CeDEP, SOAS, University of London International Programmes[1]

The Politics of Space for Conservation: A political economy analysis of the allocation of territory for biodiversity in Kenya

Oli Brown, September 2018

Abstract

Kenya is famous for its world-class wildlife viewing. Nineteen percent of Kenya's land area is protected through a network of more than 220 national parks, reserves and private and community conservancies. However, the country is also changing rapidly as a result of population growth, infrastructure development, extractive industries and agricultural expansion. This is leading to multiple, overlapping demands for the limited—and fixed—amount of land available in the country. This research aims to understand the economic and social factors that are driving political decisions on the allocation, or removal, of protected areas in Kenya. This will help to identify points of leverage to influence political decisions in support of conservation. This research employs a political economy analysis approach informed by expert interviews and case studies to map the stakeholders involved in decision making and understand the various factors that help drive decisions around conservation outcomes. These factors are in three main groups. First, the 'foundational factors' are the deeply embedded structures that shape the character and legitimacy of the State, the political system and economic choices. Second, the 'rules of the game' are the formal and informal institutions that exist and the rules, norms and incentives that determine actors' behaviour, as well as the scope for collective action. Finally, the 'here and now' are the current, transitory factors such as the behaviour of individuals or groups that may help to propel, or inhibit, change (USAID, 2016a).

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1 Introduction

1.1 Background

Kenya is a country whose reputation is interwoven with its rich biodiversity and world class national parks. The Government has formally set aside 8% of Kenya's terrestrial and marine ecosystems for wildlife conservation in a network of 64 national parks, reserves, and sanctuaries (Government of Kenya – GoK, 2018). An additional 11% of the country, or 6.36 million hectares, is managed for wildlife through a network of 160 private or community conservancies (GoK, 2018). This protected habitat, and the biodiversity it helps to sustain, has proved to be an enormous asset for the country (Büscher, 2015). According to Akama et al. (2011), Kenya is the fifth most visited country in Africa, with one in two visitors expecting to see wildlife during their stay. The Government of Kenya (2018) estimated that in 2017 tourism generated 13.5% of gross domestic product and directly employed 11% of the workforce. In 2015 the sector attracted 83.6 billion Kenyan shillings worth of investment (830 million USD), a sum which is forecast to rise by 5.2% over the next decade to 146.8 billion shillings by 2026 (GoK, 2018).

However, a wide variety of factors are degrading Kenya's environment and undermining its biodiversity (see Figure 1). Since aerial monitoring began in the 1970s it is estimated that Kenya has lost between 50% and 70% of its wildlife (Bedelian, 2014). There has also been significant loss of habitat – the Government (2018) estimates that the country lost 6.5% of its forest cover between 1990 and 2010 and 18% of its mangroves between 1985 and 2010. Despite wildlife tourism being one of the country's leading sources of foreign exchange, poverty remains endemic in many communities surrounding wildlife areas. This creates the conditions for the persistent challenges with poaching that have led to steep falls in Kenya's elephant and rhino populations over the past two decades (Kabiri, 2010).

Figure 1: Word map of issues threatening wildlife in Kenya mentioned in 2017 public consultations as part of the development of the National Wildlife Strategy (GoK, 2018, p. 8).[2]

Well-managed, sustainable protected areas are Africa's best chance for nature conservation (Fitzgerald, 2017). However, conservationists are struggling to develop strategies that conserve wildlife and the long-term viability of fragile ecosystems in ways that are politically acceptable to national governments and local communities (Newmark and Hough, 2000). Land is an inelastic resource with many competing uses (GoK, 2016). Land in Kenya is under particular pressure from population growth, infrastructure development, extractive industries and agricultural expansion. This results in multiple, often overlapping, demands for the limited—and fixed—amount of land available in the country. Perhaps unsurprisingly, the extent and integrity of many protected areas have suffered as a result. In fact, since independence there have been 145 separate instances where Kenyan protected areas have been downgraded, downsized or degazetted, representing a loss of 19,014 square kilometres of protected land (WWF, 2018).

1.2 Research aims and objectives

The aim of this research was to understand the economic and social factors that are driving political decisions on the allocation, or removal, of protected areas in Kenya with a view to

[2] HWC refers to human wildlife conflict and IWT refers to the illegal wildlife trade.

identifying points of leverage to more effectively influence political decisions in support of conservation.

The research falls within the broad realm of political ecology (see section 2.1), which studies the interaction between environmental change and political, economic and social factors (Robbins, 2004). Specifically, the objectives were to:

- Identify the stakeholders involved in decision making over the allocation of land for conservation in Kenya.
- Test the value of political economy analysis as a vehicle for shedding new light on the prospects for biodiversity conservation in Kenya and elsewhere.
- Examine three case studies of conservation land use change in Kenya in a political economy analysis context.

1.3 Structure

Chapter 2 provides an overview of the existing literature on political ecology, and in particular how conservation action can be examined through a political lens. The chapter then introduces political economy analysis as one method to understand systematically the social, economic and political factors determining conservation policy and practice, before finishing with a review of the literature on conservation in Kenya. Chapter 3 outlines the research methods deployed to develop the political economy analysis. Chapter 4 investigates three case studies of conservation land use change through a lens of political economy analysis. Chapters 5 and 6 presents the results of the research, along with a discussion of its significance and provide some concluding points.

2 Literature Review

2.1 Conservation through a political ecology lens

Political ecology (Bryant & Bailey, 1997; Fletcher, 2010; Rainer, 2013; Vaccaro et al., 2013; OECD, 2016) aims to explain how environmental changes mould wider political, social and economic processes, and how those same processes in turn determine the direction and extent of environmental change (Rainer, 2013). The starting point of political ecology is to define the environment as an arena where different actors, with very different levels of social, political and economic power, compete for access to, and control over, natural resources (Bryant & Bailey, 1997).

Protected areas are created—and sustained—for a number of reasons, not all of which may be evident: their biodiversity value may be an important factor of course, but often their economic, social or political value also plays an important role. Taylor (2016) for example, argues that conservation areas in the Panama Canal Watershed were gazetted for primarily economic reasons, in that they aimed to stem the deforestation-caused soil erosion that was threatening the profitability of the Panama Canal. Rainer (2013) looks at the role of protected areas in determining trajectories of peace and conflict in the Democratic Republic of Congo. In several places, conservation areas have been created as 'peace parks' specifically to resolve long-standing disputes over contested land borders, such as the Cordillera Del Condor peace park on the border between Ecuador and Peru (UNEP, 2009).

Vaccaro et al. (2013) describe an evolution of conservation through three broad phases. The first phase, 'fortress conservation', is an approach that goes back to the creation of the first national parks in the United States in the nineteenth century. This is where conservationists adopted a 'fence and fight approach' in an effort to keep out the local community. Doyon and Sabinot (2014) note that this approach was borne out of idea that humans are somehow unnatural, and that they need to be excluded from conservation areas for 'wild nature' to flourish. The second phase, which became more widespread in the 1990s and early 2000s, is 'co-managed conservation'. Co-managed conservation empowers local people to be more closely involved in the management of protected areas. The protected areas are then designed with the aim of achieving explicit developmental outcomes in addition to their environmental goals: a package of

interwoven interventions known as 'integrated conservation and development'. This approach emerges from the recognition that traditional ('fence and fight') conservation had become a form of occupation and exclusion which had imposed tremendous costs and injustices on local people in terms of their rights to traditional land and resources (Vaccaro et al., 2013). However, a sense of disillusionment has gathered around the real-life experience of integrated conservation and development projects. This has been quantified in several studies which have identified community conservation projects that fail to live up to either their conservation or their developmental promises (Newmark and Hough, 2000). The third phase identified is neoliberal conservation, which developed almost as a backlash against the previous participatory co-management model (Vaccaro, 2013). The authors argue that neoliberal conservation approaches are rooted in a concern for the long-term financial viability of conservation areas. Consequently, neoliberal conservation often focuses on various ways to raise income – whether through tourism, or from companies hoping to derive reputational benefit (Vaccaro, 2013).

This very broad typology of fortress, co-managed and neo-liberal approaches to conservation underlines the realization that—whether they like it or not—conservationists are not just scientists, but also political actors (Hammill et al., 2009). The creation of a conservation area inherently involves redistributing resources and renegotiating (or imposing) a new political economy across a particular area (Gibson, 1999). Consequently, political decisions are among the main driving forces influencing the fate of biodiversity (Helmhotz, 2010). Bryant and Bailey (1997) describe the very act of "declaring and implementing a conservation policy [as] a paradigmatic example of this competition for environmental control" (quoted in Vaccaro et al., 2013, p. 257). These interventions can have a series of unanticipated, unintended consequences. Neumann (1997) argues that efforts by conservation non-governmental organizations to include lands surrounding protected areas as buffer zones under the jurisdiction of the state can have major implications for land tenure relations. Meanwhile, projects in buffer zones are often not designed to achieve a particular environmental goal but rather to 'buy' local cooperation and diminish local opposition (Neumann, 1997). Eklund et al. (2011) investigated the role of governance in determining global conservation priorities. The authors argued that global conservation priorities are determined on the basis of a calculation of species type and richness, and threat level. They suggest this cost–benefit calculation tends to prioritize those developing countries where biodiversity is high but costs, especially land costs, are low. However, in those

same countries governance can be weaker, thereby compromising the very biodiversity outcomes the conservation intervention is intended to safeguard.

2.2 Political Economy Analysis

Political economy analysis (PEA) is a field-based, structured methodology that bridges politics and economics by trying to understand how power and resources are distributed (DFID, 2009). It aims to improve interventions by focusing not only on *how* things happen but also *why* they happen (Harris, 2013; USAID, 2016 a, b; McCulloch, 2017; Whaites, 2017). Although the practical applicability of the PEA approach has been criticized, it can help untangle how decisions are made, determine who is benefitting from those decisions and how reform is either promoted or obstructed (Hudson & Marquette, 2015).

There are many different approaches to PEA but Whaites (2017) suggests that PEA should aim to understand four elements. The first is the structural context—those background issues such as demographics that shape the institutional environment but that are hard to influence. The second is the bargaining process through which different actors engage. The third is around the stakeholders who have power to participate in bargaining processes or who are impacted by their outcome. The fourth is the range of incentives that provoke or constrain action.

Conservationists have long recognized that managing biodiversity effectively requires attention to the social and political context in which that biodiversity is found (Hammill, 2013). PEA can help to understand the societal and political interactions that conservationists need to master if they are to achieve their environmental goals. By investigating these variables practitioners can develop new perspectives on how to approach their work. They can identify new allies or obstacles and find opportunities for interventions that are necessary for the success of the enterprise but that may lie outside the scope of normal conservation planning (DFID, 2009; USAID, 2016a). Yet, with the exception of the USAID work (2016a, b), there has been little PEA of conservation.

2.3 Conservation in Kenya

Britain established colonial rule over East Africa, including the area that is now Kenya, in 1895. The British imposed an administrative structure and a centralized approach that has shaped

conservation approaches ever since (Jandreau, 2014; Petursson and Vedeld, 2015). In 1898 the earliest regulations to control hunting were issued (GoK, 2018). The emergence of the national park system can be traced back to the period of big game hunting expeditions between 1900 and 1945. This raised concerns about the implication of excessive destruction of wildlife for continued game hunting. In 1939 the colonial government responded by appointing a committee to advise on the administration of game parks in Kenya and elsewhere in East Africa (Akama et al., 2011). The committee's recommendations led to the creation of some of Kenya's most famous parks: Nairobi National Park (1946), Tsavo (1948), Mt Kenya (1949) and Amboseli (1957).

Little attention, however, was paid to the indigenous inhabitants of these areas. Local people were prohibited from entering the parks and using the existing wildlife, water or fuelwood resources, thereby undermining traditional livelihood strategies (Akama, 2011). Norton-Griffiths (1995) noted that conservation is often seen as something imposed from the outside. Akama et al. (2011) argue that tourism in Kenya has privileged Western models of tourism development and wildlife conservation (safari tourism) – predicated on the exclusion of indigenous communities. Büscher (2015) argues that, at a continental scale, Africa's political economy is determined by its biodiversity and natural resources which are either extracted or conserved—in both cases, the resources are consumed by high-paying outsiders.

Kenya, like other biodiverse rich countries, offers conservationists a high *benefit-to-cost* ratio in terms of global biodiversity benefits. One obvious benefit is the large populations of charismatic mammals that conservationists can protect – especially elephants, rhinos and several species of big cat (Eklund, 2011). Unsurprisingly, conservation has become closely tied to land tenure relations and property rights in Kenya (Norton-Griffiths, 1995). But at the same time the country is changing fast. Rapid economic growth (between 4% and 6% since 2015), population growth of 2.6% in 2017 and urbanization rates at 4.5% each year are radically reshaping the country (GoK, 2018). As a result, land, and the use to which it is put, has become a major form of contestation. This is particularly the case in and around urban areas but also in the northern parts of Kenya where pastoral and agricultural groups often overlap (Greiner, 2013). The result is that a variety of possible land uses - urban expansion, industrial activity, agriculture at all scales and transport infrastructure - are increasingly competing for land that is rich in wildlife (Akama et al., 2011).

3 Research methods

This research employed a political economy analysis approach that builds upon a methodology developed by USAID in 2016 (USAID, 2016a, b, c) to better understand the specific process of political decision-making around space for conservation in Kenya. This PEA framework has three dimensions. The first is the 'foundational factors', or the deeply embedded structures that shape the character and legitimacy of the state, the political system and economic choices. These tend to be slow to change like class or caste structures, or historical grievances. The second is the 'rules of the game'. This refers to the formal and informal institutions that exist and the rules, norms and incentives that determine actors' behaviour, as well as the scope for collective action. The third is 'here and now'. This refers to the current, transitory factors such as the behaviour of individuals or groups that may help to propel, or inhibit, change. These include leadership changes as well as domestic and international processes that influence political, economic and social processes (USAID 2016a).[3]

To develop a national level PEA of the factors supporting or undermining the allocation of land for conservation and biodiversity in Kenya, the research involved three phases. First a literature review analysed existing research on conservation decision making in Kenya as well as the evolution of Kenya's conservation policy from the colonial period to the modern day (Chapter 2). The literature review helped to categorize a set of stakeholders involved in conservation decisions in Kenya and identified some of the initial factors shaping those decisions. Second, more detailed investigation of three illustrative case studies helped to refine the identified stakeholders and factors (Chapter 4). These examples included a case where land has been degazetted from a national park (Nairobi National Park), a case where a major infrastructure project may transect conservation areas (the Lamu Port and Lamu-Southern Sudan-Ethiopia Transport Corridor, LAPSSET), and a final case where new land has been formally protected (Ol'Bolossat Wetland Protected Area). Third, six detailed, semi-structured interviews were held with conservation professionals and academics with many years of cumulative experience in the field of conservation in Kenya (see Annex 1). The interviews focused on the process of decision

[3] The original PEA framework proposed by USAID includes a fourth dimension of 'Dynamics' – which focuses on the potential feedback impact of possible interventions and so has been omitted from this diagnostic assessment.

making over land allocation for conservation, and asked interviewees to rank which factors were, in their opinion, the most significant. Collectively, these stages informed the development of a typology of factors for the PEA analysis (Chapter 5).

3.1 Limitations of the research

Clearly this research has just touched on a few of the most significant factors that could have been mentioned in a more exhaustive analysis. The case studies were a small sample size and so more illustrative than representative of the range of political factors driving conservation in Kenya. Likewise, the interviewees were not a representative sample of the population or decision-makers, but rather a sub-set of actors engaged in the conservation scene, and so inherently biased towards the value of wildlife. In the same vein the literature on conservation tends to be written by conservationists themselves and so often has an inherent pro-conservation bias where the ideological starting point is the inherent value of nature and the importance of preserving it.

4 Challenges and opportunities facing conservation in Kenya –an analysis of three case studies

4.1 Nairobi National Park

Nairobi National Park is a relatively small (117km^2) park on the southern edge of Kenya's capital city (see Figure 2). It is the only national park to fall within the administrative boundaries of a city anywhere in the world (Hyman, 2013). While the northern border is fenced, the park's conservation value is as a migratory park based on access to the wildlife coming in from the Amboseli plain through the unfenced southern border (interviewee response). It was not originally intended as an urban park but Nairobi, which has a population of 6.54 million in 2018 (World Population Review, 2018), has grown around it, giving rise to iconic images of wildlife in front of the Nairobi skyline (see Figure 2).

Figure 2: The Nairobi skyline from Nairobi National Park © Ninara, Creative Commons

Rapid population growth and industrial developments on the southern border have eaten away at the migration corridor, which is effectively enclosing the park along its southern edge and severely impeding the previous migration routes (interviewee response). There have been multiple attempts over the years to carve off sections of the park for development, but the conservation community has mobilized strongly against any adjustments to its boundaries. They

argue that any concessions of the park's current territory would represent the 'thin edge of the wedge' that would open the door to ever more claims (interviewee response).

In a controversial article, Hyman (2013) argued for 'constructive pragmatism' in defending the borders of the Nairobi National Park, arguing for a reimagining of the parks' boundaries given that the surrounding landscape was changing in ways that already undermine the park as it is currently laid out. In 2015, and despite sizeable protests, the Kenyan Wildlife Service agreed to let the Highway Authority use 53 acres of the northern edge of the Park as part of the construction of a southern bypass road designed to loop around Nairobi and relieve its legendary traffic (Varagur, 2016).

Around the same time, plans were raised to route the extension of the Single Gauge Railway (SGR) from Nairobi to Kampala through the Park. This was the second phase of a 600 km railway from Mombasa to Nairobi, completed in 2017 at a cost of $3.6 billion dollars and Kenya's most expensive investment since independence (Kimanthi, 2018). The first proposed routing of the SGR would have dissected the park, with potentially devastating consequences for the wildlife (personal communication). Although National Land Commission chair Muhammad Swazuri refuted allegations that the decision to cut through the park was taken to avoid more costly compensation to private developers (Burrows, 2015), the view among the conservation community was that this was exactly the reason for the proposed routing (personal communication).

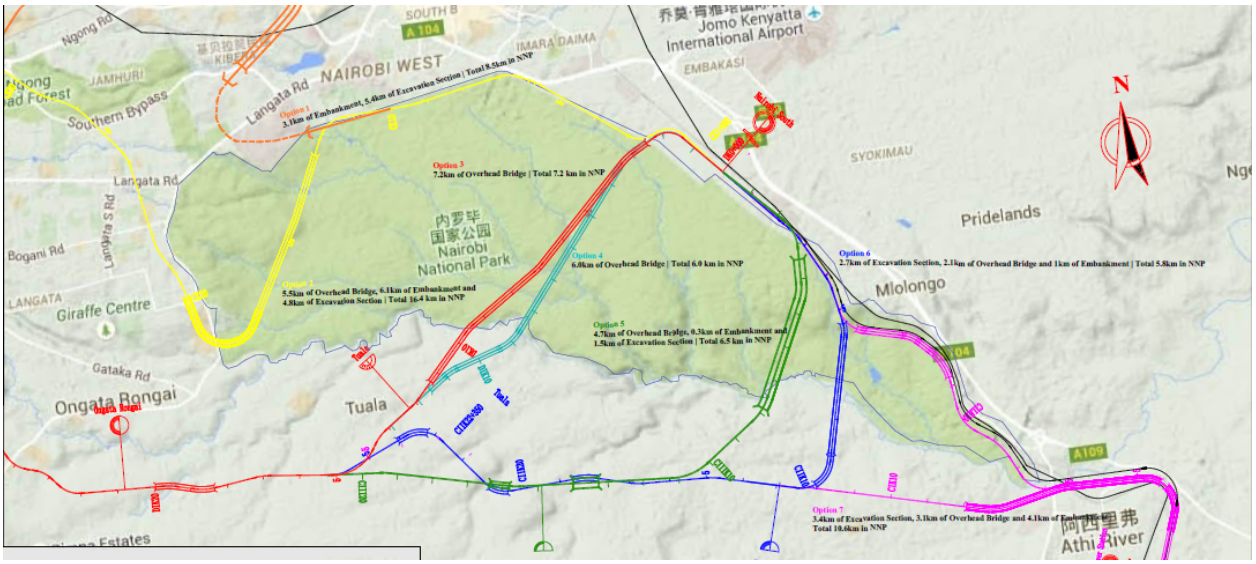

Figure 3: Nairobi National Park and the various options discussed for the SGR (the eventual routing follows the yellow line) © Conservation Alliance of Kenya (Conservation Alliance, 2018)

Conservation groups argued that their experience of mobilizing a political response to the various plans for the southern bypass road helped to inform their approach to the SGR. Akshay Vishwanath, one of the park's board members, said: "What we realized in that episode is that we didn't really have a foot in the door with the real decision-makers… with the railway, we're really trying to move past the 'tree-hugging' environmental aspect into strategic negotiation" (Varagur, 2016, p.1). In 2016 a coalition of Kenyan conservationists obtained a court order stopping construction of the railway within the park until an environmental impact assessment was completed by the National Environmental Management Agency and considered by the court (Associated Press, 2016). The eventual route of the SGR, which was under construction in 2018, still runs through the park for six kilometres, but with elevated sections to allow for the passage of large mammals. Nevertheless, some of the conservation groups' concerns about the road and rail projects being a 'slippery slope' towards further development seem to be justified as a 4.15 km section of a new road linking the rail terminus and the southern bypass road was proposed in April 2018 (Kimanthi, 2018).

4.2 Lamu Port and Lamu-Southern Sudan-Ethiopia Transport Corridor (LAPSSET)

The Lamu Port and Lamu-Southern Sudan-Ethiopia Transport Corridor (LAPSSET) project is a major project to link Kenya, South Sudan and Ethiopia with railway, road, tourism and energy infrastructure (Figure 4). The project will comprise a 500 m wide corridor for transport infrastructure across northern Kenya, from the coast to the border with South Sudan, overlaid by

a 50 km wide economic corridor for industrial and agricultural investments (Enns, 2017). It is one of 32 major transport corridors either planned or under construction in sub-Saharan Africa that have the potential to radically affect the use of land across the continent (Enns, 2017).

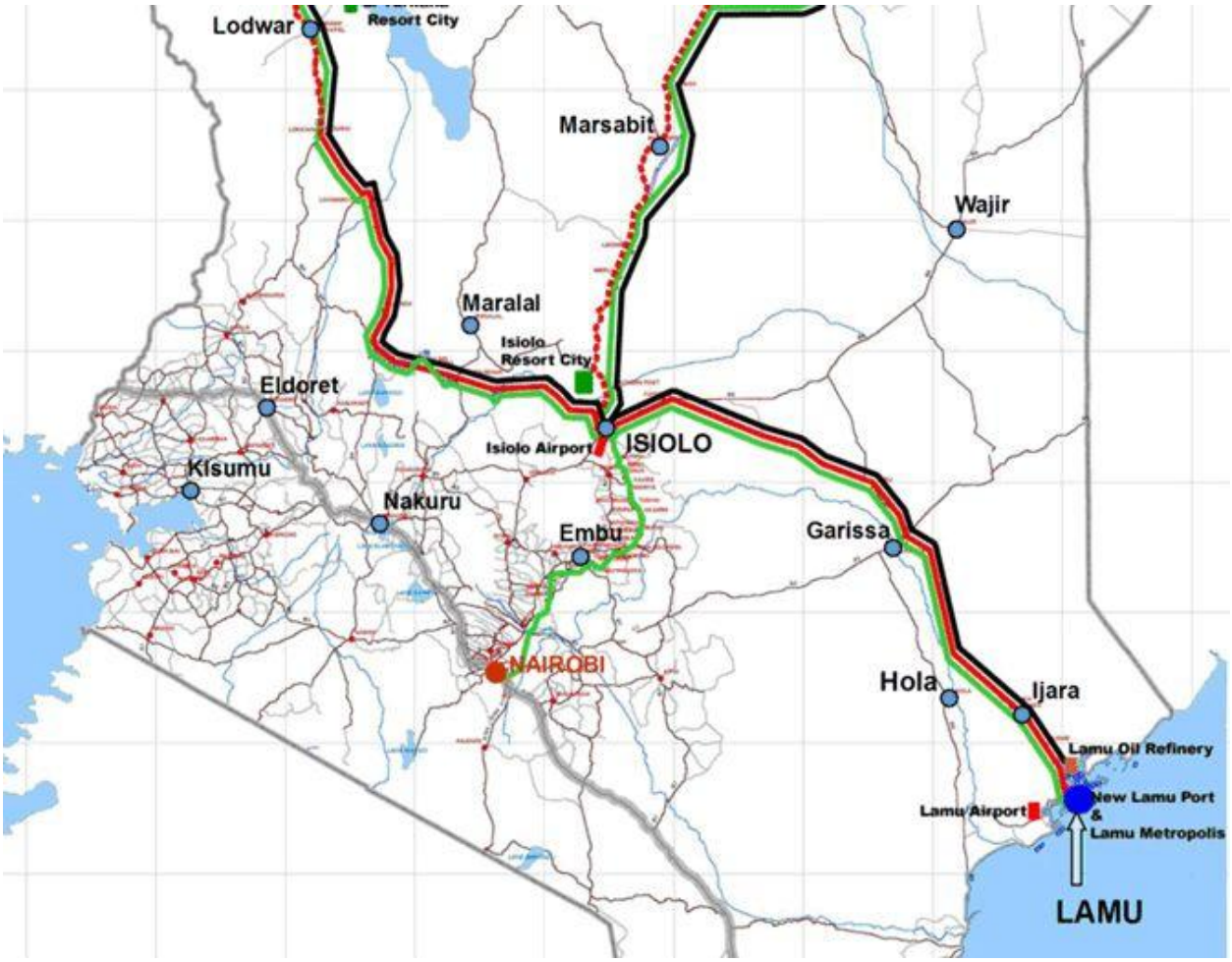

Figure 4: The proposed routing of the LAPSSET transport corridor © Heinrich Boll Foundation (2018)

Northern Kenya, through which the LAPSSET will pass, is a globally important biodiversity hotspot, home to 75% of the country's wildlife, as well as 18 national parks, reserves and sanctuaries and 33 community conservancies (Enns, 2017). The exact route of the LAPSSET has not yet been determined (see Figure 4) but may cut across or run alongside some world-famous conservation areas such as Marsabit National Park and Samburu National Park (Enns, 2017). Conservation actors have been active in questioning the long-term environmental costs of the different proposed routes. Enns (2017) argues that the conservationists themselves have effectively deployed scientific knowledge as political actors. The author notes how well-informed and well-organized advocacy has helped to influence the delayed publication of the

project's Strategic Environmental Assessment, which recommends rerouting the corridor and relocating a resort city.

> *"While it remains to be seen whether these mitigation measures will be heeded, the proposal to reroute the corridor to protect wildlife habitats demonstrates the successes that conservation actors have had in producing and circulating alternative ideas about how land in northern Kenya should be used, managed and valued"* (Enns, 2017, p19–20).

Interestingly, the LAPSSET Corridor Development Authority (LCDA) deploys conservation language to argue that a spill-over benefit of the project will be to support the economic viability of the protection of the wildlife areas:

> *"The envisioned resort cities in Lamu, Isiolo and Lake Turkana and the construction of the road from Isiolo to Moyale and the airport in Isiolo and Lamu have great impetus for tourism in the LAPSSET corridor. The Mt. Kenya, Samburu, Meru, Aberdares and Marsabit National Parks as well as the wildlife conservancies within that region have benefitted a lot from the new road from Isiolo to Moyale"* (LCDA, 2016, p14).

4.3 Lake Ol'Bolossat

In January 2018 the government announced that it would formally gazette Lake Ol'Bolossat and its immediate surroundings as a protective wetland (NEMA, 2018). The lake, the only freshwater lake in central Kenya (see Figure 5), is the headwater for the Ewaso Nyiro river and supports livelihoods and communities across several counties in Northern Kenya. However, heavy abstraction of water has led to the lake shrinking from 10,000 hectares to 3,000 hectares in the past decade (Nature Kenya, 2018).

Figure 5: Aerial view of Lake Ol'Bolossat © A. Wamiti/ Naturekenya (2018)

The announcement was made at an event to mark the 2018 International Wetlands Day. At the event the Cabinet Secretary for Tourism outlined the rationale for the gazettement as being the value of wetlands in disaster risk reduction, their potential value as a site for tourism and the biodiversity important of the endangered bird species in the area (Wetlands International, 2018).

5 Results and discussion

Conservation is a land-intensive exercise. In fact, the biggest single factor enabling large mammals to survive and thrive in Kenya is the existence of large expanses of natural habitat (Graham, 2012). Elephants can cover 80 kilometres in a day, and the home range of a cheetah can exceed 150 km^2 (Lalampsa, 2017). Modern Kenya has a complex 'ecosystem' of approaches to conservation and indeed one can find examples of all three of Vaccaro *et al*'s (2013) conservation models within the country – fortress conservation, community conservation and neoliberal approaches. The major national parks, such as the Masaai Mara, are heavily guarded and patrolled, and are a classic example of fortress conservation (Bedelian, 2014). But around their edges there are multiple examples of community led co-managed areas with a range of integrated conservation and development style interventions. Meanwhile, the many high-end private game reserves around the country speak to a move towards a neo-liberal commodification of 'wild' nature through expensive and highly exclusive safari operations open to a very select international demographic. This 'conservation ecosystem' is subject to numerous pressures from a number of different actors.

5.1 Stakeholder analysis

Stakeholders are those with power to participate in bargaining processes, whether they are winners or losers from a particular decision. Drawn from an analysis of the literature, case studies and interviews, Figure 6 is a map of the main stakeholder groups typically involved in decision-making over land use for conservation in Kenya. Although every case is specific and each location is different, it is possible to make some general analysis of the strength of cooperation and the direction of influence between these stakeholders, as well as to highlight potentially conflictual relationships (Figure 6).

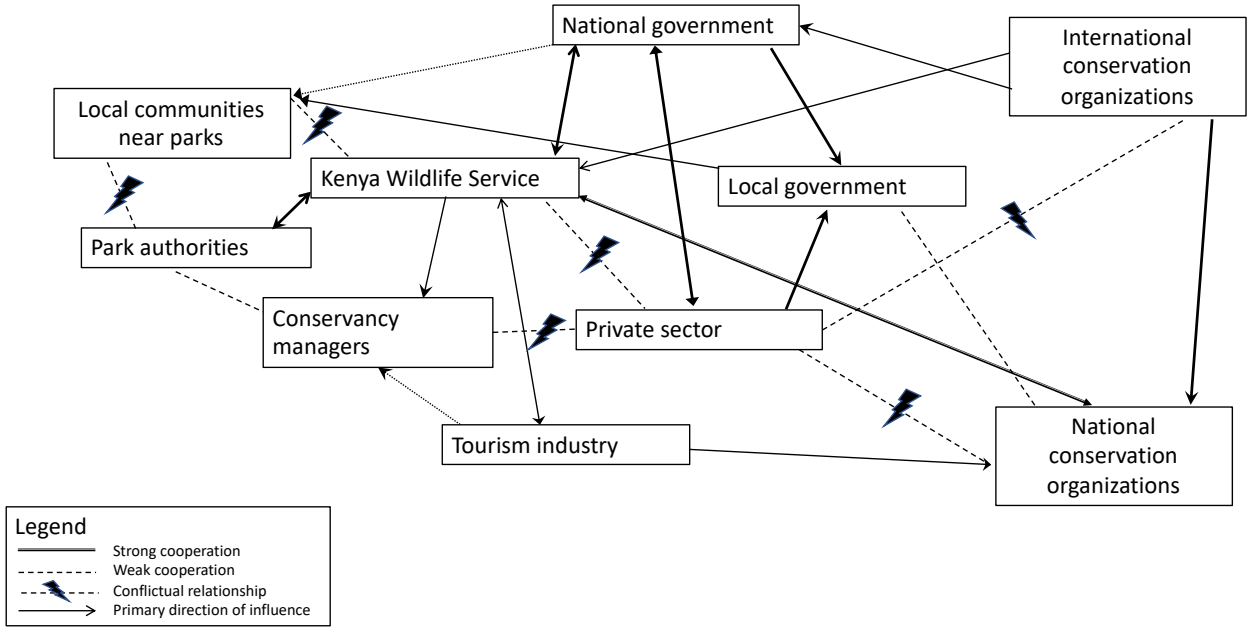

Figure 6: Stakeholder mapping – decision-making over land for conservation in Kenya

Although much can be said about each of these stakeholder groups it is worth noting briefly the role of three actors – the Kenya Wildlife Service (KWS) and conservation organizations, both national and international. The KWS was created in 1989 by the Government's Wildlife (Conservation and Management) Amendment Act (GoK, 2018). It replaced the Wildlife Conservation and Management Department, which had failed to stem steep drops in wildlife as a result of poaching (Western, Waithaka and Kamanga, 2015). Importantly it was set up as a semi-autonomous agency with responsibility for wildlife and national parks, though not forestry reserves. In 1991 KWS started to formally promote community-based conservation, and the number of conservancies has grown from fewer than 10, all on private ranches, to 230 in 2014, mostly on communally held lands. The land managed as conservancies grew from 100 km^2 in 1991 to 43,600km2 by 2014 (Western, Waithaka and Kamanga, 2015). However, despite successes there continues to be strong pressure on wildlife and severe financial and managerial challenges within KWS, which have curtailed its impact and influence (Pike, 2016a,b).

Meanwhile, conservation organizations can be powerful players, particularly in places such as northern Kenya where conservation is the second most widespread form of land use after pastoralism, and an important contributor to the local economy (Enns, 2017). Enns (2017) assessed the LAPSSET corridor (case study 4.2) and analysed how conservation groups are deploying "divergent expertise" (p. 1), in this case scientifically based estimates of the

environmental costs of different routings of the corridor, as a way of influencing the negotiation of that routing. One interviewee from a national conservation organization summarized their role as engaging with the government in diplomatic advocacy to explain the environmental downsides of development (interviewee response).

5.2 Political Economy Analysis

The results of the PEA are summarized in Table 1 and discussed below. Informed by the framework proposed by USAID (2016a), the factors identified in this study that support the allocation or maintenance of land for conservation, and those which undermine conservation are classified into three types: 'foundational', 'rules of the game' and 'here and now'.

Table 1: Selected PEA of factors supporting and undermining conservation in Kenya: summary of results

Factor	Supports conservation	Undermines conservation
Foundational factors: *the deeply embedded structures that shape the character and legitimacy of the State, the political system and economic choices.*		
Parliamentary democracy	*Provides a framework of legislation and a degree of accountability for conservation action*	*Promotes a wide variety of competing, occasionally contradictory, priorities for the country*
Colonial legacy	*Existing network of protected areas which has a high degree of institutional inertia and is difficult to change*	*Association of conservation as an 'imposed' form of land use*
Rules of the game: *the formal and informal institutions that exist and the rules, norms and incentives that determine actors' behaviour, as well as the scope for collective action.*		
Legislative framework	*Biodiversity conservation is listed as a national priority in the Constitution and other legislation*	*The regulations that give force to the primary legislation are weak or not enforced.*
Gazetting national parks	*Degazetting existing national parks is a complex, politically sensitive task*	*Creating a new protected area can is a long, time-consuming and complex process*

Creating conservancies	*Creating new conservancies is more straightforward*	*Individuals can have high disruptive power where consensus is needed among a group of landowners to create a conservancy*
Kenya's environmental obligations under various multilateral agreements (e.g. the Convention on Biological Diversity)	*Meeting international environmental obligations is seen as politically desirable in Kenya*	*Pressure to meet generalized targets for the percentage of land covered by protected areas (e.g to meet targets set by the Convention on Biological Diversity) may undermine long-term public support for conservcation*
Here and now: *the current, transitory factors such as the behaviour of individuals or groups that may help to propel, or inhibit, change.*		
Ability of key stakeholders to mobilize and influence decision-making	*Professional conservation community is an influential political actor, particularly in counties where conservation is prominent*	*High level of corruption increases the ability of stakeholders with an interest in degazetting protected areas to influence political decision making*
Rising costs of conservation	*Recent, controversial introduction of 'consumptive use' options may defray costs of conservation*	*High and rising cost of managing protected areas with the 'big five' (elephants, lions, rhinos, leopards and buffalo) becomes prohibitive for some conservation areas*
Increasing demand for agricultural, industrial and residential land	*Expensive, high margin conservation enterprises can be a going concern, but often need additional resources from donors or government, or creative ways of making money*	*Rapid increase in the opportunity costs of land set aside for conservation and biodiversity.*

Different narratives of conservation	*Sense of national identity: conservation and 'wild Kenya' is part of the national language*	*Strong national narrative about the need for economic growth as an overriding priority*
Public environmental awareness	*Conservation and 'wild Kenya' is part of the national language*	*There is a small national constituency for environment because of low public environmental awareness in urban areas, and human–wildlife conflict in rural areas.*

5.2.1 Foundational factors

There are numerous foundational factors, the deeply embedded structures that shape the character and legitimacy of the State, the political system and economic choices, that shape the availability of land for conservation in modern Kenya, including its rich endemic biodiversity, but also its topography and democratic style of government. For reasons of space Table 1 does not list all of these. However, a particularly prominent factor is the legacy of existing protected areas inherited by the newly independent country in the early 1960s. As described in the literature review (chapter 2), Kenya's network of protected areas was created during the colonial period by the British: it was pieced together from the forcible expropriation of land from indigenous peoples. As such it created "structurally embedded wildlife conservation policies" (Akama et al., 2011, p. 285) which have largely continued uninterrupted since Kenya gained its independence from Britain in December 1963. Post-independence land allocations have developed around the network of gazetted land that was created by the British, and which is still recognizable today.

Conversely, the persistence of the colonial network has also embedded the perception among the Kenyan population that wildlife is a preoccupation of 'the whites', and indeed the whole concept of safaris has become imbued with the idea of remote, white privilege (interviewee response). Even the language used to describe the consumptive use of wildlife – white hunter versus black poacher – speaks to the cultural overtones that still colour conservation action in Kenya (interviewee response). As Jandreau (2014, p135) notes, "The historical legacy of conservation

plays a significant role in today's palpable aura of mistrust that continues to plague conservation efforts".

5.2.2 Rules of the game

The rules of the game are the formal and informal institutions that exist and the rules, norms and incentives that determine actors' behaviour, as well as the scope for collective action. An important factor supporting the allocation of space for conservation in Kenya is that biodiversity conservation appears as an explicit goal in several important parts of the country's legislative framework. For example, Article 69 of the 2010 Constitution obliges both the State and every person to protect and conserve the environment (Wairagu, 2017). There are a number of other Acts of Parliament that also affect the conservation of land. The Forest Conservation and Management Act (2016) gives effect to Article 69 as it relates to forested areas, the Community Land Act (2016) provides for the recognition and management of community lands for conservation, the Tourism Act (2011) sets out standards for tourism development plans and the Wildlife Management and Conservation Act (2013) reinforces legal protection for gazetted national parks (Wairagu, 2017).

This legislative framework helps to set the parameters for planning and action at a sectoral level. Allocating land for conservation is generally a centralized process but it also varies significantly between types of protected area. National parks are the responsibility of the Kenya Wildlife Service, national reserves are under local government, while community protected areas are privately run or operated through a process of communal decision-making (interviewee response). In 2016, the Ministry of Lands published a National Spatial Plan (2015–2045) which includes in its list of principles for future spatial plans at a county level, the goal that "plans shall promote the protection and conservation of environmentally sensitive areas" (GoK, 2015, p19). Most recently, the National Wildlife Strategy, released in June 2018, aims to provide an overall framework for the implementation of Article 69 (GoK, 2018). The very first goal of that strategy is to secure space for wildlife habitats through the expansion of the protection of key habitats to ensure sustainable wildlife conservation through habitat rehabilitation, preservation, and the restoration of connectivity through securing corridors and dispersal areas (GoK, 2018, p30).

The legislative framework has created a chain of complex and centralized steps to go through in the event of a proposal to degazette a part of a national park, which raises the costs of boundary changes in the national park system and ensures a certain amount of institutional inertia in the system of the national parks (interviewee response). The corollary of this is that it can be equally hard to create entirely new protected areas given the web of existing land claims across the country. Case 4.3 on Lake Ol'Bolossat is an example of the government formally gazetting previously protected land. Collectively this provides a legal framework within which the government can be held to account, to a degree, in the event of proposals to degazette existing conservation areas. One example of this was the success of campaigners in securing a temporary halt to the construction of the SGR in Nairobi National Park (case study 4.1) until the court had reviewed the Strategic Environmental Assessment.

That said, much of this declaratory primary legislation has not been backed up by detailed regulations with appropriate penalties, so the net effect tends to be more limited than would appear on paper (interviewee response). At the same time there are a number of competing priorities which promote alternative uses for land, and so these build in tensions and possible trade-offs that need to be negotiated. One of the most important of these is the "Vision 2030" - an ambitious development blueprint for Kenya, recommended by Kenya's National Economic Council and formally adopted by the Government in 2006 - which aims to transform Kenya into an industrialized, middle-income country by 2030 (Graham, 2012). One of the plan's goals is sustained growth in the country's gross domestic product at a rate of 10% per annum. This helps to set up a competing narrative (see section 5.3) of the country as needing economic growth at all costs.

While the boundaries of national parks are relatively resistant to change (for either expansion or diminution), the same cannot be said of the network of conservancies, whether private or communal, that are scattered across 27 of the 47 counties of Kenya (Lalampsa, 2017). The 2013 Wildlife Act defines a wildlife conservancy as land set aside by an individual owner, group of owners, or community for the purpose of wildlife conservation (Lalampsa, 2017). Over the past 25 years conservancies have become an important part of the Kenyan conservation landscape and have more than doubled the land area under conservation – with 6.4 million hectares or some 10.9% of Kenya's landmass in conservancies of some form or other (Lalampsa, 2017). Kenya

has been at the forefront of community conservation approaches and it is seen as a way of incentivizing communities to become stewards of wildlife (interviewee response).

The Laikipia Plateau in the northern area of the country, for example, hosts some of the country's most diverse and important wildlife areas but has just one officially designated protected area: Kirumun National Reserve (Graham, 2012). The first conservancies appeared in the 1990s, not as a result of specific top-down policies, but rather individual initiatives by private or community landowners, occasionally with the help of tourism enterprises (interviewee response). Warigia and Buzzard (2017) suggest that a lack of proper policy and regulation may have actually been a driver for their growth by providing room for experimentation with different financial models (Patton, 2016). The barriers to entry for a conservancy are relatively low—anyone may form a conservancy and there is no minimum size. Prospective conservancies need to register as a legal entity and have a management plan approved by the local County Wildlife Conservation and Compensation Committees (CWCCC) (Warigia and Buzzard, 2017). Warigia and Buzzard (2017) argue that conservancies are an example of where practice has led and policy has followed, as it was only with the 2013 Wildlife Act that conservancies were legally recognized.

A final important 'rule of the game' factor that emerges from the research is the importance of Kenya's international environmental obligations. Kenya is a signatory to the Convention on Biological Diversity (CBD) and committed to Aichi Biodiversity Target 11 of the Strategic Plan for Biodiversity 2011–2020 (CBD, 2010). This target commits signatory countries to ensure that at least 17% of their terrestrial and inland water areas and 10% of their coastal and marine areas are effectively conserved for biodiversity and ecosystem services (CBD, 2010). One theme that emerged from the interviews is that this web of international obligations is a more significant driver of environmental action than might first be assumed in a world where ratification is often not followed by close adherence to the terms of a multilateral environmental agreement (interviewee response). It is interesting to note, for example, that the gazetting of Lake Ol'Bolossat (case study 4.3) was announced on International Wetlands Day. Arguably aimed as much at an international as a national audience, which reflects the stakeholder mapping presented in section 5.1 showing the strong relationships between government, local conservation organizations and international ones.

5.2.3 The here and now factors

The final set of PEA factors are described by USAID (2016a,b,c) as the 'here and now' issues or the transitory factors such as the behaviour of individuals or groups that may help to propel or inhibit change. One prominent issue that emerged from the literature and interviews is the idea of the different narratives around conservation that are present in the country. Conservation decisions are tied closely to cultural values and priorities, particularly the importance that people ascribe to the inherent value of nature (Bedelian, 2014). These narratives, and whether they present a positive, neutral or negative view of the inherent value of wildlife and its preservation, are a powerful, often unspoken, factor in Kenya. The National Wildlife Strategy (GoK, 2018) clearly states the perception, widely held among Kenyans, that the country's "rich natural heritage [is] central to our identity and prosperity" (GoK, 2018: p 2). As one interviewee noted, conservation is a part of the common language in Kenya, and that everyone - whether they agree with conservation or not - is aware of the issue of conservation. Another interviewee suggested that there has been a great improvement in terms of how people perceive conservation in Kenya and that the public are becoming more aware of their rights to a green and healthy environment. A third interviewee, however, argued that the lack of environmental awareness among urban population undermines the long-term constituency for the environment, and human–wildlife conflict in rural communities undermines support for wildlife. Any would-be conservationist needs to understand the main actors behind these narratives and how those actors move those narratives forward (interviewee response).

However, there is a parallel, widely held and also very compelling narrative about Kenya being a country with ingrained poverty where the national ambition to become a middle-income country is an over-riding priority and one for which certain sacrifices will need to be made (interviewee response). These competing narratives – on the one hand, the country is a biodiversity hotspot, but on the other, the country is an ambitious and emerging economic power – often echo the core tension that conservation in Kenya faces, and that is the economic viability of conservation in the context of a changing country where land prices are rising rapidly, and with them both the costs and the opportunity costs of devoting that land to wildlife (Graham, 2012).

The interplay between these two narratives is significant, as conservation is an expensive enterprise, and it is getting more costly. As one interviewee noted, nature does have intrinsic

value but that value takes money to maintain and the question is who is going to pay for it? Fitzgerald (2017) calculates that between US$365 and US$930 are needed per square kilometre per year for effective elephant conservation. In the case of habitat that can support lions, the cost is roughly US$2,000 a year in unfenced areas and US$500 in fenced areas. However, the majority of protected areas in Africa are managed on less than US$50 per square kilometre per year (Fitzgerald, 2017). Given the need for 24-hour armed guards, rhino conservation has particularly high costs – so much so that three rhino sanctuaries in the northern Kenyan area of the Laikipia plateau decided to hand over their rhino populations to the Kenya Wildlife Service for translocation to other sites in the country (Graham, 2012). The promise of tourism revenues is often used as an argument for conservation, but, according to several interviewees, the idea that tourism alone can finance Kenya's conservation system is highly unrealistic (interviewee response).

Tied in with this is a sense, expressed by several interviewees, that decision making in Kenya is highly susceptible to elite influence and corruption (interviewee response). According to Jandreau (2014), in theory 19% of park revenues should be distributed to surrounding communities, but these resources are often lost to corruption or mismanagement, which undermines local support for the conservation area. Meanwhile, one interviewee noted that people involved in setting up tourist infrastructure in and around parks and conservancies tend to have a short view of the future and assume high discount rates on their investments as there is a lack of trust that corruption won't lead to an outcome where one's investment is diluted, such as illegal tourist lodges being allowed to go ahead (interviewee response).

Meanwhile, population growth, agriculture and industrial expansion are massively increasing demand for land, including land currently set aside or slated for conservation (e.g., case studies on Nairobi National Park and LAPSSET). In Laikipia the greatest threats to wildlife habitat are human population growth as well as the expansion of smallholder agriculture and livestock production (Graham, 2012). One interviewee noted that the assumption has always been that poor communities can bear the costs of forsaken opportunities that might have been possible on land set aside for wildlife but the opportunity costs of using that land for conservation are growing (interviewee response).

The country is changing rapidly. Kenya's population has grown from 8.6 million at independence in the early 1960s to 47.9 million in 2017 (GoK, 2018). Its 2.7% annual growth rate is one of the highest in the world, leading to a projected population of 65.4 million by 2030, 95.5 million by 2050 and 156.9 by 2100 (GoK, 2018). The population of Nairobi alone, for example, is projected to reach 14.3 million by 2050 and 28.4 million by 2075 (GoK, 2018). This will certainly increase pressure on whatever green space exists in Nairobi (interviewee response).

Historically, the range of possible revenue-raising activities available to fund conservation has been limited in Kenya by a national-level decision to ban trophy hunting and the sale or production of game meat. The debate over the 'consumptive use' of wildlife (such as trophy hunting and game meat production) versus 'non-consumptive use' of wildlife (such as safari tourism and environmental research) is emotive and contentious. However, the recent National Wildlife Strategy (GoK, 2018) marks the emergence of the idea of the 'consumptive use' of wildlife with a proposal for a market study to gauge the sustainability of game farming and game ranching as a way to increase the economic viability of the wildlife. This may change some of the calculations about the financial sustainability of particular wildlife areas.

The introduction of some aspects of consumptive use is part of a wider policy shift under the new Wildlife Act (2013) and Wildlife Strategy (2018) to encourage communities to participate in conservation. Lalampsa (2017) argues: "The conservation arena in Kenya is characterized by disincentives as opposed to incentives for local people to engage in conservation" (p.27). However, one interviewee maintained that there is good will on the part of government, which has come up with new legislation (such as the 2014 Wildlife Act) and civil society groups have been supportive of that legislation, in particular to push for more community management (interviewee response). As another interviewee noted, it is possible that the consumptive use of resources could change the economic rationale for conservation, and that could in turn affect land use choices by lowering the opportunity costs of conservation set-asides and making it more economically viable to have conservation land (interviewee response).

Such a shift could prove to be particularly relevant in the conservancies which, unlike national parks, are not protected in perpetuity. Conservancies tend to be on marginal land, often in pastoral areas, that was typically seen as unsuited to other uses. However, as one interviewee

noted, there is no such thing as marginal land with the right technology and water; it has only been marginal in the context of low investment (interviewee response). Meanwhile, climate change is altering the calculation around land use across the country in particular affecting the availability of water and the likelihood of drought in ways that could have long-term implications for land allocation and land competition in the country (interviewee response).

6 Conclusion

This research sought to dissect the complex and dynamic political, economic and social context in Kenya to understand how decisions are made around the allocation of land for biodiversity conservation. This aimed to both identify the stakeholders involved in decision making over the allocation of land for conservation in Kenya and to test the value of political economy analysis as a vehicle for understanding the prospects for biodiversity conservation. As the analysis demonstrates, the factors that determine how much land is allocated to wildlife conservation in Kenya can be usefully subdivided into three broad dimensions – the 'foundational factors' that paint the larger context, the 'rules of the game' that help to understand the institutional and legislative framework in which decisions are made, and the 'here and now' of behaviours, capacities and coalitions that determine whose voices are heard and how. The results show how different factors interact across the three dimensions — for example, the colonial legacy of conservation (a foundational factor) has helped to institutionalize conservation as a priority in the national mindset (thereby influencing the rules of the game) and both create an overall narrative of conservation (a here and now factor). Thus, Kenya's colonial legacy of conservation both supports today's conservation efforts, insofar as it helped to embed the value of Kenya's wildlife deep in the national psyche and institutions, but it also hinders those efforts, because the wider public perceives conservation as a priority imposed by outsiders.

Furthermore, the analysis helps to identify those factors, the foundational factors, that are significant, but unlikely or impossible for individual stakeholders to change, such as Kenya's colonial legacy or current parliamentary system. This range of factors are less likely to yield significant change and so should be second order priorities for conservationists' action. The analysis also helps to show the legislative framework that constrains and channels conservation action, such as Kenya's international environmental obligations and the processes for creating or

degazetting protected land. These factors, the rules of the game, could be an important goal of advocacy for policy change, particularly to ensure that Kenya's international environmental obligations are fully reflected, and adhered to, in domestic legislation. Meanwhile, the 'here and now' factors such as the behaviour of individuals and groups and the economic calculations around conservation are a second, important dimension of possible policy action by conservationists, for example to reinforce public awareness of the importance of conservation and to work to adjust the financial incentives in favour of conservation action. This research demonstrates that a political economy approach is powerful way to 'unpack' the economic and social factors driving political decisions on the allocation, or removal, of protected areas in Kenya. Future research could build on this political economy analysis to investigate the different points of leverage that conservationists have at their disposal to influence decision-making and draw lessons from past experiences to do so. Ultimately, this may help conservationists in Kenya develop strategies that conserve wildlife and the long-term viability of fragile ecosystems in ways that are politically acceptable to national governments and local communities.

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