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## WILDLIFE CONSERVATION AND THE ROLE OF THE INDIGENOUS COMMUNITIES LIVING AROUND CONSERVATION AREAS

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Key words: institutional partnerships; community-based conservation; collaborative wildlife management

#### Abstract

The Indigenous Kenyan Maasai community has coexisted with the wildlife surrounding it for decades from Nairobi National Park, Maasai Mara and Amboseli. These parks border Maasai lands. Although the northern, eastern, and western perimeters of the Nairobi National Park are fenced, the southern part is not. It is at this point that the Maasai community's land meets the park. This area also acts as a wildlife dispersal area where wildlife can freely migrate to other parks, including Maasai Mara and Amboseli. The park is only 117sq kms and its vitality depends on the plains to the south where the Maasai live so that the animals can migrate in and out. Without that open space, the park would be little more than a zoo. The fact is that approximately 60 to 80 percent of wildlife in Kenya is outside formally protected areas.

For the Maasai community, wildlife poses an enormous threat. As herbivores migrate during the wet season, they are followed by predators such as lions. Livestock are an easy target for them. A lion attack can be devastating, ruining family lives and livelihoods. Lions have traditionally been the Maasai tribe's greatest adversaries; they are a deadly threat to the cattle and other livestock that are both an integral part of the Maasai culture and the tribe's greatest source of wealth. Despite the ongoing livestock predation, lions may be the tribe's strongest hope of preserving their way of life.

With these in mind, it becomes imperative that we think of systems for better correlation between all aspects of conservation and understand that the wildlife, livestock, and the surrounding pastoral communities play a key role in each other's survival.

#### Introduction

Wildlife populations around protected areas are declining throughout Africa (Ogutu et al. 2013). In Kenya, more than 65% of wild herbivores exist outside protected areas because most national parks are too small to accommodate wildlife movements. When most of the land was communal and in pastoralists' hands, both wildlife and livestock could migrate. The areas surrounding protected areas are now vulnerable to changing land use and land tenure, growing human populations, fences and infrastructure development that fragment the landscape, making it difficult for both livestock and wildlife movement (Hobbs et al. 2008). Further, climate variability and extreme events such as floods and droughts are increasing in the world's grazing lands resulting in expanding arid grasslands (Keith et al 2015, Prăvălie et al. 2019).

Community-based conservation (CBC) is growing as a governance arrangement to conserve biodiversity and enhance pastoral societies and economies under conditions of socioeconomic and environmental change. CBC success depends on conditions such as local participation in decision-making, collaborative management, trust building, combining different kinds of knowledge and ties to other organizations such as NGOs, donors, and government (Galvin et al. 2018, Armitage et al. 2019). This paper addresses local participation and organizational ties that are pivotal to the Naretunoi Conservancy at the southern border of Nairobi National Park.

## **Methods and Study Site**

The first author has been involved in the community management of Naretunoi Conservancy while the second author has conducted research on the efficacy of community-based conservation. The data here are derived from the first author's engagement with Naretunoi Conservancy and wildlife conservation more generally.

Nairobi National Park (NNP) connects to the Athi Kaputiei Ecosystem (AKE) to the south (Figure 1). The AKE serves as a key wildlife dispersal area for wildlife movements between NNP and to the southeast (to the Amboseli Ecosystem) and to the south (to the Magadi and Mara ecosystems). The AKE is an expansive wet season dispersal area that historically has been used by a diversity of wildlife to move into and out of NNP. The area now consists of many private ranches and some community lands, but which collectively hold dispersal area habitats much larger than the land within NNP (Figure 1).



Figure 1. The Athi Kaputiei Landscape showing existing conservancies (orange) and potential conservancies (yellow). The red circled conservancy is Naretunoi and the long arrows are the wildlife dispersal areas. The zone numbers represent four different breeding zones for different species of wildlife such as lions, vultures, and elands.

## **Results and Discussion**

The Athi-Kaputiei Wildlife Conservancies Association (AKWCA) was established in 2014 as a regional body representing the private landowners and communities that together have formed conservancies. The Association has a membership of 10 registered conservancies, with about 15 new potential and proposed conservancies that are in the process of registration. The Wildlife Foundation (TWF) is the NGO that has become the secretariat to AKWCA and has several programs in Zone 1 (see Figure 1). Some of the programs are discussed in detail in the Parmisa and Reid paper published in the IRC proceedings, so they are just mentioned here. They include: The Wildlife Conservation land lease program that brings community and private land under conservation; Participatory patrols by community rangers' program; Human-wildlife conflict mitigation program run primarily through the predator deterrent lights system; The Wildlife Foundation Center to facilitate education on community-based conservation which is located within Naretunoi Conservancy. The Wildlife Foundation partners with the Kenyan Wildlife Service, Nairobi National Park and AKWCA to work on the Center's goals. The Center also works with innovators and the local community to identify traditional (bee keeping) and innovative (carbon/wildlife credits) revenue streams. The carbon project solution is developing in tandem with technology partners in the USA and the Kenya Wildlife Conservancy Association in Kenya. Prior to the COVID-19 pandemic international students were hosted at the Center but when that revenue stopped an 'adopt-an acre' platform was developed that crowdsourced small payments from the public which successfully maintained land lease payments. The TWF Center is partnering with the World Wildlife Fund, USAID, Panda Labs, and the Global Environmental Facility to expand the role of the education Center. Finally, communities and TWF are now partnering with the World Wildlife Fund to scale out all these efforts across the Athi Kaputiei Ecosystem.

#### **Implications and the Future**

Strong partnerships are at the core of community-based conservation success. Partners, from the local to national and beyond are required to access resources, build trust, resolve conflict, and provide networking, or they may be knowledge based to mobilize knowledge at different scales (e.g., NGOs, county and state governments, universities, and others) (Berkes 2007). Further, CBC goals need to enhance community goals, use local knowledge, and devolve management to local communities. The Naretunoi Conservancy is run by the Maasai community who have partnered with a diverse set of organizations in its development. Strong collaboration and relationships between the member conservancies and outside NGOs will continue to be imperative to build projects to increase the wildlife connectivity in the region. Diversifying income streams will be critical for keeping these lands open for wildlife and enabling the continuation of practices that are core to the culture of the Maasai community.

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