'We are our land'—Ogiek of Mount Elgon, Kenya: securing community tenure as the key enabling condition for sustaining community lands†

JUSTIN KENRICK, TOM ROWLEY and PETER KITELO

Abstract We outline how securing the community tenure rights of forest peoples can create a rapid, rights-based route to the effective and sustainable conservation of their forests. We draw on the different skillsets and experiences of the authors (long-term fieldwork, mapping and monitoring, and a lifetime of experience) to identify the conditions that enable the Ogiek of Chepkitale, Mount Elgon, Kenya, to sustain and be sustained by their lands. We also identify the conditions that drive the disruption of this sustainable relationship through an appropriation of Ogiek resources by external interests that threaten to degrade, alienate and destroy their ecosystem. It is increasingly recognized that securing sustainable conservation outcomes can be best achieved through the deep knowledge, connection and commitment that ancestral communities have regarding their lands. Evidence from Mount Elgon and more broadly shows that Indigenous Peoples are better guardians of their forests than international or state protection agencies. This challenges the idea that evicting forest peoples is the best way to protect forests. Other studies, including those conducted by the Kenyan governmental Taskforce on Illegal Logging, highlight the way Kenyan state agencies such as the Kenya Forest Service have been responsible for the severe depletion of Indigenous forests. We examine how collective community control can enable decisions to be made in line with taking care of community lands over the long term, but also highlight how this ability is under constant threat until and unless national law and practice recognizes the collective tenure rights of such communities.

Keywords Community-led conservation, Indigenous Peoples, Kenya, Mount Elgon, Ogiek, protected areas, sustainable conservation, Whakatane Mechanism

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Introduction

There is increasing recognition that securing sustainable conservation outcomes can be best achieved through the deep knowledge, connection and commitment that ancestral communities have regarding their lands (e.g. Seymour et al., 2014; Blackman et al., 2017; Sze et al., 2021). More specifically, an increasing number of studies have substantiated the key claim (Ostrom, 1990) that communities who have secure collective rights over their lands are in a position to make long-term decisions of care for their lands (Nelson & Chomitz, 2011; Alden Wily, 2018; Garnett et al., 2018; Whitehead et al., 2019). For the Ogiek of Chepkitale, Mount Elgon, Kenya, securing their community tenure would require being granted a community land title. The Ministry of Lands has the power to do this through registering Chepkitale as Ogiek community lands under the 2016 Community Land Act, a process that would require recognizing the bylaws and governance structure of the Ogiek community.

Furthermore, the need to recognize the rights of Indigenous Peoples is being increasingly recognized in conservation policy, with formal commitments made by the major conservation organizations. IUCN first recognized the right of traditional societies to self-determination nearly 40 years ago (MacInnes et al., 2017). Newing & Perram (2019, p. 596) noted:

> Several of the major non-governmental conservation organizations have made equally strong commitments, and in 2009 Conservation International, Fauna & Flora International, IUCN, The Nature Conservancy, Wetlands International and WWF signed the Conservation and Human Rights Framework (IUCN, 2009), which reaffirms commitments to respect internationally proclaimed human rights, including those in the United Nations Declaration on the Rights of Indigenous Peoples and in International Labour Organization Convention 169. Yet these commitments are rarely invoked in current debates about conservation and many conservationists are completely unaware of them.

A mismatch exists between what is written in global conservation policy and what actually happens. For example, a recent global geospatial analysis (Sze et al., 2021, p. 3) concluded that 'Indigenous Lands in Africa avoid more deforestation than Protected Areas or Protected Indigenous Areas across all our scenarios'. Yet, across much of Africa, 'enhanced recognition and protection [of Indigenous land rights] is at best nascent or, at worst, governance and law work against Indigenous land rights' (Sze et al., 2021, p. 1).

Most forest peoples in eastern Africa, including the Ogiek at Chepkitale, have been evicted from their ancestral

lands in the name of conservation. This includes, for example, the Batwa of Bwindi and Magahinga in Uganda, the Aweer of Boni Dodori in Kenya, the Sengwer of Embobut in Kenya, and the Batwa of Kahuzi-Biega in the Democratic Republic of the Congo (Couillard et al., 2009; Kitelo, 2022).

The ongoing conflict between the Ogiek of Mount Elgon and Kenyan government conservation authorities highlights these issues. The Ogiek of the moor and forest lands of Chepkitale, Mount Elgon, are traditional honey-gathering hunter-gatherers who have become semi-pastoralist since being forbidden from hunting by colonial and then post-independence conservation regulations. However, the Elgon Ogiek are a good example of how having de facto control of their territories helps such communities protect their forests and wildlife, which strongly suggests that having their community tenure recognized in law would strengthen such protection (Whitehead et al., 2019).

The Ogiek of Chepkitale have lived across the vast swathe of moorland and forests of Mount Elgon since before colonial occupation and the subsequent creation of the modern Kenyan state. They are believed to be the first people to have lived in the region (Ochien'g, 2017) and can trace their use of caves on Mount Elgon to at least the 12th century.

However, the government conservation agencies Kenya Forest Service (KFS) and Kenya Wildlife Service (KWS) have ignored their human rights and used forceful evictions to exclude the community from a national park, from forest reserves and from a wildlife reserve, all of which have been created on their community lands without consultation. The KFS also brings in agriculturalists to clear indigenous forest to create plantations of non-indigenous trees to generate profits from timber sales.

In 2011, having been unable to persuade the KFS and KWS to enter into dialogue with them, the Ogiek sought to secure their lands, forests and wildlife by requesting IUCN to hold a pilot Whakatane Assessment at Mount Elgon. The IUCN Whakatane Mechanism seeks to enable conflict resolution in protected areas (IUCN, 2016). At the request of an Indigenous People, a team, including IUCN, Indigenous Peoples' organizations, government officials and others, is constituted to conduct a field assessment and subsequently to address and redress situations in which Indigenous Peoples consider themselves to be affected negatively by a protected area designation or management practices. The Whakatane Mechanism also celebrates and promotes best practices in conservation and successful partnerships between Indigenous Peoples and protected area authorities. Through both of these approaches it seeks to promote 'the new conservation paradigm' (Freudenthal et al., 2012, p. 86). Despite the Whakatane process and recent improved relations between the Ogiek and KWS, the Ogiek continue to experience burning of their homes and forceful evictions at the hands of the KFS.

Here we examine how Ogiek de facto control of parts of their territory along with strong community governance structures and sustainability norms have helped to counter charcoal burning, elephant poaching and forest exploitation by outsiders, including state agencies, and we highlight how national legal recognition of Ogiek community tenure would strengthen their ability to conserve and enhance the biodiversity of their lands. We also show how successive evictions of the Ogiek have eroded these sustainable practices and left the forest land that is no longer managed by the community degraded, cleared and privatized as a result of imposed forest management regimes that make Ogiek community control impossible.

Study area

Mount Elgon is an extinct volcano straddling the border of Kenya and Uganda (Fig. 1). It is one of five major montane forests in Kenya and an important water catchment, facilitating agriculture for > 2 million people in Kenya. The 4,321 m peak rises from its 4,000 km^2 base above the Uasin Gishu Plateau through a succession of gentle slopes broken by high cliffs. Below the rocky peak, the mountain is encircled by moorland and below that by altitudinally zoned bands of densely forested slopes that contain a diversity of wildlife. The forest ecosystem is a biodiversity hotspot of global significance and was declared a Biosphere Reserve by UNESCO in 2003. Thirty-seven animal species in the area are categorized as globally threatened, of which nine are endemic, making the area a priority for species conservation (Cameron et al., 2000).

Rivers run down the mountain through steep-sided and heavily forested valleys to the savannah elephant *Loxodonta africana* corridor and breeding ground that pass through the bamboo belt around the foot of the mountain. The river valleys connect the high mountain peak and crater, which have mineral-rich hot springs and provide breeding grounds for buffalo *Syncerus caffer*, to the moorland (where most of the Chepkitale Ogiek live) and then to the elephant corridor below. The rivers run on through Bungoma, Busia and Kisumu counties on the way to Lake Victoria, and through Trans Nzoia, West Pokot and Turkana counties on the way to Lake Turkana. The Mount Elgon ecosystem is gazetted as a 73,705 ha montane forest reserve managed by KFS, a 16,916 ha national park managed by KWS and a 17,200 ha nature reserve (Chepkitale National Reserve, henceforth referred to as Chepkitale) nominally under the management of Bungoma County Government (Petursson et al., 2013b; KEFRI, 2018).

The tropical forest below the bamboo forest has been almost completely destroyed. The bamboo forest is under threat by external firewood collectors and is subject to encroachment by agriculturalists, including where it has been under the control of KFS who have encouraged it to

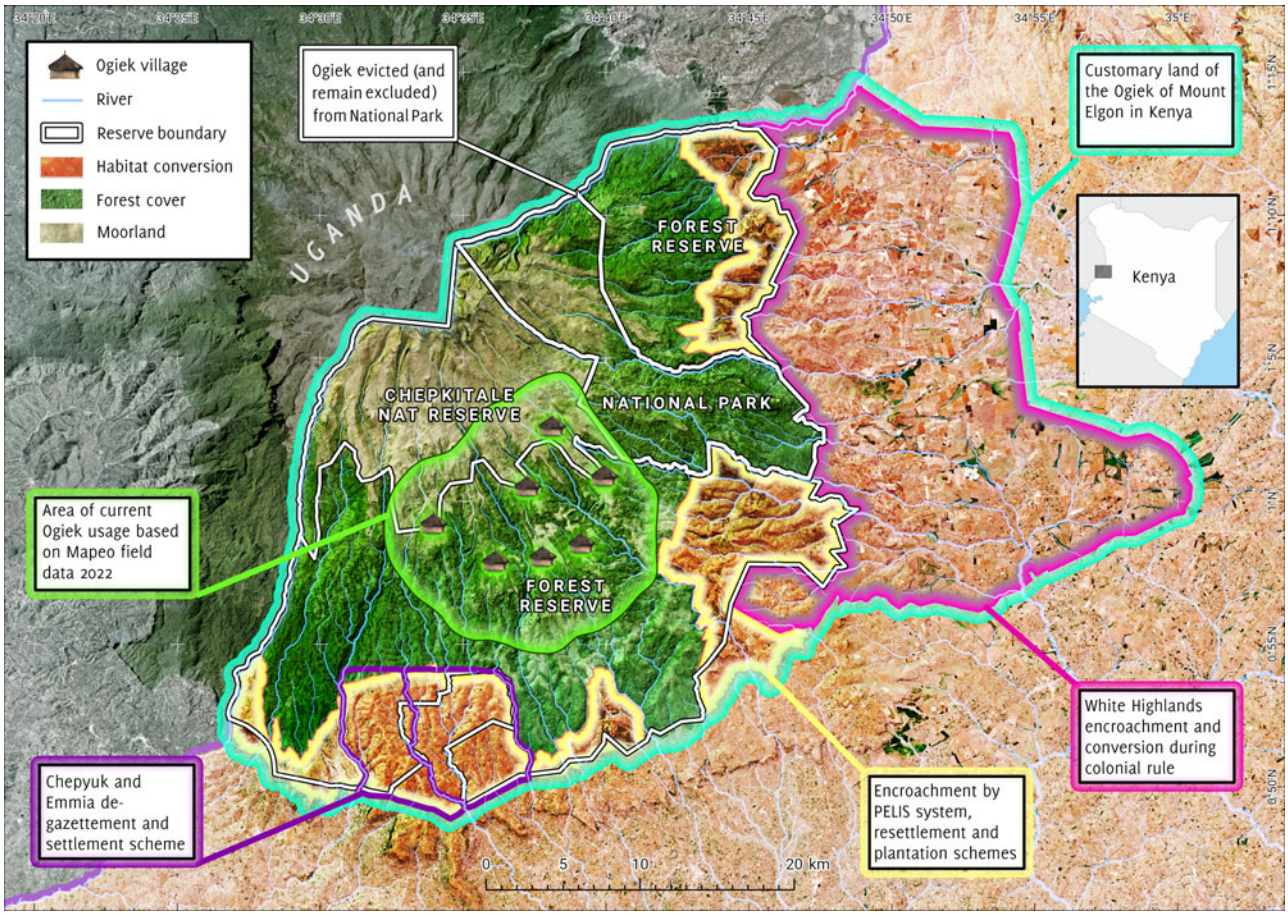

FIG. 1 Overview of historical and ongoing encroachment and habitat conversion impacts on Ogiek customary land on Mount Elgon, Kenya, showing the area of remaining Ogiek access and activity, derived from community field data. Simplified from the submission to the Ogiek historical injustices court case of the National Land Commission in 2022. PELIS, Plantation Establishment and Livelihoods Improvement Scheme. (Readers of the printed journal are referred to the online article for a colour version of this figure.)

be converted into plantation forest or agricultural areas under the controversial Plantation Establishment and Livelihoods Improvement Scheme (PELIS).

Poaching is also facilitated by a fortress conservation approach by state agencies that forces the Ogiek from their lands, leaving the lands open to exploitation. Poaching can be small-scale snaring of antelopes on steep slopes by agriculturalists from the lowlands, killing of buffaloes and elephants by outsiders connected to powerful political actors, or heavily armed poachers from the Bagishu communities in Uganda.

The 2019 census (KNBS, 2019) recorded 3,621 Ogiek at Chepkitale (500–1,000 families). They are organized into 33 clans, each linked to a specific totem species and united through a representative leadership structure. This system of totems and taboos, as well as the bylaws and governance structure that enforce them, means that the majority of species are protected. Ogiek identification with their ancestors who now inhabit and are the land increases the importance of ensuring the well-being of the whole ecosystem through, for example, only collecting deadwood from the forest rather than cutting live trees. Disputes are resolved at the lowest possible level, with Ogiek elders, bylaws and community assemblies ensuring the continued well-being of the environment.

The Ogiek gather honey, mushrooms, vegetables and medicinal plants, and graze their cattle and some sheep and goats on the high Chepkitale moorland of Mount Elgon and into the forests below the moorland in the dry season. The Ogiek have no cultivation in Chepkitale apart from some small garden plots. Crops do not grow well in Chepkitale and would require a different socio-cultural livelihood system compared to one focused on animal husbandry. The Ogiek exchange their milk, honey, baskets and other products for maize flour and vegetables from farming communities below the forest that encircles the mountain.

Methods

This article is a collaboration between an anthropologist with decades of experience in East and Central Africa and

who has worked with the Ogiek of Mount Elgon since 2011 (JK), an Ogiek leader from Mount Elgon who has led in court cases and in negotiations with government agencies (PK) and an expert in mapping and monitoring from the Forest Peoples Programme (TR). We conducted this research through close, long-term collaboration over many years, including through reciprocal visits and joint facilitation of community engagement processes and monitoring, such as community meetings, in-depth interviews and participatory mapping conducted by the Ogiek community. The community's mapping, meetings and monitoring have been undertaken by the Chepkitale Indigenous Peoples Development Project with support from the Forest Peoples Programme, as well as by Digital Democracy, developers of the *Mapeo* app (Digital Democracy, 2022).

We draw on the anthropological and policy literature, evidence from conservation and human rights studies, and mapping and monitoring undertaken by PK and TR, and on many community meetings and one-to-one in-depth interviews and many months of participant observation with the Ogiek during 2011–2022 (JK), 2016–2022 (TR) and over a lifetime as a member of the Ogiek community (PK).

The Ogiek wanted primarily to map their lands for their own internal purposes, to describe the spatial aspects of their bylaws in relation to habitation, grazing and forest regeneration, and to monitor a range of environmental impacts and encroachments by external actors and the violations of human rights that often accompany them. However, these data can also demonstrate some of the co-evolved complexity of longstanding landscape–culture connections, the conservation utility of this highly sensitive system of community land management, and the damage wrought in areas in which such community management can no longer be practised because of exclusionary conservation and other drivers of land dispossession. For mapping and monitoring we used *Mapeo*, a customizable, non-hierarchical peer-to-peer mapping application designed for offline use (Digital Democracy, 2022), which enabled the Ogiek community to collect data to help formalize and revitalize their customary zoning and land management systems.

Mapping land-use issues at Chepkitale has involved developing a bespoke Ogiek configuration to collect community field data using *Mapeo*, with a range of observations chosen and illustrated by the community and described in the Ogiek language (Supplementary Table 1). We configured the *Mapeo* app over five participatory sessions in which community members from the Chepkitale Indigenous Peoples Development Project relayed and explored suggestions from large Ogiek community meetings to the designers at Forest Peoples Programme and Digital Democracy, and vice versa. This process evolved iteratively, developing a bespoke Ogiek data structure with input from across the community as well as from an elected customary spatial planning committee (Kemper, 2021). Twenty-eight community members (14 men and 14 women) were nominated and selected at the village level from all 15 Elgon Ogiek villages, and we trained them to collect, synchronize and visualize data using *Mapeo*. The app is configured to allow suggestions for new feature classes (observation types) to be submitted directly by users. The Chepkitale Indigenous Peoples Development Project team and spatial planning committee held open meetings to arrange data collection planning, data syncing and management and cross-checking with the whole community. Mobilization was rapid, with thousands of data points generated in the first weeks of the project, covering $>$ 25,000 ha of the study area.

This mapping has also involved participatory inference from aerial imagery and a 3D terrain model in a geographical information system (GIS) in which point data from fieldwork were overlaid for use as a layer of known reference points from which the community could delineate spatial planning zonations for their own use. Field data collection and participatory inference of Ogiek land-use zoning and encroachment issues are ongoing and have at the time of writing generated over 5 GB of GIS data, including geotagged, date-stamped photographic evidence of each field observation.

Our results are based on the preliminary results of ongoing mapping and monitoring work being undertaken, on interviews and observations, and on the Whakatane Assessment, which was carried out at the request of the Ogiek at Chepkitale during 22–27 December 2011 by the IUCN East and Southern Africa Regional Office, KWS, KFS, Mount Elgon County Council, Indigenous Peoples organizations (Indigenous Peoples of Africa Co-ordinating Committee, Sengwer Indigenous Peoples Program, Chepkitale Indigenous Peoples Development Project and Inter-Mountain Peoples Education and Culture in Thailand Association) and the Forest Peoples Programme. The team sought to assess whether the presence of the Ogiek on their ancestral lands at Chepkitale sustained or threatened the conservation of their lands. A preparatory roundtable process involving all relevant stakeholders arrived at an agreed question for the study:

> In relation to Chepkitale: how best can the forest and wider ecosystem be preserved, the wildlife be protected, the Ogiek live in a way that ensures their cultural, social and livelihood needs are met, and ecotourism revenue be generated? (Kenrick & Kaka, 2011, p. 1)

The Whakatane Assessment team spent several days observing Ogiek daily livelihood practices and questioning the Ogiek, focusing on the use and protection of the forest, wildlife, grasslands and moorlands. Their findings are included in the following assessment of Ogiek practices, norms and bylaws.

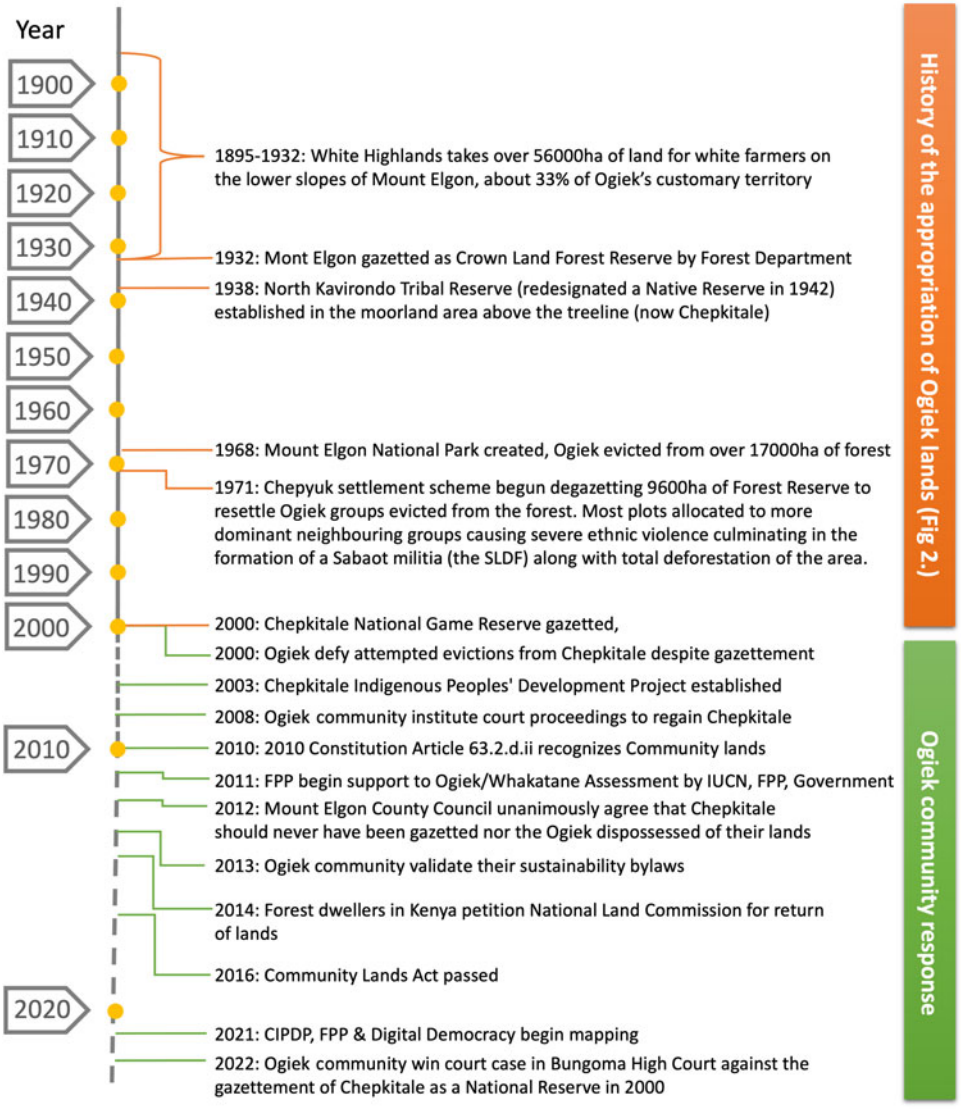

FIG. 2 Abbreviated timeline of Ogiek land and forest loss from the 1890s to the present on Mount Elgon, Kenya. CIPDP, Chepkitale Indigenous Peoples Development Project; FPP, Forest Peoples Programme; KFS, Kenya Forest Service.

Results

Ogiek historical inhabitation of Mount Elgon and surrounding lands, and repeated evictions

The Ogiek were subjected to repeated evictions during colonial occupation and in more recent times in the name of conservation, violating their human rights. From the 1890s the lower eastern lands of the Ogiek were occupied by colonial settlers, as the White Highlands, deforested to create farms (Figs 1 & 2). This process pushed the Ogiek into the remaining forest higher up the mountain. The song Chebaba reminds them of these first evictions. It is sung about a place called Endebes, reminding people of the wider area that belonged to the Ogiek and marking other evictions by the colonialists in the 1920s. It was a protest song sung during ceremonies and it is still sung, including before meetings with government authorities. Colonial records show that during this period the authorities were aware the Ogiek were 'excellent preservers of the forest'. Senior Commissioner Hempstead wrote:

> I am inclined to doubt whether the presence of cattle in the forest does much harm to it. In fact, I think such people as the Massai [Ogiek] are inadvertently excellent preservers of forest inasmuch as the grass is grazed short and the number and magnitude of fires diminished. (Hempstead, 1925, p. 1)

However, the eviction of the Ogiek from the White Highlands was then followed by gazettement of the remaining forest lands, culminating in their being made Crown Land Forest Reserves by the colonial administration in 1932.

The British forcibly evicted the Ogiek from the forests below the moorland and then left them mostly undisturbed once they had been pushed above the treeline. The British saw the moorland as useless land and categorized it as an untitled Tribal Reserve in 1938 (becoming a Native Reserve in 1942). Following independence, in 1968 the creation of Mount Elgon National Park evicted community members from a swathe of land on the north-eastern side

of the mountain, which restricted the movement of the Ogiek around the mountain as well as from the higher moorland to the lower forests). In 2000, their presence at Chepkitale was made illegal when it was gazetted by the state as a wildlife area (Chepkitale National Reserve) on advice from IUCN. The Ogiek returned to Chepkitale despite these evictions.

The following account by one of the Ogiek elders reflects the complete indifference of the government during the colonial period:

> When the white settlers came to our area, they caused us to move to the higher side of the area. During the dry season we would move to the lower areas and during the rainy season we would move back. The colonial government restricted us from moving to the lower areas, areas which are still important to the community as the caves are in this area. They had officers from the Forest Department who would control this. The first evictions as informed to me by my mother happened around the year 1940. (Johnson Kipsirat Ngeywo, 23 November 2016)

The colonial administration appears to have made little or no attempt to understand the Ogiek way of life, perhaps assuming they would be absorbed by their more dominant neighbours, an assumption that persists along with a top-down exclusionary model of land administration and conservation.

Petursson et al. (2013b, p. 30) described how this process affected the Ogiek at Mount Elgon:

> A large section of the moorlands in Chepkitale became part of the national park that employed a strict conservation strategy and perceived the pastoral Mosop [the Ogiek] as a threat to the conservation of the area. This seriously constrained their opportunities for grazing and possibilities to access important forest resources. [] negotiations to relocate the [Ogiek] started in 1965 between their leadership and the government. The majority of the [Ogiek] agreed to move down the slope in 1971. To create space, a 3,686 ha section of the forest reserve was degazetted and designated in Emia and Chepyuk [] for their relocation (Simiyu, 2008).

Petursson et al. (2013a, p. 30) noted:

> The relocation process was, however, poorly implemented by the authorities. There was inadequate monitoring of the legitimacy of the land claims, resulting in an inflow of people claiming rights and grabbing land. The degazetted area was largely occupied by other people, mainly by the Soy subgroup [the Sabaot] (Simiyu, 2008). The demarcation of the excised area has also been blurred, resulting in large areas of forest lands cleared in addition to the initial degazettement. Since then all forests within the resettlement area and an additional 4,500 ha of surrounding forests have been cleared.

From the point of view of the Ogiek of Mount Elgon, what Petursson et al. described as the Ogiek agreeing 'to move down the slope in 1971' is remembered vividly as their being moved forcibly to Chepyuk by the authorities who threatened them at gunpoint and burnt their homes. Despite the risks, many returned to Chepkitale.

In addition, Petersson et al.'s account needs to be understood in a broader historical context. One Ogiek leader notes:

> The true story is that the colonial Government wanted to train the community to produce our own food and even posted a District Officer to Laboot [in Chepkitale] to assist in this. This was after bouts of hunger that affected the entire East Africa including the neighbouring communities who the community depended on to exchange basketry with food, and who now did not have food. When it was discovered that food (maize) could not grow in Chepkitale, a proposal to hive the lower areas of the forest next to where maize was growing was made. While this process was ongoing, Kenya became independent. At independence, this process was then picked by the local political elite who saw an opportunity to hive the forest and settle their people using the Ogiek community as the excuse and the term 'resettlement'. The colonialists had settled on this area after the Ogiek community had turned down several 'resettlement' proposals; one to be resettled at an area next to the current Eldoret, then to Lelan in West Pokot, and then to 6 km from the forest cut-line of Mt. Elgon from River Suam in the east to River Rokook in the west. (P. Chongeywo, pers. comm., 2022)

These lower areas in Chepyuk were forest lands used traditionally by the Ogiek. Despite the fact that they are part of the ancestral lands of the Ogiek community and that this so-called resettlement involved destroying more of the forest, whereas resettling them in the lands left by the white settlers would not have involved such forest destruction, these Ogiek forest lands at Chepyuk were excised, supposedly to compensate the Ogiek for being removed from the rest of their lands at Mount Elgon. Subsequently, most of this compensation land was distributed to more dominant and well-connected non-Ogiek peoples. This alienation led to extensive forest destruction as sustainable systems of mutually negotiated territorial governance by the Ogiek were replaced by private ownership and control by those (whether farmers or conservation agency employees) with no long-term interest in maintaining the rich biodiversity of these lands.

Another attempt to evict the Ogiek from the moorland took place in 1989 and further instances occurred, including in 2006. Each time, many Ogiek returned to Chepkitale. The 2006 instance led to violence in Chepyuk, which was fanned by politicians whipping up their supporters and various ethnic groups against each other ahead of the elections. The conflict, during which an estimated 2,000 people were killed, lasted until 2008.

The gazettement of Chepkitale Trust land as a national reserve in 2000 resulted in many attempted evictions. Despite these, many Ogiek returned to Chepkitale and sought to negotiate with Mount Elgon County Council for the recognition of their community land rights. However, because of the eviction notices issued by the then Provincial Commissioner, and because of uncertainty over whether proposed constitutional reforms would lead to the dissolution of Mount Elgon County Council, in 2008 the community decided to institute court proceedings to contest the gazettement of their lands. At the same time, the Ogiek played a role in the movement that led to the establishment of the progressive 2010 Constitution of Kenya that includes, in its recognition of community lands, the 'ancestral lands and lands traditionally occupied by hunter-gatherer communities' (Article 63.2.d.ii; Republic of Kenya, 2010). Despite this and the ongoing court case, sporadic evictions by KFS have taken place ever since.

The Ogiek are still on their land at Chepkitale because they returned despite the threat of force from KFS and

because of the court case they instigated in 2008. Their argument in court has been that they were evicted wrongfully from Chepkitale in 2000. On 26 September 2022 the community secured a legal victory when Bungoma court ruled that the gazettement of Chepkitale Trust Land as Chepkitale Game Reserve in 2000 was unlawful because this gazettement had not been conducted in consultation with the community. The court declared that 'the conversion of the land into a national reserve . . . was unconstitutional, unlawful and of no legal effect', and that '[t]he land shall revert to the pre 6 June 2000 status'. The land therefore reverted back to the community, which should be able to register it as community land under the 2016 Community Land Act. Despite Bungoma County Government declaring they would abide by the ruling, the Attorney General might pursue an appeal. If such an appeal against the community is pursued and is successful, then this example of rights-based conservation could be overturned. It is for this reason that all three authors have been working together to support the community to remain on their lands and to continue to enhance biodiversity through their presence (CIPDP, 2022).

The often perverse impact of conservation interventions by outside authorities

Conservation interventions at Mount Elgon have focused on evicting the Ogiek community from their ancestral lands. During colonial times, the lower forest lands that the Ogiek community members were evicted from in Trans Nzoia were parcelled out and given to the white settlers as part of the White Highlands, and these settlers then cleared them for farming (Fig. 1). The forests from which the Ogiek community were evicted (e.g. Kiptugot Forest) were then given out as forest concessions for the logging of indigenous trees and subsequently as plantation forests. The key dynamic underlying forest degradation has remained the same. Conservation agencies have evicted the Ogiek, whose livelihoods and way of life depend on the well-being of the forest, whilst simultaneously degrading that same forest through overexploitation for timber and charcoal burning. In contrast, as a result of the Ogiek bylaws, customs and norms, those areas of forest under Ogiek management are better conserved than the forest reserves on Mount Elgon that are under sole KFS management (Fig. 1).

The KFS has evicted Ogiek from many areas and then distributed Ogiek community land as individual parcels to farmers from the lowlands. Such areas are run as PELIS *shamba* (agriculture) schemes and are distributed by KFS through Community Forest Associations that KFS supervises, a system that KFS has used across Kenya since the 1970s (Petursson et al., 2013a).

The PELIS *shamba* system is supposed to encourage farmers to farm plots in degraded forest and to plant trees, thereby restoring forest cover. According to PELIS policy, once the trees are established the farmers are supposed to be moved by KFS to other areas where exotic trees have been harvested recently. However, at Mount Elgon the PELIS *shamba* system is used in the opposite way. It acts as a way of converting indigenous forest into farmland. Allocating forest land or land at the edges of forests is particularly beneficial financially for KFS because this raises revenue via charcoal burning and timber, and clears forest for more *shambas*. Instead of replenishing the forest, the *shamba* system destroys it, making some within KFS wealthy in the process. Allocating land is a lucrative business for KFS staff, irrespective of whether this is understood as corruption or revenue.

At Mount Elgon, results from time-series analysis of Landsat images characterizing forest extent and change during 2000–2022 (Fig. 3) show the significant advance of agriculture into both forest reserves (Hansen et al., 2013), especially on either side of the Chepyuk settlement scheme that was cleared before 2001, when the Hansen et al. data series begins. Some tree loss occurred in the Ogiek areas, but mostly as a result of charcoal burners moving up river corridors or over the border during the unstable years immediately following the attempted eviction in 2000. Little tree loss occurred in more recent years in Ogiek-controlled areas, especially compared to the agricultural areas under KFS control. Although the community appear to have expanded their glade slightly around Toboo, all 33 Ogiek clans have been pushed back to the rivers of just six clans. Community activity, especially habitation, would presumably be more diffuse if the Ogiek retained the territory of the 33 clans rather than being reduced to the territory of only six clans. Despite the instability and pressure caused by this encroachment (which has led to a reduction of c. 89% in the Ogiek-controlled area), Ogiek customary systems appear to prevent forest loss far more effectively than forest reserve status alone.

Petursson et al. (2013a) traced how the same approach to forest conservation led to forest exploitation at Mount Elgon first under the British, then under the Forest Department and now under KFS. Their account of how the *shamba* system failed when it was run by the then Forest Department is a good description of the current system run by KFS (World Rainforest Movement, 2004):

> The farmers were required to rent the plots from the Forest Department. That created monetary dependency at the Forest Department and by that a disincentive for the officials to transfer the agricultural plots back to forest, as should have happened once the trees matured. In order to sustain the agricultural potential, the forest tree seedlings were purposely damaged or uprooted. Furthermore, the Forest Department failed to control the number of farmers and the type of agricultural practices and to carry out proper replanting. (Petursson et al., 2013a, p. 27)

This supports the analysis of the Deputy Minister of the Environment and Nobel Peace Prize laureate Wangari

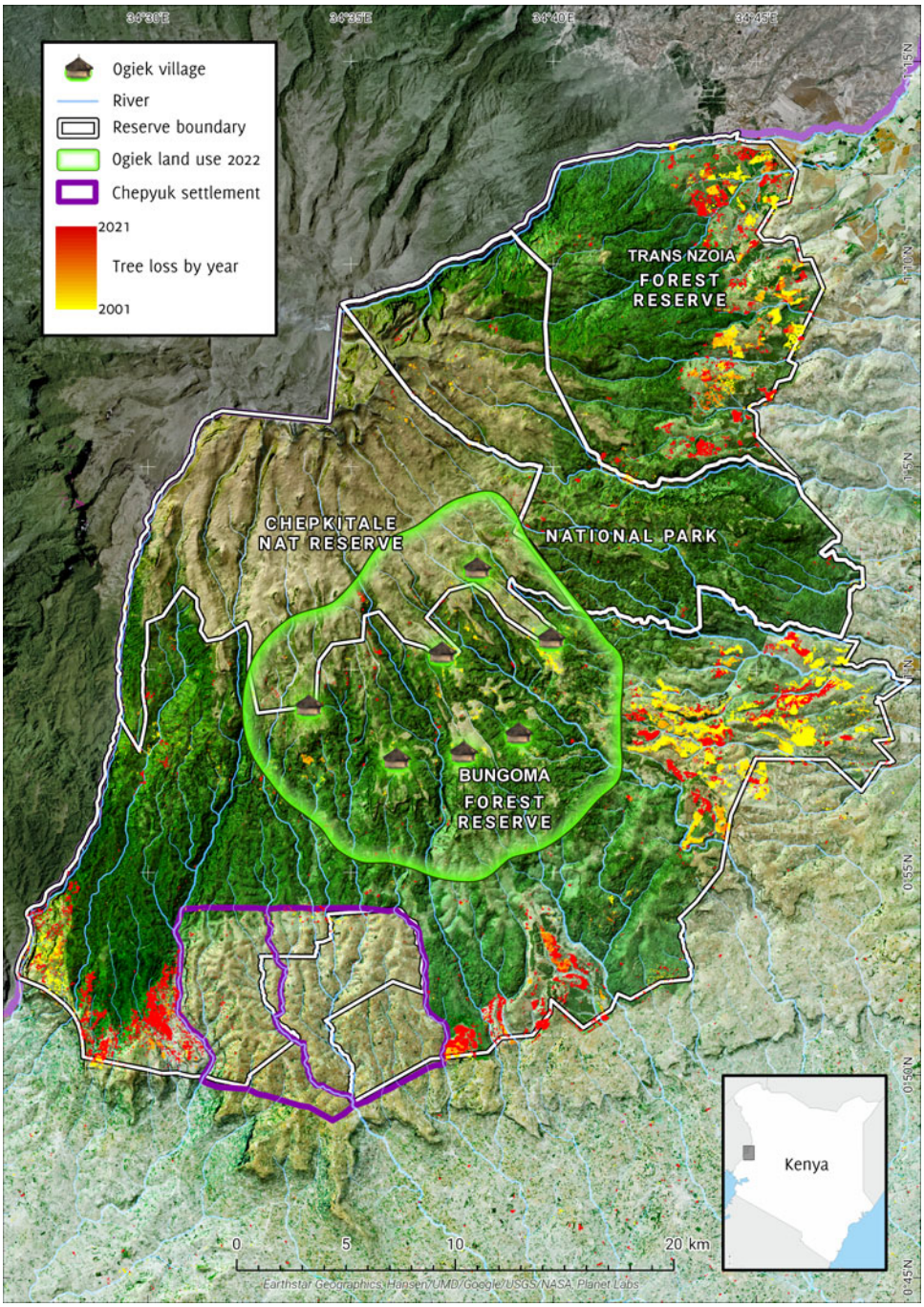

FIG. 3 Tree loss data for 2001–2021 (Hansen et al., 2013), showing the advance of agriculture into both Bungoma and Trans Nzoia forest reserves. Note the surrounding land, including the Chepyuk settlement scheme, had already been converted to agriculture prior to the start of the Hansen data set in 2001, and also that the comparatively low tree loss near the Ogiek villages occurred soon after 2000 in an unstable period when the community were facing eviction, with any more recent loss in the Ogiek area occurring in the deep river valleys furthest from the villages and accessible from the lower slopes. (Readers of the printed journal are referred to the online article for a colour version of this figure.)

Maathai, who contended that '[w]e cannot sacrifice indigenous forests at the expense of exotic plantations. Plantations represent a monoculture of trees, but a forest is an ecology system' (World Rainforest Movement, 2004). Despite this, the government of Kenya under President Ruto is lifting the ban on the *shamba* system, with predicted severe consequences for the forest (Otieno, 2022).

The *shamba* system is just one key aspect of a set of policies in which KFS has sole decision-making power over who can use what from the forest. Access to forest resources is restricted to those who form Community Forest Associations that are directly linked to specific KFS stations. Community Forest Associations can only be formed by those who live adjacent to the forest and therefore exclude the people whose livelihoods have depended on living in and sustaining the forests. Instead, Community Forest Associations tend to only include those who see the forest as a resource to exploit.

The damage caused by this PELIS *shamba* system was outlined by Robert Kibugi, the government-appointed Chair of the Mau Task Force, who highlighted the fact that the government Taskforce on Illegal Logging had noted

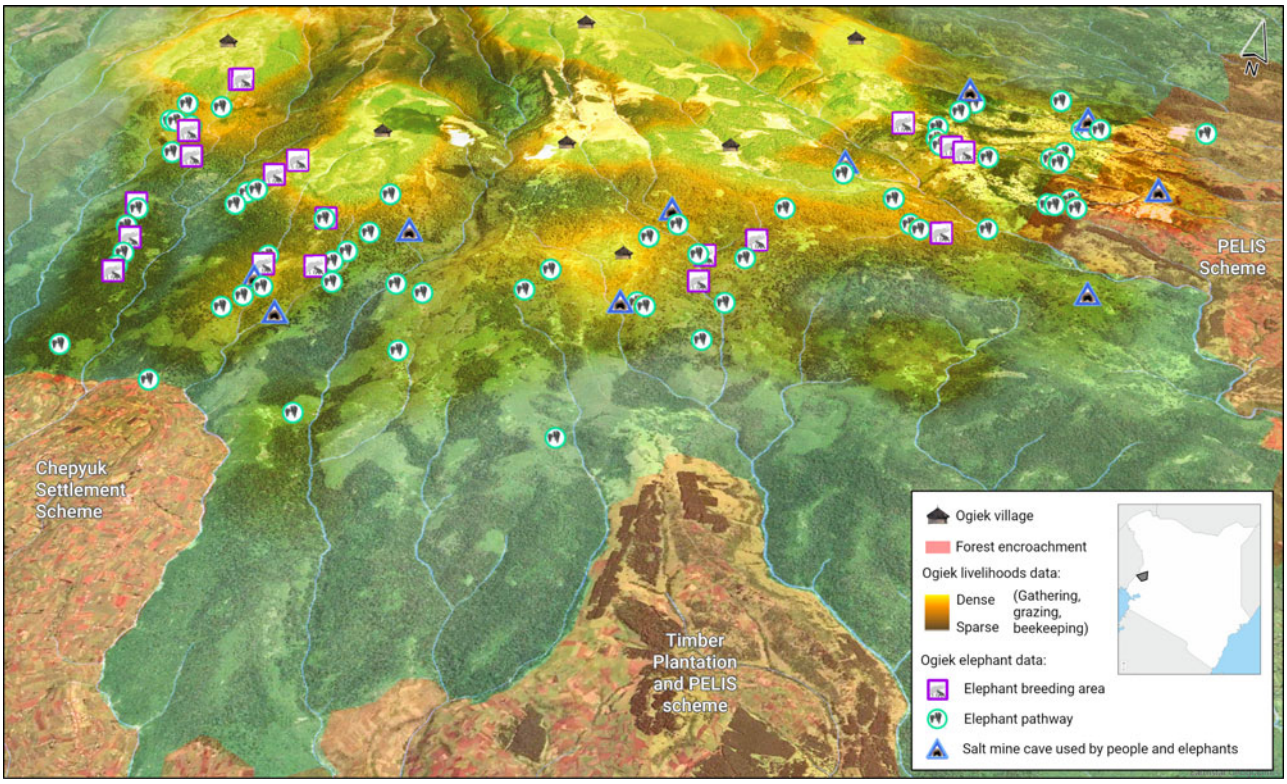

FIG. 4 Ogiek livelihood activity heatmap overlain with the elephant point data collected by the communities. Although comparison with other areas is not yet possible, the map shows elephants make use of and breed within areas of low to intermediate intensity Ogiek gathering, grazing and beekeeping activity around the community habitation areas and the mineral caves shared by people and elephants. Where forest, and with it elephant grazing and Ogiek livelihoods, has been encroached and replaced by settlement, farming and plantation schemes, agricultural communities and elephants compete over crops, resulting in human–elephant conflict. PELIS, Plantation Establishment and Livelihoods Improvement Scheme. (Readers of the printed journal are referred to the online article for a colour version of this figure.)

'while the PELIS program was meant to improve the economic gains of participating farmers while ensuring the success of planted trees, it had instead led to considerable abuse and loss of forestland (Republic of Kenya, 2018, p. 35). This is because many other illegal practises are camouflaged under its umbrella, including agricultural encroachment into the indigenous forest via plantations' (Kibugi, 2021, p. 38).

The Taskforce on Illegal Logging highlighted the complicity of KFS in forest destruction in 2018. The first two key findings of the report (Republic of Kenya, 2018, p. 6) state:

> The Board and Management of the Kenya Forest Service has been unable to stem, and in some instances have directly participated in, abated, and systemized rampant corruption and abuse of office. By so doing they have overseen wanton destruction of our forests, have systematically executed plunder and pillaging of our water towers and bear the responsibility for the bringing our environment to the precipice.
>
> The Kenya Forest Service has institutionalized corruption and the system is replete with deep-rooted corruptive practices, lack of accountability and unethical behaviour.

Despite the resulting removal of the Director of KFS and many other key staff, the same PELIS *shamba* system continues at Mount Elgon. It is an approach to conservation that damages the ecosystem as severely as it damages the ability of the Ogiek to sustain and be sustained by their lands.

Mutualism between the Ogiek and elephants

According to the Ogiek spatial plan, Mount Elgon can be envisaged as a network of wildlife corridors connecting the mountain peak and bamboo forest belt via steep-sided river valleys radiating from the crater. These habitats are all known to the Ogiek as breeding grounds and refuges for key species such as buffalo and elephant. Ogiek settlements are on the flat, treeless clifftops between these river valleys, overlooking the forest. Beekeeping is conducted throughout the year and grazing alternates between the higher moorland in the wet season and the lower forest in the dry season. This allows the high moorland grasses to be grazed at their nutritional maximum, whereas bamboo shoots and tree saplings in the forest below are left alone during their growing season.

Ogiek field data suggest that elephants make use of low- to medium-intensity Ogiek community-use areas because of mutually beneficial salt-mining practices, encouragement of

their preferred grazing annuals because of dynamic disturbance by the Ogiek and because of the relative safety that Ogiek community livelihood activities provide, including through monitoring and controlling poachers and charcoal burners. Further research is required comparing human–elephant conflict data from across the elephant range with data from areas under Ogiek management.

Elephants migrate around the bamboo belt at the base of the mountain, and Ogiek field data suggest they move up towards the Ogiek area of use and down towards the PELIS settlement and farming schemes of KFS (Fig. 4). Human–elephant conflict is prevalent around the PELIS settlement and farming schemes of KFS, where indigenous forest has been replaced by plantation forest and farming, and where elephants enter the maize, cabbage and potato cultivation that encroach their natural grazing areas. Such conflict has led to elephants being killed in these areas (G. Mongir, pers. comm., 2022). In contrast, elephants graze and breed within and around the Ogiek community usage and habitation areas where low- to intermediate-intensity gathering, grazing and beekeeping activities do not promote conflict or competition between people and elephants.

In the land that the elephants share with the Ogiek higher up Mount Elgon there is an example of mutualism between elephants and people. They obtain salts using tusks and pickaxes, respectively, in caves where mineral-rich and otherwise inaccessible compacted volcanic ash sediments, which are the primary sources of minerals for both elephants and Ogiek livestock, are exposed. The presence of the Ogiek community could also deter poachers. Annual elephant poaching data based on estimates by Ogiek community scouts (G. Mongir, pers. comm., 2022) and by the Mount Elgon Elephant Monitoring Team (Redmond, 2015) vary significantly, but the community reported 67 elephant corpses in and around their homesteads once they returned to reoccupy their land in 2000 (Plate 1). The Ogiek have secured 6 years of research funding from the International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety to facilitate monitoring and assessment of these issues.

The mapping work suggests that cave-dwelling elephants (savannah elephants who have adapted to living in the forest) coexist with the Ogiek and their cattle (Plate 2), sharing the caves and mineral resources that the elephants and cattle use in turn, with elephants preferring caves that have been recently disturbed by people and therefore may require less excavation effort. Similarly, there are many accounts of the Ogiek rescuing elephants that have fallen into ditches or become caught in swampy areas. The bamboo forest is also important for both human and elephant populations, from where elephants seem to be retreating from the deforestation front to be near Ogiek villages, where they reside at night, to find salt and for safety. This apparent reliance of the elephant population on being protected by the presence of Ogiek settlements questions the distinction made in fortress conservation models between wildlife refuges and human-use land categories (Fig. 4).

PLATE 1 An Ogiek community member inspects an elephant *Loxodonta africana* bone from one of several individuals killed adjacent to his homestead during a period of instability when the Ogiek community were evicted from Etapei. Photo: Tom Rowley.

Anecdotal evidence also supports the hypothesis that evictions of the Ogiek (e.g. from the Mount Elgon National Park, which KWS manages) leave elephants more vulnerable to poachers. For example, after the 1989 evictions the elephant populations were decimated by poachers, including in areas inhabited previously by the Ogiek, where this would have been unlikely. Both community members and KWS staff have stated that when the Ogiek returned to Chepkitale, elephant numbers increased, with a depleted and concentrated population splitting recently into several more diffuse herds. In 2022, elephants were observed to have crossed the Suam River for the first time since the 1970s, revisiting areas from which they were exterminated in Uganda (Mount Elgon Foundation, 2022).

Before 2000, poaching elephants for ivory was conducted mostly by the Gishu crossing the border from Uganda, but

PLATE 2 Ogiek cattle and elephant graze together beside an Ogiek habitation area. Photo: Torio Tenderosi, Toomoi.

this poaching has stopped since the Ogiek returned to their lands in 2000. The Ogiek oppose the killing of elephants and in 2016 they secured 4 months of training from KWS for five of their community scouts so that the scouts can arrest poachers and alert the authorities to their presence. The presence and patrolling of the Ogiek community scouts have significantly reduced the activities of elephant and buffalo poachers. In response to the possibility that the Ogiek could be evicted from Chepkitale National Reserve, their last remaining lands, one KWS staff member said: 'If they are evicted, we might as well say goodbye to the elephants.'

The work of arresting well-armed and politically well-connected poachers puts the community and the scouts at risk. There are many examples of scouts having held poachers and reported this to KWS or KFS, but as the relevant authorities did not arrive, the scouts had to release the poachers, who can only be held for 24 hours before needing to be arrested or released. Despite this, since the community scouts were trained in 2016 their presence has deterred most poachers from neighbouring communities. In late 2016, a particularly notorious poacher from Chepyuk was arrested, along with other poachers, by the community scouts working with KWS. The community scouts managed to recover elephant tusks in the process and later gave testimony in court. However, the poachers managed to secure their release, except for the lead poacher, who is still being held in custody and on trial for suspected killings of community members in Chepyuk during 2016–2017. This highlights the risk the community takes by opposing well-connected elephant poachers.

Possibilities for the new conservation paradigm

In terms of moving towards a rights-based approach to conservation, the Whakatane Assessment led to some positive outcomes. In 2012, Mount Elgon County Council unanimously passed a resolution declaring that the 2000 gazettement of Chepkitale as a game reserve had not been conducted in a way that had consulted properly with those affected, and requested that Chepkitale National Reserve revert back to the Ogiek community.

At the same time, the Ogiek started enforcing their by-laws by establishing community scouts. The scouts then sought to collaborate with KWS and KFS. The former trained the scouts in firearms use and arrest procedures, and the scouts aim to apprehend charcoal burners and elephant poachers and hand them over to KWS or KFS.

A 2013 report commissioned by the Ministry of Environment and Natural Resources determined that Ogiek presence on their own lands helped secure conservation outcomes. It outlined how '[t]he Ogiek people were never consulted nor involved in the process of converting Chepkitale from a community trust land into a national reserve' (MENR, 2013, p. 4). It also quotes key KWS staff as saying that '[t]he Ogiek have coexisted well with wildlife. As KWS we have not had any problems with Ogiek and their livestock. We appreciate that their presence there is not a security risk but adds a lot of value to the security of the area and in particular checking out poachers' (MENR, 2013, p. 11). The recommendation of the report was that the gazette notice 'be rescinded by the government and Chepkitale reverts back to its original status of a Community Trust Land as a pilot of community government partnership in natural resource protection, management and conservation' (MENR, 2013, p. 19). The Ministry never published the report, however, and so was able to avoid acting on it.

The Ogiek have continued to seek community ownership on conservation conditions through a Historical Land Injustices claim to the National Land Commission. Article 67 of the Constitution states that the functions of the National Land Commission include '(2) (e) to initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress' (Republic of Kenya, 2010, p. 45). The Ogiek have also continued to seek community ownership through trying to register their lands as community lands under the 2016 Community Land Act. The implementation of this Act has been delayed because those with power in government often either personally own the land the communities are seeking to reclaim, or the government they hold a position in owns the land. This means that those tasked with implementing the Act have a strong conflict of interest.

In 2014, the Mount Elgon Ogiek joined with other forest-dwelling communities from across Kenya to petition the National Land Commission. The Forest Dwellers Position

Statement to the National Land Commission Task Force Historical Land Injustices proposed the following:

> The conflict between the demands of forest conservation and our demand that our land rights be recognised need not exist. Traditional forest communities are potentially ideal conservators. Our proposal is that: In return for restitution of our customary forestlands through a transfer from public to community land status, we are willing to be legally bound to rehabilitate, conserve, and manage our forests for the people of Kenya. In fact, we look forward to that responsibility even although we know it will take a lot of work on our part. (Traditional Forest Dwellers, 2014, p. 3)

However, just as the Ministry of Environment and Natural Resources report was never published, so the National Land Commission, despite initial positive signs, continued with their demand that forest peoples leave their lands. Despite the Ogiek entering into discussions with KFS and KWS with a willingness to work collaboratively and despite the National Land Commission initially seeming to be willing to act as an honest broker and seeking a resolution, ultimately the National Land Commission was unable and unwilling to play this role. Instead of acting as an independent commission helping to resolve matters between the government and communities, the National Land Commission took the government position. This position is based on the fact that no government agencies have been willing to entertain the new conservation paradigm because they have an interest in maintaining the status quo. Despite all of the positive momentum, KFS continues to seek to evict the Ogiek from their lands, including through burning homes and challenging their rights to their lands in court.

There have been many studies of the diverse and destructive ways in which evictions such as these are carried out (Kenrick, 2019; Weldemichel, 2021; Kitelo, 2022; Schetter et al., 2022). As Ostrom (1990) and others have pointed out (Dawson et al., 2021, pp. 2–12), securing land tenure is the basis for communities being able to make decisions in line with taking care of their lands over the long term. It is only because of their community cohesion despite such ongoing insecurity that the Ogiek continue to protect their lands, including from forest destruction by KFS, through, for example, arresting and reporting charcoal burners and drawing attention to the destruction wrought by the PELIS *shamba* system.

The key conclusion from the evidence presented here is that at Chepkitale conservation is not achieved by placing a barrier between people and other aspects of nature. Ideas of maintaining and measuring degrees of separation from nature are unhelpful in contexts where, as one Ogiek leader, co-author Peter Kitelo, put it (Forest Peoples Programme, 2013): 'We do not conserve. It is our way of life that conserves.'

Discussion

We have presented evidence from community mapping, community meetings and in-depth observation and interviews indicating how de facto community control is the key condition needed to support forest communities to secure their forest lands. We have also highlighted how sustaining this requires securing the community's collective title in law and examined how internal governance systems and norms enable the community to sustain and improve the biodiversity of their lands.

Our research contributes to the increasing recognition that sustainable conservation outcomes can be best achieved through the deep knowledge, connection and commitment that ancestral communities have regarding their lands and, more specifically, that this cannot be maintained without a secure tenure base (Nelson & Chomitz, 2011; Seymour et al., 2014; Blackman et al., 2017; Alden Wily, 2018; Garnett et al., 2018; Whitehead et al., 2019; Sze et al., 2021). For example, a comparison of 40 protected areas and 33 community-managed forests in 16 countries found that community-managed forests reduced deforestation to a greater extent than protected areas (Porter-Bolland et al., 2012). Research also shows that secure community tenure correlates with more effective carbon sequestration (Blackman & Veit, 2018; Walker et al., 2020) because '[w]hen local users perceive insecurity in their rights (because the central government owns the forest land), they extract high levels of livelihood benefits from them, and when their tenure rights are safe, they conserve the biomass and carbon in such forests' (Chhatre & Agrawal, 2009, p. 17669).

The findings from Mount Elgon in Kenya contribute to a larger body of evidence showing that Indigenous Peoples can be better guardians of their forests than international or state protection agencies and challenge the idea that evicting forest peoples in Kenya is the best way to protect the forests. In areas outside Ogiek community control such as in the Forest Reserves claimed by KFS, anecdotal evidence suggests that elephants are more vulnerable to poachers. The 6-year German-funded International Climate Initiative research project should be able to evaluate this more thoroughly. Other studies, including those conducted by the Kenyan governmental Taskforce on Illegal Logging, highlight how Kenyan state agencies such as KFS, which are supposed to be responsible for forest protection, have been responsible for the severe depletion of indigenous forests (Mutune & Lund, 2016; Republic of Kenya, 2018).

In contrast, the Elgon Ogiek continue to demonstrate that respecting the rights of customary communities to own and manage their lands according to their sustainable norms and practices can be a more effective and sustainable form of conservation than coercive, heavily monetized, exclusionary models. The Elgon Ogiek are not obstacles to conservation on Mount Elgon. Securing the community tenure rights of forest communities can create a rapid, rights-based route to the effective conservation of their forests.

Despite positive shifts in policy and discourse, the fortress conservation eviction approach continues globally

(Hill, 2018; Tauli-Corpuz et al., 2018), allowing resource exploitation by government conservation agencies funded and advised by international conservation organizations to continue under the guise of protection, especially in Africa (Kenrick, 2017, 2019; Long, 2022; Mbaria, 2022).

As this Ogiek example makes clear, the fortress conservation model pursued by such state agencies involves evictions of communities, which weakens the security of tenure that is crucial to enabling communities to make long-term decisions that support sustainability. Pursuing this model also reduces the area within which the community can practice such sustainable decision-making, thereby restricting the influence of their customary institutions and permitting external forces to clear the forests for timber, charcoal or agriculture.

The 2010 Kenya Constitution makes clear in Article 63(2)(d)(ii) that the lands of ancestral hunter-gatherers should be recognized as community lands. It is therefore a way in which these lands can be owned and managed by the community (Republic of Kenya, 2010, p. 44). The 2016 Forest Conservation and Management Act recognizes the conservation efforts of communities and includes community forests as a category of forest conservation (Republic of Kenya, 2016b, p. 698). The Act creates a clear process through which to transfer ownership of such lands to ancestral forest communities (Republic of Kenya, 2016a), which could facilitate the implementation of the approach of community tenure with conservation conditions described earlier.

Enacting the law in this way would enable forest areas to be designated both as in need of protection and as community forests on community lands. This is an approach that aligns with conservation science rather than with the attitudes that sometimes underpin resource appropriation in the name of conservation. However, in practice, the 2016 Forest Conservation and Management Act included all community forest areas in the schedule as public forests and so did not allow any of the community forest areas to be owned and managed by communities (Republic of Kenya, 2016b, pp. 734–736) as should have been made possible under the Constitution. In practice, the old fortress conservation approach continues to be followed, to the detriment of the ecological integrity of the environments on which such communities depend. The 2016 Forest Conservation and Management Act recognizes that community forest areas should be owned and managed by communities, but then ensures that all such areas are categorized in the schedule as public forests and not as community forests. This is an example of laws and policies being presented as progressive, but being enacted in such a way as to ensure they do not change the status quo. In practice, even with relatively progressive policies, unnecessary conflict is perpetuated between the rights of ancestral forest communities and the need for forest conservation. This stems from outdated colonial approaches to conservation that continue to perpetuate a long history of land rights abuse that prevents such communities from being able to conserve the flora and fauna of the forests by being allowed to live on and care for their lands.

Conclusion

Colonial and state agencies on Mount Elgon have eroded the long-standing and complex Ogiek land management and conservation systems, which they have sought to replace but that still continue to function well where they are able. This was done in the pursuit of exclusionary models rooted in the assimilation of land into economic systems that promote habitat conversion, enclosure and homogeneity even where they are designed to conserve. These processes have occurred in tandem with and as a result of land and human rights violations that have been committed to take control of the customary land of the Ogiek. This land appropriation has been undertaken by evicting the community and imposing more intensive, simplified and inappropriate land management systems. These simplified systems have included both PELIS and fortress conservation schemes as well as habitat conversion to farms and plantations.

We offer two recommendations: (1) An effective, alternative approach to forest conservation should be adopted in Kenya, based on the 2010 Kenyan Constitution (Republic of Kenya, 2010), the 2016 Community Land Act (Republic of Kenya, 2016a) and the positive but not the contradictory and regressive elements in the 2016 Forest Conservation and Management Act (Republic of Kenya, 2016b). This legislative framework contains the necessary progressive elements to facilitate an effective rights-based, science-based and community tenure-based approach. (2) IUCN should fund and facilitate the widespread use of the Whakatane Mechanism. The Whakatane Mechanism allowed the Ogiek to enter into new dialogue with the government and other organizations. For example, through the Whakatane Mechanism the Ogiek talked for the first time with the County Council about the possibility of their ancestral land being returned to Ogiek community ownership. Although numerous events during the Whakatane assessments demonstrated how powerfully some institutions continue to marginalize the Ogiek, the assessment successfully documented the sustainable livelihood practices of the Ogiek and allowed international and national conservation and development agencies to recognize that the Ogiek presence on their lands can be key to protecting forests, fauna and water catchments.

The biodiversity of the Mount Elgon ecosystem is rich, as is the culture of the Ogiek whose norms, bylaws and practices help to sustain it. The Ogiek are able to demonstrate a rights-based, cost-effective and successful approach to conservation. Whether that approach is permitted to continue will depend not only on the tenacity of the community but also

on whether their rights to their lands can be secured. This will depend on whether national and international organizations who claim to be committed to conservation see greater short-term advantage for themselves in denying that such communities have the ability and commitment to conserve their lands, or whether they are able to leave the colonial legacy behind and move towards an approach based on partnership, both between communities and their lands and between communities and national and international authorities.

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