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LISTENING TO RAFIKI: THE PAST, PRESENT,
AND FUTURE OF CONSERVATION IN TANZANIA

by

Leila K. Wojtkowski Barbeau

A Thesis Submitted in Partial Fulfillment
of the Requirements for a Degree with Honors
(Ecology and Environmental Sciences
and Parks, Recreation and Tourism)

The Honors College

University of Maine

May 2017

Advisory Committee:

Christine M. Beitzl	Assistant Professor of Anthropology, Advisor
Caroline L. Noblet	Assistant Professor, School of Economics
Jim Roscoe	Professor of Anthropology, Cooperating Professor of Climate Change Sciences
Sarah J. Nelson	Associate Research Professor in Watershed Biogeochemistry, School of Forest Resources
Sharon Tisher	Lecturer, School of Economics and Honors College

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ABSTRACT

Utilizing a "fortress conservation model" that emphasizes Western worldviews and divides nature and culture into separate realms, conservation efforts in Tanzania have disenfranchised many indigenous groups like the Maasai and placed their livelihoods at risk. In order for conservation to be a successful endeavor, efforts must take local and indigenous people into account and work to improve the understanding of the relationships between people, land, culture, and historical context. This thesis will explore the historical context and implications of the fortress conservation model, my personal experience with conservation issues while in Tanzania, alternative conservation models and their draw backs, autonomy in conservation management, and how societies can begin to reframe their conservation agendas. In order to ensure a sustainable future for Tanzania's environment and people, conservation initiatives and solutions should aim to balance the needs and livelihoods of communities, while honoring the dignity and ancestral lifestyles of all citizens. It is vital that attention be re-focused on solving the conflicts between people and parks, otherwise a future full of further disenfranchisement, conflict and species extinction may become a reality: we must learn from the past, rather than run from it.

DEDICATION

To all of my friends across the ocean, I would like to dedicate this Thesis to you.

My time in Tanzania challenged my inner environmentalist
and allowed me to see through new eyes.

You showed me the beauty of your country, the secrets to traditional dance and the right
way to barter in a shop. You gifted me love, shared your history and allowed me to
encounter the beauty of a foreign place.

I imparted my American knowledge on you and you imparted the complexities of
Tanzanian resilience and livelihood on me.

Because of you, I know that a multi-dimensional lens on environmental issues is a must
if I am to protect ecosystems and serve the people.

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A big thank you to all of my professors, especially Dr. Tim Waring, for asking the difficult questions and inspiring me to create a thesis that will help others learn about the complexities surrounding sustainable development, including especially pressing environmental issues.

To Lindsay Seward, who helped me grow and experience all that Tanzania has to offer in just ten days. Your encouragement, passion and kind heart have helped me to see all of the potential that lies within me.

I'm particularly grateful for the support of my parents - encouraging me to make the most out of my college education and to stick with the Honors program.

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CHAPTER I

INTRODUCTION

In December of 1983, the Secretary-General of the United Nations called upon Gro Harlem Brundtland to create and chair a new type of commission that would attempt to concoct a 'global agenda for change' (United Nations, 1987). The General Assembly of the United Nations wanted to accomplish four important tasks through the creation of an independent commission: 1) to find long-term strategies to achieve sustainable development by 2000; 2) to suggest ways that environmental concerns can be adapted and used to create cooperation between both economically and socially developing and developed nations to achieve 'common and mutually supportive objectives' that understand the interconnectedness of citizens, resources and the natural world; 3) to contemplate different ways that nations, separately and together, can manage their environmental worries; 4) to distinguish perceived environmental concerns shared by the international community and contemplate means to successfully deal with those problems, devise a plan for action over the coming decades, and establish goals that will inspire the world to act (United Nations, 1987).

Heading this recommendation, Brundtland organized the World Commission on Environment and Development, and after its conclusion in the fall of 1987, published a vital document that calls all of us, as people and as nations, to understand and further the spirit of responsibility as we move forward. This document, known as *Our Common*

Future or The Brundtland Report, brings a new idea to the table: sustainable development. The report describes sustainable development as: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987). In other words, they describe the motivation to meet human development goals by protecting and ensuring the ability of the environment to provide ecosystem services and natural resources on which the social and economic spheres ultimately depend. Separately, these three spheres - Social, Economic and Environment - may operate at full capacity, but ultimately lead to the deterioration of the others. As the sustainable development diagram demonstrates, when two spheres

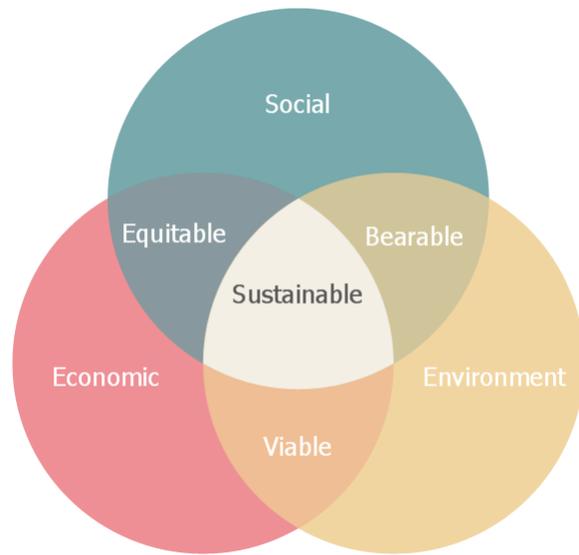


Figure 1: Sustainable Development Diagram (CS Odessa, 2017)

combine, we find that human society becomes either equitable, bearable or viable. However, when we can combine all three spheres of influence, we set ourselves up for a future where we can achieve development goals that don't come at the cost of environmental degradation or social justice.

The notion of sustainable development is important for industrialized countries like the United States; however, it is especially vital for those nations that are currently developing. In this state, countries are working towards social justice via improved access to shelter, food and clothing, bettering their employment opportunities by improving and

expanding industry and educational institutions, building infrastructure and by increasing the nation's wealth base. In many developing countries, improvement in the economic and social spheres is highly sought after in the here and now, leaving the environment in a forgotten corner of the mind and often in a degraded state.

Without proper intervention, humans have already begun to see the collapse of entire ecosystems, the loss of biodiversity, the contamination of water sources, and a hindered ability to combat global climate change. More along social lines, societies have begun to lose essential ecosystem services like storm buffering and water filtration, see the collapse of subsistence species and fertile soils, and experience threats to health from air pollutants.

In an attempt to minimize negative impacts on the environment, humans have often turned towards conservation, which is the practice of sustainably using and managing natural resources and wildlife. This form of protection affords continued land use and extraction of natural resources, without negatively impacting sensitive habitats or vulnerable creatures, and are exemplified in conservation models such as community-based natural resource management model, the bottom-up jurisdiction model, conservation with development model, and the citizen-led non-governmental organization initiative model (Park and Allaby, 2017, Hartley, 1997, Murphree, 2001, Igoe, 2004). In different ways and with their own drawbacks, these models attempt to balance conservation needs with those of people. In situations that are facing potentially ruinous consequences, certain conservation models do not offer adequate protection of especially susceptible areas. In these cases, humans have often turned towards greater

restrictions: a system that's aim is to preserve areas in their most natural condition, without the influence or intrusion of man (Ofcansky, 2002). As a result of achieving this conservation goal, the 'fortress conservation' model was born and has become one that excludes people in the name of nature.

In many nations around the world, fortress conservation models have disproportionately affected indigenous populations. Comprising over 5,000 groups in over 90 countries, and amounting to over 370 million in population size, some indigenous groups are currently struggling to retain land and natural resource rights, while others have long been displaced from native lands, denied their language and traditions, and been pushed into poverty (United Nations, n.d.). In its 1989 Indigenous and Tribal Peoples Convention (no. 169), the United Nations International Labour Organization made real progress towards identifying tribal rights for the first time since the 1920s (United Nations, n.d.) The published convention document recognizes the aspirations of indigenous groups to maintain sovereignty over their institutions, traditions, and economic development, and preserve their religions, languages, identities, and traditional ways of life. These aspirations are often voided by the fact that many indigenous groups are unable to enjoy freedoms as the rest of the population does, and that customs, laws, and perspectives have been viciously eroded over the years (United Nations, n.d.). Overall, the convention calls all ratifying states to recognize and work in conjunction with indigenous human rights in many facets of life including: land, employment, rural industry, health, education, and cross-border cooperation (United Nations, n.d.).

Most applicable to indigenous displacement by conservation initiatives is the Indigenous and Tribal Peoples Convention of 1989's second section regarding land rights. Here, the United Nations states that "the rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy shall be recognized," and that "measures shall be taken...to safeguard the right of the peoples concerned to use lands not exclusively occupied by them, but to which they have traditionally had access for their subsistence and traditional activities" (United Nations, 1989). It continues that indigenous groups shall have full rights to the use, management, and conservation of natural resources pertaining to their lands, and further details necessary grounds for relocation programs and full compensation for lost lands (United Nations, 1989). As of 2017, twenty-two nations in the world have ratified this Convention, allowing their indigenous populations to have fuller access to their rights in many facets of life. A majority of the ratifying nations are found in South America, with only two nations joining them from other development hotspots of the world: Africa and Asia, the Central African Republic and Nepal respectively (United Nations, 1989).

Given these considerations on the balancing of conservation efforts with the wellbeing of indigenous groups, it is important to ask, is there a point where humans cause harm by focusing solely on protecting the environment they have started to destroy? Do good intentioned conservation plans have rippling consequences that spread beyond the walls of parks and reserves that are erected? Do our righteous pursuits to protect endangered species and rare habitats have ethical implications for indigenous populations? Are there penalties to pay for tucking away natural beauty and landscapes

from hands that could so easily devastate it? Who should be deciding if new conservation programs or initiatives should be implemented? Does the United Nations, the United States or any other nation have the right to determine a nation's future? Do all humans have a stake in protecting endangered species? Do citizens and indigenous groups, who may not know anything about how formal conservation initiatives work, deserve a say in their own future? Or are landscapes and biodiversity worth protecting more than worrying about how citizens and indigenous populations may be impacted?

One developing nation that, like many others, is attempting to meet the needs of its growing population as rapidly as possible is the East African country of Tanzania. Fifty-two million people populate land that is slightly bigger than twice the size of California, 43.7% of land being used for agricultural purposes (Central Intelligence Agency, 2017). With the seventeenth highest birth rate in the world, 36 births per 1,000 population, Tanzania is growing rapidly at a rate of 2.77% annually, in comparison to the United States' 0.81% (Central Intelligence Agency, 2017). According the Central Intelligence Agency, Tanzania has one of the poorest economies based on per capita income: \$3,100 USD in 2016. In an attempt to develop and route more money into the pocket of Tanzanians, the nation has achieved the ninth highest GDP growth rate in the world. This growth is highly attributed to tourism, mainly in the form of nature-based or eco-tourism, and the vast amount of natural resources that the country possesses which include: diamonds, gold, nickel, uranium, natural gas and tanzanite (UNESCO, n.d.).

One portion of Tanzania's population is indigenous people, with a majority of people belonging to one of four main groups: Akie, Hadzabe, Barabaig, and Maasai. The

Akie and Hadzabe groups are primarily hunter-gatherers, while Barabaig and Maasai people are nomadic pastoralists (International Work Group for Indigenous Affairs, 2016). This thesis focuses on the Maasai people located along the Great Rift Valley area of southern Kenya and Northern Tanzania. Their population totals about 1.2 million individuals, with 430,000 individuals living in Tanzania; however, population estimates are uncertain due to remote locations of villages and the format of the Tanzanian census which does not break up populations based on ethnicity (International Work Group for Indigenous Affairs, 2016). Distinct from other ethnic group, the Maasai utilize the Maa language, with only a small portion of the population knowing Swahili or English. Traditionally, the Maasai maintained a herding economy, based on the tenure of large herds of cows, sheep and goats, and had a nomadic lifestyle to ensure the viability of grazing throughout seasons (Igoe, 2004). Unfortunately, despite that Tanzania voted in favor of the 2007 United Nations Declaration on the Rights of Indigenous Peoples, it does not officially recognize the existence of any indigenous populations in the country and lacks any official policy or legislation regarding the rights of indigenous peoples (International Work Group for Indigenous Affairs, 2016).

In Tanzania, conservation has always been at the front lines - especially now, as the country continues to strive for increased development and urbanization. Since the establishment of national parks, game preserves and conservation areas beginning in the 1920, there has been intense and vested interest in protecting Tanzania's forests and savannas - especially the species that find their home there (Tanzania National Parks, 2017). Dotted Tanzania's landscape are sixteen national parks, comprising over 42,000 km², 10,378,426 acres, or 4.4% of the country's land area, numerous game reserves and

conservation areas, all managed by the Tanzania National Parks Authority (Tanzania National Parks, 2017). Many campaigns, namely within the walls of conservation areas or parks, have become popular world wide, focused on saving the rhinos, stopping big game hunting of cape buffalo and lions, and eliminating the threat of poaching. Although elephant populations may be rebounding, conservation efforts over the years have taken a toll on Tanzanians, disenfranchising many indigenous groups like the Maasai and risking potential livelihoods that could develop in the near future. Here, the three pillars of sustainable development have remained clearly divided: the Maasai and indigenous perspective stay confined in the social sphere, pro-park advocates find themselves enclosed in the environmental sphere, while the State may find itself rooted in the economic sphere, transfixed on increasing revenues into the country. In Tanzania, the Indigenous and Tribal Peoples Convention of 1989 has yet to be ratified, leaving indigenous groups vulnerable to the land loss, unemployment, and impoverishment that are associated with fortress conservation.



Figure 2: Tanzania National Parks and Protected Areas (Kideghesho and Msuya, 2012)

This notion is clearly demonstrated in present-day areas surrounding Tanzanian national parks, where indigenous groups, like the Maasai, remain completely disenfranchised. The division of the sustainable development spheres is also evident in Arusha, the second largest city in Tanzania. Here, many citizens are in conflict with Arusha National Park in their desire for urban and agricultural expansion: the environmental sphere remains at odds with the social and economic spheres. Experiencing this conflict during my time in Tanzania, on a ten-day field ecology course through the University of Maine, helped me realize how detrimental conservation has been on citizens. This thesis will explore the historical context and implications of the fortress conservation model, my personal experience with conservation issues while in Tanzania, alternative conservation models and their draw backs, autonomy in conservation management, and how societies can begin to reframe their conservation agendas. In order to ensure a sustainable future for Tanzania's environment and people, conservation initiatives and solutions need to balance the needs and livelihoods of communities, while honoring the dignity and ancestral lifestyles of all citizens. It is vital that attention be re-focused on solving the conflicts between people and parks, otherwise a future full of further disenfranchisement, conflict and species extinction may become a reality. In the end though, what are the alternatives to fortress conservation that will help protect critically endangered animals, unique ecosystems and combat further disenfranchisement of Tanzanians? Are there any solutions that will allow us to combine the economic, social and environmental spheres, and work towards conservation within the sustainable development framework?

CHAPTER II

BACKGROUND

The idea of fortress conservation is as a conservation model that is "based on the belief that biodiversity protection is best achieved by creating protected areas where ecosystems can function in isolation from human disturbance," (Robbins, 2007: 704) assuming that people utilize natural resources with destructive tendencies, causing degradation and biodiversity loss. For these reasons, fortress conservation models also embody the idea that humans should be evicted from parks and reserves to achieve biodiversity protection (Robbins, 2007).

In East Africa, fortress conservation finds itself rooted in European colonialism, which advanced the spread and influence of European culture and religion. Igoe (2004) suggests two notions from the Genesis creation story have blossomed and encouraged the growth of Western conservation ideology: that humans have a special control over nature, and at the same time, are indeed separate from nature. We are in a way, unworthy of being a part of nature after our committal of sin in the garden, but are still tasked with being caretakers of Eden and nature's species (Igoe, 2004). Having the tendency to ravage ecosystems and exceed healthy levels of extraction, the Western World has been on a mission to discover a new 'Eden' or 'forgotten wilderness,' a land in pristine condition that can be discovered and restored to its ultimate state of being. The notion of caretaking, and righting the destruction that we have already committed, is manifested in the Western

World's idea that humans, namely Europeans, are the only ones with the knowledge to 'rescue the few remaining Edens in the world' (Igoe, 2004). Post-reformation Europe focused on the right to conquer nature, with leaders like Francis Bacon sharing ideas like: "the purpose of science was to restore to man the dominion that had been lost by the fall from Eden" (Thomas, 1983.) This sentiment carried over to the periods of intense conquering and colonization in South and North America, Australia, Asia and Africa. Some swaths of area in these new lands were dubbed as prime sources for natural resources and others were considered wonderful enough to be preserved (Igoe, 2004). As they colonized, European powers encountered local peoples and were quick to label them infrequently as 'ecologically noble savages,' but more often 'ignoble savages:' indigenous people that were far removed from Christianity and did not belong in civilization. Too primitive, these peoples did not possess the abilities to reason and understand the natural beauty of their surrounding ecosystems (Thomas, 1983 and Igoe, 2004).

A new trend began around 1910 and indigenous people were expelled from their lands to make way for estates, commercial farms, hunting reserves and parks (Igoe, 2004). In England itself, the nobles disenfranchised local peasants to make way for large swaths of country estates, being the only ones who understood the true natural beauty of the nation. Later dubbed the 'enclosure movement,' this property transition changed common property fields and pasture into privately owned units bordered by walls and fences (Igoe, 2004). In the United States, the creation of the first national parks in the late 1800s, Yellowstone and Yosemite, led to the removal of Native Americans. Dozens of tribes were often removed by force, moved to areas insufficient in size and resources outside of the parks (World Watch Institute, 2005 and National Park Service, 2017). In

1969, during the formation of Kruger National Park in South Africa, the indigenous Makuleke tribal community was forcibly removed from within new park boundaries, an individual community of 3,000 members was forced at gunpoint to burn down their homes and move outside park boundaries- a decision made based on the idea that land restitution within nature reserves or parks would diminish the areas themselves (Fabricius and Chris de Wet, 2008). Reaching into the future in India, during the creation of Project Tiger, a program aimed at rehabilitating Bengal tiger populations, by the Wildlife Protection Act in 1972, it was required that the Indian police forcibly remove the thousands of indigenous peoples living within new reserve areas (National Tiger Conservation Authority, 2017).

Regardless of the location, this cleansing and locking up of swaths of land was a strong effort to make these landscapes into what man "imagined it would be," a true "pleasing prospect" (Cosgrove, 1984). This desirable illusion is only held in place by the notion that wildernesses have always been wildernesses. This idea effectively erases people from the landscape and justifies the removal of many, as indigenous peoples are only the 'first visitors' of these areas (Igoe, 2004). American National Parks have come to serve as a prominent fortress conservation model for the rest of the world, showcasing "preservationist efforts and native dispossession" (Spence, 1999).

These ideas and the new practice of fortress conservation were adopted by colonizing countries in their African territories, namely Tanzania during German and British rule, but not initially. Two main groups became responsible for the first major conservation and national parks movements in East Africa starting in 1910: the penitent

butchers and colonial officials (Igoe, 2004). Both parties believed in their destiny to carry out the 'civilizing mission,' known more commonly as the 'white man's burden,' to lift up the uncivilized world and bring it to its destined glory (Igoe, 2004). However, the two groups carried out this civilizing mission in the conservation realm much differently than the other. Aristocratic big game hunters, who came to be known as the penitent butchers, established many game reserves where hunting was forbidden. These protected areas acted as a species' breeding grounds that fueled the surrounding game control areas where elites excessively hunted species (Marks, 1984). Reserves were also designed to keep local African people out to maintain breeding stock and the availability of animals for hunting (Igoe, 2004). Colonial officials decided to carry out their civilizing mission towards conservation in a much different way: wanting to separate wildlife and humans, mainly for the benefit of human health. Even in this process, wildlife reserves were set up and humans forcefully evicted and relocated. Populations were controlled inside and outside of the reserve, including the slaughter of thousands of elephants, to rid communities of tsetse flies that carried 'sleeping sickness' (Igoe, 2004 and Ofcansky, 2002).

As time progressed, these segregated areas for wildlife started to reflect new potential, rather than just aiding in the mission to develop human dominated and organized landscapes. Areas had the ability to become real places of conservation and attract wealthy tourists (Igoe, 2004). Isolated game reserves that could be converted into national parks posed the perfect opportunity to create "a stable and harmonious man-animal balance without disturbing the region's social and economic development" (Ofcansky, 2002). Conservationists began pulling from the American National Park

fortress model to save East Africa from the ecological destruction that was occurring (Igoe, 2004). Following the establishment of the first two African national parks, Prince Albert and Kruger, The Society for the Preservation of the Wild Fauna of the Empire created a commission in 1930 to discuss the creation of East African national parks (Bonner, 1993 and Igoe, 2004). The commission came to the conclusion that African landscapes still needed to be segregated, to maintain the unintrusion of communities, especially European estates, and also to allow the preservation of wildlife for perpetuity in these confined areas. Here, they continued, wealthy tourists could come and witness what true wilderness looked like before the hand of human intervention (MacKenzie, 1988). Places for ideal parks were identified, including Mt. Kilimanjaro, the Serengeti Plains and the Ngorongoro Crater and plans were underway. Fortress conservation had finally, and indirectly, made its way to East Africa and Tanzania, locking up wildlife and biodiversity, and locking out local peoples. Although fortress conservation's original goals did not include displacing peoples, disenfranchisement and relocation were inevitable consequences of this model.

Fortress Conservation in Tanzania, although it reflected the imperialistic desires of colonial rulers, has failed as a model of conservation in pursuit of sustainability. Within the sustainable development framework, social and economic spheres are just as important to integrate into management systems as the environmental sphere. In Tanzania the exclusion of these spheres barred citizens, a large part indigenous, from meeting their individual and community needs, and denied their dignity as people. Since most of the national parks in Tanzania were constructed in vast areas of savanna, some of the largest impacts of fortress conservation have fallen upon one particular indigenous group that

made the area home: the Maasai (Adams & McShane, 1992). Inherent in this conflict and disenfranchisement is the base level difference in agendas between the two groups. Park managers, modern non-governmental conservation organizations (NGOs) and proponents of Western conservation models focus on the need to establish protected areas and parks, creating management plans to ensure their success. More often than not, indigenous involvement, if included at all, is seen as a means to a desired end, rather than as an end in its own right (Chapin, 2004). The Maasai on the other hand, are most concerned about their legal land rights and ownership, ensuring continued access and use of lands that they have inhabited for centuries. They desire to find methods to balance making a viable living off of the land without destroying the very resources that give them life. Maasai agendas often include the importance of documenting their tribal history, traditions and language, and identity as a Maasai culture (Chapin, 2004).

Game reserves grew into fortress conservation areas during German and British colonial rule from the late 19th century until Tanzanian independence in 1961. Conservation quickly exploded after the establishment of a sovereign nation, with the creation of new national parks that quickly followed in the footsteps of colonial game reserves - developing into fortress conservation areas (Kideghesho and Msuya, 2012). During these formative years of Tanzania, thirteen new national parks were established and many Maasai were forcefully removed from within new park boundaries, and told to relocate, with no sort of compensation or guidance about what to do next (Brockington, 2002). In 1988, the Tanzanian Government carried out a successful eviction operation for the Mkomazi Game Reserve. Here, Brockington shares, the dilemma of fortress conservation was exemplified:

Its conservation is pursued in the name of a good cause - to save biodiversity and beautiful landscapes for humankind. But at the same time its conservation has imposed decision with little or no consultation and with violent enforcement. It has invented and obliterated history. (2002: 3-4)

Only having small areas to reside in, Maasai people had a more difficult time engaging in traditional practices like controlled burning. Fire was used to eliminate scrub bushes that were believed to harbor tsetse flies, and to encourage new growth of nutritious grasses that would not only benefit cattle, but also wildlife (Igoe, 2004). The lands previously occupied by the displaced were locked up for good reason: the wet-season often enhanced fertility, making it an exceptional place to graze for wildlife. Denial of access to these lands put cattle owners and herds at great risk, and were often the cause of death for many cattle, due to the lack of sufficient grazing and increased susceptibility to disease from poorer health (Brockington, 2002). Overall herd size and performance was severely impacted following eviction, carrying with it cultural implications, as the Maasai place virtually all of their worth and wealth value into cattle. Families who were previously middle-income or poor felt disproportionate effects after disenfranchisement and eviction, becoming even poorer. Traditional tribal bride prices also had to be renegotiated after cattle were decimated - changing long-standing traditional marriage practices and contracts (Brockington, 2002).

Local economies also took a huge hit when Maasai people were evicted from new park boundaries. Records of the Kisiwani cattle market, dating monthly all the way to the 1970s, all showed dramatic decreases in revenue and sales after evictions ramped up, cutting in half around 1986 and bottoming out to zero sales in 1995. At this point, the market was no longer viable and ceased operation (Brockington, 2002). The collapse of

this specific cattle market had negative implications for the economy of Kisiwani: less money flowed into the businesses and pockets of the villagers, which in turn, meant less money was spent. Kisiwani suffered economic depression after the collapse of its cattle market (Homewood et al, 1997). This market crash spilled over and negatively affected neighboring markets as well (Brockington, 2002). In Maasai society, more male than female cattle are sold: males are a source of income for pastoralists, while females produce offspring and milk, and therefore are hardly slaughtered or sold (Dahl & Hjort, 1976). After evictions from national parks, regional markets saw high sales of female cattle - a sign that owners were selling the most vital parts of their herd. Brockington shares that this is indicative of extreme stress in the pastoralist economy: "it shows that pastoralists have no surplus animals to sell, and need to dispose of their basic means of production to supply their household needs" (2002).

Fortress conservation and its associated game policies have also created negative attitudes and hostility towards national parks, managers and even the animals themselves. The Maasai were split on the issue, half were angry that the colonial government had not paid for any previous damages caused by excessive hunting in parks and game reserves, the other half angry as fortress conservation allowed local animal populations to boom, creating conflicts between herders and 'pests.' All could agree on the fact though, that fortress conservation had disenfranchised their populations (Olcansky, 2002). Even the word 'conservation' brings out angry and spiteful responses from Maasai people. For example, Jim Igoe found that members of the Simanjiro Maasai group responded differently to the notion of conservation and the act of managing the environment in beneficial ways:

When I asked my informants...if the Maasai did conservation, they usually responded, "Of course not, why would we do anything so ridiculous?" If I asked them, however, whether they ever managed the environment in ways that were beneficial to wildlife, they often responded, "Of course, don't you see that more animals graze in areas that we burned last year than in other areas?" In short, my informants did not describe conservation as an activity, but as an alien force over which they have no control. (2004: 171-172)

In the present day, fortress conservation has also pitted many families, communities and individuals against each other - as select individuals are now working as national park and game reserve guards. The guards find themselves caught between a rock and a hard place - working for the parks provides income for their families and the possibility of promotion in status. However, these jobs mean working for institutions that previously disenfranchised their entire community - pushing them beyond park walls. Often times, park rangers are forced to threaten their community and family members, to prevent them from crossing fortress boundaries, even if it means their cattle will starve from limited grazing opportunities (Igoe, 2004). Overall, fortress conservation directly influenced the home ranges of the Maasai people and had cultural implications as well influencing livelihoods, cattle ownership, marriage practices and regional economies. This Western conservation model, within the sustainable development framework, has failed to protect local indigenous people's rights to ancestral land and ways of living, and as we'll see in the next section, has even failed the species it aims to protect.

CHAPTER III

CASE STUDY

Over the course of ten days, March 12th - 22nd, during my fourth year at the University of Maine, I had the chance to travel to Tanzania. Weeks earlier, I had enrolled in the field ecology course offered through my department - an opportunity that I had been waiting on for three years. At the start of the semester, I met once a week with my twenty classmates and two professors. We began covering the basics of Eastern Africa: where countries were located, what the ecosystems and cultures were like, how Tanzanian society functioned as a whole. Next, came introductory species identification and which families make their homes in the regions we would be traveling. I learned about customs, especially bartering at shops, the influence of tourism, and some of the larger 'hot topics' in conservation plaguing the country right now. Although I did not really know what to expect, I had this preconceived notion that Tanzania would be just like it was in pictures. The savannas would be lush and green, since we were traveling during the wet season, animals would be everywhere your eye could reach - and those animals would be wild. I felt like I was headed towards one of the last undefiled places on Earth - a sentiment I now realize was painted for me by the 'Last Eden' mentality I discussed earlier.

After flying into Kilimanjaro International Airport at night, I anxiously waited for the sun to lift the veil of darkness over the land that lacked electricity to power the

millions of lights I was used to seeing. On the morning of our first full day in Arusha, the second largest city in Tanzania, I found that I was already wishing it would be dark again. My preconceived notions of East Africa were already being shattered as we departed the Outpost Lodge on the outskirts of Arusha. I realized that I would be heavily facing the realities of fortress conservation during the entirety of my field course.

Our truck drove through the main drag of Arusha, a two lane road separated by a median containing no grass, only dirt. On both sides, the road was walled in by buildings of great length containing everything from food markets, to cafés, small dwellings and even lumber and construction supply shops. People swarmed the streets, walking with bags on their arms and containers atop their heads. Children gathered in large groups, all dressed in proper school uniforms. Troops of men on motorbikes waited for potential customers - the Tanzanian form of a taxi. Vehicles were being washed at car washes that dotted the street more frequently than in Maine, even though the country receives a fraction of the precipitation. With every movement of your eye on the ground, you rested upon old metal cans, single use plastic bottles, plastic bags, used rope and clothing, even broken toys and bald tires. When the cards lay just right, you could see Mt. Meru towering over the city in the background - eclipsed by clouds and tall inner-city trees. Arusha seemed to be overflowing with people and with litter, with seemingly no way to disperse the population or safely contain garbage.

Departing from the main road, we traveled only about ten minutes to the gates of Arusha National Park - a small 'hidden gem' only 212 square miles in size. The entrance to the park was a literal translation of the word fortress: guard stations and a small

permitting office dotted the welcome area. Guards employed by the park wore forest green military uniforms and often adjusted their machine gun's cross body strap. Entrance to the park was contingent upon the payment of fees - about \$45.00 USD per person and the signing of paperwork. As we pulled forward, our safari company guide, an older gentleman named John, began to share the challenges and implications of Arusha National Park.

The very first thing that he said brought a great sadness upon the whole vehicle: Arusha National Park may not exist by the end of our lifetimes. The urbanization and expansion of the city of Arusha has been putting extensive pressure on the park over the past few years. The population keeps growing - requiring more room for people to live, but more importantly, requiring more land for agriculture. A majority of residents maintain farming land of some sort to garner salaries and to feed their own families. Soil exhaustion is common, as most people don't have the luxury or the space to rotate crops around a series of fields.

This urban expansion has put urban residents at odds with the national park - seeing it as an overbearing government presence that is impacting their ability to live a semi-comfortable life. The people are highly excluded from the park, kept strictly on the outskirts of its boundaries - mostly due to the fact that Tanzanians cannot afford to pay the necessary fees. Citizens feel excluded from the Park and its decision making, finding themselves as natural enemies. As the urban areas of Arusha expand, Arusha National Park shrinks. An obvious change that has taken place manifests itself in the elephant, a common sight ten years ago, that has been extirpated from the park. There is no longer

sufficient area or resources for the species to exist solely within the confines of the park. In a way, the park has also failed the animals it is trying to protect. With its fortress conservation model, Arusha National Park only provides protection within its walls, allowing any animals that leave the boundaries to be put at risk. No one is really sure where the elephants have gone, if they have even made it to another protected area for that matter, or if the individuals are still alive. The people are not too concerned either, having very little vested interest in the animals that put them in constant battle with park authorities. They have no reason to protect the animals, it would almost be better if they all were killed - allowing citizens to grow more food and take care of their families. In a way, fortress conservation has pitted Arusha National Park against its neighboring citizens. Maybe, only one can be victorious.

I found myself sitting in the truck, contemplating how different the park, the people and the protection of species might be had the Western models of conservation not been used. Would the people be more concerned about species conservation and preventing habitat degradation if they had a stake in protection? If the community partnered with the park, could funding programs be set up to help citizens and achieve conservation at the same time - a sort of aid that would balance the tradeoffs? No matter the potential solutions to the problem, I found myself face-to-face with the problems of fortress conservation on the very first day.

A few days into the bulk of our trip, I experienced a head-on collision with the disenfranchisement of the Maasai people. Having briefly learned about the Maasai and their conflict with protected areas in an anthropology class the previous semester, my

mind immediately began rolling to pick up on any similarities with what I had learned. As we drove between Arusha National Park and Lake Manyara National Park, I saw the first traditional Maasai people of my life; some huddled in small groups under a tree, while many others, young and old, shepherded their mixed flocks of cows, sheep and goats. The herds ranged in size, some containing twenty members and other much larger than I had imagined; about one hundred and fifty animals under the Maasai's care. What I could not understand at the time was why animals were brought to graze right alongside the road? Why were pastoralists letting their animals eat in drainage ditches or the slopes leading down to them?

As we went, John began to present answers to the questions that had rattled around in my head: most of the Maasai that we were driving alongside belonged to populations displaced by Lake Manyara National Park at the time it was founded in 1960. Many of the Maasai remained on the outskirts of the park boundaries, trying as much as possible to remain close to the lands they had previously lived on. Over the years, a greater concentration of Maasai outside of the walls of Lake Manyara accompanied by their herds, meant an increased amount of stress on ecosystems and pastoralist lifestyles. As tribes, and in turn flocks, grew larger, these settled areas slowly degraded away. Maintaining healthy herds requires the availability of nutritionally rich grasses - all of which were now bitten down to a few centimeters above the soil. Maasai pastoralists led their herds wherever they could find grass, even if that meant coming dangerously close to the road or leading animals in drainage ditches. Limited in scope from Lake Manyara National Park as to where herds could be grazed, Maasai found that they were quickly running out of resources. Areas that had been heavily overgrazed were quickly visited

again; fragile, young grasses eaten by livestock - often taking the entire root system of the new blades as well.

Without vegetation cover, severe erosion kicked in. Soil found itself blown away by strong winds and carried off by wet season rains, leaving only rills and gullies behind. Through the truck windows, I could see entire areas that existed as vegetated savanna. Now, the gullies were so deep that I could stand at the bottom and my head would not reach ground level. The exposed and eroded soils composed much of the ground surface, with small blades of green sparsely placed. This erosion problem posed much more than a grazing issue to Maasai people, as I would later learn in a conversation with Lara Foley, a program manager for the Wildlife Conservation Society Tanzania, a national branch of the the larger Wildlife Conservation Society (WCS). The Tanzanian program of WCS has been on the ground since 1956 and officially established since 2006, working to "protect Tanzania's unique biodiversity and rich natural heritage through science, landscape level interventions, community support, species conservation, and addressing key global challenges" (Wildlife Conservation Society Tanzania, 2016). Because runoff is so extreme during rain storms, flooding becomes a massive problem for the Maasai and surrounding populations. Her testament to that came in the form of a flood several weeks before we arrived that had killed several people.

My interaction with a Maasai tribe after visiting Serengeti National Park only enhanced and highlighted the disenfranchisement people were experiencing from fortress conservation. The tribe that allowed our group to visit, like many other tourist groups, discussed the many struggles currently plaguing their villages. Unlike the older

generations before the park was established, the village has now settled into a sedentary lifestyle. Land control and Maasai occupation in regions of displacement has made nomadic lifestyles impossible. No longer do villages travel seasonally to new areas with their cattle, but rather, they live entirely within the confines of a permanent village - taking their cattle out each day to graze in the neighboring grassland. Young boys who herd the animals must now take the animals up to nine miles away from the village to even find suitable grass. Not only have their Maasai people experienced increased pressures on grazing and keeping herds, but they acknowledge that their traditional lifestyles have been drastically damaged by fortress conservation displacement.

Our lunch with Lara Foley, who I previously mentioned, at Arusha Coffee Lodge on the last day of our trip also opened my eyes up to the ways that fortress conservation had failed many species that it was trying to protect. Lara, who works with the Wildlife Conservation Society Tanzania, dove immediately into the subject of poaching. Although the elephant population has been rebounding in the park where she works, Lara shared that elephants and rhinoceros are still especially vulnerable. Many of the places where the species are protected, like game reserves and national parks that were founded on the fortress conservation model, are seeing extremely high levels of poaching - not surprisingly enough by citizens in the surrounding areas that are facing poverty and hunger due to disenfranchisement. With the high price that ivory currently yields, many individuals are willing to risk fines and imprisonment on the chance that can get away with killing an animal and removing the horn or tusks. Technology has even advanced to a point where hackers can break into online data bases full of GPS collar data points. The data is sold off to individuals who now know the exact location of the animal they are

targeting. Lara's hope is that the abolishment of the ivory trade in China will play a huge role in diminishing both supply and demand around the world. However, I find myself reflecting upon whether abolishment is going to solve the problem - are not the people still going to feel marginalized beside these parks? Are not they still going to be poverty stricken? Will they just find new ways to scrape by if ivory is no longer a suitable option? It seems that society is trying to put a bandage on the side effects of fortress conservation, without actually attempting to fix it at the roots.

The impacts of fortress conservation do not just impact the city of Arusha, but rather, fan out across the entire region we were visiting. I began to realize just how massive of a population that the National Parks must have displaced at their creation. The Maasai I was seeing had been marginalized to the outskirts of National Parks that raked in massive amounts of tourism money each year - none of which has found its way into the pockets of the neighboring indigenous people. People's livelihoods have been negatively impacted and traditional Maasai lifestyles are no longer feasible. I acknowledge the sense of guilt that was rising within me - I had long been a proponent of using national parks as a tool to protect biodiversity and species. My time in Tanzania was already proving to me that fortress conservation models were failing both the animals and Tanzanians, most whose lineage traced back thousands of years.

I do fear what is to come in the future, as Lara reiterated that there has been huge support and international pressure to establish more conservation efforts in Tanzania. Countries are worried that the loss of biodiversity and flagship species will spell the end of the tourism industry in the East African nation. To ensure that nature-based tourism

continues to thrive, bringing in valuable dollars and tourists, conservation will be encouraged. To add more to the pile, a public highway, which would connect northwest Tanzania with Dar es Salaam, has recently resurfaced after being proposed back in 2005. International players, like the United States and United Nations, in addition to many Africa conservation groups like the African Network for Animal Welfare, are becoming even more impassioned about the highway that, in Lara's words, could 'destroy the zebra and wildebeest migrations.'

CHAPTER IV

DISCUSSION

It is easy to discredit a model of conservation without offering any alternatives - it is difficult to denounce a model and provide the perfect solution. There are several different frameworks that may fix some of the problems that are inherent with fortress conservation, coming with their own set of factors that need to be considered, including: conservation with development, community-based natural resource management, bottom-up jurisdiction, and citizen-led initiatives in the form of nongovernmental organizations (Park and Allaby, 2017, Hartley, 1997, Murphree, 2001, Igoe, 2004).

Within the framework of conservation with development is the idea that conservation authorities, in this case the Tanzania National Parks Authority, maintain full control over the park and its resources while offering handouts and compensation to neighboring communities (Hartley, 1997). This type of conservation framework was implemented in Amboseli National Park in neighboring Kenya and saw that the Maasai communities received funds to create adequate water supplies and secure government services, while ranches in the area received payment to foster good relationships between owners and the parks (Western, 1994). Although this conservation framework would alleviate local citizens and Maasai tribes in Tanzania from the stresses placed on them from fortress conservation, there are implications to consider. Namely, if monetary compensation and goods are being offered, should it be understood that their value be

equal to the costs and tradeoffs of displacement, disenfranchisement and being unable to utilize the protected resources they once could (Adams & Hulme, 2001)? However, how would we even begin to measure cost of a Maasai not having access to ancestral lands? Or the cost of cattle declines, the price of grazing inconvenience or local market collapse (Brockington, 2002)? This conservation framework may help alleviate problems, but may not do so in a just enough manner.

The community-based natural resource management (CBNRM) model is focused on returning power back to the people and allowing them to have greater, more localized control of wildlife and natural resources (Park & Allaby, 2017). This framework has become increasingly popular over the years - as of 2002, over 50 national governments have given decision-making authority back to local peoples (Agrawal, 2002). Since 1990, Pretty estimates that over 500,000 locally based resource management organizations within this framework have been established (2003). Community-based conservation management reaches this high level of appeal because:

(It) link(s) the concerns of conservationists, traditional rights advocates, and political reformers, including social equity, traditional resource access and use rights, local economic development and livelihoods, alternative forms of state–community relationships, and the promise of environmental conservation. (Armitage, 2005: 704)

This conservation model, as one example, was implemented in the West African nations of Burkina Faso and the Republic of Cote D'Ivoire by a World Bank pilot West Africa community-based natural resources & wildlife management project. This program, running from 1995 to 2005, was established to "explore more decentralized and participatory approaches to rural development, natural resource management, and

biodiversity conservation, to overcome lack of capacity within central government to effectively deliver services and development support to rural areas" and "extend the conceptual scope of the CBLM approach by adding wildlife management as an alternative ecologically sustainable and economically viable land use option" (World Bank, 2005: 2). Although the program proved successful by implementing community-based natural resources programs in the West Africa nations by establishing local institutional mechanisms, influencing policies like Cote D'Ivoire's 1995 National Protected Area Management Program and the 1999 Declaration of Forest Policy, along with Burkina Faso's extension of CBNRM to wildlife and biodiversity management and their National Community-Based Land Management Project, CBNRM did not prove to be long lasting in this situation (World Bank, 2005). Based on the premise that CBRMN, in the study communities, would generate substantial income for the residents and work as an incentive for communities to commit to conservation, the program failed as sustainable income from eco-tourism was insufficient (World Bank, 2005). Although this conservation model was ineffective in supporting local communities and safeguarding large ungulate populations from poaching, CBNRM can prove successful under different circumstances and in different regions.

In addition, this conservation framework does come built on assumptions and has potential implications that may not make it a viable option. One major assumption of community-based natural resource management is the idea that local communities, individuals and organizations are closely connected to the resources that would be under their protection. Secondly, it assumes that this connection will foster sustainable resource use. Thirdly, this framework is built upon the notion that these communities have the

knowledge and understanding to do so (Armitage, 2005). A potential implication that may lend a hand to greater harm rests upon the idea that "nature and politics of participation are not straight-forward" (Brockington, 2002, Little, 1994, Songorwa, 1999). Levels of local involvement can mean different things within distinctive community-based natural resource management frameworks and problematically, communities are often understood, even assumed, to be homogenous bodies that are comprised of the same sentiments. The reality is, communities are often divided along social, ethnic, political and economic lines (Brosius et al, 1998). Like ideals in fortress conservation, Western ideals can also shape community-based natural resource management, with the belief that the process will be democratic in nature. The reality is, many African societies, especially indigenous ones, are hierarchical in nature - someone at the bottom always has a smaller voice. Power within the community-based framework can lead to decision-making being left in the hands of a few (Strum, 1994).

When it comes to the bottom-up jurisdiction model, power can be decentralized from a national governmental authority, like the Tanzania National Parks Authority, to a local authority - like rural village governing body or an elected group (Murphree, 2001). One issue within this framework that may not be considered before implementation addresses the role of the marginalized, indigenous or poor in national affairs:

It suggests that the poor are central to the operation of African states, that without their support nothing long-lasting can be achieved. But the rural poor in Africa tend to be weak and marginal to their countries' affairs. They can be and often are, ignored by their rulers. (Brockington, 2002: 10)

All in all, this framework may only be setting up disenfranchised communities to clash further with authoritative bodies.

However, with support from the national government, this conservation model can prove to be incredibly successful, just as it did South Africa's Kruger National Park. The Makuleke groups that were displaced in 1969 during the park's creation gained over 60,000 acres of land back from the country's new land restitution laws that were implemented in 1996, along with negotiations between the Makuleke, the South African national government, and the South African National Parks Board (Department of Environmental Affairs and Tourism, n.d.). These lands were located within the national park's boundaries and included some of the most fertile soil and diverse species, and were deeded with full ownership back to the indigenous. The group, within the negotiations, agreed to manage their land in a way that is compatible with wildlife conservation, and forgo overly-extractive practices like mining (Department of Environmental Affairs and Tourism, n.d). Full rights to commercialize the 60,000 acres within the park was granted to the Makuleke, and a joint board of indigenous and park officials was created to manage the wildlife. This joint bottom-up jurisdiction and community-based natural resource management model, has allowed the people to regain ownership of traditionally occupied lands, engage in community development - improving infrastructure, education and employment opportunities, and has brought millions of dollars into Kruger and the Makuleke community through tourism (Department of Environmental Affairs and Tourism, n.d). Something similar may prove fruitful for the Maasai in Tanzania's national parks, however, this option must be weighed heavily with the traditional pastoralism lifestyle difference of the Maasai.

Citizen-led initiatives in Tanzania, in the form of non-governmental organizations (NGOs), grew rapidly during the 1980s and 1990s. Following in the successful footsteps of the Pastoralists of the Highlands NGO, social movements grew out of villages and local towns - focusing their mission on specific concerns. The citizen-led initiatives directly involved local people who worked, volunteered and provided input to further their cause (Igoe, 2004). Igoe continues that these initiatives usually originated out of traditional socio-cultural institutions, which citizens could understand and connect with (2004). The downfall of this movement though, lay within the recognition and funding requirements that resulted in 'scaling up' of many initiatives into legal NGOs. Rather than operating in the context that villages and tribes had been for centuries, consensus decision making was replaced by funding cycle driven executive boards. Local elders were replaced by committees, secretaries and executive officers (Igoe, 2004). Legal accountability and object-driven funding often made it difficult for NGOs to carry out their original mission or projects. People that were involved in the initial citizen-led initiatives found themselves excluded from project planning - merely invited to participate in funder decided projects (Igoe, 2004). Often, these funders came from outside of Africa: by 1989, the European Union was supporting Tanzanian NGOs with \$600 million dollars, and Canada's International Development Agency was pledging 12% of its aid to NGOs (Igoe, 2004). Although many NGOs became incredibly successful through this movement, corruption and detachment from community became prominent for others. This great influx of money actually weakened the mobilization movement among the people: no longer were NGOs representing the "culture, aspirations, and historical experiences" of their constituents, but rather, they could throw together poorly

constructed funding applications and an admirable image and guarantee excessive funding (Igoe, 2004). Kelsall and Igoe express that this nature of Tanzanian NGOs actually goes to show that the organizations cannot be the fairy-tale cure for the multifaceted social problems plaguing the country (1998, 2004).

During my time in Tanzania, I learned of a movement towards a new model of conservation, something that seemed very unexpected to Lara Foley: the Maasai land trust movement. In some ways, this model resembles the community-based natural resource management model. However, unlike community-based natural resource management, this framework is devised and put into place by the Maasai people, rather than being implemented by a conservation organization or initiative. The Maasai land trust movement has the inherent ability to understand societal structure and limitations built into its core, allowing many fallible assumptions to be avoided. As a last ditch effort to protect themselves from further disenfranchisement, the Maasai are now utilizing legal resources to protect the lands they currently inhabit. Their biggest worry comes from encroaching agriculture, threatening to plow and plant the only remaining grazing land for cattle. The second largest concern comes from expanding conservation and what that could mean for land tenure and wildlife conflict. Already, the Maasai are facing unprecedented conflict with wildlife - prior to parks, the Maasai coexisted with wildlife by utilizing large areas of land and being highly mobile. Now, with sedentary, permanent communities, and limited grazing ranges for cattle, wildlife conflicts have been increasing and impacting Maasai herds.

Even though the Maasai do not own the land they occupy, as the national government owns all land in Tanzania, they have something called customary tenure: the right for an individual or group to occupy village land without time restriction (Charity Mugabi, 2004). This tenure, unlike statutory tenure which is granted to most non-tribal affiliated communities or individuals in the form of a deed for 33, 66, or 99 years, allows the Maasai to separate accompanying land rights like a bundle of sticks. Within the entirety of land 'ownership,' each stick represent a different right. Customary tenure allows the Maasai to legally tuck the 'zoning' right away in a desired form (Charity Mugabi, 2004). Happening right now, the tribes are making the move to ensure that their land can, legally, only be used for pastoralist activities, banning future agriculture and settlement to take place on them at any point in the future. This movement also helps prevent increased wildlife conflict that could occur from future displacement and even smaller deeded lands. Although this action honors the dignity of the Maasai and their traditional lifestyles in perpetuity, while also being compatible with wildlife conservation and habitat preservation - it will definitely cause tensions between expanding conservation areas and large scale agricultural development.

Although there is very little information regarding this movement available, several formal organizations are pursuing something like a combination of the Maasai land trust movement and community-based natural resource conservation in neighboring Kenya. Instead of being developed in the hands of the Maasai, the Big Life Foundation (BLF) and the Maasai Wilderness Conservation Trust (MWCS), are helping to implement programs in Maasai communities that decrease wildlife conflict, improve resource management, restore rangelands and ensure the permanent leasing of land. In order to

better protect highly prized herds and decrease threats to wildlife that prey on cattle, BLF and MWCS utilize compensation programs that reimburse the Maasai for lost animals. The hope is that this compensation will allow the Maasai to reestablish relationships with wildlife and to better understand species' economic value, ultimately protecting predator species like lions, hyenas, and leopards (Big Life Foundation, 2012 and Maasai Wilderness Conservation Trust, 2016). A take on the Maasai land trust movement, the Maasai Wilderness Conservation Trust is also helping the Maasai groups they are working with to secure permanent leases for large swatch of lands that will be deemed as conservancy areas. Rather than a model of conservation that disenfranchises the Maasai, this method allows the Maasai to maintain their settlements and pursue community development, while also preserving the integrity of ecosystem services and components (Maasai Wilderness Conservation Trust, 2016). Funding through MWCS's other programs provide the Maasai with monetary compensation to make lease payments over time. Since the program's founding, MWCS has "negotiated, secured and funded two such lease deals, totaling over 12,000 acres, for a key habitat reserve and a critical wetland that lies directly within the wildlife migration corridor" (Maasai Wilderness Conservation Trust, 2016). This program sheds light on the possibility that the Maasai land trust movement may prove successful in protecting permanent land tenure, while helping alleviate future wildlife and development conflicts. However, the Maasai Wilderness Conservation Trust program also highlights that adequate funding might be necessary to ensure success. At this point in time, it is uncertain at this point in time if the Maasai land trust movement will blossom into anything greater.

Even if we are able to determine a framework that achieves the sustainable development goals of the Brundtland Report and in the inclusive nature of the Indigenous and Tribal Peoples Convention of 1989, how is the decision maker determined? Does Tanzania have the right to be autonomous, to pursue self-determination? Or does the rest of the world have a justified share in defining conservation goals and plans? These questions find an answer in whether or not biodiversity loss results in global or local-level impacts.

In the instance where the products of an action have impacts that span globally, like the emission of greenhouse gases, it can be argued that international preferences and input need to be considered. However, if effects are centralized to a specific nation and essentially impact local populations, it can be said that matters should be presented on a localized platform, rather than doing so external of that society. Countries facing the impacts of actions should be allowed to make decisions on what is acceptable to them. (Godfrey and Chalmers, 2012).

As a local impact, biodiversity loss plagues the country it is focused in - impacting revenues from reduced tourism, causing the loss of local jobs, and cascading effects throughout Tanzania ecosystems. If we do consider biodiversity loss to be a local impact, then international players should not have a say in conservation planning and initiatives, or internal development projects. Allowing global institutions to influence planning or decision making, in turn, only degrades the potential legitimacy gained of a country dealing with its own concerns. Similar to other resources, species management may be effective in the short term if external actors are involved, but often effective

management can be degraded in the long term. (Godfrey and Chalmers, 2012). However, what if biodiversity loss in the case of Tanzania can be called a global impact? In this instance, biodiversity loss would mostly impact global intrinsic and bequest value systems, causing distress to citizens internationally. If these global impacts are truly justifiable and can be found to outweigh the definitive and tangible local impacts to Tanzania - then the issue should be brought to a global stage, where all interested parties have the power to guide policy and action (Godfrey and Chalmers, 2012).

Even in the wake of determining whether losses see local or global impacts, one must consider the role of the United Nations Educational, Scientific and Cultural Organization's (UNESCO) World Heritage Site Program which:

seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity... Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located (2017).

Do sites like Serengeti National Park and Ngorongoro Conservation Area, which are part of the World Heritage listing, invite international influence and power into their decision making, forgoing their autonomy when agreeing to participate in this program? Or do nations still maintain the power to make their own management decisions?

In its seventeenth session, The General Conference of the United Nations Education, Scientific and Cultural Organizations (UNESCO) met in Paris, France from October 17 to November 21, 1972. At this convention, UNESCO's goal was to adopt an innovative treaty that would establish a newer, more effective system of protecting heritage sites, built on a collective foundation that coincided with modern scientific

methods (UNESCO, 1972). In their published text, UNESCO highlights the autonomy of nations possessing heritage sites within its borders:

Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage...situated on its territory, belongs primarily to that State. (1972).

Throughout the remainder of the convention treaty, the organization highlights the fact that states have the ultimate voice in managing their cultural heritage sites, and that international assistance must be requested by the nation before it can be given. However, UNESCO does not waiver in its charge to heritage site countries, stating that a nation must "do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and cooperation, in particular, financial, artistic, scientific and technical, which it may be able to obtain" to ensure the future of its world heritage sites (UNESCO, 1972). Although nations maintain their own autonomy in overseeing their sites, being a world heritage site holder comes with responsibilities of "identification, protection, conservation, presentation and transmission" (UNESCO, 1972). In Tanzania's case, being part of this UNESCO program requires their best effort in ensuring a future for these important sites, especially if that means requesting international assistance, while still maintaining their national autonomy. However, all participants in the program have entered into this cooperative agreement with the full knowledge that "protection...is the duty of the international community as a whole to cooperate" (UNESCO, 1972). While this program sets up protections for areas of natural and cultural heritage, decision making can get very convoluted when sites like Serengeti National Park and Ngorongoro Conservation Area are facing extreme risk for biodiversity collapse.

CHAPTER V

CONCLUSION

In the 1994 Disney film, *The Lion King*, young Simba finds himself running from his home, carrying the belief that he caused the death of his father, Mufasa, king of the Pride Lands. As he spends the next years in isolation, Simba meets Rafiki, a wise mandrill elder with shamanistic abilities. He is able to read mystical signs and omens in the wind, and comes to share wisdom with Simba. When facing the terrors of his past, Rafiki provides a simple answer to Simba: " Oh, yes, the past can hurt, but the way I see it, you can either run from it or learn from it."

Although it may seem far removed, we too can listen to the advice of Rafiki - running or learning from the past, when evaluating the damage fortress conservation has had on the Maasai and species alike. Ignoring the fact that national parks, based off this Western model of protecting 'Eden,' displaced people without compensation, led to increased poverty, decimated cattle populations and local markets, only leads us to make these same mistakes again moving forward. Fortress conservation was built off the values of Western Ideology and do not take into account local indigenous culture, knowledge, management practices or relationships with the environment. If we are to fix the conservation problems that are in need of attention right now, we cannot utilize the fortress conservation framework, at the risk that we will only disenfranchise indigenous peoples further (Igoe, 2004).

Igoe warns:

Obviously there is no foolproof strategy for a system that has the weight of the Western world behind it and has been 500 years in the making. It would also be simplistic to believe that a perfect alternative could ever be achieved. While utopian thinking can easily become counterproductive, I believe that positive change begins by imaging alternatives and what they might be like. (2004)

Like he suggests, alternatives, even though they may more effectively balance biodiversity protection and the needs of human beings than the fortress conservation model, also pose risks and imbalanced benefits of their own. These benefits include insufficient monetary compensation, misunderstood hierarchical structures in society and the relationships between local and national governments, and disengaged citizen projects. Moving into the future, there does not seem to be a clear-cut solution that will solve the problem of disenfranchisement and the increased pressures on already endangered species. However, it can only help to brainstorm 'utopian' solutions that will provide for all parties, with no associated drawbacks or negative effects. This utopian thinking might start us on our journey to creating new conservation frameworks for the future.

Moving forward, we also need to consider the exact role that national parks and conservation areas play our society, and whether the potential failures of biodiversity and species protection would offer negative localized or globalized implications. It is vital that we begin the conversation of who exactly the stakeholders are in the Tanzanian conservation realm, and which of them have legitimacy in the decision making process.

In the end, there is not a clear cut-and-dry solution or a perfect model that can be utilized moving into the future. As international conservation pressure mounts against

species extinction and battling the trans-Serengeti highway, we will have to consider new ways of conservation planning that are fair and inclusive of previous and potentially disenfranchised people. This will ensure that we can achieve goals in both protecting biodiversity and honoring the dignity and ancestral lifestyles of all, while minimizing adverse effects effectively. There is also an unclear answer of who should have the final say in pressing environmental issues: autonomy is truly a thorny issue. Although Tanzania holds the power to ultimately determine its future, the world will have to collectively decide the role external nations play in conservation issues that may affect the greater good. With many parties having a vested interest in the future of indigenous people, endangered species, and fragile ecosystems, we must discover a platform where global collaboration and input can play a role in Tanzania's decision making processes. Giving a greater voice to Tanzania's citizens, especially the indigenous, to understand concerns, and giving greater power to influence decision making may help the country better understand what its conservation agenda should look like.

This thesis and its ideas are based predominantly on secondary research and my study abroad experience, with a majority of information gained from company guides, rather than from Maasai people - therefore it is limited in scope and the comprehensive understanding of conservation issues in Tanzania. Given adequate time and resources, this thesis would be expanded to include an ethnographic study of the Tanzanian Maasai and the implications that conservation, specifically national parks, have created for traditional lifestyles, local economies and younger generations.

Although this work does not offer a definitive solution to fortress conservation or who should have the final say in development projects and conservation initiatives, the hope is that it begins the conversation of what conservation should look like and where decisions should fall in Tanzania, and, in truth, in all other nations of the world, moving forward. Only then, will we be able to move towards conservation within the sustainable development framework. There is one thing that Rafiki made very clear: we must learn from our past, not run from it.

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AUTHOR'S BIOGRAPHY

Leila K. Wojtkowski Barbeau was born in Manchester, New Hampshire on October 12, 1994. She grew up in the city of Manchester before moving to the small town of Nottingham in 2014. Leila spent her four years of high school attending Western Reserve Academy, a boarding school located in Hudson, Ohio known for its brick walkways and sweeping lawns. She graduated from WRA in the spring of 2013.

A dual-degree graduate, Leila holds a B.S. in both Ecology & Environmental Sciences and Parks, Recreation & Tourism. She is the first member of her family to graduate from college.

Leila holds membership in Gamma Sigma Sigma National Service Sorority, Xi Sigma Pi, Phi Kappa Phi and Golden Key International Honour Society. She is the recipient of the Rendle A. Jones '65 and Patricia K. Jones '65 Thesis Fellowship.

After graduating in May, Leila will be preparing for her summer wedding to Aaron St. Pierre, first introduced through the Honors College, and spending the remainder of summer traveling the country on a National Parks road trip. Leila will be attending the University of Massachusetts at Amherst beginning in the fall for a M.S. degree in Sustainability Science.

This thesis earned the distinction of 'Honors.'