; Inselman 2003; Mbogga 2014), what Kagan et al. (2009) call 'the Karamoja syndrome'. Throughout colonial and post-colonial periods, the popularity of the area's communities was/has been woven around tags of violence, barbarism, primitivity and conservatism (Bell 1923; Mamdani 1982; Ocan 1993; Muhereza 2018), and they have been known as perennial perpetrators and victims of cattle raids. In the broader regional context, guns are reported to have become instrumentalities of both defence and offence, since the days of slave and ivory trade (Barber, 1962; Muhereza 2018; Ocan 1993; Muhereza 1998), up until the formal stop of the disarmament period in 2011 (Saferworld, 2012). Although many non-Karimojong may simplistically blame Karimojong and/or internal factors for insecurities, violence and underdevelopment in Karamoja, foreign/external factors (especially guns and colonial policies) have been central in shaping socio-environmental feedbacks and perceptions of the sub-region to date. In its history, Karamoja experienced waves of cattle and related resource conflicts, gun violence and insecurity, droughts, famine, animal epidemics, deprivation and variability of environmental resources, and environmental degradation (Ocan 1993; Muhereza 2018). While some of these conditions have natural and local triggers (and they are the centerpiece of most literature on Karamoja), this study reveals that their excesses were/are products of external economic interests, their political commissions and omissions, as well as their devastating and lasting impacts on the sub-region.

[2] It is a sub-region in north-eastern Uganda, bordering with South Sudan and Kenya. It is a pastoral region, the size of 27,000 km^2 and habited by around 14 communities, most of which are historically related and are pastoralists or agro-pastoralists. At this size, the sub-region makes 11.2% of Uganda.

[3] He referred to them as "a proud pastoral people who do not fit into the new Africa of nationalism, constitutional changes and subtle voting arrangements" (Barber 1962, p.111).

Anchored within the theoretical strand of critical realism (which, in part, is exemplified in the critical review of literature), this study highlights and discusses deliberate and systemic undertakings which brought about environmental and social exploitation of Karamoja. These hardly get the attention they deserve. To achieve this, state policies (most of which were exclusively implemented in Karamoja, and not in the rest of colonial and post-colonial Uganda) as well as their impacts on the environment-based pastoral economies have been evaluated. Going by the evidence of economic gains made by the colonial government through deliberate exploitation of the sub-region, as presented herein, it can safely be stated that the popularized belief that Karamoja is a land of scarcity and poverty is not only a diversionary mental construct, but also intent on suffocating the fact that where and when poverty and scarcity visibly exist, they are outcomes of external interests, exploitation and suppression of the sub-region.

Theoretical Positioning: Critical Realism and Environmental Justice Perspectives in the Context of Karamoja

This study institutes its reflections on the insights of the critical realism and the environmental justice theories. The critical realist theory is used in the interest of propelling the much-needed re-examination of social, economic and political interventions and dealings across the historical terrain of Karamoja, for fair positioning of the debates on the contemporary ramifications (socio-economic and environmental) in the sub-region. The environmental justice theory is meant to play two roles. First, to lay a basis upon which the environmental situation of Karamoja can be judged as a typical case of environmental injustice. Second, and most important, it is a potential advocacy tool for environmental re-dress in view of traceable environmental injustices.

The concept of environmental injustice originated from a realization that some communities/ human groupings are excessively exposed to higher levels of environmental risks than others, even in a same society. While this is a genuine concern, it is important to note that 'the environmental injustice concept' of this nature does not centralize environmental elements (other than humans), yet they (non-human environmental elements) are the biggest object of abuse and misuse by humans, in absolute terms. Instead, it is concerned with humans who face high environmental risk exposure resulting from anthropogenic environmental abuses (misuse). Initial environment justice advocacy movements were limited to "the issue of equity or the distribution of environmental ills and benefits" (Schlosberg 2004, p. 517). Subsequently, environmental justice expanded to encompass distributive conceptions of justice, alongside ideas of justice based on recognition, participation and increased capabilities (Schlosberg 2004; Bauler 2013).

In the context of Karamoja, the theory proposes the need for environmental injustice redress, which should take participatory and inclusive approaches. Schlosberg (2004, p.517) suggests that environmental justice take a triadic theoretical and practical response, namely (i) equity in the distribution of environmental risks; (ii) recognition of the diversity of the participants and experiences in affected communities; and (iii) participation in the political processes, which create and manage environmental policy. Schlosberg (2004) and Young (1990) are critical of liberal justice models, which preclude thorough examination of social, cultural, symbolic and institutional conditions that may underlie injustice. Feasible, applicable and successful environmental policies, therefore, should be locally grounded and theoretically broad - embodying matters of recognition, distribution, and participation. These important features almost always lacked in the policies and interventions that impacted both social and environmental systems of Karamoja.

On the matter of theoretical broadness suggested by the proponents of the environmental justice theory, I deduce the need for broadening the ontological focus of environmental justice theory and policies, to non-human environmental constituents, which often suffer blind or deliberate abuses from human beings. This

would, for example, draw the economically-driven hunting of elephants into environmental justice discourses.

Critical realism applied in this study is an intellectual product of Roy Bhaskar. The theory hinges on a premise that epistemology/knowledge (or, what we may claim to know) may be different from ontology/ existence or being (Bhaskar 2008). As a theory of knowledge, critical realism is built on a belief that there are unobservable happenings which cause observable events. Thus, the social world can be understood only if we understand underlying mechanisms that generate such unobservable happenings. Bhaskar (2008) suggests three domains that are worth our focus in search for knowledge on the basis of which solutions can be formulated. The domains; of the empirical (that which is experienced); of the actual (that which occurs - events and entities) and of the real (combination of the two above, and their underlying mechanisms with causal properties) (Bhaskar 2008; Priestley n.d). On the one hand, the critical element of the theory lies in its recognition of epistemic fallacies - the practice of examining ontological propositions in terms of epistemological propositions. Epistemic fallacies are caused by the inability to distinguish between ontological and epistemological realms. On the other hand, however, the realist element of the theory gives attention to the existence of different domains of the real (causal mechanisms), the actual (events and entities), and empirical (experiences). This theory applies to this study in two ways. First, the uncritical evaluation of happenings in Karamoja, based on lack of understanding of the functionality of socio-cultural and ecological systems, have been central to creating both social and environmental injustices and second, addressing the situation of Karamoja requires critical evaluation of what happened and potential remedies with depth of ontological underpinnings of the events and experiences of the sub-region. It can be further noted that, in this study, matters of justice are conceived as matters of both ontological and epistemological concern.

Contextual Landscape of the Study

Unlike studies that confine their causal analysis of 'the problem' of Karamoja to socio-ecological dynamics (such as culture and resources scarcity) of the sub-region, this study sets to (i) challenge the basis for exclusive negative portrayal of Karamoja, as well as to (ii) expand the framework of analysis, to show the central role external factors/foreign interests played in breeding a situation of scarcity, environmental degradation, and conflict and insecurity in the Karamoja sub-region. This study uses prevailing evidence to show that the current affairs of Karamoja cannot be understood in isolation from the effects of pre-precolonial and colonial trade activities, colonial and post-colonial policies, and the social conflicts they hatched and/or fueled. The study builds a foundation for addressing the prevailing social and environmental challenges of the area.

Before the colonial take-over of Karamoja, trade activities, especially in ivory and cattle, were taking place in Karamoja. By then, Karamoja had roaming herds of elephants, which attracted ivory hunters and traders from as far as Ethiopia, Zanzibar, Mombasa and Nairobi (Barber, 1962; Ocan, 1993; Muhereza 2018). Two outstanding figures worth a mention for their lasting influence on Karamoja are Allidina Visram, who was the most outstanding trader of the time in Karamoja, based in Nairobi, and Walter Dalrymple Maitland Bell, an outstanding elephant hunter, who became famously known as 'Karamojo' Bell, owing to his hunting expeditions in Karamoja. He is known to be the greatest elephant hunter of his time. In his own 1923 memoir, '*The Wonderings of an Elephant Hunter'*, Bell openly shares his joys in killing elephants. In one exceptional day, he tracked and shot down 9 elephants from which he earned a day's wage of £ 877. Bell is reported to have made a fortune from more than 1,100 African elephants.

For some time, the colonial administration in Entebbe decided to keep out of Karamoja, a position that was supported by the Secretary for Colonies (Barber, 1962; Lubega 2017). This position did not change until reports of increased arms smuggling by traders and their private armies into the sub-region from Abyssinia (the present-day Ethiopia) abounded - a practice reported to have begun as early as 1898 by

Maj. J. R. L. Macdonald (Muhereza 2018; Lubega 2017). Macdonald, during his search for the source of River Nile came to Karamoja, advised the British government to place control (a standing military patrol) over the territory, lest it falls "the prey of unscrupulous traders and adventurers" (Lubega 2017; Muhereza 2018). In July 1898, "Lord Salisbury ordered Major General. James Roland Leslie Macdonald to lead a British military expedition to lay claim on Karamoja" in view of preventing other European powers from reaching River Nile (Muhereza 2018, p. 61).

When the colonial government finally took over Karamoja and declared it a 'closed district', a small post was created in Mbale to oversee government affairs in the sub-region (Lubega 2017), mainly the collection of taxes and granting of trade and hunting licenses to traders and hunters. Although major trade items in the sub-region were ivory and arms, trade licenses restricted the sale of guns to natives. Also, hunters and traders who traded in ivory were (at least in principle) forbidden from killing female elephants (Lubega 2017). Reportedly, there were restrictions on the number of male elephants one would hunt (Bell 1923; Lubega 2017). Through these licenses, the colonial government was earning from an area it never wanted to invest in. With its absence on the ground, the observation of license/contractual terms of reference was solely left at the mercy of license bearers. The sub-region's wildlife, which was a central element of the Karimojong ecology and environmental economy, was open for economic exploitation.

As it had been feared, the inflow of Abyssinian traders enabled some natives access to guns, to the worry of colonial government officials. In his May 1911 report to Entebbe (which was the capital of colonial Uganda then), the Mbale District Commissioner noted that the Abyssinians had an indiscriminate hunting practice of attacking herds of elephants in large numbers and with heavy gun fire, leading to their unselective killing and wounding (Barber 1962; Lubega 2017). Even then, the Commissioner's greatest worry was not on the ecological disaster the practice wreaked on the sub-region, but rather on the fact that the illegal practice enabled natives to access ivory from random deaths of elephants with which they could exchange for rifles. Resultantly, as the number of elephants in the area decreased, the number of rifles that could be exchanged for ivory increased, this encouraged demise of more elephants in Karamoja. Following reports of increased raids by Abyssinian traders and their private armies, and the pressure from British colonial administrators (namely the Governor of the East Africa Protectorate in Kenya and the District Commissioner of Nimule, southern Sudan), the colonial government of Uganda decided to give more attention to Karamoja. Even then, the budget estimate of £500 that was planned for Karamoja for the financial year 1909/1910, was never committed (Lubega 2017).

Traders were not only inflicting economic and ecological havoc, but they were also facilitating inter-communal cattle raids to their advantage, to acquire more cattle for purchase. These exploitative practices culminated in occasional fights between the Karimojong and Swahili trade caravans (Muhereza 2018; Lubega 2017). Traders influenced and sided with one community to raid another. For example, the armed Jie would raid the Bokora with the Swahili caravan's support. Due to these dynamics, social groups in the northern part of Karamoja, namely the Dodoth, Kamchuro, and Jie, became far heavily armed compared to their counterparts in the south (Ocan 1993; Muhereza 2018; Lubega 2017). By then "a gun was costing 13kg of ivory" and regular safaris arriving from Abyssinia every three to four months delivered rifles, ammunition, and mules returning with ivory - each estimated to have brought 120 rifles and between 3,000 to 4,000 rounds of ammunitions into Karamoja (Lubega 2017). By the end of 1911, Karamoja was estimated to have amassed around 2,000 rifles; the Dodoth possessed a sizeable fraction of these guns (Ocan 1993; Lubega 2017).

Often, reports about conflicts and cattle raiding in Karamoja are not situated in the context above, which makes them lacking in appreciation of historical backdrop. The chain of social, economic and ecological exploitations above and the colonial policies discussed below, caused ecological damage and built a foundation for social conflicts, regional vulnerability and insecurity during colonial and post-colonial

periods (Kabiito 2018). Even the 'Karamoja syndrome', which recognises colonial mismanagement of the Karamoja pastoral ecology, as well as the cyclic and mutual influences and feedbacks of environmental and anthropogenic systems (Kagan et al. 2009), does not particularise the extent of this mismanagement in the diagrammatic representation of the syndrome.

Pastoral Policies, Resources Politics, and the Environmental Resource Use in Karamoja

Public policies can generically be understood as systems of laws, regulatory measures, courses of action (or inaction), and funding priorities concerning given topics promulgated by governmental entities or their representatives (Kilpatrick 2000). With focus on Karamoja, I highlight and discuss policies and interventions that relate to the study's conceptual focus (environmental economies, urban ecologies, and survival options in Karamoja) as well as to the broader discourse of environmental justice in the area of study, whether articulated by commission or omission.

Policies/interventions of interest relate to massive loss of grazing land and limitation of land-use rights; forced settled lifestyle and confinement of communities in drier sections of the sub-region; forced government cattle buying scheme, confiscation of female cattle stocks (as a punitive action); and forced taxation, and forced labour, among others. Resource politics in Karamoja evolved around use of political power and institutional instruments by the colonial government to limit or block the influence and access of other (potential and real) interest groups over Karamoja's land resource, in the interest of securing monopoly and exclusive access to and use of the resources in Karamoja. This move, to some extent, forced some traditionally mobile pastoralists to adopt a settled lifestyle in the region's townships colonial agents considered ideal for developed societies, which also doubled as a control strategy. Though rarely documented, there is evidence to show that Karamoja sub-region may have been the most economically lucrative part of the colonial Uganda to the 'protectorate government', as shown in subsequent sections of this study. As it will be noticed, three authors (Mamdani 1982; Ocan 1993 and Muhereza 1998; 2018) are outstandingly informing the debate about colonial policies and their implication on two grounds. First, among the accessible sources of information, these works uniquely and substantially focus on the study's interest area (colonial and post-colonial policies in Karamoja). Second, in their temporal situatedness, they provide much more useful insights on both colonial and post-colonial dealings in Karamoja, than literature sources before independence.

Land Policies and Region-wide Displacement

Although the sub-region had people and communities to sustain, whose rights over the land was naturally bequeathed, different state policies restricted them from use of over 90% of their land. This land was preferred for purposes such as: pacification buffer zones (separating Karamoja from other regions); redrawing of borders between Kenya and Sudan, which left much of their grazing areas outside Uganda; and formation of game parks, games reserves and protected forests (Ocan 1993; Muhereza 1998). Rugadya, Margaret and Kamusiime (2013) reveal that by 1960s, as much as 94.6% of the Karamoja's land had been allocated to wildlife conservation of some kind (national parks, controlled hunting grounds, game or forest reserves, among others), leaving only 5.4% of the sub-region's land mass to legal use by various Karimonjong communities. This only changed in 2002 when by Act of Parliament, the status of land use and tenure of half of the said 94.6% was changed to allow community access. It is still not clear how Karimojong communities are benefiting from the degazetted land. The land question among pastoralists country-wide, just like their other livelihood needs, is still given insufficient attention by policy makers, yet they are a sizable interest group in the country. Their exploitation and marginalisation have continued to escalate natural resource-based conflicts, especially revolving around the struggle to access and control of land, pasture and water resources, which are the basis of their survival (Bainomigisha et al. 2007). Land tenure challenges, which often result in conflicts, have been registered

in pastoral communities across the continent; in Ethiopia, Kenya, Uganda, Tanzania, Burkina Faso, Mali and Senegal (Pica-Ciamarra et al. 2007; Shettima and Tar 2008).

Mamdani (1982, p. 68) notes too that the "colonial intrusion into the productive economy of the Karimojong began with the forcible acquisition of land." By the time this undertaking stopped, "access to nearly a fifth of what was formerly grazing and agricultural land was denied to the people of Karamoja." Forceful colonial land acquisition was such a protracted process that took place in four phases, from 1920s to 1960s, between which 1,500 to 2,000 square miles of land was transferred to the Kenyan colonial administration, and 486 square miles of land fenced off and declared a game reserve (the present-day Kidepo National game park), among others (Mamdani1982).

While soil erosion was a key excuse for some colonial interventions, the relationship between the loss of land user-rights and soil erosion was clear even to some colonial officials. The loss of grazing grounds increased the concentration of cattle on the remaining marginal grazing lands since what had been previously demarcated by pastoral communities as dry season grazing areas, like the western grazing grounds, were now being grazed on well into the wet seasons (Mamdani 1982).

To prevent contact between the people of Karamoja and the neighbouring communities, buffer zones were created out of their dry season grazing areas, pushing communities to the eastern parts of the sub-region which is drier (Ocan 1993). The increased concentration of cattle over smaller areas along the eastern border further depleted pasture resources. Thus, as early as 1940, soil erosion was identified as one of the problems facing resource use in Karamoja (Muhereza 1998).

Forceful land-use-restricting policies had serious implications for sustainable management of the vegetation resources (pasture and trees/wood/forests). The immediate result of this was the reduction in the bulk of residual grass available for burning at the end of dry seasons, which had double consequences. On the one hand, as grazing space decreased, people started cutting down forests on mountain slopes and burnt them to create more grazing ground. D.J. Parsons of the Uganda Protectorate Department of Agriculture observed in 1962 that "all the mountains of Karamoja today support a vegetative cover that is a mixture of fire-induced grasslands and relict forest" (Mamdani 1982, p. 68). Out of this, both forest resources and their positive influence on rainfall formation and sub-regional cooling were reduced, affecting the micro climate of the region adversely. On the other hand, "the custom of annually burning a wide area to rejuvenate the grass savannah could not be continued." This "accelerated the growth of termite and harvester ant populations" (Mamdani 1982, p. 68), which reigned havoc on a regional savannah vegetation cover, destroying the plant cover, increasing bare ground exposure to the sun, steadier loss of soil moisture, and wide-scale soil erosion. The prolonged, and cumulative outcome of these processes and subsequent erosion was a complete vegetational change. Mamdani (1982, p. 69) reports that "what was once grass savannah now turned into bushland with little grass. Much of Karamoja country became huge expanses of barren soil punctuated with shrubs".

In 1962, Wilson observed that;

> Overgrazing of the centrally situated grasslands has taken place and is still taking place. This had led to widespread sheet erosion of the biologically active top soil and the loss of much potential soil moisture. The continued loss of soil moisture plus overgrazing has led to the virtual destruction of what were grass savannas and the invasion and multiplication of bushland and thicket-forming trees and shrubs with a very poor coverage. What was once good pasturage, is now only marginal ground (Wilson 1964, p. 52 in Mamdani 1982, p. 69).

Wilson was reporting the above in the official channel of the colonial government (*the Uganda Protectorate, Department of Agriculture Series*) propagating the official one-side narrative. His analysis was not only limited to a small section of the sub-region in which pastoral activities had been confined by the government, but also, it is disassociated from what was happening to the primary cause - the induced confinement. His mention of "overgrazing of the centrally situated grasslands" points to this (in Mamdani 1982, p. 69). Still, the problem of soil-erosion is primarily attributed to overgrazing, rather than to loss of sufficient grazing land. As Mamdani (1982, p. 69) reports, "the problem in the eyes of colonial officials like Wilson and others, however, was the 'overgrazing' of land - because of the 'overstocking'. The solution thus was to 'de-stock' the herds."

De-stocking Policies: Government Cattle Buying Scheme and Forced Taxation

From the foregoing section, having identified de-stocking as the suitable policy option to the soil erosion problem, de-stocking campaigns began in 1934. Reportedly, "for political reasons, however, the campaign was disguised to appear as a natural result of the forces of supply and demand" (Mamdani 1982, p. 69), thus the emergence of the government cattle buying scheme. However, evidence shows that forces of demand and supply never had a chance (Mamdani 1982, p.69; Ocan 1993) since the entire process was closely monitored and supervised, from its beginning in 1934 to independence. Thus, instead of solving problems of Karamoja, it intensified the exploitation of the people of the region (Mamdani 1982, p. 69; Ocan 1993; Muhereza 1998).

There was a deliberate integration and enforcement of policy interventions to achieve colonial interests of masters' enrichment and subjects' control. The first step thereof was to set-up a system of taxation: Poll tax and African Local Government tax, among others. The tax collection procedure was also exploitative in a fundamental way. For example, "the efficiency of the tax-gathering bureaucracy was ensured by making the income of chiefs directly dependent on the amount of taxes they collected, and not on the total civilian population under their direct administration" (Mamdani 1982, p. 69). So, sub-chiefs in Karamoja, would be paid according to any of the five levels of payment; that is, "according to whether they collected taxes from 500, 700, 1,000, 2,000 or over 2,000 persons" (Mamdani 1982, p. 69).

The second step was to open cattle-buying posts where the government-run 'Karamoja Cattle Scheme' was the monopoly buyer. To the advantage of this monopolistic pass, "the colonial government was now able to set buying prices for cattle administratively in such a way that for the people to get enough money to pay their taxes, they would have to sell the government a certain number of cattle" (Mamdani 1982, pp. 69-70).

Deducing from the Annual Report of the Treasurer for 1934, "the volume of cattle sales was directly related to the need for cash to pay taxes", or more or less, the tax payment obligation was the reason for cattle sales, thus "that year, the estimated tax revenue of the government of £3,600 was exceeded by £1,650.15" (Mamdani 1982, p. 70). To this unexpected development, the treasurer gave a simplistic explanation that, "the opening up of the cattle trade in the district enabled more natives to pay their taxes" (Mamdani 1982, p. 70). For authors like Muhereza (1998) and Ocan (1993) the Karimojong were simply forced to sell their livestock, and it would occasionally be confiscated to pay the imposed taxes. There also emerged a practice of confiscating female stocks under the pretext of fighting or controlling cattle raiding as a putative action to cattle raid suspects (Muhereza 1998; Ocan 1993). All these were impactful on the environmental economies and survival means (food security, status, certainty, and continuity) of herds of the Karimojong.

By 1939, the average cost for cattle in Lango sub-region was shs 27/- (£1.35)[4] but shs 72/- (£3.6) in Buganda (central Uganda). Notably, cattle were being bought at 2.6 times higher in Buganda or lower in Lango. Comparably, it costed shs 45/- (£2.25) and shs 86/- (£4.3) in 1943; shs 87/- (£4.35) and shs l60/- (£8) in 1947, in Lango and Buganda, respectively. These figures are presented in shillings[5] in the Veterinary Department Annual Reports for 1945 and 1947 (Mamdani 1982, p. 70). By the time the government's cattle trade monopoly ended in Karamoja in 1964, the officially set average price was shs.178/-. However, when trade was being opened to private traders after independence, the average price was immediately steeply raised from shs 178/- to shs 258/-. The number of cattle sold through this scheme numbered in thousands, annually. Evident too, profits of the Karamoja Cattle Scheme ranged in thousands of pounds annually, often being the largest single revenue earner, even ahead of the African Local Government Tax. The figures below are provided for comparison purposes of revenue earned from two revenue sources by the colonial government between 1949 and 1953:

Table1: Comparison of Colonial Revenue for Northern Province -1949 to 1953

Source of Revenue	**1949**	**1950**	**1951**	**1952**	**1953**
African Local Gov't Tax	£7,029	£7,065	£7,235	£7,740	£13,160
Karamoja Cattle Scheme Profit	£8,700	£15,000	£13,000	£19,000	£19,000

Source: Mamdani (1982, p. 70)

The exploitative cattle government-set prices for northern Uganda notwithstanding, the figures in the table above show the disproportionately huge gains that were being made in Karamoja; an area that was and is committedly portrayed as Uganda's champion of poverty, scarcity and underdevelopment. These figures serve as an invitation to re-think the socio-environmental injustices slapped onto Karamoja, on the one hand, and the potential of Karamoja, on the other. To further appreciate the economic importance of Karamoja to the colonial government in particular and to imperial Britain in general, Ingram (1960) described Karamoja as a "13,000 square mile ranch where the British government was making a profit of 50,000 sterling pounds a year" (cited in Ocan 1993, p. 97). During the annexation of Karamoja, it had been evaluated that Karamoja "had potential to feed Britain's expanding army of industrial workers, and providing raw materials for industries" (Lugard 1936 in Muhereza 2018, p. 62). The true figures of how much in total was being made from Karamoja is hard to tell, but the figures above speak to the fact that Karamoja was not poor, but rather impoverished.

Although the official government cattle buying scheme was opened in 1930s, Kenya-based British settlers like Wreford Smith, were already travelling to Karamoja to buy cattle in the 1920s. By then, Liebig's Ltd, a British Kenyan-based meat canning monopoly, dominantly operated in Kenya. When the government's cattle buying scheme in Uganda stopped operating during the Second World War, Liebig's Ltd was allowed to buy large numbers of cattle from Karamoja for meat canning at its Athi River factory. In a period of 6 years (1940 - 1945), a total of 57,982 heads of cattle are reported to have been bought by this company from Karamoja. Before the colonial government stepped out of Uganda, as independence loomed large, the colonial administration "invited local subsidiaries of British companies to take over the cattle trade" (Mamdani 1982, p. 71). The biggest of these was Fresh Foods Ltd, a subsidiary of A. Baumann Ltd. When this particular one entered the market in 1960, out of their annual export of 21,685 cattle, 7,145 were bought from Karamoja. In the following year (1961), out of their total export sales of 36,217 cattle, 22,668 cattle (62.5%) of them were 'bought' from Karamoja. What these subsidiaries did not buy, went majorly to a government established meat packing factory, which had been setup in Karamoja (at Namalu) in 1954 (Mamdani 1982). The question worth asking

[4] The exchange rate I was able to find was of 1927, when 20 East African Shillings were equivalent to 1 Pound Sterling. We are thus using this as our standard exchange rate.

[5] Conversions in Pounds are improvisions by the author.

here is, if the market was fair, and trade undertakings in the region were meant to cause development, in view of all the cattle that was sold, why didn't the region register any signs of development?

Closure and Military Occupation of Karamoja

As noted earlier, although the colonial government was earning from Karamoja ~~area~~ even before its full control, through the granting of hunting and trade licenses, the attitude of controlling at a distance changed upon the intensification of economic activities and conflicts among pastoral communities, traders and their private armies. When they intervened, it was by military control which began in 1911 (Ocan 1993). By 1915 an effective British military occupation/presence in the form of patrols had been established. In 1921, a District Commissioner of Karamoja was posted, "marking the beginning of colonial civil administration", after almost a decade of military occupation (Mamdani 1982, p. 67). However, even with the birth of 'civil administration' as it is called, Karamoja remained a restricted area (closed district) by the colonial authorities up until the1950s (Mamdani 1982).

Since the Jie community was the most feared by the British, due to their military experience that sprang from their earlier contacts with guns from traders and their war-lord leaders, the British used influential traders in the sub-region, such as Lopetum, as allies against the Jie war-lord Loriang. From 1911 "the Karimojong and Jie came under military administration, with regular patrols, initially by the Kings African Rifle (K.A.R), and then after the First World War, by the Uganda Police, operating throughout the district" (Ocan 1993, p.109). Generally, the first pronounced military action against the Karimojong was the closure of the sub-region to all entrants, except to colonial military personnel. This curtailed the practice of trade many Karimojong had adopted. Yet, it is trade in livestock from Abyssinia (Ethiopia) at the close of the century that had helped communities to restock their livestock, following disastrous natural calamities (especially disease and drought) that had decimated their cattle. The closure of the sub-region was such a grave setback on the progress of trade-based development; the same way it curtailed progress in cultivation agriculture, it confined them exclusively to pastoral lifestyle.

Forced Settled Lifestyle and Forced Labour in Karamoja

It is widely believed that colonial policies and interventions in Karamoja sought to incapacitate pastoralist communities, by constraining pastoral activities/lifestyle, and force sedimented lifestyles (Muhereza 2018; Caravani 2017; Muhereza 1998; Ocan 1993, Mkutu 2004; Mamdani 1982). This was devised to force them to adopt what was the more acceptable mode of living as-preferred by the colonial agents. As Ocan (1993) and Muhereza (1998) note, starting with the colonial government, different Ugandan governments adopted anti-pastoralist policies. These made pastoralism to appear somewhat illegal, or pursued with state opposition, or at least with lack of support. Attempts to forcefully settle pastoralists resulted in an unanticipated social crisis, intensifying conflicts over the allocation and use of environmental resources (Ocan 1993).

Turning pastoral communities into sedentarised citizens was to be achieved through complementary measures, including restriction of the movement of people and their animals as well as their subsequent confinement to the drier parts of the sub-region into camps established in 1916. As Ocan (1993, p. 114) notes, "whole communities were forcefully moved so as to create and maintain a network of tracks for official use." They were forced too, to move their stocks to the drier eastern border. "It was after this forceful settlement of whole communities that the policy of restricted movement was introduced in 1921." Creating camps and settlements along a network of tracks (used by colonial administrators and military personnel) was to enable their easy monitoring and control, but also to allow the emergence of town centers.

To realize the desire of creating a permanently settled working class, forced labour was introduced in the early stages of the occupation. Forced labour was viewed as the first major attempt at making social classification of the Karimojong society and creating a working class. It was majorly introduced for road construction between 1915-1919 by C.A Turpin, who was the police chief and District Commissioner of the time. Karimojong were not only required to offer labour, but also to provide upkeep (food) for both themselves and for the colonial supervisors, during working days. By 1919, "over 2000 men were enrolled under this forced labour scheme, against a total adult male population estimated at 5290" (Ocan 1993, p. 114). This was exceptionally higher (over 40% of the male population of Karamoja) than what was ever recorded in other parts of colonial Uganda (Ocan 1993).

An elder confirmed the forced labour narrative during an interview:

> They constructed that hospital (referring to the present-day Moroto Regional Referral Hospital). It was down there in a place called Natoukaikok by then; it was grass thatched. One time, my father was arrested, I was not yet born by then, but our sisters were there by then, even our father told us himself. He was arrested for having refused to be a chief. He was kept there for six months, but my family members were meant to carry grass as a kind of payment for my father's release – this issue of corruption started with those people, it did not start anywhere else. So, if my father was to be released, my people had to continue carrying grass for building the hospital. One of my sisters who is still alive was carrying it with the rest of the relatives for about six months, then my father was released (Interview, Moroto, June 2015).

Reports awash in the literature (popular, policy or scholarly) portraying Karimojong people as culturally violent, or violent for the sake of it, need to be scrutinized against the background of such long-term oppression, exploitation and other injustices.

Environmental Economies and Environmental Injustice in Karamoja

Scarcity, poverty, famine, violence and absence of development constitute the most popular images and accepted socio-economic descriptions of the Karamoja sub-region. For many, these are givens and at most, products of the sub-region's people as well as their ecology (Barber 1962). In the analysis framework of the critical realism theory used herein, the descriptions/beliefs above can be treated as epistemic fallacies, because they are based on half-truths or neglect of underlying causes. Noteworthy, though, authors like Mamdani (1982), Ocan (1993), and Akabwai and Atey (2007) acknowledge that the poverty and scarcity narrative, as well as the negative portrayal of the area's environment and people, are a continuation of long political and socio-economic exploitation as well as a history of marginalisation of the region. Consequently, some Karimojong have bought into these disempowering narratives, which serve to create, re-create or reinforce the phenomenon by generating collective neglect, irresponsibility and carelessness (on the part of both the leaders and the led), allowing further marginalisation and exploitation in contemporary times. In the counsel of the critical realist theory, for social transformation and empowerment to happen, we should be intent on discerning underlying causes of reality over symptoms, which may as well constitute what is known as 'epistemic fallacies.' In view of this theory, the dominance of narratives of poverty and scarcity, should not themselves be the basis for one to claim knowledge of the matter, but rather the raw material for analysis of underlying and sustaining causes of poverty and scarcity. With such historical hindsight here provided, the impressions that suffering and deprivation are insurmountable monopolies of Karamoja are questioned.

With the evidence in the foregoing sections, it can be noted that just like the Democratic Republic of Congo, whose crime for being too poor is being potentially too rich (Keowen 2017), so is the Karamoja sub-region. There is no convincing evidence to the effect that an area that became (i) a favorite for ivory and trophy hunters (in the 19th century), (ii) a source of beef and fat profits to imperial Britain (throughout

the colonial era), (iii) a source of livestock to cattle raiders and traders (in much of the 20th century), and (iv) currently a source of marble and limestone for industrial development (in the 21st century) succeeded in being and becoming so out of lack (poverty and scarcity). On the contrary, these are indicators of wealth and abundance. It is important to note that concepts of poverty and scarcity, often used on the Karimojong and Karamoja, do not apply the same way in their worldview. Among the Karimojong, the clearest indicator of poverty is collective lack of livestock, a condition that was a deliberate creation of state policies at a regional scale. Contrary to the narratives of scarcity and poverty, Karamoja was rich with life, with a vibrant ecological system, animals (wild and domestic), pastureland, woodlands, and the socio-ecological services they provided. These ably formed an environmental economy that supported human and animal life, in addition to keeping flora in balance.

Environmental resources are at the core of what this study conceptualizes as environmental economies. In the context of Karamoja, these constitute the pastoral economy, crop economy and wild plant-game-based economy, and of late the mineable (mineral) resources. To further appreciate the giftedness of Karamoja, one needs to move 50 miles east of Moroto district, into the neighborhoods of Turkana county (in Kenya). Weary of the climatic dryness and ecological limitations in Turkana, and in admiration of seasonal greenery of Karamoja, people in Turkan often refer to Karamoja as a 'greenbelt'. In a disappointing contrast though, many Ugandans 100 miles away (even those who have never been to Karamoja) show contempt for Karamoja as a desert. Yet, Karamoja is one of the regions with the highest number of cattle and the highest number of commercially valuable minerals in Uganda (World Resources Institute 2010; FAO 2014; Hinton et al. 2011). Also, it is endowed with high tourism potential, and stretches of watered and highly productive agricultural land (in Namalu and Karinga, Nakapiripirit District; Iriiri in Napak District; and the Kidepo valley in Kaabong District, among others).

The scenes of poor living conditions of most people of Karamoja and reports of poverty, misery, and desperation thereof, are indeed all deplorable, especially in the sub-region whose resources (environmental and otherwise) have been heavily robbed and are still being robbed. There are three important environmental resources that have been hugely robbed from Karamoja, namely, the wild games (especially elephants), land, and cattle, in addition to the most important temporal resource - time. The number of elephants whose slaying became the economic lifeline of Arab and European traders cannot be estimated with precision. Yet, the 'famous' elephant hunter Bell (1923) who killed over a thousand elephants, could afford to describe his 'interesting hunting experience' remorselessly.

Ocan (1993) observes that social analysis of Karamoja is infested with a dominant tendency to conceive the 'Karamoja problem' as springing from the Karimojong social structural arrangements, which are regarded as primitive. In the view of such conclusions, these arrangements work to preclude social transformation in the area. On the contrary, awareness of the historical conditions and colonial policies accounts for altered traditional pastureland resource management practices, regional biophysical changes (as reported below) and formalization of regional economic exploitation. Ocan (1993, p. 97) proposes a different diagnosis, which I find more plausible. For him "the 'Karamoja problem' centers around the area's increasing inability to sustain its people economically".

Savory (2013a; 2013b) confesses that the earlier belief that too much livestock caused environmental degradation and desertification, through practice of overgrazing and soil erosion, represents a serious lapse in science and understanding. He demonstrates that limiting animals' numbers or concentrating them on a permanent grazing area immensely contributes, triggers, and even quickens the problem of environmental degradation. He believed that, "10,000 years of animal farming created the problem, and 100 years of science accelerated it" (Savory 2013b, p. ii). Savory's over 30 years of research and reflection showed that systems like one that was fought by the colonial administration in Karamoja, upon being judged as primitive, represents the soundest science for sustainable management of grasslands. The solution may seem/sound simple, but it is a true product of critical observation and insight; in Savory's

view, "we need bundled and moving livestock. There are no other alternatives left for mankind" (Savory, 2013b, p. ii). It is interesting to learn that the perceivably uneducated 'primitive' pastoral communities had a better science for grassland resource management, whose suppression quickened the process of environmental degradation in Karamoja.

As some elders accounted, "at the beginning of the century what is now Karasuk (the current Karamoja sub-region) was a *'white country'* (meaning: covered with grass)". British settlers described this phenomenon in 1920s, "as being waving grass up to his chest" (Mamdani 1982, p. 66). By 1960, however, Karasuk was no longer "a white country but a red country"; it was a complete bush with little or no grass (Mamdani 1982, p. 66). In a historical survey of the soils of Karamoja District of 1962, a colonial agricultural officer concluded that "there is abundant evidence to show that 40 years ago much of Karamoja was such a grass savanna" (Mamdani 1982, p. 66). It is baffling that what had predominantly been a grassland at the beginning of colonial rule, by the rule's end, it had been transformed "into a short-tree savanna, or worse off, barren bushland" (Mamdani 1982, p. 66). Mamdani, contends that colonial rule was the worst and the most deep-seated social catastrophe to have befallen Karamoja.

Mamdani (1982, p. 66) further refutes beliefs that challenges Karimojong face, including famine and food insecurity are due to marginalisation by colonialists; on the contrary, "the roots of the present famine lie in the intense colonial exploitation of the people of Karamoja, an exploitation that systematically destroyed not only the very basis of a pastoral way of life but also hampered the transition to an agricultural mode of existence." The dominant belief that communities in the sub-region have been stuck to pastoralism is not accurate. By 1920s, the Karimojong had three means of obtaining food: hunting, grazing and cultivation. The imposition of restriction on use of land, especially on areas ideal for agriculture was a weighty disservice. In Mamdani's view "the Karimojong had been cut off both from their past (hunting) and from their future (agriculture)" (Mamdani 1982, p. 72). This view may give an impression that agriculture was only to be Karamoja's source of livelihood in future. In actual sense however, agriculture was an ever-present practice historically, expected to attain levels of advancement and sophistication in future.

At the onset of the colonial rule (1911), the shrub thickets, which currently colonize much of Karamoja, were preserves of exceptionally dry parts of the broader Karamoja cluster area, like the Turkana escarpment. Karamoja was categorized into three natural vegetation zones, corresponding to differing climatic conditions, namely; (i) the grass and tree steppe were found in the dry parts of Karamoja; (ii) a lush grass savanna covered the moist areas of the sub-region; and (iii) forests, which dominated the uplands and the larger mountains (Mamdani 1982). Despite their large numbers, animals (wild and livestock) never caused over-grazing or deterioration of vegetation cover, since they lived by extensive browsing of shrubs and trees, and kept moving over a wide/regional landscape (a strategy lately advocated by Savory (2013a & 2013b). In a study on the vegetation of Karamoja Wilson (cited in Mamdani, 1982, p. 67) concluded that "animals contributed to the stability of the environment by encouraging the occurrence of grass". It was in the continuity of such conditions, that "a stable plant cover was built up and erosion was negligible", and, "the people's economic and social life was also organized with one goal in mind; to ensure the best possible conditions for procuring a livelihood given existing natural and technological constraints" of the sub-region (Mamdani 1982, p. 67).

To achieve this goal, a production (or land utilization) system had evolved whereby permanent settlements (*manyattas*) were located in a semblance of long line down through the centre of Karamoja, from north to south, positioned mostly around permanent water sources or near riverbeds. During rainy seasons, production (both cultivation and grazing) would be organized around these permanent settlements. In dry seasons, however, youths erected temporary camps in the distant eastern and western parts of the sub-region, grazing on areas unoccupied during the wet months (areas of seasonal droughts). This was a smart resource management strategy operated under extensive regulations to ensure

sustainable productivity of their grazing areas. They also exercised annual burning of grass towards the end of the dry season, a practice which had three benefits, namely (i) fire (its dangers notwithstanding) controlled the growth of shrubs and directly assisted the growth of tree and grass savanna, (ii) it was indirectly beneficial by controlling growth of harmful organisms like harvester ants and termites, by removing dead material on which they would feed, as well as limiting regional movement harvester ants, and (iii) nitrogenous ash would fertilize the ground for fresh grass. The Karimojong had long noticed that "harvester ants would destroy the ground cover, create much bare ground, destroy perennial grasses and replace them with annual grasses, herbs and shrubs" (Mamdani 1982, p.67). This is exactly what happened to much of the sub-region, when over 90% of the land was closed off from their use, thus changing much of the Karamoja from a grass land to a shrub land and bare ground.

Implications and Concluding Remarks

I do not by any means refute the widely reported livestock raiding and violence of warrior groups among the Karimojong communities and their effects on the sub-region. These were real and regrettable. I however, refute the belief that these phenomena are cultural practices. What are conceived as 'cultural practices' can instead be expressions of tradition, sub-culture and/or social deviance (which are in principle, limited to some, not all members of a society in question). It is also acknowledged that there was collective defiance towards colonial policies and establishment by the Karimojong, including those that 'may have had 'positive' personal and social transformational effects such as education, health services and religion. Humanly, in full account of five decades of systemic colonial exploitation and suppression (1911-1962), followed by over five decades of neglect, insecurity, stagnation and continued exploitation (1962- to date), defiance and self-defence are realistic bare minimums of what a concerned society could have done under the same circumstances. In light of objectivity, there is no basis for naming Karimojong culture as particularly and uniquely violent and their environment as an ecology of poverty and scarcity. These are convenient mental constructs, hanging against decades of suppressive exploitation and huge financial gains made in the sub-region, which bear a tag of alleged scarcity.

With the above in view, redress interventions need to be guided by the environmental justice theory, which proposes thorough examination of social, cultural, symbolic and institutional conditions that underlie the injustices, as the starting point. In principle, environmental justice prescribes three basic pillars of redress: a) recognition of victims and their experiences; b) equitable distribution of environmental risks and redistribution of gains; and c) participation of victims in socio-political processes, which create sustainable environmental management mechanisms. The first pillar can be attained through undertakings of research and publications, which contextualize the affairs of Karamoja and break free from the stereotypes that have engraved the injustices in question. The other two pillars can be achieved through (i) regional human capacity development, (ii) regional rangeland management master planning, and (iii) regional compensatory actions. Currently, the sub-region is being subjected to some form of unsystematic affirmative action. This may work for societies with minimal developmental marginalization but cannot address the injustices. The scale of Karamoja Justice, however, demands for deliberate and systematic compensatory actions for the social, economic and ecological exploitation. Exploitation and marginalisation are two different experiences, each leveling independent, but sometimes reinforcing sets of effects. The envisioned compensatory actions should constitute policy actions and regional empowerment of productive means. These should include investment in research and research centres (with focus to responsible social and economic development, climate protection and conservation research), Resources needed to this effect should come from exploiters or their representatives (local and international). To strengthen regional resources and their production capacity, livestock economy, agriculture, tourism industry, mining, and industrial development and sustainable nature conservation need to be prioritized.

An increased number of people in the sub-region now appreciate the importance of education than ever before. Thus, education is an area that requires most attention. There is need for massive investment in sufficient, relevant and broad-based education systems in the region. It should be based on decolonization philosophy of education and development, of formal and non-formal nature. It should be an education system that resonates with developmental (human and economic) needs and aspirations of the sub-region and the country at large. There is need for hardware and software investment at all levels, from the primary to the tertiary/university. Priority should be given to value-based and skill-based education. This does not only form empowered citizens, but it also creates empowered and conscious stewards of the environment.

Environmental justice interventions should be able to address both social and ecological challenges. To this end, ecological diversity and vibrancy are as important as social welfare and collective empowerment. While education and social exposure can deliver social benefits, regional rangeland management master-planning is necessary for environmental/ecological balance. The grand objective of such a plan should be the promotion of conservation, restoration, rehabilitation and sustainable use of the region's resources. Solutions should here be sought from within, with supplemental resources from the compensatory action fund, civil society, national and international agencies like the Global Environmental Facility. Key focus areas of such a plan should be: (i) Grassland conservation and restoration (integrated and aligned with cattle economy development); (ii) Woodland/forest conservation and tree planting (integrated with dryland agro-forestry systems); (iii) Watershed protection, management and rehabilitation (integration of water management and conservation strategies); (iv) Climate-smart agriculture (integrated and conservational agriculture) in suitable sections of the sub-region; and most importantly (v) strengthening the cattle economy of the area, through sustainable rangeland cattle production systems, preferably the one proposed by Savory (2013a; 2013b). Each of these mosaics is an important survival, welfare and conservation contributor to regional ecological diversity, tourism potential and social empowerment. With a cattle economy running, energy needs of the sub-region can be addressed through either home-based or centralized investments in bio-gas, as well as solar energy alternatives, to limit dependence on slowly growing trees for fuel.

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