

Future-making and scalar politics in a resource frontier: Energy projects in northern Kenya

GREINER, CLEMENS

KLAGGE, BRITTA

GRAWERT, ELKE

MKUTU, KENNEDY

WORKING PAPER #63

28-01-2022

PLAAS Working Paper 63: Future-making and scalar politics in a resource frontier: Energy projects in northern Kenya

The PLAAS Working Paper Series is designed to share work in progress. Please send any suggestions or comments to the author.

©Institute for Poverty, Land and Agrarian Studies, University of the Western Cape, and the Trade Law Centre 2022.

Author: Greiner, Clemens¹; Klagge, Britta²; Grawert, Elke[†]; and Mkutu; Kennedy³

1 Global South Studies Center, University of Cologne and CRC228 Future Rural Africa

2 Department of Geography, University of Bonn and CRC228 Future Rural Africa

3 International Relations at USIU-Africa, Nairobi, Kenya and CRC228 Future Rural Africa

Copyeditors: Jonathan DeVore; Ursula Arends

Cite as: Greiner, C., Klagge, B., Grawert, E. and Mkutu, K. 2022. "Future-making and scalar politics in a resource frontier: Energy projects in northern Kenya." Working Paper No. 63. Bellville: Institute for Poverty, Land and Agrarian Studies, University of the Western Cape, Cape Town, South Africa.

ABSTRACT

This contribution explores conflicts in the context of energy-related investments and infrastructure projects in Kenya's arid and semi-arid north. Over the past decade or so this historically marginalised region has turned into a resource frontier. Such frontiers arise as capitalist and state actors penetrate rural hinterlands, with the aim of transforming these regions according to competing visions of the future that operate at different scales. The projects considered here include the Lake Turkana Wind Power Project (LTWP), the expansion of geothermal energy production, and the extraction of crude oil, which jointly exemplify the contested and scalar politics entailed by "future-making". Against this background, this contribution analyses how different energy projects are brought about by different actors, including how their impacts on local livelihoods are negotiated across scales. This contribution explores how frontier situations generally, and the recent devolution of government in Kenya, impact such negotiations.

KEYWORDS: energy; future-making; frontier; infrastructure; investors; Kenya; land rights; politics; scale

ACKNOWLEDGEMENTS

We would like to thank those who participated in our research, as well as David Greven, Chigozie Nweke-Eze, and Tobias Wabomba Simiyu, for generously sharing their knowledge and experiences with us. Great thanks also go to our copyeditor, Jonathan DeVore. This research was supported by the German Research Foundation (DFG) through funding for the "Energy Futures" project, as part of the collaborative research centre, "Future Rural Africa" (Project-ID 328966760 – TRR 228).

ACRONYMS AND ABBREVIATIONS

DFG	German Research Foundation (Deutsche Forschungsgemeinschaft)
KNBS	Kenya National Bureau of Statistics
LAPSSET	Lamu Port-South Sudan-Ethiopia-Transport
LTWP	Lake Turkana Wind Power Project
NLC	National Land Commission

TABLE OF CONTENTS

ABSTRACT	3
ACKNOWLEDGEMENTS	3
ACRONYMS AND ABBREVIATIONS	4
1. INTRODUCTION	6
2. FUTURE-MAKING AND SCALAR POLITICS IN A RESOURCE FRONTIER	8
3. RESOURCE FRONTIERS IN NORTHERN KENYA	10
4. METHODOLOGY AND CASE STUDIES	12
5. SCALES OF FUTURE-MAKING: A COMPARATIVE ANALYSIS	17
6. CONCLUSIONS	22
REFERENCES	25

1. Introduction

Recent developments in formerly marginalised parts of northern Kenya are driven by large infrastructural investments for the extraction and production of energy. The Lake Turkana Wind Power (LTWP) Project, the massive expansion of geothermal energy production, and the extraction of crude oil are among the most important projects. They not only epitomise the struggle between carbon-based and renewable energies (Boyer, 2014; Love and Isenhour, 2016), but they also bring substantial ancillary infrastructures to these remote areas, such as roads, water pipelines, power lines, and – most prominently – the Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) Corridor (LAPSSET Corridor Development Authority, 2016). These developments also resonate with McCarthy's claim that capitalism's socioecological fix disproportionately falls on rural areas "where land values are lowest and existing users often have less power and fewer formal land rights" (2015: 2487).

Kenya's northern arid and semi-arid lands, formerly and predominantly used as pastoral rangelands, have entered into view of the Kenyan state as well as national and international investors, thereby turning the region into a "resource frontier" (Tsing, 2003). None of the three energy projects under consideration are designed for local use: oil is exported and electricity generated from wind and geothermal power is fed into national grids that largely do not serve areas of production.

Against recent political transformations in Kenya, namely a new constitution (2010) resulting in decentralisation of political power (devolution from 2013), these energy extraction and production schemes bring about both opportunities and challenges, including threats to the lives and livelihoods of local residents (Mkutu and Mdee, 2020). These projects are emerging within an institutionally volatile regulatory environment, typical of frontier dynamics (Kopytoff, 1987; Tsing, 2003), as regional governments appear as new players and intermediaries between local communities and the national government. Furthermore, issues of constituency and county boundaries have become contentious in many areas, particularly where land-based resources and potential economic benefits – such as oil revenues or compensation payments – are anticipated.

Massive infrastructural interventions and political transformations are not the only changes in the East African drylands. While pastoralism has been the predominant mode of procuring livelihoods throughout the area, recent decades have brought about dramatic changes (Anderson and Bollig, 2016; Gabbert et al., 2021). Deteriorating environmental conditions, rapid population growth, sedentarisation, land-use intensification, indigenous commodification of land, and increasing contestation of territorial boundaries have led to the contraction of communal pastures (Catley et al., 2013; Lind et al., 2020). Formerly open rangelands are increasingly fragmented (Galvin, 2009; Greiner, Vehrs, and Bollig, 2021), and local communities' relations to land and landed property have changed profoundly (Greiner, 2016; Korf et al., 2015).

Against this backdrop, this contribution explores the implications of different energy-related investments and accompanying infrastructural projects for local populations. We address the following question: How and by whom are different energy projects, including their impacts on local livelihoods, negotiated among and across different actors and scales? We focus in particular on scalar dimensions of negotiations over the distribution of benefits derived from wind, oil, and geothermal energy projects. We explore, moreover, how the frontier context, including the devolution of political power, affect the forms and outcomes of such negotiations.

Although there is a good deal of literature on the LTWP (e.g. Achiba, 2019; Cormack and Kurewa, 2018; Drew, 2017), oil extraction (e.g. Enns and Bersaglio, 2015; Johannes et al., 2015; Mkutu, 2017; Orr, 2019; Tyce, 2020), and geothermal development (e.g. Greiner, 2020; Klagge et al., 2020, Klagge and Nweke-Eze, 2020; Rogei, 2021), as well as a number of contributions that sketch challenges and conflicts arising from these investments more broadly (e.g. Lind, 2018; Lind et al., 2020; Mosley and Watson, 2016; Schilling et al., 2018), there have been no systematic attempts to examine local impacts of these three infrastructural projects. No studies analyse these projects in terms of scalar politics, frontier dynamics, and future-making, by which we refer to strategies, practices, and activities geared towards bringing about specific futures, visions, and aspirations.

This paper is organised as follows: section 2 links the frontier concept with future-making and scalar politics; section 3 introduces the northern Kenyan setting, while section 4 describes our methodology and case studies on wind, oil,

and geothermal energy. Section 5 systematically compares future-making activities among stakeholders for different projects and infrastructures, including ways that conflicts are negotiated. The conclusion summarises our findings on the scalar dynamics of future-making in our case studies.

2. Future-making and scalar politics in a resource frontier

Kenya's arid and semi-arid northern region can be described as one among many resource frontiers that have been created in many parts of the world since the end of the Cold War (Dressler, 2017; Tsing, 2003). Although the "frontier" concept has been widely critiqued, especially Frederick J. Turner's vision (1894), it has nonetheless been invoked to characterize relations among states, capitalists, and their peripheries (Li, 2014; Watts, 2018). Along these lines, Korf and Raeymaekers (2013: 10) define frontiers as "the space where territorial and institutional penetration of the modern state has (not yet) been completed." The term is currently employed to describe the penetration of extractive industries and infrastructure projects into previously remote areas (Bennett, 2017; Tsing, 2003). Such frontier spaces are characterized by transitional arrangements and the crumbling of established principals of social order – in our case of customary land-tenure systems – and by the emergence of new regimes that have not yet been established (Schetter & Müller-Koné, 2021). Kopytoff (1987: 7) has described this as an "institutional vacuum." The affected spaces often abound with real or perceived economic opportunities, as well as open or latent violence (Korf et al. 2013; Rasmussen & Lund, 2018). The frontier, as Tsing (2003: 5102) writes, "is made in the shifting terrain between legality and illegality, public and private ownership, brutal rape and passionate charisma, ethnic collaboration and hostility, violence and law, restoration and extermination."

Like many infrastructural projects, recent provisions of energy infrastructures – wind, oil, and geothermal – with all their ancillary infrastructures are "intimately caught up with the sense of shaping modern society and realizing the future" (Larkin, 2013: 352). As such, they may also raise expectations and involve people in a particular "community of aspiration" by promising economic benefits for local communities affected by these developments (Hetherington, 2014: 198). This results in economies of anticipation, driven by emerging topographies of

(imagined) value, but also fear, anxiety, and insecurity about the future. In such scenarios, indigenous populations, peasants, and pastoralists are often portrayed as “victims of progress” (Bodley, 2008). Pessimistic accounts of land-grabbing, oppression, displacement, and disenfranchisement – or “frontiers of exclusion” (Geiger, 2009: 198) – prevail in scholarly work, while research on collaboration by indigenous or other local populations in processes of land commodification is mostly lacking, as some authors have pointed out (DeVore, 2018; Korf, et al. 2015; Li, 2010).

We suggest that the voices and perspectives of subaltern populations can be included in frontier research, if frontier situations are understood as dynamic processes of future-making (Appadurai, 2013). Frontiers are co-produced by different actors with various and potentially conflicting aspirations, which are negotiated across scales. Because of their institutionally volatile environment, frontiers open up spaces for negotiation about desired futures among local and distant actors, equipped with more or less bargaining power. The frontier, therefore, marks a situation in which different visions of the future become spatially inscribed.

This raises questions about relationships between centre and periphery, local and global, and ultimately about scalar politics and hierarchies. Some scholars have controversially proposed to remove scale from the human-geographical vocabulary (Marston et al., 2005). While acknowledging that scale is socially constructed, and established through (political) relations, we do not follow this radically poststructuralist position. Rather, we follow MacKinnon (2010) who proposes a concept of “scalar politics,” aiming to incorporate a processual and historically-sensitive perspective attentive to the strategic deployment of scale in both its discursive and material expressions. Scale itself is not contested, “but rather specific processes and institutionalized practices that are themselves differentially scaled” (MacKinnon, 2010: 22f).

This approach not only focuses on interactions between administrative levels (e.g., central and devolved county governments), but also on emergent social practices that may challenge existing power asymmetries. Large-scale extractive projects such as the ones we discuss in this contribution are constituted by multi-layered structures. They are shaped, as Harvey et al. (2017: 10) observe, by multiple and often competing actors “engaged in an indefinite set of distributed

interactions over extended periods of time.” We therefore suggest that the frontier situation opens spaces for negotiation and new alliances, while also facilitating reckless appropriation and, ultimately, conflict.

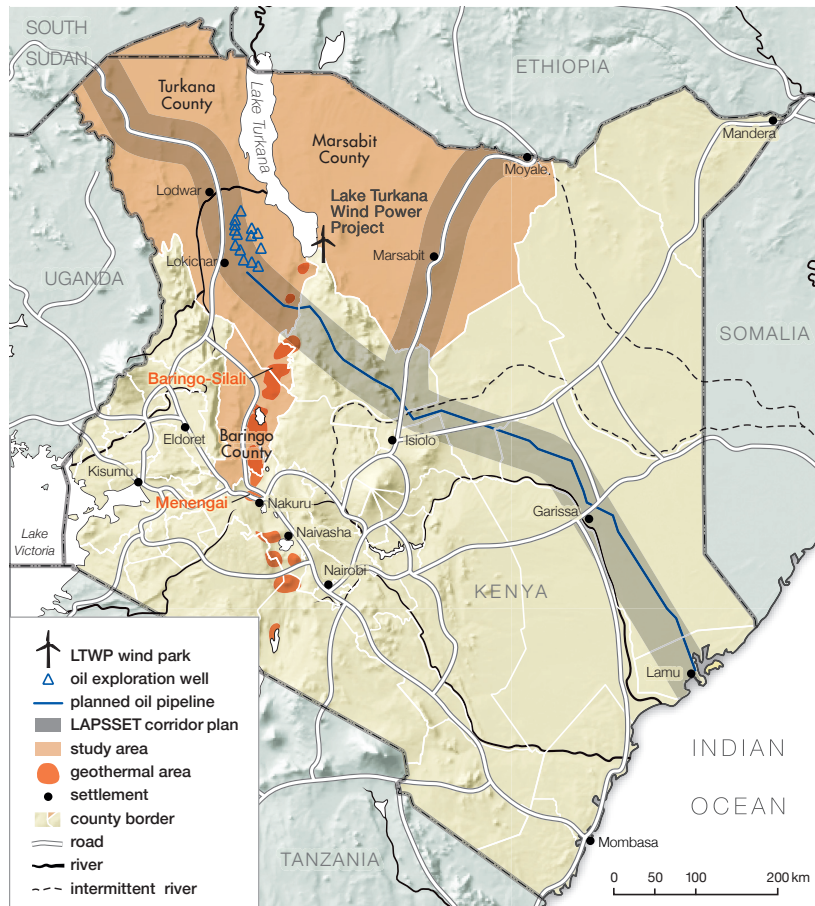


Figure 1: Map of the study area and the case study sites (authors' illustration based on Cordaid et al., 2016; Golder/ESF Consultants, 2019; Klagge et al., 2020; LAPSSET Corridor Development Authority, 2016)

3. Resource frontiers in northern Kenya

Among the main pillars of Kenya's Vision 2030 – an ambitious national masterplan aimed at transforming Kenya into a middle-income country by 2030 – are promises of significantly enhanced infrastructure, energy provision, and land reform. A relevant policy report, the Development Strategy for Northern Kenya and other Arid Lands, evokes the “significant amount of untapped wealth” of Kenya's previously marginalised arid north (RoK, 2011: 15). In the foreword to the report, Kenya's then-President, Mwai Kibaki, wrote: “The arid lands in

particular have a limitless supply of renewable energy which could power our homes, schools and factories. The region is thus blessed with unique opportunities” (ibid.: 5). Northern Kenya has come into investors’ focus, contributing to a dramatic rise in local expectations to participate in and benefit from new opportunities (Lind, 2018; Mosley and Watson, 2016).

Historically, Kenya’s northern region was considered remote, backward, and without potential for economic exploitation (Elliott, 2016). The vast area, including Baringo, Marsabit, and Turkana counties (see Figure 1), is inhabited by groups living from pastoralism and agro-pastoralism (see Table 1). Land tenure in the project areas for wind, oil, and geothermal development was and is still partly communal trust land. Since 2016, the Community Land Act paved the way for individual titling as well as group registration, thus providing legal protection for users. Implementation, however, has been slow, mainly owed to a lack of political will, as suggested by Alden Wily (2018), who also doubts its effectiveness for protecting land rights of local populations.

	Unit	year	Baringo	Marsabit	Turkana	Kenya
Area	km ²	2019	10,976	70,944	68,233 ¹	580,876
Population	in 1,000	2019	667	460	927	47,564
Population density	number per km ²	2019	60.7	6.5	13.6	81.9
Population below age 5	share of total	2019	15%	18%	15%	13%
Doctors/medical officers	per 100,000 residents	2014	6	4	1	21

Table 1: Basic data on Baringo, Marsabit, and Turkana counties in relation to Kenya as a whole (Source: KNBS, 2019)

Many communities in these areas also have historical grievances against the state and a weak sense of belonging to the Kenyan nation. Inter-community conflicts

¹ This figure is disputed; elsewhere it is given as 71,597 (Turkana County Government, 2018b)

between ethnic groups over water, pasture, and livestock resources are frequent; guns play an important role in these conflicts and contribute to the high prevalence of banditry, deaths, and injuries of people in the area (Bond and Mkutu, 2017; Mkutu, 2008).

Devolution was initially lauded as a remedy against the “underlying pathologies of Kenyan politics” (D'Arcy and Cornell, 2016: 247), namely corruption, politicised ethnicity, and over-centralisation. In the structurally weak and historically marginalised north, however, implementation has been particularly slow and fragile, allegedly due to a lack of skilled personnel and organisational capacities (Turkana County Government 2018a). It also appears to have reinforced patronage relationships and enhanced competition for some powerful positions (Lind, 2018). Devolution occurred in tandem with revisions to county boundaries, which fuelled pre-existing conflicts in many areas (Greiner, 2013). Due to the low presence of state security, these conflicts – often referred to as cattle rustling – have turned increasingly violent, as most pastoralist groups in Kenya's arid north are armed with automatic rifles (Mkutu, 2007).

New legislation, such as the Petroleum and Energy Acts of 2019, provides for sharing of public revenues at the local level from oil investments and geothermal development, although not for wind energy (Schilling, et al., 2018; Tyce, 2020). According to such legislation, counties will receive 20% and local communities will receive 5% of the national government share of public revenues. Negotiations over this provision polarised relations between counties and the central government (Orr, 2019), and also intensified conflicts of inter-county and sub-county boundaries, as pastoralist livelihoods traditionally required flexible concepts of territorial belonging.

4. Methodology and case studies

Northern Kenya provides an interesting setting for energy-related investments and future-making by a variety of actors whose aspirations and strategies coalesce into complex resource frontier dynamics. There are several commonalities as well as differences between our three wind, oil, and geothermal case studies. To address these complexities, we draw on scholarly and grey

literature (in all three case studies), field research, including expert interviews with national and county representatives, companies and non-governmental organisations (NGOs) as well as other stakeholders (in the cases of oil, geothermal) and more than ten years of ethnographic research (on geothermal). The authors conducted joint field research in Lodwar in March 2019, including at the oil production site at Lokichar in Turkana County, and in Baringo in August 2018. Below, we highlight specific characteristics of our three case studies.

4.1. Lake Turkana Wind Park in Marsabit County

Northern Kenya has large wind resources, especially on the south-eastern shores of Lake Turkana, where the LTWP was developed by an international consortium of private firms and public institutions, mainly from the United Kingdom (UK), the Netherlands, and Scandinavia (Klagge and Nweke-Eze, 2020; see Figure 1). After a nearly 10-year development phase, which included the granting of land rights by the town planning committee in Marsabit County Council in 2007 (Danwatch, 2016), wind farm construction started in 2015 and was completed in 2017. With 365 turbines from Danish manufacturer Vestas, and a generation capacity of over 300 MW, the LTWP is the largest single wind park in Africa and the biggest private investment in Kenya's history (Cormack and Kurewa, 2018). The Kenyan government, which was neither part of the consortium nor among the lenders, supported the development with a pre-negotiated power-purchase agreement (Eberhard et al., 2016; Klagge and Nweke-Eze, 2020), and agreed to take responsibility for the greater than 400-kilometre connection to the national grid. From 2013 onward, successive county-level governments have supported the project. However, the project engendered local protest and resistance by several communities and was also heavily criticised by the Danish NGO, Danwatch. Danwatch is an “independent media and research centre specialised in investigative journalism on global issues” (Danwatch, n.d.) which reported on various negative social impacts of the LTWP (Danwatch, 2016).

The major contention was the neglect of community land rights. This was the target of a 2014 lawsuit against the LTWP filed by the senator of Marsabit County and several members of the County Assembly (Achiba, 2019) against the LTWP, the first Marsabit County Government, and three national-level actors, including

the attorney general, chief land registrar, and National Land Commission (NLC).² Petitioners acting on behalf of local residents claimed that the land acquisition by investors was illegal due to a lack of community consultation, among other violations (Cormack and Kurewa, 2018; Enns, 2016). The lawsuit was then challenged by other local residents, who claimed that they were in fact consulted and that the plaintiffs were outsiders to the area (Achiba, 2019). In 2017, the application for “a 99-year lease of 150,000 acres of community land” by the LTWP was approved by the Marsabit County Council (Achiba, 2019: 16). However, in October 2021, the court ruled that the title deeds given to the investor were void and that the land had been acquired irregularly (Wanyoro, 2021).

Other contentious issues and conflicts concerned the disturbance of livelihoods and lack of compensation for adverse social and economic impacts (Enns, 2016). At first, the LTWP did not accept the criticism and the implicit call for greater local participation, arguing that it only occupied empty land. Moreover, by granting people the right to graze their cattle in the wind park, the company argued that there was no justification for further compensation beyond providing for community resettlement (Enns, 2016). However, as growing international attention posed reputational risks for Vestas and other investors, the LTWP started a comprehensive corporate social responsibility (CSR) programme, the so-called LTWP Winds of Change Foundation, to support local communities with water provision, education, and health infrastructure (Achiba, 2019).

4.2. Oil production in Turkana

Oil discoveries in Kenya date to colonial times (Anderson and Browne, 2011). In 2012, however, under favourable conditions of a “frontier market” (Tyce, 2020: 733), the Anglo-Irish oil company Tullow formed a joint venture with Africa Oil and Centric Energy to acquire onshore licences and began oil exploration near Lokichar, in the southern part of Turkana County (see Figure 1). By 2018, oil was transported to Mombasa for export, pending expansion of existing well pads from 33 to 321 and the construction of a pipeline from Turkana to the coast. The oil sites are fenced in and inaccessible to local communities, disrupting access to

² See <http://kenyalaw.org/caselaw/cases/view/116298/>

pasture, water sources, and migration routes, creating a situation that is likely to deteriorate as further developments occur (Schilling et al., 2018).

Since 2012, there have been numerous confrontations between the local community and the company and sub-contractors over participation deficits, jobs, compensation, and tenders. These have usually been small in scale and non-violent, but a large 2013 demonstration led to the closure of oil operations for three weeks. When Tullow Oil established an operation base and airstrip on 400 acres of community land, which an investor had leased from Turkana County Council in 2012, community members entered the base and damaged property worth 60,000 USD. By way of compensation for lost land, and in response to increasing protests and stoppages (Wanguhu, 2019), Tullow Oil significantly increased its CSR measures, including water boreholes, schools, a hospital, funds for community development committees, and grievance offices.³ Moreover, employment of local workers and subcontracts by Tullow Oil for Kenyan suppliers increased until 2016. However, when most of the required construction work was completed, many people lost their jobs. Community protests again escalated in 2017, when community members blocked company trucks and hindered access to oil production sites (Mkutu and Mdee, 2020; Schilling et al., 2018). Furthermore, the historical rivalries between Turkana and Pokot to the south were exacerbated by the presence of oil, and raised the stakes for territorial control in the area (Agade, 2017, Mkutu and Mdee, 2020).

The Kenyan government is responsible for acquiring land for the 824-kilometre oil pipeline, as part of the LAPSET corridor. In February 2019, the NLC officially designated the required land without involving Turkana County Government or local communities. When the NLC announced the designation and associated compulsory acquisition during a public assembly in Lokichar, turmoil broke out. A member of the county assembly closed the event and filed a complaint (Grawert, 2019), demanding to nullify the land acquisition. Furthermore, the Turkana County Government went to court to stop the compulsory acquisition of indigenous land.⁴ Issues of contention included the lack of consultation between national and county governments, lack of community participation, and

³ Author's interview with a staff member of the Tullow Oil Resource Centre in Lodwar, 07 March 2019.

⁴ See

<https://www.standardmedia.co.ke/adblock?u=https://www.standardmedia.co.ke/business/article/2001316308/government-blocked-from-acquiring-land-in-turkana>

compensation. The court ordered the matter to be handled by alternative dispute resolution through the Intergovernmental Relations Act, and Tullow Oil suspended its pipeline activities.

4.3. Geothermal development in Baringo-Silali

Kenya's Rift Valley has vast potential geothermal energy exploitation (Mariita, 2002). Large-scale resource development began in Naivasha in the mid-20th century, and was only recently expanded to the northern part of the country. Major new infrastructural developments include the Menengai caldera close to the city of Nakuru since 2011, and developments at Baringo-Silali shortly after, which is our focus (see Figure 1).

The most important actors in geothermal development are national-state agencies, mainly KenGen, the national power-generation company, and the Geothermal Development Corporation (GDC), a 100% state agency established in 2008 to fast-track geothermal energy exploitation. Geothermal development begins with surface studies and well pad preparation, followed by exploratory drilling and then, if all previous steps are successful, the construction of power plants. Geothermal power plants gather steam from different sites through a pipeline system, and transmit electricity to the national grid. Geothermal energy involves various ancillary infrastructures, including access roads, water provision for drilling, as well as facilities for workers, engineers, and managers.

Geothermal development thus greatly changes livelihood conditions, and provides both challenges and opportunities for local communities (Greiner, Greven, and Klagge, 2021). Livestock herding may be particularly disrupted by associated traffic, pipelines, and emissions (Hughes and Rogei, 2020; Rogei, 2021).

Although Baringo-Silali is still in exploratory stages of drilling, its estimated potential is about 3,000 MW.⁵ As things stand, the deep well drillings are very promising and plans were announced for an integrated geothermal heat park for industrial usage besides electricity production.⁶ To access drilling sites, the

⁵ See <https://gdc.co.ke/baringo.html>

⁶ See <https://www.standardmedia.co.ke/business/news/article/2001415292/geothermal-company-eyes-heat-parks-for-baringo-silali>

existing road network was improved and more than 100 km of feeder roads, as well as a 160-km fresh-water provisioning system, were constructed. Once sufficient steam is secured, the wells will be sold or leased to KenGen or private independent power providers to construct power plants and feed electricity into the national grid. Recent conflicts mainly concern job opportunities, CSR measures, and compensation for the transfer of communal lands for infrastructural developments. The latter has not yet occurred and a comprehensive treaty regarding the use of communal land is still pending. The project, however, is still in its early stages. Further consequences remain to be seen when completed pipeline systems obstruct the movement of cattle, geothermal electricity is produced, and profits are made.

The most important community benefits so far provided by GDC, include a water provisioning system for humans and livestock, including 20 water treatment points, job opportunities, and improvements to local schools. Despite its relatively early stages, geothermal developments have contributed to a local land rush, particularly along newly-built roads, as well as to soaring ethnic conflicts between Pokot and Turkana peoples. These ethnic conflicts are owed to the fact that both groups claim ownership of the Silali geothermal site, which is located on the border between Baringo and Turkana County (Greiner, 2020). Against this background, representatives from Turkana, including the county government, demand their share of short- and long-term benefits, including financial revenues, once electricity generation has started.

5. Scales of future-making: A comparative analysis

National state and policy actors, as well as external investors, not only pursue their economic interests, but they must also involve local communities because of legislative requirements focused on land and community participation. This occurs in a region that has not been a historical focus of international investors, and in a situation where many communities are undergoing profound changes with respect to their lands and livelihoods. These processes are further complicated by the ongoing devolution in Kenya, and changing legal frameworks concerning communal land. In this institutionally volatile regulatory environment, various actors struggle for influence and authority, and ultimately

power to shape the future at different scales. Unresolved land issues between investors and all levels of government, employment of local people, CSR projects mainly negotiated between investors and local communities, and local-to-national revenue-sharing are main arenas for conflicting interests. In what follows, we examine the following sites of scalar politics: national government and investors (5.1), communities and investors (5.2), inter-community conflicts (5.3), and counties as new players (5.4).

5.1. Nation-state and investors: Future-making on a large scale

The national government plays a key role in all three projects, whether as a key investor – as with Baringo-Silali – or in other functions – as with the LTWP and oil extraction in Turkana. The national state has supported all these investments by facilitating or even financing land access, planning activities (including environmental and social impact assessments), and the construction of ancillary infrastructures, such as roads and transmission lines.

The situation in northern Kenya, therefore, does not resemble the neoliberal, privately secured resource extraction enclaves that have emerged in other parts of the African continent (Ferguson, 2005). By contrast, the Kenyan government actively pursues future-making activities, which are firmly embedded in social and economic development goals that are explicitly stated in both Vision 2030 and the LAPSSET corridor plan.

Because all projects started while, or even before, devolution was implemented, the national state was in a position to set the scene(s) before county governments were able to participate in planning and decision-making. Major partners in these early stages were private investors and development finance institutions, whose own profit- or development-oriented goals were largely compatible with the national government's long-term vision. Major counterparts in all stages of project development are the affected local communities, whose visions of the future are much more concrete, leading to various conflicts with investors as well as among local communities.

5.2. Communities and investors: Future-making around land rights, job opportunities, and other benefits

Communities hosting large-scale energy projects in the northern Rift Valley have a history of marginalisation. Social services were available in towns but not in the rural areas where the new projects seemed to appear out of the blue, raising fears that again only the ‘big guys’ would benefit. While there is variation within communities, local communities in all three project areas reacted strongly to the implementation of infrastructure and other projects, exhibiting different degrees of cooperation and confrontation with the different investors. Reactions ranged from approval, critical negotiations over compensation and benefits, and outright resistance. Different reactions are related mainly to perceptions of future livelihoods, as either threatened or improved by the projects and associated infrastructures, as well as hopes for employment (cp. 5.3). Therefore, the loss of grazing land, a lack of compensation, or the issue of too few and too poorly paid jobs have stirred communities against the investors.

The companies responded with increased care towards offering available unskilled labour to locals, and a range of CSR measures involving affected populations. The private investors, LTWP and Tullow Oil, initially engaged very little with local communities, whereas state-owned GDC, responsible for geothermal development in Baringo-Silali, tried to involve local communities from the outset. Tullow Oil increased CSR spending significantly in response to mounting conflicts (Mkutu and Mdee, 2020; Tullow Oil, 2020). At all three sites, CSR has been focused on water provision, education, and health infrastructures. The measures helped to pre-empt resistance by local communities, and deflected the most critical legal issue, land rights.

Employment, especially for unskilled people, was the most important benefit in the early stages of all three projects. However, once projects moved towards operation, and ancillary infrastructures such as roads were in place, jobs began to dwindle, which contributed to a rise in protests (Klagge et al., 2020; Schilling et al., 2018). In all cases, rather than open resistance to the projects as such, what was at stake were “terms of inclusion” (Hall et al., 2015), which, as we show below, led to fierce contestation among local communities.

5.3. Communities versus communities: Future-making and inter-community conflict

In all three case studies, inter-community conflicts are fuelled by distribution of, and access to, project-related compensation and benefits. These conflicts often revolve around distance from project sites, location of administrative boundaries, and customary claims to land. Who is regarded as affected by a new energy infrastructure depends on how the project's geographical coverage is conceived. This is especially difficult to determine for decentralised projects distributed across several sites, such as oil exploitation or geothermal development, especially if pipelines connect sites with each other, or are necessary to transport oil, water, or electricity to nearby or distant locations. In addition, gas, odour, noise, and other emissions from projects, as well as ancillary infrastructures, can disturb local livelihoods well beyond their actual locations.

The complex geographies of energy projects are further complicated by historical hostilities between specific communities, as well as the fact that precise territorial boundaries are difficult to determine, given the communal nature of land rights, and the flexible, overlapping land use patterns historically prevalent in northern Kenya. Adding to these complexities, the mobile nature of livelihoods allows people to move toward projects or to claim traditional use of certain areas in order to become eligible for compensation and CSR measures. Such practices of future-making engender conflict with investors, and particularly with neighbouring communities, but sometimes also create intra-community conflicts, such as those that occurred between different territorial sections and clans in Turkana (Agade, 2017; Lind, 2018). Inter-community conflicts frequently have ethnic dimensions that sometimes turn violent. Such conflicts have sometimes exceeded 'traditional' ethnic hostilities to involve repeated attacks on Chinese workers in Turkana, as some interview participants told us.

5.4. Counties as new players: Impact of devolution

The devolved county governments operate on the basis of County Integrated Development Plans that are aligned to the Kenya Vision 2030. The largest shares of county budgets come from the national government. Additionally, county

governments at production sites also receive 20% of public revenues from oil production and (future) geothermal electricity generation, and are obliged to set up trust funds for the community share of 5% (RoK, 2019, Art. 58). With these budgets, new counties administer and control a variety of county-level issues, such as health provision, roads and transportation, pre-primary education, cultural activities, agriculture, planning and development. Moreover, the county governments hold all unregistered community land in trust on behalf of the communities (RoK, 2016, Art. 6).

Counties thereby have an important role in facilitating energy projects through land negotiations with the NLC and the local communities. All these functions could make counties important intermediaries between the national government and local communities. However, power struggles among national politicians and county governors have undermined county government institutions and cross-scale coordination. As Tyce (2020) and Wanguhu (2019) report, the increased number of claimants, including members of the county assembly, the county governor, and regional politicians in state institutions, has “the power to unravel existing power networks in the periphery while also creating wholly new networks” (Tyce, 2020: 734). Furthermore, there are issues with administrative capacity, which is why international development agencies still remain deeply involved in capacity-building and in providing support to county governments (Council of Governors, 2017).

Whereas the county government’s role in Baringo-Silali has so far been negligible, this is not the case for the LTWP in Marsabit and oil production in Turkana. While the Marsabit County Government acted like an ally to the national government, other official county-level actors supported opposing local communities in their lawsuit. By contrast, the Turkana County Government eventually supported local communities by filing a petition to stop compulsory land acquisition by the national government, thereby indicating that the county government is committed to actively shaping the county’s future (see 4.2). Many inhabitants, however, distrust both chiefs and the county administration, and therefore demand that the 5% share comes as direct cash payments to each community member (Mkutu and Mdee, 2020). This controversy highlights local communities’ fears that the county government will side-line them from the

expected oil wealth. These fears are supported by the fact that the legally required trust fund to manage the 5% community share has not yet been set up.

6. Conclusions

Energy projects in northern Kenya include both renewable and fossil fuels, which are exploited in large-scale flagship projects. The three case studies considered here – wind in Marsabit, geothermal in Baringo-Silali, and oil in Turkana – are firmly embedded in the national government’s future-making masterplans, whose long-term visions and aspirations are closely aligned with those of private investors and/or development financing institutions’ goal of capitalist development. Together, the national government and investors turned these marginalised hinterland regions into resource frontiers. They benefitted from the pre-devolution situation when the projects started, as they only had to negotiate with local communities, whose land rights were weakly protected by then-existing legal frameworks. However, reckless appropriation has been challenged and contested by local communities and their representatives, thereby opening up spaces for negotiation and scalar politics.

Scalar politics in northern Kenya not only involve a variety of actors at different government scales (national, local and county), but also private (transnational) investors and NGOs. However, “it is often not scale *per se* that is the prime object of contestation between social actors, but rather specific processes and institutionalised practices, that are themselves differently scaled” as McKinnon (2011: 22-23, italics in original) suggests. More concretely, in the case of northern Kenya, the resource frontier’s inherent institutional vacuum allows for renegotiations and the rearrangements of scalar relations, for example, between central and county governments, or through the intervention of international actors. For example, international donors and NGOs have been found to demand (more) comprehensive environmental and social impact assessments or CSR measures, thus potentially interfering with national or county governments’ sovereignty in order to protect local communities from the negative impacts of large-scale resource development.

Within local communities, the projects have raised both expectations and fears, leading to various reactions ranging from cooperation to resistance, as variously seen in road blocks and court cases. In northern Kenya's extractive frontier, where communities are well armed and ready to use their weapons, resistance reinforced communities' claims and their negotiating power. These and other activities have been directed towards defending or improving existing livelihoods, as well as benefitting from jobs and other opportunities created by different projects (especially CSR measures aimed at water, health, and education).

The institutional changes – Kenya's new constitution, devolution, and land laws – have gradually empowered local communities, as they have come to learn about these political and administrative changes and thereby strengthened their negotiating position. Moreover, they have also opened up spaces for new alliances. While investors were supported by the national state, the counties emerged as new players and potential partners during project development. In the cases of wind in Marsabit and oil in Turkana, official county-level actors backed local communities and their activities vis-à-vis private investors and the national state, thereby highlighting the independent and active role county institutions can play in disputes with local communities. This dynamic is also confirmed by the recent court ruling on the unlawful land acquisition in the LTWP case. Such scalar politics are additionally complicated by inter-community conflicts at the sub-county level. Inter-community conflicts are mainly about the distribution of jobs and CSR benefits, but they are associated with fierce and even violent, often ethnicised, contestations about land rights, constituencies, and inter- and intra-county boundaries.

Our case studies show that resource frontiers open fields of contestation over future-making, involving various actors, and challenging pre-existing power asymmetries at different scales. Frontiers, thus, mark a situation in which different visions of the future become spatially inscribed. This finding also underlines the importance of processes and practices in scalar politics, which shape “the interaction of inherited and emergent projects and scales” (MacKinnon, 2010: 31). Future-making in such constellations is not only about realizing competing future visions and aspirations in institutionally volatile environments. It is also re-shaping the relationship between centre and

periphery, local and global. As we write this article, the COVID-19 pandemic has contributed to the declining oil price, which added to doubts that Tullow Oil will complete the project (Global Energy Monitor, 2020), although the company appears to be reassessing the project with a view to a scaled-down plan for extraction (Tullow Oil, n.d.). More recently, the pandemic has also affected geothermal operations in Baringo, which have come to a halt, as local communities fear the spread of the virus through labourers and technicians from outside the area. The future, as always, is open.

REFERENCES

1. Achiba, G. A. (2019). Navigating contested winds: Development visions and anti-politics of wind energy in northern Kenya. *Land*, 8(1). <https://doi.org/10.3390/land8010007>
2. Agade, M. K. (2017). Oil and emerging conflict dynamics in the Ateker Cluster: The case of Turkana, Kenya. *Nomadic Peoples*, 21(1), 34-62. <https://doi.org/10.3197/np.2017.210103>
3. Alden Wily, L. (2018). The Community Land Act in Kenya: Opportunities and challenges for communities. *Land*, 7(1). <https://doi.org/10.3390/land7010012>
4. Anderson, D. M., and Bollig, M. (2016). Resilience and collapse: Histories, ecologies, conflicts and identities in the Baringo-Bogoria basin, Kenya. *Journal of Eastern African Studies*, 10(1), 1-20. <https://doi.org/10.1080/17531055.2016.1150240>
5. Anderson, D. M., and Browne, A. J. (2011). The politics of oil in eastern Africa. *Journal of Eastern African Studies*, 5(2), 369-410. <https://doi.org/10.1080/17531055.2011.573187>
6. Appadurai, A. (2013). *The future as cultural fact*. London: Verso.
7. Bennett, M. M. (2017). *Development on ice: Global transportation infrastructure and the Arctic frontier*. DPhil Dissertation, UCLA, Los Angeles.
8. Bodley, J. H. (2008). *Victims of progress*. Lanham, MD: Altamira Press.
9. Bond, J., and Mkutu, K. (2017). A 'patchwork' for peace: Institutions and activities in Kenya's northern drylands. *Local Environment*, 23(3), 1-23. <https://doi.org/10.1080/13549839.2017.1417360>
10. Boyer, D. (2014). Energopower: An introduction. *Anthropological Quarterly*, 87(2), 309-333. <https://www.jstor.org/stable/43652700>
11. Catley, A., Lind, J., and Scoones, I. (Eds.). (2013). *Pastoralism and development in Africa. Dynamic change at the margins*. London: Routledge.

12. Cordaid, Timu, KCSPOG, and RDC. (2016). Potential government revenues from Turkana oil. Discussion Paper, April 2016.
<http://kcspog.org/wp-content/uploads/2016/04/Revenues-from-Turkana-Oil-April-2016.pdf>
13. Cormack, Z., and Kurewa, A. (2018). The changing value of land in northern Kenya: The case of Lake Turkana wind power. *Critical African Studies*, 10(1), 89-107.
<https://doi.org/10.1080/21681392.2018.1470017>
14. Council of Governors. (2017). Strategic Plan 2017-2022.
<https://www.cog.go.ke/images/Strategic%20Plan%202017%20%E2%80%93%202022.pdf>
15. Danwatch. (2016). A people in the way of progress: Prostitution, alcoholism and a lawsuit on illegal land acquisition in the Lake Turkana Wind Power Project. Copenhagen.
<https://landportal.org/pt/file/37726/download>
16. Danwatch. (n.d.). About Danwatch.
<https://danwatch.dk/en/about-danwatch/>
17. D'Arcy, M., and Cornell, A. (2016). Devolution and corruption in Kenya: Everyone's turn to eat? *African Affairs*, 115(459), 246-273.
<https://doi.org/10.1093/afraf/adw002>
18. DeVore, J. (2018). Scattered limbs: Capitalists, kin, and primitive accumulation in Brazil's Cacao Lands, 1950s-1970s. *Journal of Latin American and Caribbean Anthropology* 23(3), 496-520.
<https://doi.org/10.1111/jlca.12380>
19. Dressler, W. H. (2017). Contesting moral capital in the economy of expectations of an extractive frontier. *Annals of the American Association of Geographers*, 107(3), 647-665.
<https://doi.org/10.1080/24694452.2016.1261684>
20. Drew, J. (2017). Pastoralism in the shadow of a windfarm: An ethnography of people, places and belonging in northern Kenya. PhD Dissertation, University of Sussex.
21. Eberhard, A., Gratwick, K., Morella, E., and Antmann, P. (2016). *Independent power projects in sub-Saharan Africa: Lessons from five key countries*. Washington DC: World Bank Group.
<https://doi.org/10.1596/978-1-4648-0800-5>

22. Elliott, H. (2016). Planning, property and plots at the gateway to Kenya's 'new frontier'. *Journal of Eastern African Studies*, 10(3), 511-529. <https://doi.org/10.1080/17531055.2016.1266196>
23. Enns, C. (2016). Experiments in governance and citizenship in Kenya's resource frontier. Doctoral Thesis, University of Waterloo.
24. Enns, C., and Bersaglio, B. (2015). Enclave oil development and the rearticulation of citizenship in Turkana, Kenya: Exploring 'crude citizenship'. *Geoforum*, 67, 78-88. <https://doi.org/10.1016/j.geoforum.2015.10.010>
25. Ferguson, J. (2005). Seeing like an oil company: Space, security, and global capital in neoliberal Africa. *American Anthropologist*, 107(3), 377-382. <https://doi.org/10.1525/aa.2005.107.3.377>
26. Gabbert, E.C., Gebresenbet, F., Galaty, J.G., and Schlee, G, (Eds.). (2021). *Lands of the future: Anthropological perspectives on pastoralism, land deals and tropes of modernity in Eastern Africa*. Oxford: Berghahn.
27. Galvin, K. A. (2009). Transitions: Pastoralists living with change. *Annual Review of Anthropology*, 38, 185-198. <https://doi.org/10.1146/annurev-anthro-091908-164442>
28. Geiger, D. (2009). Turner in the tropics: The frontier concept revisited. Doctoral Dissertation, Universität Luzern.
29. Global Energy Monitor. (2020). Lokichar-Lamu oil pipeline. https://www.gem.wiki/Lokichar%E2%80%93Lamu_Oil_Pipeline
30. Golder/ESF Consultants. (2019). Lokichar to Lamu Crude Oil Pipeline (LLCOP) Environmental and Social Impact Assessment. LAPPSET Corridor Development Authority. <https://drive.google.com/file/d/10giLNnHjfroj7OyeFCZQZrZq2FjhohzL/view>
31. Grawert, E. (2019). Between 'strong institutions' and the 'political marketplace': Layers of land conflicts in northern Kenya. In FriEnt (Ed.), *Land and conflict prevention*, pp. 42-45. Bonn: FriEnt. [https://www.frient.de/fileadmin/user_upload/FriEnt-](https://www.frient.de/fileadmin/user_upload/FriEnt-Dokumente/FriEnt-)

Dossier_Land_and_Prevention/land_and_conflict_prevention_web_9_MB-42-45.pdf

32. Greiner, C. (2013). Guns, land and votes: Cattle rustling and the politics of boundary-(re)making in northern Kenya. *African Affairs*, 112(447), 216-237. <https://doi.org/10.1093/afraf/adto03>
33. Greiner, C. (2016). Land-use change, territorial restructuring and the economies of anticipation in a Kenyan dryland. *Journal of Eastern African Studies*, 10(3), 530-547. <https://doi.org/10.1080/17531055.2016.1266197>
34. Greiner, C. (2020). Negotiating access to land and resources at the geothermal frontier in Baringo, Kenya. In J. Lind, D. Okenwa and I. Scoones (Eds.), *Land, investment and politics: Reconfiguring Eastern Africa's pastoral drylands* (p. 101-109). Woodbridge: James Currey.
35. Greiner, C., Greven, D. and Klagge, B. (2021). Roads to change: Livelihoods, land disputes, and anticipation of future developments in rural Kenya. *European Journal of Development Research*, 33(4): 1044-1068. <https://doi.org/10.1057/s41287-021-00396-y>
36. Greiner, C., Vehrs, H. and Bollig, M. (2021). Land-use and land-cover changes in pastoral drylands: Long-term dynamics, economic change, and shifting socioecological frontiers in Baringo, Kenya. *Human Ecology*, 49(5), 565-577. <https://doi.org/10.1007/s10745-021-00263-8>
37. Hall, R., Edelman, M., Borrás, S. M., Scoones, I., White, B., and Wolford, W. (2015). Resistance, acquiescence or incorporation? An introduction to land grabbing and political reactions 'from below'. *Journal of Peasant Studies*, 42(3-4), 467-488. <https://doi.org/10.1080/03066150.2015.1036746>
38. Harvey, P., Jensen, C. B., and Morita, A. (2017). Introduction: Infrastructural complications. In P. Harvey, C. B. Jensen, and A. Morita (Eds.), *Infrastructures and social complexity: A companion* (pp. 1-22). London: Routledge.
39. Hetherington, K. (2014). Waiting for the surveyor: Development promises and the temporality of infrastructure. *Journal of Latin*

- American and Caribbean Anthropology*, 19(2), 195-211.
<https://doi.org/10.1111/jlca.12100>
40. Hughes, L., and Rogei, D. (2020). Feeling the heat: Responses to geothermal development in Kenya's Rift Valley. *Journal of Eastern African Studies*, 14(2), 165-184.
<https://doi.org/10.1080/17531055.2020.1716292>
 41. Johannes, E. M., Zulu, L. C., and Kalipeni, E. (2015). Oil discovery in Turkana County, Kenya: A source of conflict or development? *African Geographical Review*, 34(2), 142-164.
<https://doi.org/10.1080/19376812.2014.884466>
 42. Kenya National Bureau of Statistics (KNBS). (2019). 2019 Kenya Population and Housing Census. Volume 1: Population by County and Sub-County. <https://www.knbs.or.ke/?wpdmpo=2019-kenya-population-and-housing-census-volume-i-population-by-county-and-sub-county/>
 43. Klagge, B., and Nweke-Eze, C. (2020). Financing large-scale renewable-energy projects in Kenya: Investor types, international connections, and financialization. *Geografiska Annaler: Series B, Human Geography*, 102(1), 61-83.
<https://doi.org/10.1080/04353684.2020.1729662>
 44. Klagge, B., Greiner, C., Greven, D., and Nweke-Eze, C. (2020). Cross-scale linkages of centralized electricity generation: Geothermal development and investor-community relations in Kenya. *Politics and Governance*, 8(3), 211-222.
<https://doi.org/10.17645/pag.v8i3.2981>
 45. Kopytoff, I. (1987). The internal African frontier: The making of African political culture. In I. Kopytoff (Ed.), *The African frontier. The reproduction of traditional African societies* (pp. 3-84). Bloomington: Indiana University Press.
 46. Korf, B., and Raeymaekers, T. (2013). Introduction: Border, frontier and the geography of rule at the margins of the state. In B. Korf and T. Raeymaekers (Eds.), *Violence on the margins: States, conflict, and borderlands* (pp. 3-27). New York, N.Y: Palgrave Macmillan.

47. Korf, B., Hagmann, T., and Doevenspeck, M. (2013). Geographies of violence and sovereignty: The African frontier revisited. In B. Korf and T. Raeymaekers (Eds.), *Violence on the margins: States, conflict, and borderlands* (pp. 29-54). New York, NY: Palgrave Macmillan.
48. Korf, B., Hagmann, T., and Emmenegger, R. (2015). Re-spacing African drylands: Territorialization, sedentarization and indigenous commodification in the Ethiopian pastoral frontier. *Journal of Peasant Studies*, 42(5), 881-901.
<https://doi.org/10.1080/03066150.2015.1006628>
49. LAPSET Corridor Development Authority (2016). Brief on LAPSET Corridor Project, July 2016.
<http://vision2030.go.ke/inc/uploads/2018/05/LAPSET-Project-Report-July-2016.pdf>
50. Larkin, B. (2013). The politics and poetics of infrastructure. *Annual Review of Anthropology*, 42(1), 327-343.
<https://doi.org/10.1146/annurev-anthro-092412-155522>
51. Li, T. M. (2010). Indigeneity, capitalism, and the management of dispossession. *Current Anthropology*, 51(3), 385-414.
<https://doi.org/10.1086/651942>
52. Li, T. M. (2014). *Land's end: Capitalist relations on an indigenous frontier*. Durham, North Carolina: Duke University Press.
53. Lind, J. (2018). Devolution, shifting centre-periphery relationships and conflict in northern Kenya. *Political Geography*, 63, 135-147. <https://doi.org/10.1016/j.polgeo.2017.06.004>
54. Lind, J., Okenwa, D., and Scoones, I. (Eds.). (2020). *Land, investments and politics: Reconfiguring Africa's pastoral drylands*. Woodbridge: James Currey.
55. Love, T., and Isenhour, C. (2016). Energy and economy: Recognizing high-energy modernity as a historical period. *Economic Anthropology*, 3(1), 6-16.
<https://doi.org/10.1002/sea2.12040>
56. MacKinnon, D. (2010). Reconstructing scale: Towards a new scalar politics. *Progress in Human Geography*, 35(1), 21-36.
<https://doi.org/10.1177/0309132510367841>

57. Mariita, N. O. (2002). The impact of large-scale renewable energy development on the poor: Environmental and socio-economic impact of a geothermal power plant on a poor rural community in Kenya. *Energy Policy*, 30(11-12), 1119-1128. [https://doi.org/10.1016/S0301-4215\(02\)00063-0](https://doi.org/10.1016/S0301-4215(02)00063-0)
58. Marston, S. A., Jones, J. P., and Woodward, K. (2005). Human geography without scale. *Transactions of the Institute of British Geographers*, 30(4), 416-432. <https://doi.org/10.1111/j.1475-5661.2005.00180.x>
59. McCarthy, J. (2015). A socioecological fix to capitalist crisis and climate change? The possibilities and limits of renewable energy. *Environment and Planning A*, 47, 2485-2502. <https://doi.org/10.1177/0308518X15602491>
60. Mkutu, K. (2007). Small arms and light weapons among pastoral groups in the Kenya-Uganda border area. *African Affairs*, 106(422), 47-70. <https://doi.org/10.1093/afraf/adl002>
61. Mkutu, K. (2008). *Guns and governance in the Rift Valley: Pastoralist conflict and small arms*. Oxford: James Currey.
62. Mkutu, K., and Mdee, A. (2020). Conservancies, conflict and dispossession: The winners and losers of oil exploration in Turkana, Kenya. *African Studies Review*, 63(4), 831-857. <https://doi.org/10.1017/asr.2020.2>
63. Mosley, J., and Watson, E. E. (2016). Frontier transformations: Development visions, spaces and processes in northern Kenya and southern Ethiopia. *Journal of Eastern African Studies*, 10(3), 452-475. <https://doi.org/10.1080/17531055.2016.1266199>
64. Orr, D. W. (2019). Renegotiating the periphery: Oil discovery, devolution, and political contestation in Kenya. *The Extractive Industries and Society*, 6(1), 136-144. <https://doi.org/10.1016/j.exis.2018.09.002>
65. Rasmussen, M. B., and Lund, C. (2018). Reconfiguring frontier spaces: The territorialization of resource control. *World Development*, 101, 388-399. <https://doi.org/10.1016/j.worlddev.2017.01.018>
66. Rogei, D. S. (2021). Mediating Maendeleo: Examining the nexus between geothermal extraction, wildlife conservation and

- community well-being in Olkaria-Suswa, Southern Kenya. PhD Thesis, Carleton University, Ottawa.
67. Republic of Kenya (RoK). (2011). Vision 2030 Development Strategy for Northern Kenya and other Arid Lands. Nairobi: Government of Kenya Printer.
 68. Republic of Kenya (RoK). (2016). The Community Land Act. Kenya Gazette Supplement No. 148, Act No. 27.
<http://kenyalaw.org:8181/exist/kenyalex/actview.xql?actid=No.%2027%20of%202016>
 69. Republic of Kenya (RoK). (2019). The Petroleum Act. Kenya Gazette Supplement No. 30, Act No. 2.
http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/2019/PetroleumAct_No._2of2019.pdf
 70. Schetter, C., and Müller-Koné, M. (2021). Frontiers' violence: The interplay of state of exception, frontier habitus, and organized violence. *Political Geography*, 87.
<https://doi.org/10.1016/j.polgeo.2021.102370>
 71. Schilling, J., Locham, R., and Scheffran, J. (2018). A local to global perspective on oil and wind exploitation, resource governance and conflict in northern Kenya. *Conflict, Security and Development*, 18(6), 571-600.
<https://doi.org/10.1080/14678802.2018.1532642>
 72. Tsing, A. L. (2003). Natural resources and capitalist frontiers. *Economic and Political Weekly*, 38(48), 5100-5106.
<https://www.jstor.org/stable/4414348>
 73. Tullow Oil. (2020). Focus on sustainability. Sustainability Report 2019.
https://www.tulloil.com/application/files/9215/8694/9510/Tulloil_Oil_plc_Sustainability_Report_2019.pdf
 74. Tullow Oil. (n.d.) Tullow in Kenya
<https://www.tulloil.com/our-operations/africa/kenya/>
 75. Turkana County Government. (2018a). Turkana County Annual Development Plan 2019/20. https://turkana.go.ke/wp-content/uploads/2019/03/Turkana-ADP-2019-2020-_09-04-2018.pdf

76. Turkana County Government. (2018b). Turkana County Integrated Development Plan 2018-2022.
<https://www.turkana.go.ke/index.php/documents/turkana-county-integrated-development-plan-cidp-ii-2018-2022/>
77. Turner, F. J. (1894). *The significance of the frontier in American history*. A paper read at the meeting of the American Historical Association in Chicago, 12 July 1893, during the World Columbian Exposition, Marlborough, England.
78. Tyce, M. (2020). Unrealistic expectations, frustrated progress and an uncertain future? The political economy of oil in Kenya. *The Extractive Industries and Society*, 7(2), 729-737.
<https://doi.org/10.1016/j.exis.2020.03.003>
79. Wanguhu, C. (2019). Oil politics and stoppages in Kenya: Agreeing to disagree again soon. *Oxford Energy Forum*, 117: 14-16. <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2019/01/OEF-117.pdf>
80. Wanyoro, C. (2021). Kenya: Turkana Wind Project title deeds nullified in land row. *All Africa*, 27 October.
<https://allafrica.com/stories/202110280031.html>
81. Watts, M. J. (2018). Frontiers: Authority, precarity, and insurgency at the edge of the state. *World Development*, 101, 477-488. <https://doi.org/10.4000/espacepolitique.4336>