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# THE PROTECTION AND MANAGEMENT OF NAIROBI NATIONAL PARK

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Viabilities, futures and strategies of Sustaining an Urban Protected Area

*A Critique of the Wildlife Conservation Lease Programme in the Kitengela Wildlife Dispersal Area*

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## Abstract

A number of conservation interventions have been implemented in the open rangeland ecosystem, south of Nairobi national park in order to halt the subdivision, fencing and sale of land for urbanization that is adversely affecting the wildlife migratory corridors and dispersal areas for wildlife from the Nairobi national park. Most of these interventions have been unsuccessful or unimplemented to a large extent. However, one of the interventions has been implemented for 12 years and has been considered successful in conserving wildlife habitats, by NGO's and conservationists working to stop fragmentation of rangeland ecosystems. The programme implemented was the Wildlife Conservation Land lease programme, based on a payment for ecosystem services model. This paper discusses the success the intervention based on interviews carried out with the participating pastoralist households that supposedly benefitted from the land lease payments to keep their private lands open, unfenced, subdivided and unsold, for the sake of wildlife migration and habitats.

Based on empirical studies, the paper notes that the sale, subdivision and fencing of land in the dispersal areas in Kitengela continues, especially after the WCL programme funding stopped. The paper discusses a number of reasons why the WCL programme is not as successful as it may have been perceived. For the Maasai pastoralists land owners who don't want to sell and subdivide their land, fencing continues because, the wildlife from the park does not benefit them at all, yet it competes with their livestock for pasture and water, predated on their livestock, destroys their crops (for the agro-pastoralists) and brings in diseases to their livestock. So they don't see the reason to keep their lands open for the sake of wildlife, which does more harm than good for them. Secondly, most of the land owners who have land near the major roads where there is urban development and in the immediate southern border of the park find it more profitable to sell their land, rather than continue with their pastoral way of life, which is filled with hardship especially during the dry season, due to lack of access to alternative sources of pasture. Besides, the land values are very high, especially near the roads and one can sell land and get enough money to last them a lifetime if they use it properly. Thirdly, some of the conservation interventions like the wildlife conservation lease programme which had very good intentions and work plan were unsustainable from the beginning, which indicates that the idea was imposed and the community was not involved in decision making.

The WCL programme needs funding in order for it to be sustainable. Since the funding stopped, the programme stopped. This reveals a major shortcoming of the programme development. It is clear that the program designers, implementers and funders (both the conservation NGOs and the government KWS) did not involve the community when deciding to come up with a land lease payment system. Members of the community revealed that their main concern is accessing pasture lands for their livestock, which is their source of livelihood. They added they share their pastures with the wildlife from the park, yet they are expected to host the animals on their land. To them, this is unfair because the wild animals compete for resources like pasture and water with their domestic animals yet they are not

allowed to go into the park with their livestock. This is the case even during the dry season, despite having hosted the animals from the parks in the better seasons, whence their grass pastures for their animals get finished.

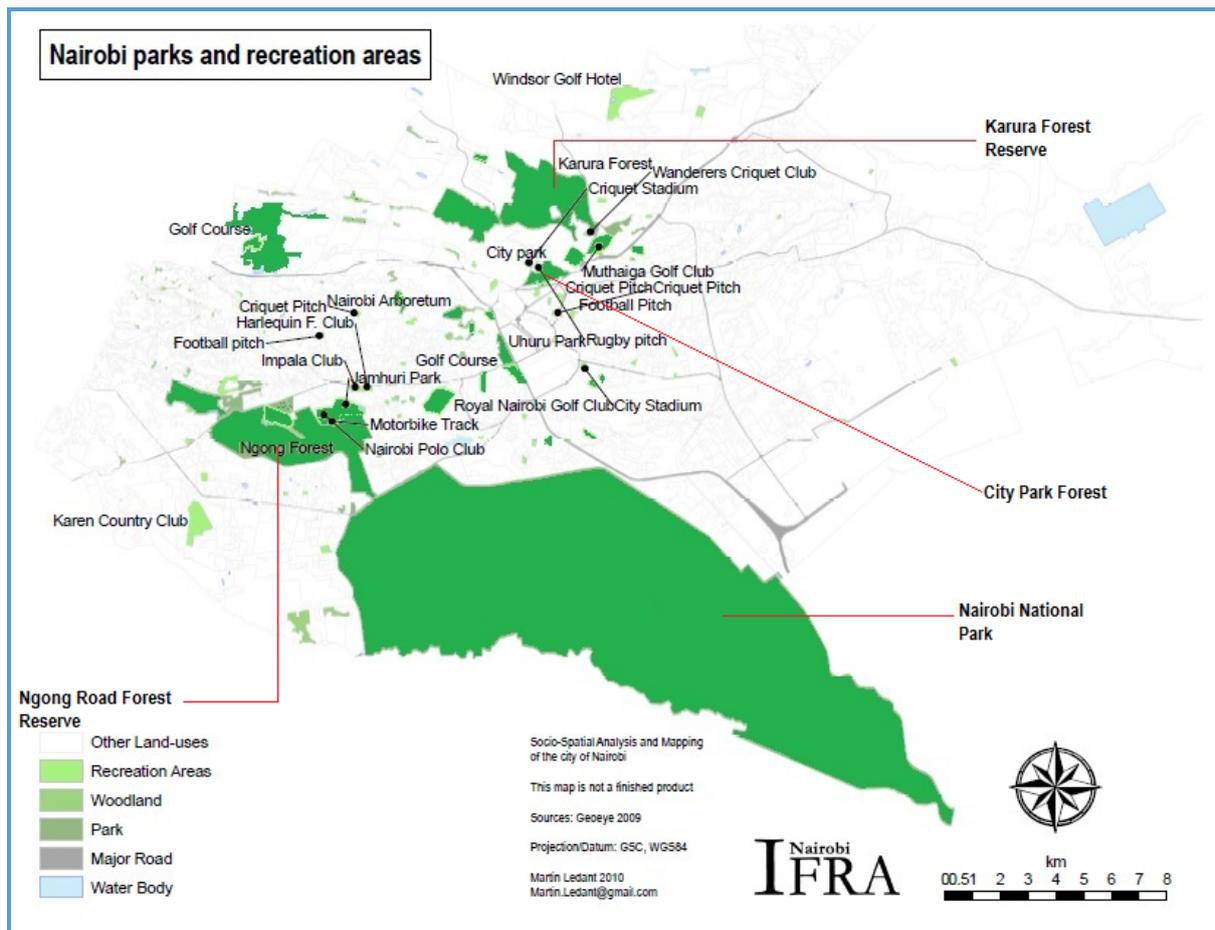
Moreover, despite being the only indigenous community that co-exists with wildlife in this modern era, the Maasai pastoralist's community are perceived as threats to conservation by conservation bureaucrats, for their tendency to kill lions which attack their livestock. Such perceptions only serve to increase tensions and animosity between the community and the management of the park. In the end, the community see no reason to leave their lands open for wildlife, and the fencing, subdivision and sale of land continues unabated.

## **Background of NNP**

### **Location and Area**

Nairobi National Park is located in Nairobi, the Capital City of Kenya. The park is situated only 7 km south of Nairobi's Central Business District (CBD), in the southernmost part of the city. It lies between 2°18'- 2°20' South and 36°23'-36°28' East, at an altitude of 1780m above sea level (Kenya Wildlife Service 2005). The park measures 117 square kilometres, (28,911.33) acres, covering almost 17% of the city (Government of Kenya 2012).

**Figure 1: Spatial Context of Nairobi National Park within Nairobi**



**Source 1: French Research Institute, Nairobi**

Administratively, the Park is in Nairobi City County, bordering Kajiado and Machakos counties to the south and east respectively. The park is left open in the southern part, opening up to the rural Kitengela Community Region within the Athi-Kapiti Ecosystem in Kajiado County (also referred to as the Kitengela Conservation area) by Kenya Wildlife Service (Government of Kenya 2012).

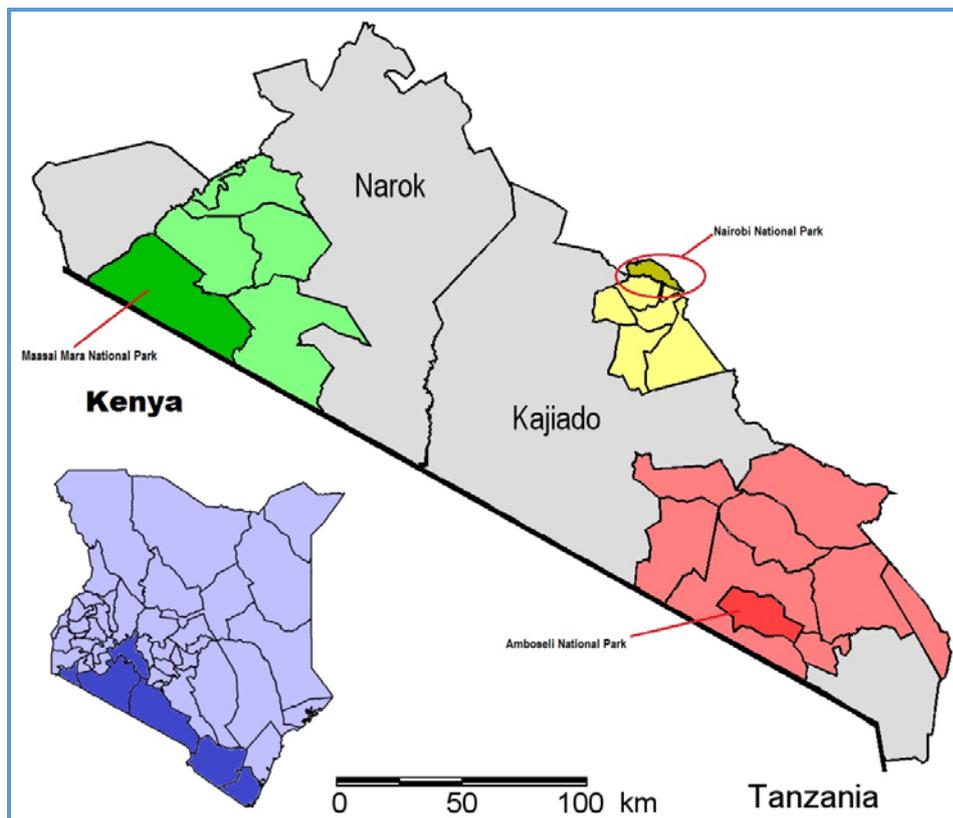
Regionally, Nairobi National Park is part of the larger Athi-Kapiti-Ecosystem which covers an area of about 2200 km<sup>2</sup> as shown in the map below (H. W. Gichohi 2003). The Athi-Kapiti plains is majorly a vast savannah land inhabited by the indigenous Maasai pastoral communities, who have utilized the plains for centuries, grazing their livestock and co-existing with wildlife. The plains have an abundant species of wildlife herbivores which attract the lions. The plains have been described as having had one of the most spectacular and largest concentration of wild animals in East Africa, before the Europeans colonists came into the area in the 19th century and early 20th century (Government of Kenya 2012).



the zebra first move out of the park, which is a dry season refuge, followed by the wildebeest and other herbivores to the south-eastern portion of the ecosystem (Gichohi 1996). Despite the now intensive use of the Athi-Kapiti plains by humans due to increasing urbanization in some areas, a lot of wildlife still exists in the athi-kapiti plains. The plains in are the life line of the Nairobi National Park. Consequently, the people living there bear most of the social, political and economic costs related to the existence of a wildlife tourism park in the city.

Nationally, the park is in Kenya's southern conservation area, one of 9 regions classified by the Kenya Wildlife Service (KWS) as worthy of conservation and protection of endangered animal species. The southern rangeland ecosystem comprises of six contiguous sub-ecosystems which are: (1) the Serengeti-Mara; (2) the Nairobi-Athi-Kapitei; (3) the south rift; (4) Amboseli-Kilimanjaro; (5) Tsavo-Mkomazi and (6) greater Lake Naivasha-Elementaita-Nakuru-Eburru forest ecosystem (Government of Kenya 2012).

**Figure 3: Nairobi National Park and the Southern Conservation Area**



Source 3: <http://www.nrel.colostate.edu/projects>

### **Natural Features and attractions of NNP**

It is believed that NNP is the only game reserve in the world that is inside a big city. Because of this, the park is considered to be not just an important ecological feature, but also a significant national symbol, with substantial economic, social and cultural benefits. Being located in a big city, in the midst of major urban, industrial and transport processes, the

park is environmentally significant, acting as a major carbon sink. Economically, the park generates significant revenues from wildlife tourism, as well as creates employment for many working directly and indirectly in the sector. Socially, the park acts as an important recreational space for the urban residents, who use it as a recreational green space. Additionally, the park is an important cultural feature that contributes to preserving the countries natural heritage. Despite its small size, NNP has a rich combination of flora, fauna and geomorphological features. The parks major habitats include grasslands, scattered trees, bush land, rocky habitats, rivers and streams, dams, wetlands and forest. The animals include a range of herbivores, carnivores, primates, reptiles and amphibians and birds.

**Figure 4: Herbivores in the NNP (Zebras and Giraffes) respectively**



**Source 4: Field Work, 2014**

The browsing and grazing herbivores found in the open and bushy grasslands of the park include Giraffes, Zebras, Wildebeeste, Buffaloes and Antelopes like Elands, Impala's and gazelles, Hartebeests , Dik Diks, Waterbuck, Reedbuck, Bushbuck, Duikers, Rhinos, Hippos and Bush Pigs. The small herbivores include Gerbils, Grass Rats, Kusu Rats, Spring Hares and Ordinary Hares. Some of the animals are territorial, choosing to stay and feed inside the park, while most of the others are non-territorial and choosy on what they feed, roaming widely far outside the park in search of young green grass shoots or soft browse.

The carnivores are the main animals that attract tourists to the park. The predators that can be spotted in the park include Lions, Leopards, Cheetahs, Spotted Hyena, Striped Hyena, Jackals, Foxes, Servals, Caracals, African Civet, Genet, Honey Badger, Mongoose, Aardvark and Hyrax. Most of these are listed as endangered species with some of them now extinct, like the cheetah which has not been spotted for many years now. They are also the source of predator attacks on maasai livestock leading to incidents of human wildlife conflicts outside the park in the Kitengela community land. The issue of predating lions on community's livestock outside the park is a very political and emotional issue, with the government, conservationists and tour companies criminalizing the Pastoralist Communities for killing lions in revenge attacks and with the pastoralist communities accusing the

government of caring more about wild animals than human life<sup>2</sup>. Currently, there are 38 lions in the park according to the latest census<sup>3</sup>. According to interviews held with members of the Maasai community, this number is too big, considering the size of the park (Mbithi, et. al. 2012).

**Figure 5: Carnivores of Nairobi National Park (a lion cub (left) and adult Lion (right))**



**Source 5: Photos courtesy of Atif Chughtai**

The primates, which are mostly omnivorous include the Baboons, Vervet Monkey, Sykes Monkey, Gorillas, Galagos and Bush Babies. Other smaller animals include Bats, Porcupines, Giant Pouched Rat, various types of Squirrels. Reptiles and amphibians include Crocodiles, Tortoise, Lizards, Geckos, and Chameleons, a variety of Snakes, Frogs and Toads. Over 400 species of bird life can be found in the park. The variety of birds depend on the season of the year. The biggest territorial bird that can be found in the park is the ostrich. Other bird species found include the Kofi bustard and its smaller resident relatives, the white bellied bustard and heartlands bustard. Guinea fowls, vultures, the green and sacred ibis, crowned cranes and secretary birds are also common. In the rainy season, the northern migrants like the Montagu's European marsh and pallid harriers are plentiful. A common raptor observed in the park is the augur buzzard (FoNNAP guide book, Nairobi city and region boo).

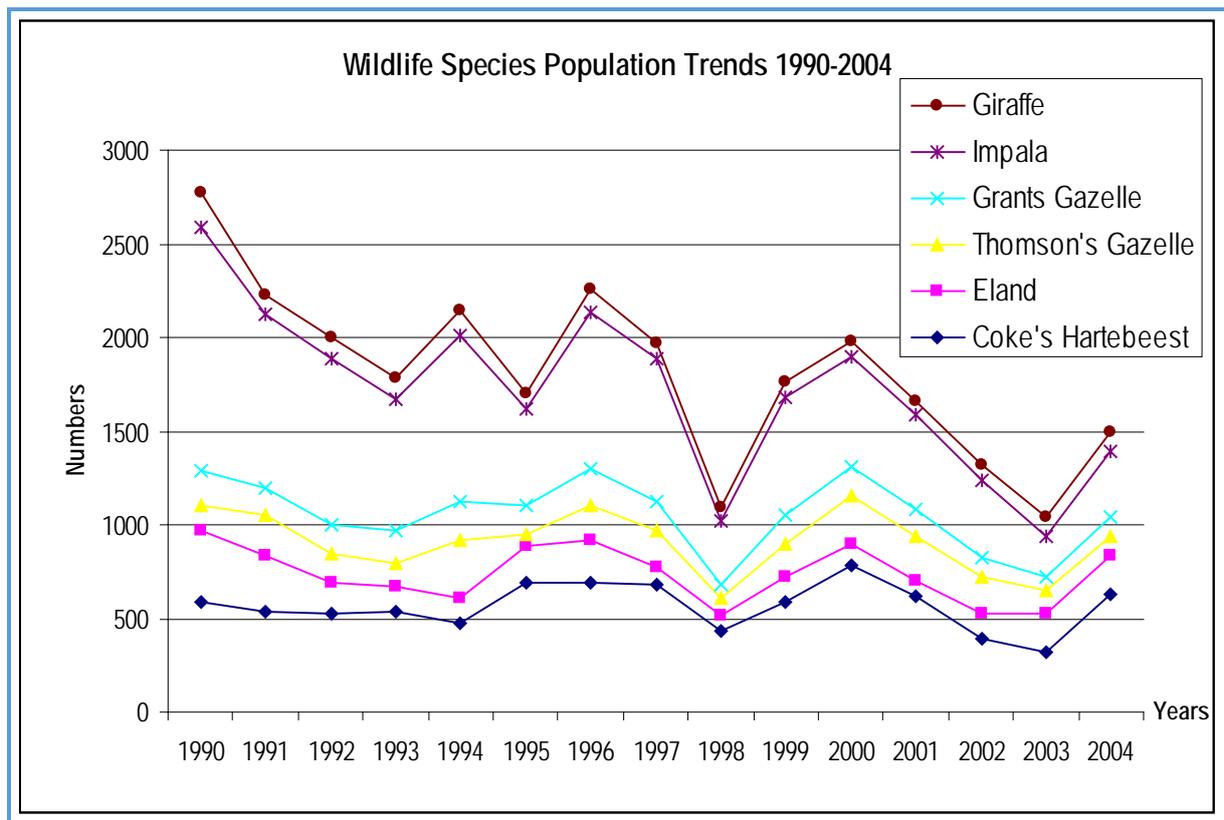
Most of the animals are not widely as populated as before listed, with many listed as endangered species by IUCN. For instance, in the 1970's, NNP and the Athi-Kapiti ecosystem contained the second largest wildebeest population of about 30,000 animals (Ogotu, et al. 2011). These population has now dwindled to less than 4,000 according to a census carried out by DRSRS in 2011 (Government of Kenya 2012).

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2 Interviews with the pastoralist communities revealed this perceptions of the government by the affected communities.

3 Interviews with Nickson Parmisa, Government appointed Chief in the local area and Maasai Pastrolist.

**Figure 6 Wildlife population trends: 1990-2004**



Source: (Kenya Wildlife Service 2005)

### Uses of NNP

Two main categories for the uses of Nairobi National Park can be identified. These are the (1) Non-consumptive uses which are conceived or legal and (2) the consumptive uses, which are perceived and illegal. The non-consumptive uses are wildlife tourism, urban recreation and leisure while the consumptive uses grazing (herding) livestock in the park and collecting firewood and medicinal plants.

#### Conceived Uses-Wildlife Tourism, Urban Recreation and Leisure

According to (Lefebvre 1991) conceived use of space refers to 'prescribed' use, in other words, agreed, recommended or arranged uses of space. These are officially planned, formal and recognised or allowed by the authorities. They are the dominant constructs of space or representations of space, which dictate the ideal use of a particular space. Having been the first park to be gazetted as a protected area in Kenya, and so close to the city, for wildlife conservation, the dominant representations of space for Nairobi National Park are wildlife tourism, recreation and leisure. As a gazetted national park, only wildlife conservation and tourism are allowed by the government's park management authorities, since the colonial times when the park was created in 1946. In their informational brochure for visitors Kenya Wildlife Service emphasises on the wildlife watching experience, the natural landscape features and the picnic sites.

The related activities allowed inside the park are game viewing; corporate events such as bush dinners and team building; video and film production; game photography; special events such as weddings; picnics and game and recently, camping in a tented lodging run by a private investor inside the park for international tourists. The camp is run by Porini camps under the brand name of Nairobi safari game watchers. It belongs to a foreign owned company, which also offers camping services in other community lands elsewhere in the Pastoralist Communities land. Porini camps are very expensive, and one night's stay is the equivalent of one night stay in a 5 star hotels. Unfortunately, KWS does not have the capacity to support cheaper camping activities<sup>4</sup>.

#### *Perceptions of Park for International Tourists*

The park is popular among international visitors and tourists who have come to Nairobi for a short stay and do not have time to visit other game parks in the world. The dominant conceptions of space as a wildlife tourism and recreation site are prevalent among such visitors. The park is sold as a good opportunity to view game in natural wilderness but very close to the city centre. On trip advisor<sup>5</sup> the park has received a lot positive reviews from international tourists such as:

*"Although this is not one of Kenya's famous safari parks, if you only have a short time in Nairobi and want to see wild life then this is a worthwhile trip. We saw 3 lions, a rhino, several ostriches, many zebra, giraffe, buffalo, eland and other antelope and were very satisfied with our morning at this park".*

Another park visitor commented:

*"Doing a mini safari round the park is definitely worth it if you do not have the time or the funds to go on safari in the other national parks, such as the Mara. It is not guaranteed that you'll see all the animals you want, but it promises to be an unforgettable experience...Go very early, around sunrise, as the animals will be actively grazing/ hunting around this time. We saw so many giraffe, zebra, wildebeest and water buffalo, antelopes and gazelles, ostriches and monkeys, and we were lucky to see a family of three rhinoceros, catch glimpses of lions and even a hippo or two. I thoroughly enjoyed this city safari, as it exceptional to view animals in the wild, yet on the outskirts of a cosmopolitan city!"*

All the reviews of Nairobi national park by tourists who have been there are mostly positive experiences and recommendations for other potential visitors to visit the national park in the city. To attract tourists and recreational seekers, KWS reminds readers that NNP is the only Wildlife Park in the world that is in or close to the city; that still has the Black

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<sup>4</sup> This could be made possible if the park was managed together with the community.

<sup>5</sup> [http://www.tripadvisor.com/attraction\\_review-g294207-d311535-reviews-nairobi\\_national\\_park-nairobi.html](http://www.tripadvisor.com/attraction_review-g294207-d311535-reviews-nairobi_national_park-nairobi.html)

rhinoceros, an almost extinct species; and has a major rhino sanctuary for breeding and restocking rhinos. The advertising and marketing work is made easier by tour operators who advertise the Nairobi national park, as part of their tour package, as the only park in the world offering an urban wildness safari experience in the country. Some examples of some of the pictures from the websites of these tour companies are shown below.

### **Perceived (illegal) Consumptive Uses of NNP**

According to Lefebvre, 'perceived spaces' or 'spaces of representation' derive from the actual use and imagined use of space. Perceived spaces are the observed spaces of inhabitants and users. They are shaped by how they are understood through associated images, visions and symbols of their everyday use. In other words, they are 'the passively experienced space (s), which the imagination seeks to change and appropriate'. Such spaces may be public or private, they may overlay or disrupt dominant practices, or may take shape alongside them. Perceived spaces make symbolic use of objects and overlay physical space (Lefebvre 1991). Symbolic manifestations of this space include slogans, signs of protest and murals. In order to understand the formation of a representational space in any particular context, the study of 'the history of thought' is crucial, because representational spaces have their source in history (Lefebvre 1991). Lefebvre interprets representational spaces as embodying complex symbolism, sometimes coded, and sometimes linked to the clandestine or underground side of social life. In this case, these entail the imagined and observed uses of the Nairobi national park by the community, both on the urban, peri-urban and rural side as well as uses perceived by local and international visitors.

### ***Grazing/herding in the park***

Lefebvre's perceived spaces can be seen operating through the images, symbols and visions of every day uses the Nairobi National park and its surrounding by the Pastoralist Communities pastoralist communities. The herders living the Kitengela area, in the southern peripheries of the park, would ideally like to utilize the park space as pasture lands for their livestock. Grazing inside the protected area by herders is the main perceived use of the park. During fieldwork for this study, many pastoralists living south of the Nairobi National park expressed interest in grazing their animals inside the park, especially during the dry season. Some of the interviewees stated they had grazed inside the park several times in the past, especially in the 1990s. They added that this was a risky affair, as one could easily get arrested and fined heavily by the KWS. Therefore, most herders took their livestock inside the park at night, to avoid getting arrested. In their opinion, they need to be recognised and accommodated inside the park during especially the dry season, where the biomass is usually high.

Herding in the park during the day was taking place with the clandestine help of park rangers, despite being illegal. The community gives the rangers milk and meat (and sometimes money) in return for being allowed to herd in the park.<sup>6</sup>

One of the pastoralists interviewed, a man aged 60 and above and living in his boma<sup>7</sup> which is about 500 metres from the southern boundary of the park, said he had a lot of interest in herding inside the park, because it was very near his homestead. As a matter of fact, he added that he still takes his livestock inside the park every day, and was nonchalant on the illegality of the act according to the wildlife law. When asked where he grazes during the dry season, he answered,

*“Grazing places depend on availability of pastures. Usually, I use the pastures on community land and migrate in drought to other places. The herding places during drought are usually Emali, Empuyiat and Portland which are very far. I am of course very much interested in herding inside NNP, because it is only 500 metres from my Boma. But this is not allowed to herd in the park. However, I herd inside NNP daily, especially along the riparian sections of the river, which is allowed”.*

In a different pastoralists homestead, within the same area, the answer was similar, and in the same tone. According to the household head interviewed, a woman in this case, the answer was similar,

*“The grazing places for our livestock includes the community land in Kitengela, Emali and Samuli... During the dry season, the herding places we usually go to are Emali and Samuli and of course in the park though illegally, and only at night. We have a lot of interest in herding inside NNP, because we live near the park. The park is only 500 metres or less from our homestead. So, we herd inside there all the time, daily and especially at night. We fear the fines but we have no choices”.*

Interestingly, even the local government officials who are members of the maasai community in the area, herd their livestock inside the park. Interviews with one of them revealed,

*“The main grazing places for my personal livestock is the community land. The herding places during drought depends on where there is pasture. I would like to herd inside the park. I herd inside the park, although it is illegal, but I herd only at night, especially during the drought seasons, because I have no otherwise. In the past, the government used to allow us to herd in the park at night during the drought season”.*

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<sup>6</sup> information based on in-depth interviews with the director, the wildlife foundation

<sup>7</sup> boma is a general word for homestead. It is swahili, maasai and most kenyan lingua word.

The candidness, casual admission and openness of this particular government official that he herds in the park was surprising. More shocking was the fact that his job as a government officer entails maintaining law and order in the community. As he said,

*“My job entails maintaining law and order in the community. I deal with different cases ranging from family disputes, shamba, boundary disputes, livestock and farmers and group ranch owners, reporting poachers etc”.*

It is therefore contradictory that as a government official who is supposed to uphold the law, when it comes to his personal activities as a pastoralist, reads the same script as the people he is supposed to arrest and report. This is quite a paradox, but understandable nonetheless.

### ***Collection of Firewood (deadwood) and medicinal products***

The community on the southern side of the park is a rural community, which mainly relies on traditional sources of fuel for energy. As such, women from the community collect firewood daily for their domestic needs from the park's southern buffer zones. However, due to fear of being attacked by wild animals, the practice is becoming less common inside the park. However, the very poor women in the community have no choice but to take the risk and collect the dead wood, both for their own domestic consumption and for sale to others, who might need and are afraid to collect themselves. The picture below shows one such woman spotted collecting firewood, together with her daughter, a girl child, at the park near the ranger's post and not too far from the hippo pool. Among the men, the fear of wild animals is much less, therefore they collect medicinal plants, but cannot collect firewood because it is a woman's job. The men who collect medicinal plants are mostly the herders, who normally take the cattle out to the wild.

### **Spatial Practices or Lived Uses Of NNP**

Spatial practice refers to the lived uses or actual uses of space, whether they have been conceived or perceived (Lefebvre 1991). In the case of Nairobi national park, we see a combination of tourism, leisure and recreation on the one hand and livestock grazing on the other hand. Livestock grazing is an important lived use or spatial practice of NNP. However, because it is illegal, it is risky because of the possibility of getting arrested and fined by the KWS rangers. However, despite the risks of getting caught and heavily fined, several of the pastoralists interviewed stated that they grazed inside the park during the dry season, as they had no choice. A big fear of the KWS is infiltration of poachers if pastoralism is allowed as well as the possibility of increasing the cases and costs of compensation to both human and livestock attacked by wildlife. The pastoralists have categorically been told by the management of KWS, that they should not be seen inside the park with their livestock, as the tourists don't want to see them or their livestock, the tourists only want to see the wildlife.

Previous other studies confirm and attest to the fact that the park is used by pastoralists for grazing in the dry season. Findings from a study by (Hazzah, et al. 2003) established NNP as

one of the main national parks which used by Pastoralist Communities pastoralists during drought. According to their study, 85% of the respondents (n=631) attempted to take their cattle into a protected area during drought. Of this, 49% went to Nairobi national park, coming from as far as Eselenkei, Olgulului and Mbirikani. Thus, the spatial practice of the Pastoralist Communities pastoralists is that they travel from some of the southernmost sections of Pastoralist Communities lands in Kenya and come to NNP, though illegally, during the dry season. Despite such evidence of the importance of livestock grazing during drought, the activity is still considered illegal. Some scholars have suggested such environmentalism policies by conservationists and government in the name of tourism and wildlife protection is tantamount to inhumanity (Hazzah, et al. 2003).

### **Challenges Facing the Protection and Management of NNP**

Over the past 20 years, NNP has been experiencing insurmountable challenges related to pressures from urbanization on all sides. On the urban and peri-urban sides of the park, the threats to the park include: (1) pollution emanating from nearby residential areas and industries on the urban and peri-urban sides; (2) Contamination of the parks Water bodies from peri-urban homes, industries and flower farms; (3) Proposed and ongoing new road and railway infrastructure development and (3) Illegal housing developments (encroachments) from upper middle class homes and slums/informal settlements, in the parks buffer zone (Kenya Wildlife Service 2005).

As far as the viability and future of the park is concerned, the pressing challenge is emanating from the rural (southern side) side of the park, where the park is unfenced. Given that the park is too small to sustain the wild animals within (it measures 117 square kilometres), the animals from the park depend on the pasturelands in the community land. Therefore, the viability of the parks animals depends on dispersal areas outside the urban protected area in the south, on land belonging to the Masaai community (see figure 2). However, the open community pasturelands which the community shares with wildlife are increasingly under threat from urbanization processes due to proximity to the expanding Nairobi city. Kajiado County is part of the proposed Nairobi Metropolitan area, a Kenya vision 2030 economic growth project, which envisages the expansion of urbanization of Nairobi's peripheries (Government of Kenya, 2008)<sup>8</sup>.

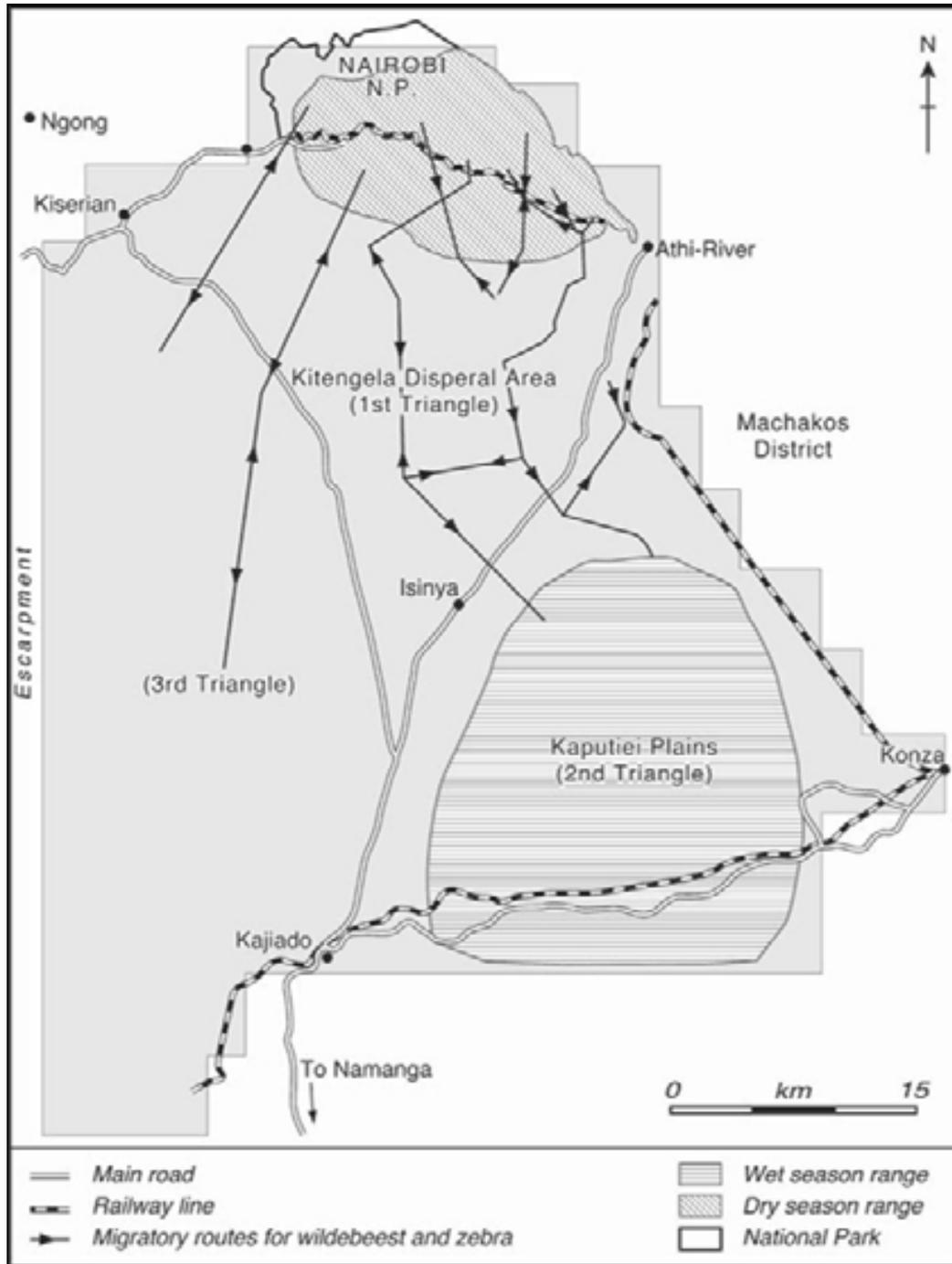
Prior to the metropolitan plans, conversion of rangelands to settlement areas has been going on at a unprecedented rate, as urban residents purchase land in the rangelands, leading to sub-division and conversion of land use to non-pastoral uses. Thus, one of the major threats facing the viability of NNP is that the community lands acting as dispersal areas for the wildlife have increasingly been sub-divided, sold and fenced, in the process blocking the wildlife migratory corridors (Reid, et al. 2008), which are pathways or routes in

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<sup>8</sup> government of kenya (2008). Nairobi metro 2030: a world class african metropolis. Nairobi: ministry of nairobi metropolitan development (mnmd), government of kenya.

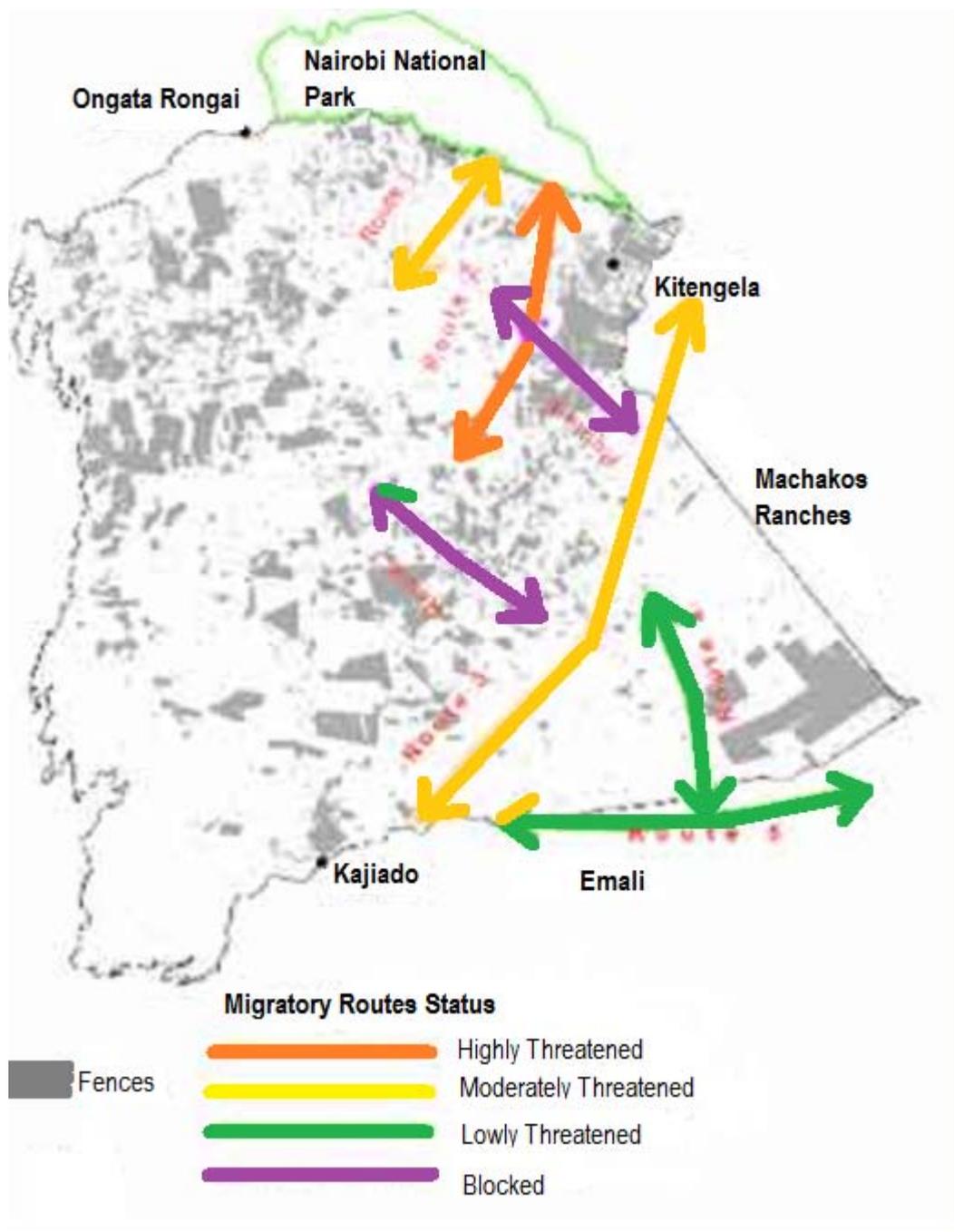
which game animals use when migrating from the northern parts of at athi-kapiti ecosystem to the southern parts in the Serengeti.

**Figure 7: Map of the Athi-Kaputie Ecosystem showing the three triangles, the migratory route for wildebeests and zebra, and the wet and dry season wildlife ranges.**



Source 6: (Radeny, Nkedianye and Kristjanson 2007)

Figure 8: migratory corridors (blocked and threatened wildlife routes)



Source 7 (United Nations Environment Programme 2013)

Due to proximity to the city, land in the Kitengela dispersal area is very attractive for people wishing to build sub-urban homes or live in sub-urban areas. The land values south of the park are therefore high, making it attractive for Maasai land owners to sell their rural land for sub-urban development. As the city expands outside, the area has increasingly become urbanized. The sub-division fencing of land parcels in the once open grasslands has blocked the paths for the migratory animals like the wildebeest, which migrate to the south towards the Serengeti every year.

**Figure 9: One of the many fences in the Kitengela Plains blocking wildlife corridors**



**Source 8: Photo Courtesy of John Solonka, The Wildlife Foundation - Kenya**

Given that these plains have been utilized for centuries by both Maasai livestock and wildlife, with minimal influence from modernity and or urbanisation, such trends are negatively affecting Athi-Kapiti ecosystem as a whole, which has an effect on the animal habitats and the migratory routes. The subdivision, sale and fencing of dispersal areas continues unabated due to pressure from increased urbanization which makes the land in the area to have a high value, tempting the Maasai pastoralists landowners to sell their land. This has been worsened by poor policies and planning for conservation and management of wildlife and their habitats outside protected areas, together with a lack of land use plan for the area. As it is now, the future seems very bleak for the wildlife habitats on which the NNP is dependent upon for its viability.

There are deep concerns by environmentalists and conservationists that if nothing is done soon, to stop the fencing of land parcels, all the migratory corridors will be blocked, and animals will not no longer to move and migrate freely in the once open grasslands. This means that in the next 15 years, NNP will be just a zoo<sup>9</sup>.

Besides that, the parks openness in the south into the rural community land results into a number of human wildlife conflicts cases which are increasing, due to increasing settlements in the area (Reid, et al. 2008) (H. W. Gichohi 2003) (2000). Two main types Human wildlife conflicts can be identified. These are: (1) predator conflicts and (2) resource conflicts. Predator conflicts occur when carnivore's lions, leopards and hyenas from the park

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<sup>9</sup> interviews with kws community officer, mr. Omondi.

attack livestock and occasionally people, and then the community reacts to protect itself by hunting and killing the predators. Since the park is open in the south, naturally, the animals do not confine themselves to the park, simply because it is a park. This is especially the case during and after the rainy season, when majority of the herbivores leave the park to utilize short, fresh and delicious grass on the community land in Athi-Kapiti plains, where they also breed and calve (Owaga 1975); (Gichohi 2000). Consequently, the lions and leopards follow the herbivores outside the park, resulting in predation of the community's livestock, which are more docile than the animals from the park.

Predator related human wildlife conflicts continue to threaten the viability of conserving the parks lions, which are the main attraction for tourists and also the most endangered species in the park. Due to the increasing number of human settlements, human wildlife conflict has increased in the Kitengela wildlife dispersal area (Matiko 2014). This has led to a decrease in wildlife numbers, particularly the carnivores like lions, cheetahs and leopards, which are killed in revenge attacks by the communities. Besides that, there have been increasing cases of poaching of bush meat by other newer communities that are now settling in the area (United Nations Environment Programme 2013)

Resource conflicts occur when the land owning pastoralists in the south of the park share their pasture and water resources with wildlife from the park, especially during and after the rainy seasons. In the dry season, when there is no more grass in the community, the wildlife goes back to the park after using all the community pasture, leaving the livestock of the pastoralists with no pastures. On the other hand, the pastoralists cannot get into the park during the dry season, and their animals starve to death. Resource conflicts also includes crop destruction. Some agro-pastoralists and farmers who plant crops occasionally experience crop destruction from the herbivores, which eat their foods (Imbahale, et al. 2008) (Gichohi 2000).

Apart from the predator conflicts, there is also the spread of disease from wildlife to livestock in the plains. Some migratory herbivores, particularly the wildebeest, have a natural annual travelling circuit through the Athi-Kapiti plains to Amboseli-Maasai Mara (southern Kenya) and Serengeti (Northern Tanzania), which means that they leave the park every other year, passing through community land where they also calve. Naturally, when the wildebeest calve, the body fluids they release on the grass are very lethal. When any livestock ingests the grass from a section which was recently calved, they contract a deadly disease known as Malignant Coast Fever (MCF) from the wildebeest body fluids. The disease is deadly and incurable. It kills the affected animal within a very short time (Reid, et al. 2008), (Gichohi 2000) (Imbahale, et al. 2008).

According to fieldwork carried out for this research, fencing of land was not only caused by subdivision and selling of land, but other reasons related to human wildlife conflicts. Indeed, the study found out that there is a new emerging trend of fencing to store grass banks to be used in the dry season among the landowning pastoralists in Kitengela. Due to the high

competition for food, land and water resources, between wildlife from the park, other peoples livestock and land use pressure from increasing urbanization amid the already subdivided lands, It is understandable why the Maasai landowners who once lived communally sharing grasslands are now preferring to fence their lands, even when they are not planning to sell or subdivide.

The second reason given for fencing is to prevent disease spread from wildlife to livestock, particularly Malignant Coast Fever (MCF), which is transmitted from wildebeest to livestock. When any livestock which is not vaccinated ingests the grass from a fresh section used to calve, they contract the deadly Malignant Coast Fever (MCF) from the wildebeest body fluids. Some of the land owners interviewed said that their animals had been killed by the MCF, and therefore they decided to fence.

### **Conservation interventions to increase the viability and future of an open NNP Ecosystem**

In a bid to halt the subdivision, sale and fencing of lands that act as wildlife habitats outside the protected areas as well as human wildlife conflict, several donor funded conservation NGO's have been implementing various wildlife conservation interventions in the animal habitats outside the park. Some of their strategies have included campaigns to push the government to legally protect the dispersal areas as conservation areas; the world bank funded wildlife conservation lease programme, which involves paying money to Maasai land owners under lease payment benefits to keep their land open for free movement of wildlife; the lion lights programme which involves installation of solar powered bulbs around the Maasai pastoralists cattle bomas to prevent predation of livestock by lions, which mostly takes place at night; the livestock consolation programme which involves compensation for livestock loss to families whose livestock have been attacked by lions; the donor funded land use master plan for Kitengela, which specifies different zones and sets aside land use for pastoralism and wildlife to prevent further subdivision and selling of the wildlife dispersal areas and the community conservancy which involves combining several pieces of community land into one large tract of land and removing human settlements from the area from the tracts, for purposes of wildlife conservation and tourism. This paper evaluates in details, one of the conservation interventions, the land lease programme, which has had the opportunity to mature having been the first major conservation intervention to be implemented in the case of Nairobi national park and its ecosystem.

### **Wildlife Conservation Lease (WCL) Program**

WCL is a Payment for ecosystem (PES) services program which works by paying under land lease payment benefits to keep their lands open from subdivision, fencing and or selling. The lease program which run from 2002-2012 was implemented in two phases. The first phase of the PES programme (the pilot) Run from 2002-2008 and was funded by World Bank- GEF Facility and implemented by the Friends of Nairobi National Park (FoNNaP) a registered civil society organisation. Land owners are paid USD4 per acre per year. Depending on the amount of land owned, the average participating households were paid 400-800 USD per year for the lease of their land for wildlife conservation purposes (Matiko

2014). Initially the land lease programme faced resistance and low enrolment by the Maasai landowners who were suspicious of the conservation NGO's and government, believing it was a ploy to steal their land for wildlife conservation. The second phase run from 2009-2014 and by The Wildlife Foundation (TWF) - Kenya a local NGO which is a child of the wildlife foundation-USA. In addition to World Bank- GEF which was the main funder, several other conservation NGOs and KWS contributed to the lease programme funds in the second phase. During the second phase, the community members were more open and enrolment increased compared to the first phase (Osano 2013); (Nkedianye 2004); (Matiko 2014); (H. W. Gichohi 2003).

**Table 1: Funding for the Wildlife Conservation Lease Programme from 2007-2012**

<b>Funding Institution</b>	<b>Amount (USD)</b>	<b>Period</b>
1. The Global Environment Facility (GEF) World Bank	792,000	5 years (2008-2012)
2. The Nature Conservancy (TNC)	150,000	3 years (2007-2010)
3. Kenya Wildlife Service	64,000	5 years (2008-2011)

**Source 9: (Osano 2013) based on TWF data**

*Objectives of the wildlife conservation lease Program*

The main objectives of the lease program were to ensure long-term ecological viability of Nairobi National Park by maintaining seasonal dispersal areas and migration corridors on adjacent privately owned lands and demonstrating the use of wildlife conservation leases as a conservation tool outside protected areas. The primary objective was to maintain the seasonal dispersal areas and migration corridors open to ensure the viability of the national park ecosystem and its biodiversity. The sub-objectives of the programme were: (1) Increasing conservation land through wildlife conservation leases (WCL); (2) Institutional strengthening and information dissemination; (3) Enhancing long-term sustainability.

**Table 2 Summary of Objectives of the WCL Programme**

<b>Objective</b>	<b>Strategies to Achieve Objectives</b>
1. Increasing conservation land through wildlife conservation leases	Increasing area under contractual commitment for wildlife use (WCL) signed between TWF and private landowners and strengthening commitments through introduction of multi-year leases.
2. Institutional strengthening and information dissemination	Developing the capacity to administer expanded WCL program efficiently and to the satisfaction of program participants and funding sources and increasing awareness of and interest in WCL and similar approaches in East Africa'.
3. Enhancing long term sustainability	Taking key positive actions on land related policy and institutional measures that support the maintenance of wildlife

	and habitat (joint objective with USAID – AWF Kitengela Conservation Project (KCP); reducing human wildlife conflicts in the project area; increasing the amount and reliability of funding for WCL during and beyond the project.
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**Source 10: (Osano 2013)**

The payments made by WCL program are supposed to help in achieving the objectives above, by giving incentives to local Pastoralist Communities families to steward a mutually beneficial relationship between their land, their livestock, and local wildlife (Osano 2013). The idea is to encourage and helps pastoral landowners to: (1) retain ownership of their land; leave land open, uncultivated and un-subdivided; (2) graze livestock sustainably; (3) share both pasture and water among livestock and wildlife; (4) allow free movement of livestock and wildlife and support secondary and university education for their children (Osano 2013) (Interviews with TWF, 2014)<sup>10</sup>. According to TWF, the program has been successful and has especially empowered women as they are the ones who receive and control the lease income on behalf of the family, and many were eager to join, not only for the payments but also for the opportunity to continue traditional ways of life like raising livestock and sharing the land with wildlife. The following sections discuss in a bit more detail, the achievements of the program.

*Achievements of the WCL program<sup>11</sup>*

In their website to the public TWF reports that the WCL programme has increased the protected area of Nairobi National Park by 200%. Further, they note that the program began in 2000 with only two Pastoralist Communities families and a total of 214 acres of grassland and but has since expanded to include 55,000 acres of land under conservation. In their website, TWF, notes, “the Conservation Lease Programme directly benefits 3096 people in 385 Pastoralist Communities families. The program also indirectly supports an additional 4000 Pastoralist Communities individuals”. This observations concur with a study done by a PhD student who evaluated the lease program (Osano 2013) and reports the objectives of the program as being well achieved.

**Table 3 Summary of Achievements of the WCL project**

Expected outcomes	Expected outputs	Baseline	Project end (2012)
Objective 1: Increasing conservation land through wildlife conservation leases			
Area under contractual commitment for wildlife use	Area voluntarily enrolled in Wildlife	10,000 acres	61,067 acres (2012)

<sup>10</sup> See <http://wildlifefoundationkenya.org/programs/>

<sup>11</sup> See <http://wildlifefoundationkenya.org/programs/>

(WCL signed between TWF and private landowners) expanded, and commitments strengthened through introduction of multi-year leases	Conservation Leases increase to 60,000 acres, with at least 20% of the WCL being multi-year	(2008)	Well achieved
	Number of participating/benefiting households increase to 400	148 (2008)	417 (2012) Fully achieved
	% of Kitengela rangeland within the 60,000 acre target area that is enclosed by fences does not increase over baseline		
	20% increase in number of lions (indicator species) regularly using Kitengela	18 individuals <sup>12</sup>	35 individuals (2012)
Objective 2: Institutional strengthening and information dissemination			
TWF develops capacity to administer expanded WCL program efficiently and to the satisfaction of program participants and funding sources;  Increased awareness of and interest in WCL and similar	Wildlife leases are used strategically, based on research and monitoring, to maximize conservation benefits achieved with available funds		Not assessed
	Stakeholders (local landowners,		Not assessed

12 As the baseline for the GEF/World Bank Grant, the number of lions was given as 18 individuals by TWF Chair, Ed Loosli

approaches in East Africa	financers) satisfied with effectiveness, transparency and responsiveness of management of scaled-up WCL program		
	East Africa conservation practitioner community identifies at least 2 additional sites for trial implementation of WCL approach		Model tested in Pastoralist Communities mara and amboseli
Objective 3: Enhancing long term sustainability			
Positive action on key land-related policy and institutional measures supporting maintenance of wildlife and habitat (joint objective with USAID KCP)  Reduction of human/wildlife conflict in project area  Increase in amount and reliability of funding for WCL during and beyond project	Land Use Master Plan (MLUP) implemented as the key planning framework for the project area (joint objective with USAID-funded project) *****.		LUMP gazetted by GoK and adopted by Kajiado County Council (Fully achieved)
	Kitengela Sheep & Goat Ranch permanently secured for wildlife habitat *****		Not assessed
	25% increase in households adopting Non-lethal measures for reducing wildlife predation on livestock. in the project area		Not assessed

	TFW develops and implements a professional fund raising strategy for WCL, and raises at least \$270,000 of additional funds (beyond baseline) for wildlife leases from non-GEF sources by end of project		TWF raised US\$ 270,000 by December 2011 <sup>13</sup> (Fully Achieved)
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**Source 11: (Osano 2013); p 5-6**

Key accomplishments cited in the project evaluation report by (Osano 2013) a PhD student who evaluated the programme on behalf of TWF include: (1) Enrolment of approximately 61,067 acres of Pastoralist Communities land in the wildlife conservation leases by 2012, compared to only 10,000 acres in 2008 when the program started ; (2) Increased number of participating and benefiting households from 148 in 2008 to 417 in 2012 and (3) Increase in the number of lions in the Kitengela area, from 18 individuals in 2008 to 35 lions in 2012 and (4) initiation of a land use master planning process for the area with a final land use master plan (LUMP) getting fully gazetted by the Ministry of Lands and settlements, adopted and implemented for Kajiado county as the key planning framework for the areas surrounding the protected area in the south.

On sustainability, the report states that TWF managed to increase the amount and reliability of funding for WCL after developing and maintaining a professional fund-raising strategy that raised additional funds for wildlife leases, beyond the initial Global Environmental Facility (GEF) by the World Bank. The report mentions other additional positive effects on economic security and quality of life of local land owner residents. These include: (1) provision of cash income and poverty reduction to households participating in the lease program; (2) building human capital through education investments; (3) reducing pastoral vulnerability to drought; and (4) gender empowerment. Other achievements mentioned by the report include the provision of an additional source of income to participating households that meets additional requirements of money to sustain basic living, instead of selling land.

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<sup>13</sup> Information provided by ED LOOSLI, the chairperson of The Wildlife Foundation to the evaluator of the program.

### *Stakeholders (Pastoralist Households) Views and opinions of WCL lease programme<sup>14</sup>*

The research for this study set out to establish the perceptions of the communities and households who had signed up for the WCL programme, in order to evaluate the achievements of the WCL according to the supposed beneficiaries. While it is true that the WCL programme achieved some of the objectives it set out, for example increasing land area available (See Table 4) several short comings of the lease program were highlighted by the participating households during this this research. This section presents some extracts of the transcribed interviews gathered empirically. One of the first interviewees was an elderly pastoralist living about 500 metres from the southern boundary of the park. He owns 400 acres of land which he has signed under the WCL programme. When asked if he has ever received any benefits from wildlife conservation, he acknowledged the potential benefit of the lease program by where he answered,

*“The lease programme through the TWF and KWS has enabled me to receive some donations. I am the number 12 beneficiary of the lease programme, where they pay kshs 300/- (3 euros) per acre per year. The money is given in January, April and September, when the schools are opening. The money helps me to pay school fees for my children. Through the lease programme, I have been getting kshs 41,000/- (410 euros) per school term for the 400 acres. For ½ acreage, they pay me kshs 21,000/- (210 euros) per term.”*

On the downside however, his opinion was that the funds were well below market value and that the program was not sustainable, considering that the NGO stopped paying them in 2012. Accordingly, he stated,

*“the money we are paid under the lease program is well below market value of our lands...It is the market value of land in the 1980’s... and the sponsors of the lease programme ran out of cash. The last time they paid us for the lease programme was in 2012.”*

Some of the women were also beneficiaries of the lease program. Case in point was Mama Tina, who lives on the family land, which is 13,750 acres in total and signed under the lease program. According to her, the family keeps livestock for both cultural and livelihood reasons. She added,

*“I was a beneficiary of the lease programme ...because I don’t have school going children, the money was used to pay school fees for my relatives children who are in university.”*

Another interviewee was Madam Nkamalo Ntalalai, a widower, with three children and two employee herdsmen. She said her level of education is primary level standard 5 (semi-illiterate). She specializes in livestock keeping and owns 70 cattle and 12 sheep. From livestock keeping, where she earns approximately kshs 20,000/- to 25,000/- (200-250 Euros)

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<sup>14</sup> This section is based on field interviews carried out between July 2014 and January 2015

per month for selling milk, 360,000/- per annum and animal manure worth 8,000/- twice a year. The interviewee said she owns 25 acres of land which were signed up under the wildlife lease program. When asked which benefits she gets from wildlife in the area, she answered,

*“I have no benefits from wildlife...the wildlife are eating food meant for our livestock ...even when we reduce our livestock, we are still having problems.”*

She added that she sells 12 calves every year at 30,000/- per head to control her herd, thereby following the advice to reduce their stock, in order to reduce over grazing, as given them to them by IRLI, other livestock experts and KWS. Grassroots government officials from the area (also indigenous people of the locality as required by county administration law) had this to say, about the lease programme,

*“As a pastoralist in the area, I have been a beneficiary of the Wildlife Conservation Lease (WCL) programme which TWF has been carrying out. The WCL programme is important because it helps to reduce human wildlife conflict. However, the money they pay is too little and unsustainable. The NGO funds finished and they have stopped paying”*

One of the TWF officers interviewed had this to say, concerning the amount paid under the lease program to the pastoralists,

*“The lease program entails paying for the land which the owners have agreed to leave ...open, for free movement of wildlife instead of selling. Here, we pay 4 dollars per year per month. The lease programme is good but not sustainable. It depends on funds from donors. ...4 dollars is well below the market value...but despite being below market value, the money comes in handy to the owners of the land. The money is usually paid to the owners of the land during the beginning of the school year. This comes in handy as the money is usually used to pay school fees for children going to school. This prevents the owners of the land from selling their land to raise money for school fees.”*

Most of the people interviewed acknowledged the small contribution of the money payments of their land under the WCL programme, at the time when the funds were still available<sup>15</sup> stating,

*“imetusaidia kidogo” (swahili for), “it has helped us a little”.*

The only benefit highlighted from nearly all the participating households interviewed was that the money contributed to their school fees expenses for their children. Additionally, all of the interviewees noted that the money paid under the land lease programme was little and well below the market value of their land. They also commented on the lack of

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<sup>15</sup> Lease payments stopped in 2010 or 2012 when the NGO funds run out highlighting un-sustainability of the program.

sustainability of the programme, noting that the last time they received any lease payments was in 2012.

### *Effects of stopped Wildlife Conservation Lease Payments*

Field work done for this research in 2014 suggests that since the payments stopped in 2012, some of the households that were participating in the lease programme were now less motivated to leave their lands open and have recently started fencing their lands again. Secondly, members of the community have started killing lions and even burying them secretly. This is because they continue to incur costs and losses due to the numerous wildlife on their lands, without receiving any benefits, compensations or even sympathies from KWS and/or NGOs/ safari tour companies that are gaining a lot from the wildlife tourism business at their cost. Secondly, they are sacrificing other more viable sources of income for themselves in the rapidly urbanizing area in a context of high land use pressure and increasing scarcity of resources. Some of the cases are presented here, to give an idea of what is happening after the payments stopped.

### *Fencing of Homesteads by Pastoralists therefore reducing wildlife grazing areas*

An in-depth interview with a member of a household who had fenced their 250 acres of their land recently in mid-2014 revealed the reasons why they had decided to fence. This particular household is located a bit far from the park, but in an area abundant with wildlife herbivores and in an essential migratory corridors. In addition to being a herder, the household head of the homestead is an educated school teacher. As the household head was away at work at the time of the interview, the interview was conducted with the wife of the pastoralist known as Mama Pato who was the one present during the fieldwork for this research. During the interesting and enjoyable conversation, she revealed the reasons which motivated her husband to fence out wild animals from their land, as being deeper than just the issue of the stopped land lease payments.

### *Reasons given for fencing*

#### *To store grass-banks*

The first reason highlighted was the need for fencing in order to grow and store grass banks especially for use in the dry season. Growing and storing of grass banks is a new coping strategy and trend that the pastoralist communities seem to be adopting. This is understandable especially now due to the high competition for food, land and water resources, between the wildlife from the park, the individual and community livestock and land use pressure from increasing urbanization amid the already subdivided lands. Therefore, this particular household was fencing their land to store grass for their individual livestock to use, especially during drought season.

#### *To prevent livestock attack by diseases from Wildlife- Malignant Coast Fever (MCF)*

As mentioned earlier, this household was located in an area abundant with herbivores and in an essential migratory corridor for wildebeest. Thus, it is also the area where wildlife from the park come to calve during the rainy season. Naturally, when the wildebeest calve, the

body fluids they release on the grass are very lethal. When any livestock ingests the grass from a still fresh section which was used to calve, they contract a deadly disease known as Malignant Coast Fever (MCF) from the wildebeest body fluids. The disease is deadly and incurable. It kills the affected animal within a very short time. The interviewee said that two of their cows had recently been killed by the MCF. Thus, her husband decided to fence also to prevent their animals being attacked by MCF. According to her, these animals were not vaccinated from MCF, because it was too expensive to vaccinate. Thus it seems clear that several households are now preferring to fence their lands and segregate their animals, especially if the animals are many and not vaccinated against MCF.

To prevent loss of livestock to carnivores (lions/hyenas and occasional leopards) Mentioning the exact date of the incident, the interviewee recounted that they had recently lost some sheep and goats to a Hyena. She added that this was a very big loss to them, and the KWS did not compensate or even sympathise. To add insult to injury, when they reported the hyena attack to KWS, they were told to go and hunt for the hyena that killed their livestock and kill it. As she narrated the experience, she was clearly incensed by the attitude and statement of KWS. In her opinion, KWS were very insensitive to the plight of the community. To demonstrate this point further, she went on to say,

*“kama ingekuwa ni simba ndio iliwa, hao watu wa KWS wangekimbia hapa haraka sana na hizo magari zao, kuchukua hiyo simba, lakini sababu ni fisi, hawajali fisi, hata wantuambia ati tuende tutafute hiyo fisi iliwa wanyama wetu na tuiuwe. Wewe unaeza imagine”*

(Translated)

*“if it was a lion which has been reported as having killed livestock, the KWS officers would have rushed to the area immediately with their rescue team, to save the lion, but because it was a hyena that was reported, they don't care, inflict, they told us to go and look for the hyena that killed our goats/sheep and kill it. So you can imagine!”*

She continued expressing more sentiments saying that for KWS, the Lion was obviously more important than anything else, including human lives and livelihoods, especially of the Pastoralist Communities who depend on livestock. From her tone during the conversation, the arrogance by KWS to their plight for the last incidence seems to have sparked her husband into action. Clearly outraged, he decided to fence his land.

To her household and others in the area in similar situations, the losses incurred from competition for resources with wildlife, the predator carnivores and poor attitude of KWS were just not worth keeping their lands unfenced. The situation is worsened by lack of any more monetary incentives to keep their lands open. These and other reasons highlighted in other sections of the report are the driving the Pastoralist Communities households to fence their lands.

### **Continuing incidents of Killing Lions**

The other effect of lack of funds for payments of the lease program has been the killing of lions and more recently in 2014, killing them and burying them secretly. One of the major incidents of lion killings in revenge attacks was on 20th June 2012, when 6 lions were killed by the community bordering the park in Kitengela. This happened after a pack of lions entered into a livestock shed at 11.00 am at night and attacked 13 sheep and goats. The owners and the community called KWS to inform them of the attack at the said hour. The longer the community waited for KWS to come and tranquilize the lions and take them away, the more the community members got agitated. By 2.00am in the morning, the KWS had not yet arrived to remove the lions. By this time, the members of the community got angrier and reacted by killing the lions (Interviews with John Solonka, Field Operations Officer, TWF).

The lions were killed right in front of three armed Kenya Wildlife Services rangers, who had come to the scene earlier, without tranquilizing dart guns and so could not do anything to relocate the lions. The three rangers had tried to persuade the community not to kill the lions unsuccessfully. Despite having guns, the three KWS rangers were threatened by the community, who refused to negotiate with the rangers about the lion killings and told them to keep off. The elders of the village also tried unsuccessfully to negotiate with the young morans.

According to some members of the community interviewed, they were incurring a lot of livestock loss and KWS did not bother to compensate or console them for livestock losses due to strayed animals from the park. Many times, they do not even go to the scene to confirm the mauled livestock. Secondly, whenever their livestock is killed, the money they were paid for compensation by the consolation fee program run by TWF was well below market value of their animals, hence dubbed, 'consolation fee'. According to them, they were getting paid only kshs 2,500/- (25 euros) per sheep or goat worth 8,000/ (80 euros) and only kshs 15,000/- (150 euros) per cow worth kshs 50,000/-80,000/- (500-800 euros). Additionally, many times they were never compensated because KWS was not mandated to compensate the losses. Thus, their major issue was the insensitivity of the KWS, therefore the anger and motivation to kill the lions in retaliation. According to the community, KWS does not care much about their livelihoods and welfare, as much as they care for the lions.

According to media reports in the Star Newspaper, the young men who speared the lions operate a community vigilance group known as 'Operation Linda Ng'ombe' translated 'Protect Livestock'. The lions were killed after the community had called the KWS and waited in vain for almost five hours for the KWS arrive and. However, KWS gave a different story of what actually transpired according to the press report published on their website, just after the incident.

According to KWS, the community had been incited to kill the lions by local politicians with selfish interests. A comment by the Senior Warden of Nairobi National Park after the incident expressed this sentiments, showing the position of KWS on the matter,

*“This is impunity of the highest order perpetuated by greedy leaders of the local community. This is cheap politics that is being played here because how can the same people who are the chief beneficiaries of wildlife preservation in Kenya kill lion cubs. They are heartless, greedy and backward. I am not ashamed to say they are headless leaders who do not see beyond their noses”* (Comment on The Star Newspaper Report on 21, June 2012)

Talking about the consolation fees for compensation for livestock given to the community by NGOs’ the senior warden added,

*“It is wrong for the elders and other Masai leaders to use the delay in enacting the Bill as an excuse to kill animals. At the end of the day, they benefit the most from the compensation fund that come from the friends of wildlife conservation in the diaspora”*

Thus, the position of the KWS was that the lion killings were politically motivated. It is interesting that KWS said the community benefits from the compensation fund yet the WMCA by then did not give a provision for KWS to contribute to compensation for livestock loss. The compensation has been carried out by wildlife conservation NGOs. It is only with the new WMCA of 2014 that KWS can now start compensating victims for livestock loss.

### **Killing and Burying Lions Secretly**

As recently as December 2014, it emerged that the Pastoralist Communities in Kitengela have been killing the lions secretly and burying them to avoid getting arrested. A report posted on the Kenyans for wildlife face book page on 24th December 2014 by active stakeholders in wildlife conservation appealed to the perpetrators of the crime to stop and be open to dialogue about how to better handle the human wildlife conflict situation.

### **Box 1 Public Announcement on Kenyans for Wildlife Facebook Forum on Lion Killings in Kitengela, dated 24<sup>th</sup> December 2014**

#### **Michael Mbithi<sup>16</sup> to Kenyans For Wildlife**

We are appealing to all community members from Munjiriri and Sholinke area Kitengela to desist from killing lions and burying the carcasses.

We can all get together and mitigate whatever conflict that exists as responsible Kenyans. These lions are our heritage and do not belong to the government but to us.

All preyed on stock will be compensated and as we speak the county wildlife conservation and

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<sup>16</sup> He is very active stakeholder in the wildlife conservation matters. He is the director of Lisa ranch in Konza, Machakos County bordering Nairobi National Park.

compensation committees have been constituted.

There is no secret in pillaging your heritage. This conflict can be mitigated if we all sit together and put our minds to it. More so we may even solve other communal issues if we work together.

My brothers we humbly request you.

*Michael*

*Mbithi*

*With John Solonka, Nickson Parmisa, Moses Parmisa, Omondi Omondi, Trish Heather-Hayes, Jack Marubu, Joseph Tuleto, Irinah P. K. Wandera, David Mascall, David Matiko, Itela Okobo*

#### **Source 12: Kenyans for Wildlife Forum, Facebook**

The secret burying of lions after killing them secretly is a new coping strategy that the Pastoralist Communities in Kitengela area are using to deal with the human wildlife conflict. Eventually, they may kill all the lions and secretly bury them, and there will be no more lions in the park and KWS will wonder where all the lions have disappeared to. According to interviews with the director of field operations at TWF, the lions are being buried secretly because the community does not want KWS to know. It is illegal to kill wildlife and they can be arrested. Even though there is now a new wildlife act recently enacted in January 2014 that mandates KWS to compensate for predation, the Pastoralist Communities know they will not be compensated because the process is very bureaucratic, political and tedious. So, they prefer to kill the lions because the owners of the livestock which have killed by lions know they will not be compensated for losses, therefore they are no longer motivated to tolerate the lions any more than is necessary. The issue of burying lions secretly so that the authorities do not find out highlights the complexity of the issue of killing lions.

#### **Summary of Findings on the WCL programme**

The issues raised regarding the amount of money paid that was below market price and the sustainable feasibility of the land lease programme for wildlife itself bring into question the participatory process that was used, if any, in coming up with the ideas and decisions on the lease program. Firstly, it is highly likely that there was no proper or real participation of the Pastoralist Communities in the decision making process that was used by stakeholders to come up with the figure or amount to be paid to the participating households.

Secondly, the possible un-sustainability of the funding for the lease programme is an issue which should have been discussed with members of the community, if there was real participation of the Pastoralist community in the design and development of the lease program. This would have contributed to a feasible solution for human wildlife conflict, fencing, subdivision and sale of land even when the funding stops. It therefore seems that there was no real involvement of the community, rather invisible coercion into the lease program through luring with piecemeal money.

Indeed, many of the traditional Pastoralist Communities households heads are illiterate or semi-illiterate, and could be easily malleable or coercible, partly due to their limited

understanding or knowledge of the operation of the lease program contract and benefits as presented to them. Many of the Pastoralist Communities households already signed commitment contracts to the lease programs. After 5 years, the payments stop with the explanation that the funds for the program have run out. A question that comes to mind then is whether the lease program was part of a plan to buy time to prevent the communities from selling their land or hidden strategies to compel the Pastoralist Communities to legally commit their lands for wildlife conservation using long term lease contracts. One of such long term lease contracts that could be illustrative of this point and questionable is the lease contract committing 1,200 acres of land for 199 years signed by one elderly illiterate Pastoralist Communities landowner, known as Mzee Somog, a pastoralist enrolled in the land lease program with 1,200 acres of Land. He has been much praised by TWF as a good role model for his decision to commit his large piece of land to the lease program (for more on this, see TWF website, *Article titled, 'The 199 Years Pledge: My 1200 Acres Of Land For My Cows And Your Wildlife'* by Ed Loosli, *The Director of The Wildlife Foundation* on <http://wildlifefoundationkenya.org/blog/the-199-years-pledge-my-1200-acres-of-land-for-my-cows-and-your-wildlife/#sthash.ADgiOSyP.dpuf>). According to TWF, the program was meant to be a pilot, to test how viable it can be, to be modelled and adopted by the government institution in charge of wildlife. However, land owners have already committed their lands to non-subdivision and fencing for the sake of wildlife, like the elderly man who committed his to 199 years, yet the funds have run out.

Despite the claims made by TWF and its coalition of stakeholders that the lease program is to enable the Pastoralist Communities to continue using their land for grazing of livestock, it is clear that the main focus of the WCL programme was to keep the plains open and ensure that the Pastoralist Communities don't fence or subdivide their lands for the sake of free movement of wildlife through their lands outside the protected area. This allows the grazing and natural migration of wildlife like wildebeest from Nairobi National Park to the Serengeti Plains in the south. Additionally, the populations of lions will increase because the other wildlife which sustain the lions will also be sustained in the Pastoralist Communities plains.

Thus, even though the concept is good and has some valid points, it is not feasible or practical in the long-term. The program can only work in the short-term, even if there are funds to sustain it. Indeed, Osano 2013 observes that a Hybrid of Conservation interventions: must be used, and that, 'The WCL cannot succeed in isolation. In that regard, there is need for development of a hybrid of interventions with a package that includes the use of Conservation easements, livestock compensation schemes, establishment of community conservancies, and strengthened anti-poaching efforts'.

However, based on the fact that the other conservation interventions have not worked in the case of NNP, it is important to let the community come up with its own solutions. It was apparent from this study that there were no real synergies between the wildlife, livestock

and community's needs, knowledge, opinions and proposed solutions, when coming up with the lease program.

### **Conclusions and Recommendations**

The sale, subdivision and fencing of land in the dispersal areas in Kitengela continues rapidly despite the many efforts which have been tried by the NGOS to halt these activities. The study found out a number of reasons why the conservation interventions were not working. For the Maasai pastoralists land owners who don't want to sell and subdivide their land, fencing continues because, the wildlife from the park does not benefit them at all, yet it competes with their livestock for pasture and water, predated on their livestock, destroys their crops (for the agro-pastoralists) and brings in diseases to their livestock. So they don't see the reason to keep their lands open for the sake of wildlife, which does more harm than good for them. Secondly, most of the land owners who have land near the major roads where there is urban development and in the immediate southern border of the park find it more profitable to sell their land, rather than continue with their pastoral way of life, which is filled with hardship especially during the dry season. Besides, the land values are very high near the road and one can sell land and get enough money to last them a lifetime if they use it properly. Thirdly, some of the conservation interventions like the wildlife conservation lease programme which had very good intentions and work plan were unsustainable from the beginning, which indicates that the idea was imposed and the community was not involved in decision making.

All the interventions which have been implemented have failed considerably because no one (both the conservation NGOs and the government KWS) is really listening to the community or involving them in decision making. The community does not gain any benefits from the wildlife from the park, yet they are expected to host the animals on their land, which compete for resources with their animals or kill their livestock. Secondly, the community is not allowed to go into the park with their livestock even during the dry season, despite having hosted the animals from the parks in the other season, which finish grass pastures for their animals.

Moreover, despite being the only indigenous community that co-exists with wildlife in this modern era, the Maasai pastoralist's community are perceived as threats to conservation by conservation bureaucrats. Specifically, they are believed to be the worst enemies of the lions and are perceived as being greedy due to their culture of keeping large herds of cattle, which are seen as reducing pasture resources available for wildlife and causing environmental degradation.

It was also evident that the Maasai pastoralist's community are not involved in decision making. A co-management arrangement for future management of the park and its environs, which balances the needs of the pastoralist community with the need for protection and management of the park seems to be the only feasible solution. This involves an integrated spatial planning and management model for community land in the dispersal

areas and land belonging to NNP. The co-management arrangement should address the needs of the community (accessing pasture in the park) in order to balance the issues of resource sharing with wildlife from the park and reduce tensions between the parks management and the community. In the process, the community will sharing benefit from costs related to living next to the park and have some power in decision making in matters related to the management of the park. As mentioned earlier, the community has indicated that they want to be able to access pasture lands in the park, especially during the dry season when there is no grass in the community land. This is understandable given that the community hosts wildlife from the park in the other seasons. The community also wants to be directly involved in the co-management of the park, using the principles of both benefit and power sharing, in order to sustainably manage and conserve the lands and wildlife in the NNP ecosystem, in the southern border of the park, where it is at least viable to conserve the park.

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