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Conserving Wildlife Habitats Beyond Protected Areas: Efficacy of Relevant Kenya's Regulatory Frameworks

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ABSTRACT
Kenya has established five national sanctuaries, 22 terrestrial parks and 28 terrestrial reserves, totalling about 8% of the country's land mass. These protected areas (PAs) are governed by the state through stiff regulation and controls. But this notwithstanding, studies continue pointing to a calamitous decline in wildlife in the country, outside parks, which account for 85 per cent loss. In light of this decline, the study sought to assess Kenya's current regulatory frameworks in conserving wildlife habitats beyond PAs. The research data was collected from a mix of primary and secondary sources. The primary data was mainly acquired through interviews with key informants, while the secondary data was derived from the literature review. The study findings indicated that, even though over 65 per cent of the country's wildlife resides outside PAs, there is a lack of a specific regulatory framework for their conservation. Equally, sectorial policies, especially those concerning land use and natural resource management, sometimes advance positions that undermine wildlife conservation. Thishas been aggravated by a lack of or inadequate linkages and coordination in the governance of the country's natural resources. The paper, therefore, concludes that merely protecting habitats with strict rules and law enforcement is not enough to conserve biodiversity. The need for Kenya's wildlife law to extend beyond the traditional PAs to encompass private and community lands outside PAs is strongly recommended. In the same vein, all land use activities beyond PAs should be planned and integrated into both national and county spatial planning to avoid the risk of PAs becoming ecological islands.

Key Terms: Law, land use, rights, wildlife.

INTRODUCTION

Kenya has established five national sanctuaries, 22 terrestrial national parks and 28 terrestrial national reserves that, in total, amount to approximately 8% of the country's land mass as wildlife habitat (**Fig 1**). Conservation of wildlife in secluded reserves dates from the 18th Century when the Western world sought to separate what is perceived as the "human world" from the "natural world" (Amboseli Ecosystem Trust, 2020). This concept was largely driven by the notion that human activity could not coexist with the natural world. It saw the creation of Yellowstone National Park in 1872, and the model spread globally, reaching Kenya in 1898 (Government of Kenya, 2020). Protected areas (PAs) have been one of the most effective and widely implemented strategies to conserve biodiversity, according to (Zeng et al., 2023).

Establishing borders and confining most anthropogenic disruptions inside critical regions, whether in legal or other effective ways, helps sustain ecological processes and connections, benefiting species within them. (Maxwell et al., 2020). To date, PAs are the cornerstone of global conservation and central to international plans to minimise global extinctions (Williams et al., 2022). As of 2020, some 15% of the world's land had been protected, falling below the 17% Aichi Biodiversity Target (Williams, 2022).

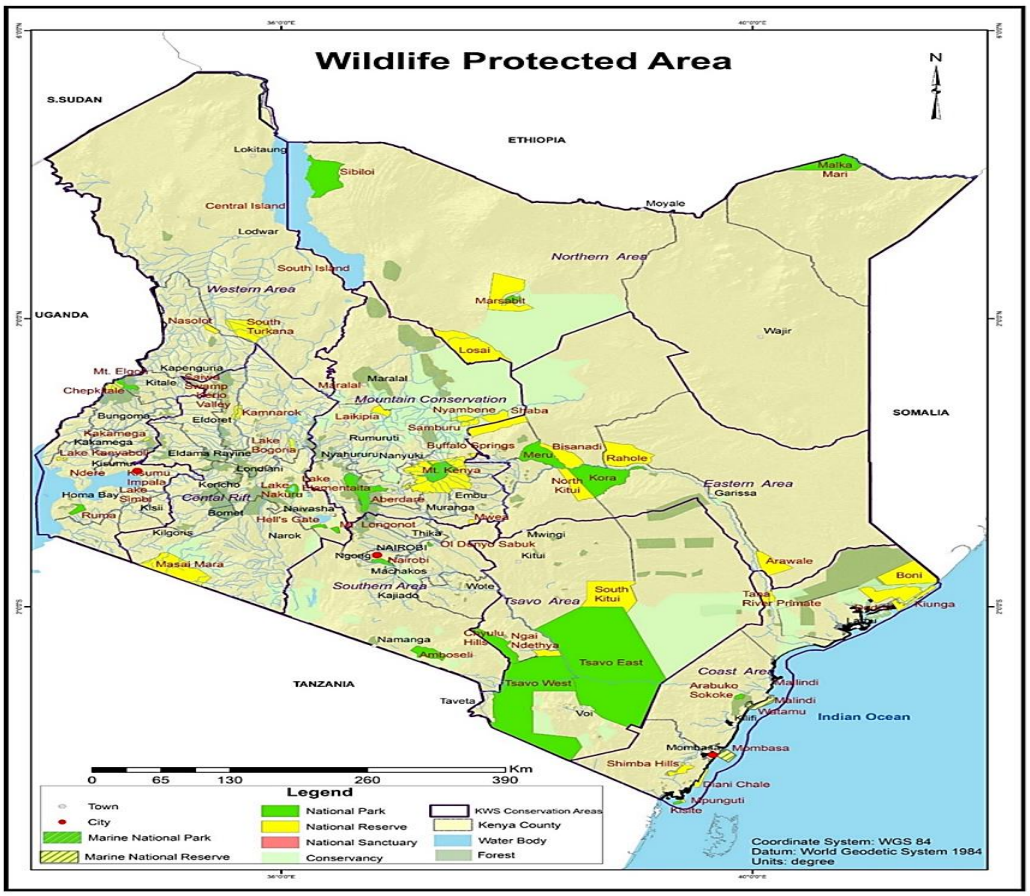

Figure 1: Kenya's Protected Areas, Source: NLC, 2023)

Despite their expansion and role in maintaining long-term biodiversity, studies continue pointing to a calamitous decline in wildlife across the globe. It's estimated that between 1970 and 2020, the size of wildlife populations decreased by 73% worldwide, with Africa experiencing a 76% decline (World Wide Fund for Nature, 2024). Similarly, nearly half, 44 per cent population declined, with one in five (22 per cent) of CMS-listed species threatened with extinction (UN Environment Programme World Conservation Monitoring Centre, 2024).

The decline of global and regional wildlife is also mirrored in Kenya. Studies by (Ogutu et al., 2016) revealed that Kenya experienced a 68 per cent loss of

wildlife populations in the 19 rangeland counties, with over 12 counties experiencing an above-average loss, with wildlife almost wiped out in West Pokot, Turkana and Kilifi counties (**Fig. 2**). The highest decline was observed in West Pokot, which has experienced a total collapse, with 99 per cent of its wildlife lost. The smallest decline in wildlife was observed in Laikipia, which experienced a 7 per cent decrease (Ogutu et al., 2016).

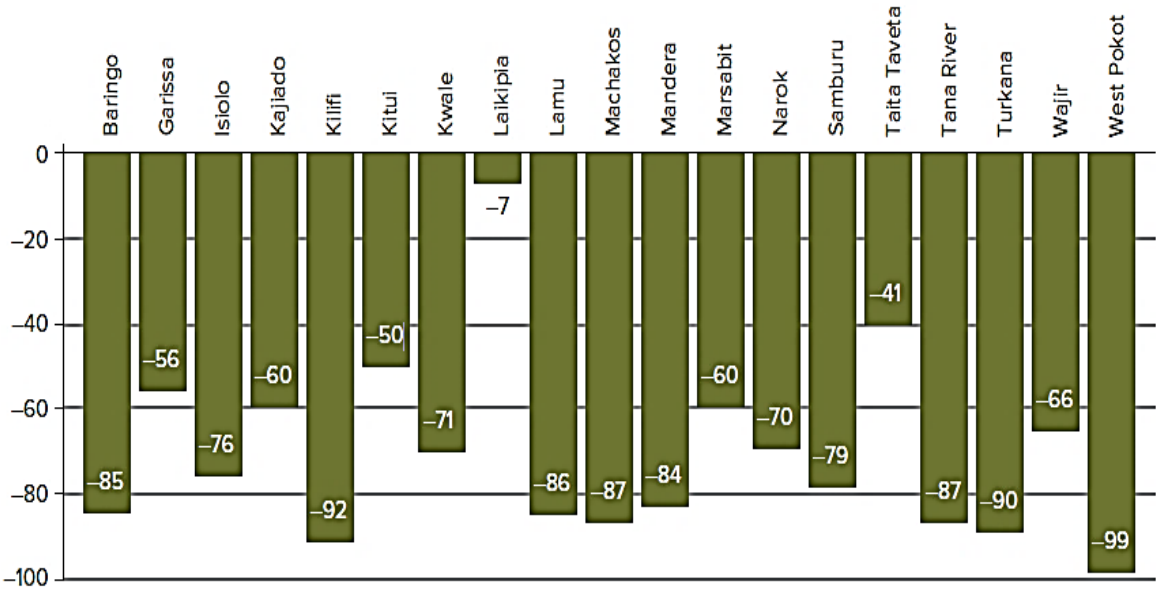

Figure 2: Wildlife Trends (%) In The 19 Rangeland Counties between 1977 and 2016 (Source: Ogutu, 2016)

This decline in population demonstrates the limitations of PAs and affirms that biodiversity preservation requires more than just strict laws and law enforcement. Like in Kenya and the rest of Africa, many PAs were set aside because of the significant wildlife movements and aggregations that took place there during the wet or dry seasons, which attracted the attention of the colonial administration at the time (Watson et al., 2010). As a result, policies that created national parks and reserves designated them as geographically distinct areas without due regard to the migratory requirements of animals (Amboseli Ecosystem Trust, 2020). As a result, the conservation and management of wildlife outside the protected areas is hardly ever integrated into the broader protected area management, threatening the viability of PAs.

Policy intervention to avert wildlife decline outside PAs (where over 65% of its wildlife reside) and extinction of PAs is key as Kenya's rangelands (hosting the country's 70% of wildlife) are increasingly being threatened. Following the discoveries of important assets such as petroleum, minerals, wind power, and large-scale infrastructural projects, including the LAPSSET corridor and the Horn of Africa Gateway Development Project (HoAGDP), among others, the economy of Kenya is slowly shifting into the rangelands. Equally, these areas continue to receive high numbers of immigrants from the potential areas seeking new agricultural lands. In some arid counties, people are taking to agriculture as a form of land utilisation as employment opportunities continue to shrink in urban areas (Duraiappah et al., 2013; Government of Kenya, 2011). Additionally, with a population growth rate of 2.7 per cent per annum (World Bank, 2013) and a planned increase of irrigable lands in the ASALs, continued wildlife decline is inevitable.

It's undisputed that PAs are the jewels in Kenya's conservation crown, as these key habitats, ecosystems, and landscapes represent the core elements of Kenya's conservation strategy. However, while much of Kenya's wildlife depends on the protection of parks and reserves (PAs), healthy wildlife populations require access to resources found in the larger landscape outside PAs. Similarly, connections between populations increase the resilience of wildlife

populations and communities in the face of rapid climate and land-use change (Government of Kenya, 2017). It is against this backdrop that the paper analyses the extent to which the current policies and regulatory frameworks in Kenya are better positioned to conserve wildlife outside protected areas. The paper's policy recommendation will be key to informing amendments to the existing wildlife laws and policies.

LITERATURE REVIEW

Kenya's government first became involved in wildlife conservation and management in 1898, when laws outlawing hunting and regulate the sale of wildlife products were passed (Government of Kenya, 2020). This was followed by the establishment of the Game Department in 1907 to enforce hunting regulations and prevention of human wildlife conflict (HWC). The Royal National Parks of Kenya Ordinance, which established national parks, was published in 1945. The first national park created specifically for the protection of wildlife was Nairobi National Park, which opened for business on December 16, 1946. The creation of Reserves overseen by Native Councils was made possible by the Native Reserves Proclamation of 1958. In 1961, Maasai Mara became the first Native Game Reserve (Government of Kenya, 2020).

Sessional Paper No. 3 of 1975, was Kenya's first post-colonial wildlife policy to be adopted. Its primary goal was to figure out how to maximize wildlife profits while taking into consideration the benefits of other land uses (Government of Kenya, 1975). The policywas developed as a result of conversations about the future of wildlife in dispersal regions between the newly formed Wildlife Conservation and Management Department (WCMD) and local communities. The Kenya Wildlife Service Training Institute (KWSTI), which trains staff for jobs in wildlife and related fields, was also established as a result of it (Government of Kenya, 1975).

In 1976, the wildlife Act was passed (Government of kenya, 2020). This Act combined the Game Department and Kenya National Parks into a single entity, the WCMD. Although the department implemented some positive changes, there were worries over ineffectiveness and corruption within it. This resulted in a decrease in the overall efficiency of national park management activities both within and outside protected areas. Illegal hunting, HWC, and biodiversity loss were not addressed in either the Wildlife Policy or the Act due to the absence of legal framework, interference from politicians, complicated administrative procedures, and severe corruption. Local communities did also not get the chance to enjoy the benefits resulting from wildlife, despite living on communal lands (Waithaka, 2012). The Wildlife Act was modified in 1989, resulting in the creation of the Kenya Wildlife Service (KWS) to take over from the WCMD (Waithaka, 2012).

Later in 1990, a comprehensive collection of policies and strategies for their implementation referred to as the "Zebra Books" or, more officially, the "KWS Policy Framework and Development Programme 1991-1996" were formulated. These tactics made it possible to establish the Community Wildlife Service (CWS), which has since allowed communities to directly benefit from the wildlife on their land while reducing illegal hunting and conflicts between communities and wildlife. CWS was established to encourage partnerships or collaborative management with communities living outside protected areas (Waithaka, 2012).

Later, the WCMA, 1976 was revoked and replaced by the 2013 WCMA (Government of kenya, 2013). This 2013 Act implementation was driven by the values of devolving wildlife conservation and management to landowners and managers in wildlife-rich areas, acknowledging wildlife conservation as a viable use of land, making the benefits of wildlife more available and easier to access, and observing the values of sustainable use. Following the adoption of the 2010 Constitution of Kenya, all current laws and policies had to be reviewed and brought into compliance with the new framework.

Kenya's second wildlife policy, Sessional Paper No. 01, was adopted in 2020 after the Wildlife Conservation and Management Act was passed in 2013 (Government of Kenya, 2020). In spite of numerous government initiatives aimed at improving wildlife policies, laws, and institutions, the threats facing wildlife have persisted and in certain cases even intensified, and new difficulties are constantly cropping up. Therefore, a clear understanding of wildlife loss and decline despite decades of significant reforms, begs the

inquiry on their effectiveness to address the persistent threats to wildlife particularly outside protected areas.

Table 1 summarises the evolution of wildlife regulatory frameworks in Kenya.

Table 1: Evolution of Wildlife Regulatory Frameworks in Kenya

Year	Milestones
1898	The British East African Protectorate established regulations to manage hunting and the trade of wildlife and its products.
1907	British Government established the Game Department that administered Game Reserves, enforced hunting regulations, and protected property and crops of settler farmer communities from wildlife.
1945	The Royal National Parks of Kenya Ordinance of 1945 signalled a shift in colonial conservation policy from protection through hunting legislation to preservation through land protection as a response to an increase in human and livestock populations.
1946	Nairobi National Park was created as the first National Park for exclusive wildlife protection.
1951	Wild Animals Protection Ordinance, which proscribed hunting without license permits.
1958-1961	The Native Reserves Proclamation provided for the establishment of Reserves managed by the Native Councils. Maasai Mara was established as the first Native Game Reserve in 1961.
1975	The first wildlife policy in post-colonial Kenya was Sessional Paper No. 3 of 1975 is titled. "*A Statement on Future Wildlife Management Policy in Kenya.*"
1976	The Wildlife (Conservation and Management) Act was subsequently passed to give effect to the Policy.
1989	The Government, alarmed by the sector's dismal performance, amended the Wildlife (Conservation and Management) Act (Cap 376 of 1976) and created a new parastatal, the Kenya Wildlife Service (KWS).
2010	The announcement of the Constitution of Kenya in 2010.
2013	In conformity with the Constitution 2010, the Wildlife Conservation and Management Act was enacted in 2013.
2020	To implement the Wildlife Conservation and Management Act, which was enacted in 2013, Sessional Paper No. 01 of 2020 on Wildlife Policy was formulated and adopted in 2020.

METHODOLOGY

The paper is a product of both primary and secondary data. Primary data was obtained from largely key informants drawn from state and non-state actors. State Actors were made up of officials of various agencies who are directly or indirectly involved in wildlife conservation on land outside of protected areas, while the non-state Actors were made up of stakeholders who have been involved in long-term research programs and community wildlife conservation initiatives. Some of the non-state actors interviewed included representatives from the Center for Wildlife Management Studies, Amboseli Ecosystem Trust, Big Life Foundation and Amboseli Trust for Elephants. Structured interviews were used to gather data and information from key sources within the area. Interviews were conducted face-to-face using semi-structured questionnaires.

On the other hand, secondary data was obtained from an extensive literature review involving a review of the past and existing policies and legislation, especially those relating to wildlife outside PAs. Through literature review, the study sought to understand the contents of written materials to enable triangulation with primary data collected. These were collected from online sources such as the Directory of Open Access Journals (DOAJ) and various government agency portals such as the Kenya Law Reports (KLR).

The research utilized content analysis to examine both primary and secondary data collected and presented using direct quotations, narratives and descriptive notes. Primary qualitative data collected was transcribed using Microsoft Word. This involved writing out all the data captured both by tape-recording and shorthand field notes. The transcribed

data was then carefully studied to enable the researcher to organise it into emerging themes based on the study objective.

FINDINGS AND DISCUSSION

Wildlife Law and Wildlife Conservation Outside Protected Areas.

Under the 2010 Kenya's constitution, the fourth schedule (Part 1), protection of wildlife is a function of the National government under the Kenya Wildlife Service (KWS). Equally, the same schedule, Part 2, assign county governments the role of planning and development as well as implementation of specific national government policies on natural resourcesand environmental conservation. In the case of wildlife, the Ministry of Tourism and Wildlife (MoTW) is responsible for formulating wildlife policies and coordinating efforts for wildlife conservation and management.

The main principle law governing wildlife in Kenya Wildlife Conservation and Management Act, 2013 (WCMA) which establishes the Kenya Wildlife Service (KWS), a state corporation mandated to conserve and manage Kenya's wildlife, enforce related laws, and manage national parks and reserves. It also establishes the Wildlife Research and Training Institute (WRTI) to provide coordinated wildlife research, data, and capacity building. Moreover, in 2020, the state adopted the Sessional Paper No. 01 of 2020 on Wildlife Policy the second policy since 1975.

Both the Wildlife Conservation and Management Act was enacted in 2013 (WCMA), and Wildlife Policy 2020 recognise the role of land outside PAs in conservation, which is largely under the control of private owners and communities. The Act establishes the legal structure for safeguarding, conserving, and managing wildlife on all types of land, including public, community, and private land and the Kenya Wildlife Service (KWS) is responsible for enforcing these laws and regulations and managing wildlife resources across the country.

The WCMA designates KWS as the authorised entity tasked with safeguarding, overseeing, and serving as the steward of the nation's wildlife assets. (Section 6). Its functions involve engaging with communities and private landowners for management and consultation purposes, as well as providing protection for wildlife. (Section 7). The Act advocates for wildlife conservation and management to be devolved, wherever feasible and suitable, to the landowners and managers where wildlife is present (Sec. 4). This means that landowners and communities in wildlife areas can participate effectively in decision-making on wildlife resources, as well as to benefit from the use of the resources. Wildlife user rights are essential because they serve as incentives for the people living in wildlife areas to create spaces for conservation outside protected areas. Securing these rights is, therefore, essential as a long-term wildlife conservation policy (Government of Kenya, 2020).

The WCMA also provides benefits for wildlife conservation that shall accrue to the land user to offset the costs of conservation (Section 4(e). Furthermore, the advantages gained from utilising wildlife resources will be fairly distributed among the county and national Government, private landowners, and local communities (section 19). Essentially, the WCMA introduces incentives to encourage the protection of wildlife by all stakeholders and as a revenue source (section 70). It also makes provision for the creation of a Wildlife Endowment Fund (Sec. 23) whose function will include but not be limited to;

a) Create wildlife protection initiatives,
b) Manage and rehabilitate safeguarded areas and conservancies,
c) Protect endangered species, habitats and ecosystems and
d) Facilitate community-based initiatives.

To conserve wildlife outside PAs, The Cabinet Secretary, following the recommendation of the relevant county government and after consultations with the NLC, may issue a notice in the Gazette to designate any land within the jurisdiction of the county government as a national reserve if that land is rich in biodiversity and wildlife resources, contains endangered species or serves as a vital wildlife buffer zone, migratory route or dispersal area (128 Section 35(1). Similarly, the Cabinet Secretary may acquire by purchase, any land deemed suitable for designation as a national park, wildlife corridor, a route for migration or dispersal area under the Act (Section 38(2)) or by publishing in the Gazette notice an official list of wildlife ecosystems and habitats requiring protection

following recommendations from the KWS and in consultation with the NLC (Section 46(1)).

Landowners are urged to contribute land to the national and county Government, community or educational institutions for the purpose of wildlife conservation (section 42). Under section 39, any person or community who owns land inhabited by wildlife may individually or collectively establish a wildlife conservancy or sanctuary. As of 2022, there were over 206 conservancies in Kenya. Despite this remarkable growth, the full potential of conservancies in Kenya is yet to be exploited. Conservancies have the potential to conserve 12% of Kenya's land mass, benefit over 5 million people and protect 65% of Kenya's wildlife in order to expand and diversify Kenya's tourism industry as envisaged within Vision 2030 (National Land Commission, 2024). It is important to point out that many individuals and communities had already established conservancies before the enactment of the WCMA, such as the Northern Rangelands Trust (NRT). The Act is, however, necessary as it gives the framework for the management of all conservancies.

Wildlife Conservation Easements (section 65). The Act now recognises the creation of wildlife conservation easements (WCE) by voluntary private arrangement to, among others, (c) create or maintain migration corridors and dispersal areas for wildlife. The involuntary nature of creating easements in the previous Act (CAP 376) was viewed as an extension of the colonial fortress conservation model, in which, in Africa and Kenya in particular, Indigenous people were displaced from their ancestral lands to make room for conservation areas (Amboseli Ecosystem Trust, 2020). This provision, therefore, allows parties to negotiate appropriate compensation for any loss or diminishment of the value of land due to the creation of the easement.

Recognition of wildlife as a land use option under section 70. Every individual has the right to be part of wildlife conservation and management as a form of gainful land use. This, therefore, among others:

(a) It provides greater land-tenure security for private and community land, particularly in the face of competing land uses such as agriculture and expansion of development infrastructure.
(b) Wildlife conservation can be adequately integrated wildlife conservation in land-use planning activities (which has been lacking)
(c) this will also call for law reforms in major land laws in Kenya including the National Land Policy, National Land Use Policy and the Physical and Land Use Planning Act among others
(d) wildlife conservation will be in a position attract greater support from the Government, civil society and the private sector

The fact that conservation areas are not complete ecosystems means that wildlife is still found in private land outside the parks/reserves; section 74 of the Act requires land owners to facilitate the ease of wildlife movement from one place to the other, considering their migratory nature that links to the resource. Taking cognisance of the opportunity cost that will lost in this case, the law provided for benefit sharing among relevant parties on a case-by-case basis, whether county, conservancy or individual landowner. However, this provision has silently avoided recognising the rights of community/landowners to be compensated when wildlife moves from protected areas to non-protected areas.

Equally, the Wildlife Policy 2020 also provided for the following opportunities for the conservation of wildlife outside protected areas: Individual or corporate landowners who adopt wildlife as a form of land use need incentives to induce or promote the establishment of wildlife conservation areas and sanctuaries. This implies that with proper incentives, land-use practices that tend to phase out wildlife, such as agriculture, could be minimised or confined to appropriate areas. Fostering of integration of wildlife corridors and dispersal areas into county spatial plans (CSPs). As mandated by the County Governments Act of 2012, CSPs are crucial for sustainable land use and development, including the management of wildlife corridors, which are key to biodiversity conservation and must be integrated into the plans. Equally, through this approach, CSPs will better land use decisions to ensure that development activities do not negatively impact wildlife corridors or other environmentally sensitive areas.

Devolving of wildlife user rights. The Policy takes cognisance of the fact that access to wildlife is

currently limited to a very small group of Kenyans, yet there is huge potential for wildlife utilisation to benefit more Kenyans. In line with Article 174 of the Constitution, which recognises the rights of communities to manage their own affairs, this provision will serve as an incentive for the people living in wildlife areas to create spaces for conservation outside protected areas, thus promoting local participation and sustainable development. Benchmarking from southern African countries such as Namibia, Zimbabwe, and South Africa has demonstrated that secured wildlife user rights empower landowners and communities outside PAs to participate effectively in decision-making on wildlife resources and benefit from the use of the resources.

Lastly, bio prospecting and Access to Genetic Resources. Wildlife resources may contain valuable compounds that are of use to humankind. According to (Government of Kenya, 2020), with over 34,747 identified species, 1,841 microbes, 2,714 protozoa, 6,817 plants and 23,375 animals that form the stock of natural capital for bio prospecting with the potential to produce commercial products that can contribute to economic development in Kenya, especially on food security, health and manufacturing (Kenya Wildlife Service, 2011).

Internationally, bio prospecting activities have led to the development of many valuable products and applications, such as medicines, cosmetics, industrial lubricants, adhesives, and the use of micro-organisms to make industrial processes cleaner and more efficient (Government of Kenya, 2020). This provision also deconstructs the narrative of the preservation of parks as a major foreign exchange earner (wildlife-based tourism) and calls for investments in existing and emerging wildlife utilisation opportunities within and outside PAs that have been successful in African countries such as Zimbabwe and Namibia.

Conserving Wildlife on Private Land

The 2010 Constitution fundamentally altered the land law terrain by redefining land categories and classifying them into private, public and community land. Article 61(2) makes it clear that all land in Kenya is public, community and private. Wildlife is found in all these land categories, but the law doesn't recognise this. Article 66 of the 2010 Constitution mandates the government "to control the use of any land or any interest in or right over any land," including land-use planning. Protected areas (PAs) that constitute national parks and national reserves are public land, but as pointed out above, public land alone cannot sustain wildlife, and most of the wildlife in Kenya lives outside these national PAs (Watson et al., 2010; Government of Kenya, 2020).

One of the most problematic issues is ownership of wildlife. As pointed out above, wildlife as a fugitive resource is not amenable to private ownership (Mbote, 2002). A private owner's interest in maximising the use of his land for optimum gain disadvantages wildlife conservation as a land use against other more beneficial uses. With market forces pushing land prices higher, this can be a hard choice. In Kenya, land tenure systems are regulated through three main legislations: the Land Act, 2012 (LA), the Land Registration Act, 2012 (LRA) and the Community Land Act, 2016 (CLA).

The Land Act contains detailed mechanisms for the conservation of natural resources and ecologically sensitive parts of the public (Article 63 of CoK, 2010) and private land (Article 64 of CoK, 2010). The National Land Commission (NLC) is required to take appropriate action to maintain public land that has endemic species of flora and fauna, critical habitats or protected areas (Government of Kenya, 2012; Government of Kenya, 2017). The NLC is also required to identify ecologically sensitive areas that are within public lands, demarcate or take any other justified action on those areas and act to prevent environmental degradation (Section 11(2) of the LA). In doing so, the NLC should consult with relevant institutions like the county government and state agencies such as Kenya Wildlife Service and Kenya Forest Service.

Significantly, the Constitution of 2010 requires the state to ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources and the equitable distribution of the accruing benefits (Article 69(1) (a) of the CoK, 2010). Further, the state is compelled to protect the Indigenous knowledge, biodiversity and genetic resources of communities (Article 69(1) (c) of the CoK, 2010). These are enabling provisions for harnessing

community knowledge of ecosystems and habitats that are shared with wildlife. The National Land Use Policy of 2017 proposes that the Government should:

a. Identify, map and publish Gazette notice on critical wildlife migration and dispersal zones and corridors in consultation with the local communities and individual landowners;
b. Encourage the establishment of wildlife sanctuaries and conservancies and engage local communities and individuals living near the parks and protected areas in the shared management of these spaces and
c. Revise the gazettement of forests and protected areas to promote the realisation of their multiple benefits and ensure that they are conserved for their ecosystem values and not merely to physically avoid human activities.

These recommendations aim to stem conflicts that arise where communities live in ecologically sensitive lands that have been placed under public authority's curatorship through gazettement but which communities claim rights over by virtue of having occupied them before the gazettement. Section 24 of the Community Land Act addresses this by allowing the NLC to convert public land to community land on a case-by-case basis in accordance with the Land Act, 2012.

Conserving Wildlife on Community Land

Communal land in Kenya has the greatest potential to conserve wildlife and there have been efforts geared towards enabling the communities, particularly those that live with wildlife and those that border protected areas, to recognize the benefits of wildlife conservation through community benefit-sharing schemes relating to revenues derived from wildlife tourism (Section 80 of the WCMA). More sophisticated mechanisms have been proposed in the WCMA, including the formation of community wildlife conservancies (Sec. 39).

While the Community Land Act, 2016 (CLA) does not expressly provide for the preservation of wildlife, a reading of it as a whole shows ways of conserving it; the Act, as a whole, seeks to safeguard and promote the right of communities to manage their lands. This will positively impact the preservation of wildlife resources within community land as communities identify with wildlife conservation as land use. Additionally, the security of tenure established by the Act gives a good context for incorporating wildlife as an essential component of the community, ensuring that the gains of conservation will be shared with community members.

Part II of the Community Land Act provides for the recognition, protection and registration of community land. Significantly, communities may hold land as freehold, leasehold or under customary tenure (Section 4). The Act, therefore, empowers communities to manage their land, including areas vital for wildlife conservation, by formalising land ownership and providing a framework for sustainable resource management, including wildlife.

Under Section 12, there are various categories of holding community land, which include communal, family or clan, and reserve land. The provision for reserve land opens a pathway for the use of community land for conservation. Indeed, among the uses for which a community may reserve land is community conservation (Section 13(3)). Related to this is the provision that enables a registered community to submit a plan for the development, management, and use of their land for approval by the county government of its own volition or at the request of such Government (section 19). The community is required to consider any conservation, environmental or heritage issues relevant to the development, management or use of the land before submitting such a plan (Section 19(2) (a)).

Inadequate organisation or absence of a formal centralised management source and control of land resources in community lands has been the greatest challenge in integrating and appreciating wildlife resources as land use in community land. Section 15 of the Act allows for the creation of a community assembly made up of all adult members, as well as the formation of a community land management committee. These institutions are in charge of the management and administration of community land, coordinating the creation of community land use strategies in cooperation with the relevant authorities, and establishing guidelines and regulations. The community assembly approves the rules and regulations and oversees the operations of the

community. Consequently, these two bodies are accountable for developing the wildlife conservation and management policy within their respective community areas.

Section 20 is devoted to the conservation of natural resources on community land. It provides that registered communities should abide by applicable laws, policies, and standards on natural resources, and further, they should establish measures to protect critical ecosystems and habitats. Registered communities must also provide incentives for communities and individuals to engage in income-generating natural resource conservation programs, measures that enhance the access, use and co-management of forests, water and other resources by communities that hold customary rights to these resources; processes for the recording of natural resources in a suitable registry, and procedures for engaging communities and various stakeholders in the administration and use of land-based natural resources. If implemented, these measures can bridge the divide between land rights-holding and conservation. They can also stem the impoverishment of communities by conservation initiatives that exclude them.

Under Section 28 of the Community Land Act, pastoral communities have the right to graze on community land. However, subject to conditions that may be imposed, such as the kind and number of livestock that may be grazed, the part of land the pastoralists may graze on, and a grazing plan. Despite Section 13 of the Act providing for the exclusivity of special purposes, the provision has not been strictly observed, leading to the prevalence of cultural practices that lead to unsustainable land use and inappropriate ecosystem management (Government of Kenya, 2017). This has resulted in severely degraded rangelands, lower productivity levels and unsustainability caused by overgrazing, poor land management practices and conversion of rangeland to crop farming and ultimately to the reduction of land available for wildlife conservation (Government of Kenya, 2017).

Section 29 of the Community Land Act allows for the allocation of some land within the community land for special purposes, including community conservation areas. Such areas can only be utilised for designated purposes. The community could establish wildlife conservation areas through this provision. Section 35 mandates that the resources found in the community land be sustainably and productively utilised for the benefit of the entire community, including future generations. Indisputably, the community assembly, the community land management committee and community members bear the burden of conserving the wildlife resources on community land and sharing the benefits that accrue from such use.

Secure tenure for communities, incentives for investments and benefit-sharing are most likely to attract investment in wildlife conservation on community land. Such investments could include wildlife conservation centres run by the communities or by outsiders with the approval of the community. The community must ensure that such investments do not impact the environment negatively. Communities can also use alternative dispute resolution mechanisms, including traditional dispute resolution mechanisms and mediation, to resolve disputes that arise among land users or even community members under part VII of the Act. Dispute resolution procedures can be provided for in by-laws developed by the community. Fast-tracked dispute resolution is vital for the sustainable conservation of wildlife resources.

Despite the above CLA provision on conserving wildlife on community land, the study has established that the biggest threat to the viability of the study area and the free-ranging wildlife is group ranch land subdivision, privatisation and change of land use that excludes wildlife. Despite widespread concerns that group ranch subdivision will fragment wildlife dispersal areas further and interfere with their movement patterns, CLA continues to push for this narrative under section 23 (conversion of community land to private land). It reads:

"Registered community land may, subject to the approval of the registered community, be converted to private land through (a) transfer; or (b) allocation by the registered community, subject to ratification of the (community) assembly as provided in section 21(2)."

Therefore, for effective management of transboundary resources such as wildlife on community land which hold over 90% of wildlife and 88% of protected areas in Kenya (Osano, 2012), CLA

should discourage communal land fragmentation including land subdivision, privatisation and change of land use.

Land Use Planning and Wildlife Conservation

Land use planning laws also have an influence on wildlife conservation as they guide the use of land across various regions of the country. Their potency lies in their ability to guide the management of natural resource management and can lead to sustainable or unsustainable practices depending on how they are framed. Land use planning in Kenya is a concurrent function of both national and county governments. Under the Fourth Schedule of the CoK, 2010, part 1, the general principles of land planning and the coordination of planning by the counties in the role of the national Government (sec. 21), while under part 2 of the same schedule, County planning and development is the role of the county governments (section 18). The land is one of Kenya's most important resources. Land uses such as agriculture, wildlife conservation, urban development, human settlement, and infrastructure depend on land. In Kenya, wildlife conservation (**conservancies, sanctuaries, parks and reserves**) is increasingly recognised as a viable land-use option, particularly outside PAs. However, this has not been recognised in the Physical and Land Use Planning Act 2019 (PLUPA).

The first National Land Policy in Kenya, launched in 2009, formally recognised wildlife as a land-use option, which was previously not the case. Further, the WCMA solidified this by legally recognising wildlife as land use (section 39). PAs alone cannot sustain wildlife in Kenya, as wildlife depends on land adjacent to PAs for continued viability (Watson et al., 2010). Therefore, land use planning outside PAs is key as it involves strategically managing land use to balance human needs with environmental protection. The various tools and approaches to achieve this include zoning and regulations, easements, conservation leases, land use planning, buffer zones, land swaps and incentive programs, among other ways.

At the national level, PLUPA, which largely implements Article 66 of the Constitution, establishes guidelines for the preparation and execution of physical development plans. The Act provides for inter-county plans (two or more counties) to secure transboundary resources such as wildlife (sec. 29). In addition, the Act also provides for the declaration of a special planning area under section 52 if *(a) that area has unique development, natural resource, environmental potential or challenges and (e) the declaration is meant to guide the management of internationally shared resources such as wildlife*. This gives an opportunity for such areas, once declared, to ensure the protection of the resources and orderly physical and land use development.

While activities such as wildlife conservation depend on land, wildlife conservation has not been formally recognised as a land-use option under the Act. This explains why the Act does not address the issue of sustainable biological diversity conservation and management, which has been of concern for some years now in Kenya. Further, the Act uses existing local authorities, which are based on political as opposed to ecological considerations, as units for management. Consequently, the law does not define new parameters for zoning the country based on sustainable resource management imperatives. This has resulted in most counties failing to adequately integrate wildlife conservation into land-use planning activities.

Further to the above, PLUPA under section 56 empowers county governments within their jurisdiction to undertake development control (DC). The broad objective of DC is to regulate and manage land development activities with the aim of achieving sustainable development. This is anchored under Article 66 of the Constitution, where the state may regulate land in the interest of land use planning. Some of the tools that aid in DC include the DC laws (CoK, 2010; PLUPA, 2019; County Government Act, 2012), land use plans, area zoning plans and county regulations (*land subdivision, county environment policy, county market development policy, etc.*)

Discussion

Kenya's Conservation Approach

While Kenya's wildlife policies recognise the need for sustainable management incorporating both conservation and sustainable utilisation aspects, wildlife laws are preservationist. The preservationist era was ushered in during colonial rule when it sought to protect wildlife from native people. Both the Act

and Policy continue to perpetuate the colonial wildlife conservation in Kenya through a protected areas (PAs) approach that was seen during colonial times, with Indigenous people displaced from their ancestral lands to make room for conservation areas in a fortress conservation model. According to (Mbote, 2005). The values attached to conservation were, for the most part, removed from the needs and aspirations of native Kenyans, for whom the whole process amounted to both the expropriation of their property rights and the severance of their relationship with their local environment and environmental resources. As a result, the state-resource relationship introduced during colonialism, which resulted in the stripping of local communities of any powers of management or control of their natural resources, particularly wildlife, also alienates people from conservation (Mbote, 2005).

Equally, through this model, national parks and reserves (PAs) were established as spatially discrete entities that neglected the migratory needs of wildlife. According to (Watson et al., 2010). Many of the PAs were set aside due to the large aggregations and migrations of wildlife that occurred in these areas either during wet or dry seasons, and which captured the attention of the colonial Government. Consequently, the areas that were set aside were and continue to be inadequate to support over 65% of Kenya's wildlife outside PAs (Ministry of Tourism and Wildlife, 2018). Likewise, this model has been associated with major wildlife decline outside PAs, especially the large migratory species (Amboseli Ecosystem Trust, 2020).

The need to move from the preservation of wildlife to sustainable management is further underscored by the fact that the role of human activity in ecosystems is not always negative (Mbote, 2005). For example, it has been shown in Botswana, Namibia, Zambia, Zimbabwe and South Africa that when landholders have full rights over the wildlife, its utilisation will be a prominent and sustainable form of land use in arid and semi-arid areas (Hitchcock, 2000).

Lack of Clarity on Incentives

Both WCMA and the Policy continue to talk about incentives that provide both "enabling environments" and financial benefits for those landowners who prioritise conservation as land use. These regulatory frameworks call for them but fall short of identifying exact incentives and benefits, and just note they remain necessary. Considering that land beyond wildlife protected areas is primarily managed by private property owners and communities, the study is of the view that with proper and clear incentives such as;

(a) Customs and excise waiver in respect of imported capital supplies for investment in wildlife conservation;
(b) Tax rebates to conservation activities and other services that promote management and conservation
(c) Land rates waiver among others, land-use practices that tend to phase out wildlife, such as agriculture, could be minimised or confined to appropriate areas.

It has further been observed that Kenyan law currently does not allow for consumptive uses of games in contrast to countries like South Africa, Namibia, Botswana, Zambia and Zimbabwe (Bigalke, 2000; Child, 2000; Child and Chitsike, 2000).

In these countries, consumptive wildlife use, like trophy hunting and game meat harvesting, has acted as an incentive for wildlife conservation by creating economic opportunities for landowners and communities to benefit from wildlife. Studies have shown that such financial incentives can encourage the protection and management of wildlife populations and habitats on private and communal lands, potentially leading to increased biodiversity and the expansion of conservation areas (Bigalke, 2000; Child, 2000; Child and Chitsike, 2000). While consumptive wildlife use can be an effective conservation tool, there are also potential challenges, including ensuring fair benefit-sharing with local communities, preventing overexploitation of certain species, and addressing ethical concerns related to trophy hunting. This is a potential area in which Kenya can benchmark and explore ways to expand their incentive base to landowners outside PAs.

Sectoral Approach to Wildlife Conservation Law and Policy

Through the analysis of sectoral policies, especially those concerning land, land use and natural resource management, it's evident that Kenya is formulated

along the lines of specific sectors. This has seen some advancing positions that undermine wildlife conservation and management. Notorious examples in this regard include the sub-division of land into individual holdings and the introduction of cultivation in areas that serve as wildlife dispersal and migration areas. Sustainable wildlife management has been adversely affected by both the failure to provide for multiple land uses and integrated land use planning at the ecosystem level that balances conservation and development. This is aggravated by a lack of or inadequate linkages and coordination in the governance of the country's natural resources at both national and county levels. This also relates to inter-governmental collaboration, where we see the existing policies and laws paying less regard to PAs and the surrounding landscapes.

This state of affairs is likely to be aggravated by the presence of incentives in other sectoral policies, such as in the agricultural sector, where farmers are often availed credit access, subsidised fertilisers and seeds, as well as extension services. This is expected to distort land-use decisions that may tilt against wildlife conservation. This silo approach in law and policy-making has seen the failure of integrated and use planning, leaving wildlife habitats to be vulnerable to land use changes from open wildlife habitats to other incompatible land uses. Famous examples in this regard include:

a. the establishment of wheat farms north around the Maasai Mara National Reserve, impeding the historical annual wildebeest migration dispersal from the Reserve into Loita forest before returning South to the Serengeti National Park in Tanzania and
b. the development of industrial, as well as human settlements in the Athi-Kapiti ecosystem (Kitengela area) South of Nairobi National Park, blocking the seasonal migration of wildebeests and zebras in and out of the park and to the Southern calving and seasonal grazing areas of the ecosystem.

Therefore, sustainable wildlife management has been adversely affected by the failure to plan for multiple land uses, which is evidently appropriate considering that there are overlaps between human settlements and wildlife habitats. Moreover, the effects of land tenure change have generally not been considered in formulating policies on wildlife conservation. Land uses such as crop cultivation, encouraged by the trend towards individual ownership, have received policy sanctions even in areas where wildlife management would be a more valuable land use, such as the Amboseli and Maasai Mara regions. This is further aggravated by a lack of or inadequate linkages and coordination in the governance of the country's natural resources among the national Government, county governments, and communities.

Inadequate Trans-boundary Resources Collaboration

Stemming from a sectoral approach to Policy and lawmaking, both the Act and the Policy have failed largely to address habitat requirements for wildlife species beyond one county, which is very critical for the survival and propagation of the species. Most wildlife species have, in fact, evolved and adapted to large home ranges, some of which straddle boundaries of two or more counties or geographical entities. This reality affects their life cycles and migratory patterns and invokes the need to promote a harmonised approach among the concerned counties or geographical entities to the conservation and management of shared wildlife resources. This governance framework is silent in both WCMA and the wildlife Policy.

Role of the Courts in Conserving Wildlife Habitats Outside Protected Areas

While it is necessary to preserve unique habitats within national park zones, it is also important to allow the migration of wildlife from and into parks and permit local communities to engage in productive human activities and their traditional way of life alongside the protected areas. Study findings have demonstrated that ANP risks becoming an "ecological island" due to the loss of wildlife dispersal areas and close corridors used by animals to visit adjacent conservation areas, such as Tsavo and Kilimanjaro.

Moreover, the effects of land tenure change have generally not been considered in formulating policies on wildlife conservation. Land uses such as industrialisation and cultivation, encouraged by the trend towards individual ownership, have received policy sanctions even in areas where wildlife

management would be a more valuable land use. A case in point is the development of industries and human settlements in the Athi-Kapiti ecosystem that blocked the seasonal migration of wildebeests and zebras in and out of the park and to the Southern calving and seasonal grazing areas of the ecosystem. This has forced the hands of the Courts on some occasions to intervene. In *Kiliavo Fresh Limited (KFL) v National Environment Tribunal (NET), Big Life Foundation & 3 others,* the Kajiado Environment and Lands Court (ELC) dismissed an application review by KFL who had purchased 180 acres of land for avocado farming within a wildlife corridor in the Amboseli ecosystem. While the ruling left room for appeal, the Court affirmed that wildlife also has the dispersal rights and land owners to facilitate the ease of movement of wildlife from one area to the other, considering their migratory nature that attaches to the resource.

Land Rights and Wildlife Law

The 2010 Constitution radically altered the land law terrain by redefining land categories and classifying them into private, public and community land. Article 61 of the 2010 Constitution provides that all land in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals. Article 61(2) classifies all land in Kenya as public, community and private. Wildlife is found in all these land categories. Article 66 of the 2010 Constitution mandates the state "to regulate the use of any land or any interest in or right over any land," including land-use planning. Protected areas that constitute national parks, national reserves and gazetted forests are public land, but as pointed out above, public land alone cannot sustain wildlife, and most of the wildlife in Kenya lives outside these national protected areas (Watson et al., 2010). This calls for innovative ways of land management, taking wildlife habitat needs as well as the needs of individual and community landowners into account.

The rights that accrue to landowners are referred to as a 'bundle of sticks' (Ellickson, 2011) or entitlements and include the rights to use, dispose, exclude, possess, manage, right to security, right to capital, and transmit. Entitlements flow from the allocation of land rights, which are delineated based on the bundle encapsulated in the grant. This explains the differences in the rights associated with freehold and leasehold titles. Consequently, rights to wildlife would, therefore, naturally be an incident of property. However, wildlife remains public property despite the fact that it is also found on community and private land (Mbote, 2019). This challenges William Blackstone's eighteenth-century full liberal ownership theory, in which a private owner was perceived as having total exclusionary rights over their property over every other person (Black-stone, 1769).

Conflicts between landowners' rights to utilise their properties and the interests of wildlife conservation authorities present a great challenge in Kenya's conservation efforts. This issue is further complicated by human-wildlife conflicts that arise when wildlife and humans intrude into each other's habitats. The increase in urbanisation is another significant contributor to these threats in Kenya as individuals relocate from rural areas to urban centres in search of job opportunities. For instance, between the years 2010 and 2015, the urban population in Kenya grew by 4.4% (Government of Kenya, 2017). In 2013, the total urban population comprised 25% of the total population in the country. This figure is projected to have increased since 2013. Increased urbanisation has led to the destruction of natural habitats to build houses for settlement, thus exacerbating human-wildlife conflicts.

The rise in urbanisation has also contributed to the fragmentation of land and conversion of what was formerly pastoral and agricultural land into residential and commercial uses, thus creating conflict between these land uses and wildlife conservation. In summary, one of the most problematic issues is ownership of wildlife. As pointed out above, wildlife as a fugitive resource is not amenable to private ownership (Mbote, 2002). A private owner's interest in maximising the use of his land for maximum gain pits wildlife conservation as a land use against other more beneficial uses. As market pressures increase land values, this decision can become quite challenging. This calls for innovative approaches in both law and Policy to promote wildlife conservation on community or private land.

Devolution

The new governance architecture that was ushered in by the 2010 Constitution is also of importance. It features devolution and some sharing of functions between the national and 47 county governments. This is a fundamental shift from the centralised approach that informed wildlife management in Kenya for a long time under the Wildlife (Conservation and Management) Act of 1976 (Mbote, 2008). The safeguarding of the environment and natural resources, specifically the protection of animals and wildlife, is a function of the national Government (Government of Kenya, 2010, Fourth Schedule Part I (Paragraph 22)); there are interfaces with county governments.

The latter is expected to implement specific national government policies on natural resources and the environment (Government of Kenya, 2010- Fourth Schedule Part II (Paragraph 10)). Counties are also required to develop County Spatial Plans, which can facilitate sustainable management of wildlife (Government of Kenya, 2010, Article 220(2)). The interface is further buttressed by the values in Articles 10 and 60 of the 2010 Constitution, which include public participation and community involvement. Participation and involvement are best realised at the local levels, which are within counties and have implications for the devolution of wildlife management that has been a concern for many African countries since the 1980s (Roem et al., 2000).

Devolution radically departs from the previous situation where centralised wildlife authorities alienated wildlife resources from local communities (Mbote, 2002). Indeed, devolution has the potential to enlist community support for conservation (Cirelli, 2002) as it enhances community participation and promotes wildlife conservation, particularly outside protected areas. The involvement of communities is critical to framing incentives in conservation, facilitating communities availing land for conservation and providing a framework for involving them in dealing with poaching. This is in line with the chief objects of devolution, namely, the enhancement of good governance and public participation at the community level (Olowu & Wunsch, 2004).

Communities are then empowered to monitor and check abuses of wildlife and to participate in land-use planning and zoning in a manner that is compatible with proper wildlife management (Mbote, 2010). The WCMA and the Community Land Act have stepped forward in terms of enhancing the devolution of wildlife management and implementing the principles outlined in the constitution.

CONCLUSION AND RECOMMENDATIONS

Conclusion: From the preceding, it is clear that the majority of the policies and regulatory frameworks dealing with wildlife management in Kenya have been in place for a considerable length of time. However, threats against wildlife continue to persist. At the same time, the task of protecting wildlife and its habitats is becoming increasingly challenging and complex, and new challenges are emerging. While the value of wildlife resources seems to have been recognised and realised by the Government, some of the policies and laws that affect wildlife management have been unfavourable to the enhancement of their value.

Specifically, policies have encouraged land privatisation and increased land subdivision, progressively causing habitat fragmentation and irreversible poor land-use practices challenges in predominantly wildlife habitat areas. Recognising wildlife as a land-use option and the role of wildlife habitats outside parks presents an opportunity to address the land-use planning deficiencies for the wildlife sector within the increasingly human-dominated landscape. Kenya's wildlife policies have to deal with the root causes of current and future conservation issues. These include the rapidly growing human population, habitat loss outside of protected areas, and property rights for all parties who bear the costs of management activities, particularly those living at the wildlife interface.

Recommendations: Giving landowners, whether they be communities or private individuals, the right to use wildlife is a fundamental component of reevaluating property or land and wildlife rights regimes. To effectively engage in management activities, landowners should possess authority and accountability over wildlife resources. Tenant security for land and wildlife resources is crucial to enabling

communities and individuals to make management decisions independently or as members of larger groups that include all stakeholders. It also creates a link between land ownership and wildlife, which is essential to halting the current lack of interest in wildlife conservation. These two benefits increase the significance and usefulness of enjoying property rights to land.

By giving land and wildlife resource rights to those most qualified to manage a particular area, incentives for sustainable wildlife management can be established. Property rights, both private and state-owned, are important and, under certain conditions, can promote sustainable resource management; however, it should be recognised that these rights have some variations that should be considered when defining rights. When strictly private rights are difficult or expensive to uphold, common property rights, for example, can serve as an efficient mechanism for managing resources. To guarantee that local residents have more influence and authority over wildlife and other resources than governments, land tenure arrangements that take into account their interests must be strengthened in community-based resource management systems.

Equally, diversifying the range of ethically acceptable wildlife-based economic ventures is crucial when figuring out the optimal incentives for wildlife management. Kenya needs to reevaluate its tourism strategy, particularly in light of the country's expanding human and wildlife populations and the resulting competition for land and other resources. In the modern era, it is unfair for landowners outside of parks to be unable to legally claim a portion of the benefits derived from wildlife management and conservation, even though they are required to maintain wildlife on their property and pay associated costs. Landowners and local communities may be permitted to take part in these activities, with KWS acting as a supervisor to make sure that no species' existence is in danger. In Southern Africa, game ranching and cropping on large privately owned farms and communal lands have been successfully implemented.

Lastly, in Kenya, the majority of laws and policies pertaining to resource conservation are designed with particular industries in mind. Laws pertaining to land use and property rights may conflict with those governing wildlife management. Changes in tenure have led to permanent modifications to land uses, like pastoralism, which is in line with the preservation of wildlife. Therefore, the paper advocates for appropriate planning of land uses and wildlife management techniques in order to realise the true value of Kenya's wildlife resources. Coordinating land use planning and the exercise of property rights by different holders over land supporting wildlife resources is necessary to ensure sustainable management and balance the diverse interests of all parties.

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