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# Contents

<b>1</b>	<b>Introduction .....</b>	<b>5</b>
1.1	Objective of the thesis .....	7
1.2	Inspiration for the study .....	8
<b>2</b>	<b>The field .....</b>	<b>10</b>
2.1	Switzerland: Lewa Savannah at the Zurich Zoo .....	10
2.2	Kenya .....	11
2.2.1	Lewa Wildlife Conservancy .....	12
2.2.2	The Leparua Community Conservancy .....	14
2.2.3	The Ngare Ndare Community .....	16
2.2.4	Subuiga Community .....	17
<b>3</b>	<b>Theoretical considerations .....</b>	<b>18</b>
3.1	Theoretical framework: political ecology and constructivism .....	18
3.2	Methods and data acquisition .....	20
3.2.1	Data acquisition .....	21
3.2.2	Data processing and analysis .....	24
3.3	History of the zoos and of nature conservation .....	25
3.3.1	Zoo: from exotic travel to nature conservation .....	25
3.3.2	Conservation: from the colonial rule to the protection of nature .....	29
3.4	Communities, conservation, and wilderness .....	31
3.4.1	From fortress conservation to community conservation .....	31
3.4.2	The myth of Wild Africa and pristine nature .....	33
3.4.3	Nature/culture dichotomy .....	35
3.5	Hypothesis .....	36
<b>4</b>	<b>Presentation of results and analysis .....</b>	<b>38</b>
4.1	Infrastructure analysis .....	38
4.2	Discourse analysis .....	49
4.2.1	What the zoo doesn't say .....	49
4.2.1.1	Lewa: from cattle ranch to Conservancy .....	52
4.2.2	Communities as a threat .....	53
4.2.2.1	Overgrazing .....	53
4.2.2.2	Poaching and security .....	61
4.2.3	Role of the communities .....	67
4.2.3.1	People as "the front soldier" .....	68
4.2.3.2	People as "conservationist" from past to present .....	69
4.2.3.3	The landscape of Lewa as a heritage of the Maasai .....	72
4.2.4	Pristine nature versus cultural landscape .....	74
4.2.5	Communities as beneficiaries: coexistence with wildlife .....	79
4.2.5.1	Human-animal conflicts in communities .....	81
4.2.5.2	Fences as a prohibition of access by Maasai .....	85
4.2.6	Communities as beneficiaries: projects for the communities .....	88
4.2.6.1	The example of Il Ngwesi .....	99
4.3	Potential consequences of the discourses in Kenya .....	100
<b>5</b>	<b>Interpretation of results .....</b>	<b>103</b>
5.1	Negative narrative on local communities .....	103
5.2	Non-inclusion of communities in decision-making .....	106

5.3	Contrasting points of view .....	107
6	Recommendations for future exhibitions .....	108
7	Positionality and limitations of the research.....	111
8	Conclusion .....	112
9	Acknowledgment .....	114
10	Bibliography .....	115
11	Appendix: list of interviews .....	123

# 1 Introduction

Every year, more than 700 million people of all ages visit zoo around the world (Estebanez, 2010). A visit to a zoo is an essential activity in a child's education, whether it is a school or family visit. Thus, given their high attendance, zoos therefore have collective social, political, and financial power and potential impact on many people: the messages they convey are important.

This study focuses firstly on the Zurich Zoo, one of the most visited zoos in Switzerland. In 2020, in the African part of the park, the zoo opened a new exhibition: the “Lewa Savannah”. Lewa is a place that really exists: in the Lewa Wildlife Conservancy in Kenya, a UNESCO World Heritage Site supported by the zoo since 1998 (Zoo Zurich, 2022). The exhibition in Zurich consists of a “miniature ecosystem” that gives the visitor a better picture of the Conservancy in Kenya. The visitor wanders through this reconstitution of nature and can observe typical Lewa fauna, such as white rhinos, Grevy’s zebras, hyenas, reticulated giraffes, etc. In addition, the exhibition features human infrastructure such as a barbershop, a school, and a rustic airstrip with a plane. The visitors can therefore wander through the “Lewa village” and discover a bit of its culture and, on the other side of the fence, they have a view of the savannah and its animals.

Zurich Zoo plays an important role in the Lewa Conservancy in Kenya, making annual financial contributions to support local socio-economic projects and anti-poaching teams on the ground (Savane Lewa, 2021). Today, nature conservation is an argument used to legitimize most zoos which support projects outside their borders (Joulian & Abegg, 2008). Thus, they wish to raise awareness of the importance of caring for life on earth and provide a solid platform for collecting donations for wildlife.

As we will see in this work, both the first zoological gardens and the concept of *nature conservation* spread during the colonial era from a Western perspective. Indeed, during colonization, many exotic animals were taken from their lands to be sent to Europe or the United States for diversification, research, and education: they were the first zoos. Regarding nature conservation on the African continent, many conservation areas, such as national parks were established and many communities were excluded from these areas, being considered threats to nature. But some postcolonial studies emphasize the fact that “contemporary practices of helping and supporting in North-South relations are often interwoven with colonial practices” (Purtschert, 2015: p. 5). The eviction of

communities in the name of conservation is still a matter of debate in Africa today. In 2022, in northern Tanzania, the Maasai, accused of being too numerous and disrupting wildebeest migration, are threatened with eviction from the Ngorongoro Conservation Area. According to environmental officials, because of the increasingly long dry periods, their livestock are competing with wildlife for resources. While some Maasai agree to leave, others categorically refuse to abandon their ancestral lands, on which they lived long before the creation of conservation parks (AFP, 2022). Thus, the expulsion of communities seems to continue even after the colonial era. In the exhibition of Zurich too, the Maasai community of Kenya is represented as a potential threat to Kenya's land due to its growing population and pastoralism, which is presented as erosive to the soil. However, the Lewa Conservancy speaks about the communities as the "first line of defense against poachers". On the one hand, they are demonized as a threat to conservation and on the other hand, they are essential to conservation. But what is the view of the communities themselves on these issues? While the zoo's explanations present a Western conservationist perspective of the problem, it is also important to give voice to the local Kenyan communities involved. Given the above, it is important to be aware of all the misleading stories about "others".

Despite the independence of formerly colonized countries, some myths and narratives of the colonial era have not been fully deconstructed and seem to persist in the discourses of zoo or exhibition in Western countries (Blanchard and al., 2011). Furthermore, Estebanez (2010) sees the zoo as a constructed space, a real staging or a "spatial device" that can show a window on another culture and another part of the world, which allows visitors to constitute a "geographical imaginary of Elsewhere" (Staszak, 2012: p.2). Considering these two statements and assuming that the zoo selects some information about Kenya for its exhibit, it is interesting to analyze what features the zoo decided to display in this "window". What perspective does it adopt on the communities and why? What impact do these representations have on visitors' imaginations? What is the perception of the communities in Kenya about the Lewa Conservancy? To answer these questions, the first part of this work takes place at the Zurich Zoo and the second stage is in Kenya, in the Lewa region. The objective of this work is to juxtapose the two different ways of making sense of the same conservation project: the Lewa Conservancy. What are the similarities and the differences in discourses between two geographically distant places that are talking about the same project?

The thesis starts with a review of other similar research or books that have inspired this work. Next, we will briefly describe the two research sites, the Zurich Zoo and the Lewa Conservancy as well as its surrounding communities. After presenting the methodology and the theoretical framework, we describe different technical concepts and historical facts based on literature about zoos and conservation. The second part of this work presents the results of the research: an in-depth analysis of the narratives and infrastructure of the zoo and the Conservancy in a comparative analysis. The thesis concludes with a discussion and potential improvements for future ethnographic exhibitions in a zoo.

## **1.1 Objective of the thesis**

The zoo exhibit offers a window into Kenyan culture and into a conservation project from a particular perspective. Concretely, this research work consists of a comparative analysis between what is shown and said at the Zurich Zoo about local communities and what is observed and studied in the field. For this reason, the research work and the data collection were in two different places, using the prism of Political Ecology (see chapter 3).

The first part consists of an analysis of the discourses and representations of the Lewa communities within the Zurich Zoo. It scrutinizes the explanatory panels, the infrastructures, the words used and the images that the zoo links to Kenya. How are the Lewa Conservancy and the communities around the park portrayed?

The second phase, which takes place in Kenya, will help to understand the relationship and collaboration of the Lewa Conservancy with the surrounding communities. This step will help understand the context of the Lewa region and to answer questions such as: how do local communities perceive the Lewa Conservancy? What is their role in conservation? Do they perceive benefits and disadvantages?

The final step consists of identifying similarities or differences between the Swiss and Kenyan discourses through a comparative study. The aim is to compare these different points of view from two different continents to better understand what reflection we have of each other, what patterns feed the exhibit in Zurich and where they come from. At the end, we should be able to answer to these questions: from what perspective does the Zurich Zoo present the communities around Lewa? Does it represent the views and

observations of communities on the ground? We will thus have the discourses at both ends of a globalized nature conservation project (Keller, 2015). The analysis and comparison of these perceptions will enable us to question certain dominant narratives.

This work does not pretend to judge what is right or wrong, but rather to highlight the differences in discourse between a Western and an African country around the same project, and possibly to propose points of attention for future exhibitions.

## 1.2 Inspiration for the study

Much research deals with the problems of conservation and the myths perpetuated in the discourses since the colonial era. For example, Guillaume Blanc (2020) was interested in the differences between European and African nature parks and their representation of social relationships with the environment. He relates his study in his book *The Invention of Green Colonialism* (2020). He noted that in Europe, shepherds or farmers are represented according to a discourse of adaptation: for example, in the Cévennes Park in France, agropastoralism is valued as a traditional heritage. In Africa, on the other hand, from the end of the 19th century onwards communities are considered destructive to nature. In Europe, killing wildlife is called "hunting" and is a tradition in some regions, while in Africa it is more often referred to as poaching. According to him, the West, which considers itself modern and civilized, would like to save Africa from the Africans: he calls this *green colonialism*. Furthermore, in his book, Blanc analyses the origin of the myth of the "African Eden", which presents Africa as a wild, untouched natural environment that must be protected at all costs.

The book of Eva Keller (2015) also inspired this research. She conducted a study within the Zurich Zoo on the Malagasy exhibition of "The Masoala Rainforest", an 11'000 m<sup>2</sup> hall housing more than 50 vertebrate species. This study can be found in her book *Beyond the Lens of Conservation: Malagasy and Swiss Imaginations of One Another* (2015). Keller (p.8) questioned the imagination "at both ends of a globalized Nature conservation project". While she analyzed the Zurich Hall, Keller also travelled to Madagascar to the Masaola park, to compare Swiss and Malagasy imaginations. She discovered contradictions in the representations of the local communities in the Zurich Hall. On the one hand, they are represented as living in harmony with nature, but on the other hand, the exhibition represents them as "eco-baddies" because of their "slash-and-burn" agriculture. While the



exhibition aims to raise awareness of the fragility of ecosystems in the face of deforestation, it also highlights the importance of its “educational” role in Madagascar: “Through our knowledge and our support, we here in Switzerland want to contribute to enabling the people to live without having to cut down the forest because they are hungry” (Keller, 2015: p.8). Such notions are also reminiscent of the colonial era, during which settlers who believed themselves to be more civilized wanted to “educate” the inhabitants of the countries they colonized. Her approach therefore also inspired this analysis of Lewa's exhibition.

To better understand the social and political context of this research field, I read articles on different subjects: conservation in Kenya, problems of land grabbing, commodification of wildlife, human-wildlife conflicts especially with elephants, pastoral livelihoods, etc. Samuel Weissman's article, *Discourse and entanglement in a transnational conservation arena* also helped to situate this research on the Lewa region. The author focusses on the Lewa Conservancy area and compares the ways in which conservation is conceptualized at different scales. It provides a better understanding of different stakeholders' speeches, depending on whether they are active on a local, national, or transnational level, as well as of the interests that link them to the park. For example, international conservation institutions see the Lewa lands as "pure nature" in peril, while local Maasai communities see them more as a cultural landscape managed in common property. According to him, it is important to discuss land grabbing in the name of conservation.

Finally, this thesis follows the publication of the article *Stuck in the colonial past? Perpetuating racist, environmental myths of Kenya in a Swiss zoo* (Sithole et al., 2021) which questions the representations of landscapes and communities in European zoos. The authors point out that narratives within zoos can amplify colonial narratives. They therefore visited the Lewa exhibition and propose recommendations for decolonising European zoos.

All the readings have helped establish the theoretical framework upon which this work is based, and a better understanding of the theoretical concepts presented in future chapters.

## 2 The field

As mentioned, the first data collection was carried out in Switzerland in 2021, at the Zurich Zoo. The second part consisting of data collection took place in Kenya, between February and May 2022.

### 2.1 Switzerland: Lewa Savannah at the Zurich Zoo

The Zurich Zoo, originally known as the "Zoological Garden", was opened in 1929. Today, this zoo is one of the most visited in Switzerland; it is divided into geographical regions and has more than 380 animal species from all over the world. (Zoo Zurich, 2022).

As a member of the World Association of Zoos and Aquariums, the Zurich Zoo participates in international in-situ and ex-situ breeding programs for endangered species<sup>1</sup>. It also participates in the protection of ecosystems and biodiversity in 8 regions around the world. To give visitors a better idea of the different parks with which it collaborates, the zoo has reconstructed some miniature ecosystems. For example, the zoo has exhibitions such as the "Masoala Rainforest" (Madagascar), the "Kaeng Krachen Elephant Park" (Thailand) or the "Lewa Savannah" (Kenya). Thus, the zoo attaches great importance to the conservation of species, not only on an international level, but also on a local level, by raising awareness among the zoo's mainly Swiss visitors. As a result, the zoo has been awarded the WAZA Conservation Award for its commitment to the Masoala Peninsula in Madagascar since 1995, contributing at least \$125,000 per year (Zoo Zurich, 2022).

Since 1998, Zurich Zoo has been working in partnership with the Lewa Wildlife Conservancy in Kenya. To date, Zurich Zoo has already contributed more than CHF 3.9 million to various projects in Lewa: anti-poaching projects, research, medical care, community support and better human-animal coexistence (Zoo Zurich, 2022). To increase the visibility of this project and its support, in 2020 the zoo decided to reproduce the Lewa ecosystem and to open the "Lewa Savannah" exhibition. The Lewa exhibit is located in the African area of the zoo, next to the Asian Elephant Park. When visitors arrive, they can see the equator sign, a reproduction of the same sign found in Nanyuki, a town an hour's drive from the Lewa Conservancy. Another panel informs the visitor that he has reached the "Lewa Savannah". On the one hand, the exhibition contains supposedly Kenyan

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<sup>1</sup> EAZA Deed of Amendment: <https://www.eaza.net/assets/Uploads/Governing-documents/EAZA-Constitution-English-2018.pdf>

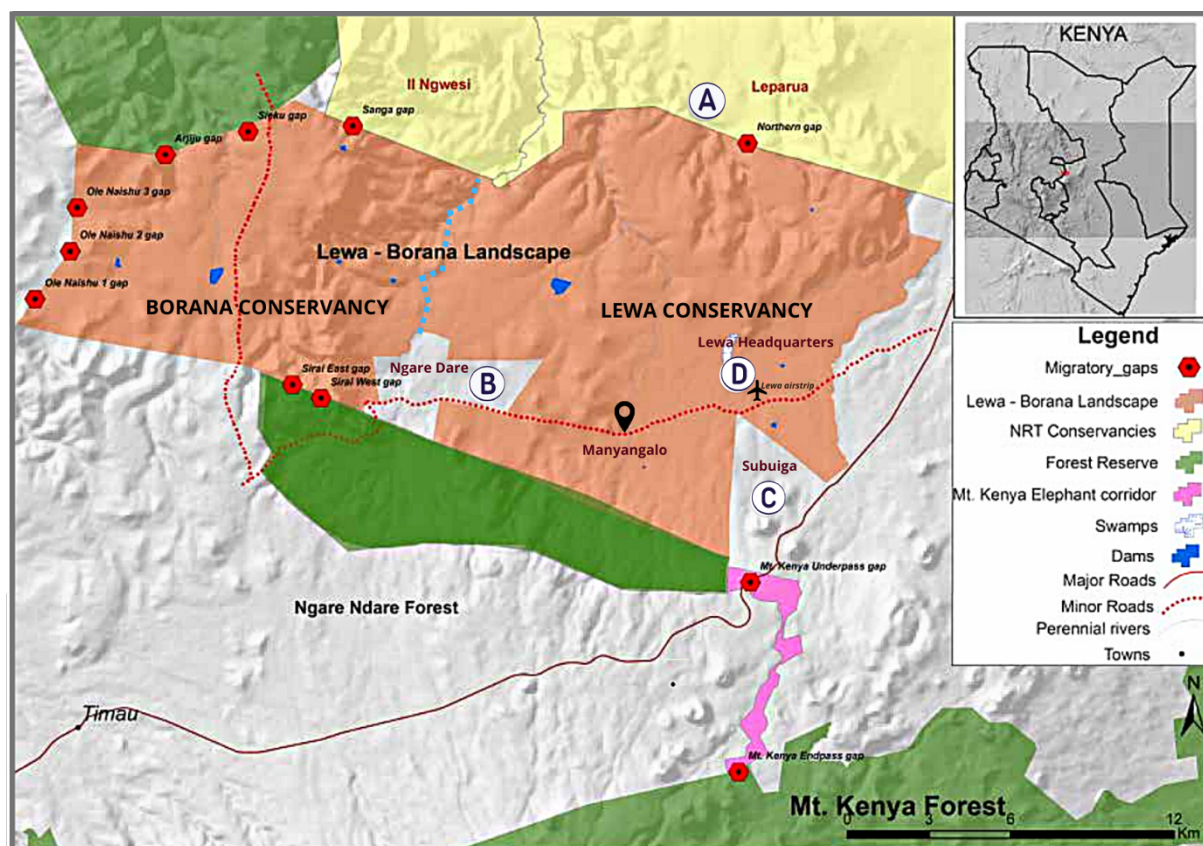
infrastructures such as a school, a barbershop, an airport and its duty-free shop, a restaurant and a giant baobab tree. The visitor can wander freely through the reconstructed village, which offers a view of a plain with Lewa animals such as white rhinos, Grevy's zebras, hyenas, reticulated giraffes, but also other species of the African savannah. A watering hole is in front of the visitors' platform so that they can observe the animals coming to drink. The exhibition contains many explanatory panels about the threats and pressure on the ecosystem and the animals of the Lewa Conservancy. They also provide details about the communities living in the area, specifically the Maasai.

We will analyze this display in more detail in a later chapter but first, it is important to know more about the ecosystem and the area reproduced in Zurich, which is the second location of this research, about 6,000 km away.

## 2.2 Kenya

My fieldwork took place at four different geographical sites, all of which are north of Mount Kenya, about a four-hour drive from Kenya's capital city Nairobi (map 1). I conducted one part at the Lewa Conservancy (D) and the other part in 3 communities around the protected area (A, B and C). This region encompasses 3 different counties: Lewa is in Meru County, Leparua is in Isiolo county and Borana is in Laikipia. Before contextualizing the sites, it is important to clarify what a conservancy is: *“a wildlife conservancy is a land managed by an individual landowner, a body or corporate, group of owners or a community for purposes of wildlife conservation and other compatible land uses to better livelihoods”* (KWCA, 2016). In this respect they are different from national parks and reserves as they are on private or community land. It is also possible to develop a tourism offer as a source of income.

## 2.2.1 Lewa Wildlife Conservancy



**Map 1 :** Research area in Northern Mount Kenya with the 4 distinct geographical sites. A: Leparua. B: Ngare Dare. C: Subuiga. D: Lewa Headquarters. The light blue dashed line represents the former boundary between the Lewa Conservancy and the Borana Conservancy, removed in 2015. (LWC, 2020, adapted by T. Ractzo)

The Lewa Wildlife Conservancy (LWC) is a private land conservancy in the foothills of Mount Kenya providing home to a wide variety of wildlife including the big five (buffaloes, rhinos, elephants, leopards and lions). On map 1, this area is colored in orange. It is called the Lewa-Borana Landscape (LBL) since 2015, as the two conservancies of Borana and Lewa decided to remove the fence between them to create a larger area for wildlife (LWC, 2020). The two conservancies together cover today approximately 37 hectares.

The LWC rises to 2,000 m a.s.l. in the south, on the slopes of Mount Kenya, and drops to 1,400m a.s.l. as you head north. It is a semi-humid climate with two main dry seasons: December to March, and June to October. The rainy season is from April to June and then between November and December. However, the climate can fluctuate, and some years are much drier which has a heavy impact on the agricultural and pastoral activities of communities in the region. There are a few small streams within Lewa whose water flow

rates vary depending on the season. The LWC is mainly savannah plains with some trees and some hills to the north.

The LWC is a fenced area with some migratory gaps for wildlife, except for rhinos; particularly endangered, these individuals cannot leave the park. Communities living around the park are therefore not allowed to enter or graze their livestock. However, a public, unpaved minor road crosses the southern part of the Conservancy from west to east and can be used by foot or motor vehicles. Along this road, in the middle of the conservancy, is a small, fenced enclave: the village of Manyangalo, whose land belongs to the community. The inhabitants can leave their village by road but are not allowed to cross the boundary into Conservancy land: the only people inside the Conservancy are employees or tourists.

LWC is connected to the Ngare Dare Forest Trust to the south, a protected forest with native species. To the north is the Leparua Community Conservancy with its communities. Finally, several villages are located on the eastern edge of the conservancy, along the A2 national road that leads to the town of Isiolo.

Lewa Conservancy is a non-profit organization which was founded in 1995 by the Craig family, owners of the land. Today, Lewa is governed by a Kenyan Board of Directors responsible for the strategic direction, governance, and fiduciary oversight of the Conservancy (LWC, 2022). Leadership is provided by the Lewa management team. Lewa Wildlife Conservancy uses a model of “community-based conservation”: the main benefits generated by animal welfare and tourism should go back to the communities in the form of development aid and improved quality of life. Thanks to this form of governance, the Conservancy has been on the IUCN (International Union for Conservation of Nature) Green List since 2018. It is a certification for area-based conservation which are governed fairly, sustainably and with a good conservation record (IUCN, 2016). Furthermore, the Conservancy is part of the UNESCO Mount Kenya World Heritage Site since 2013.

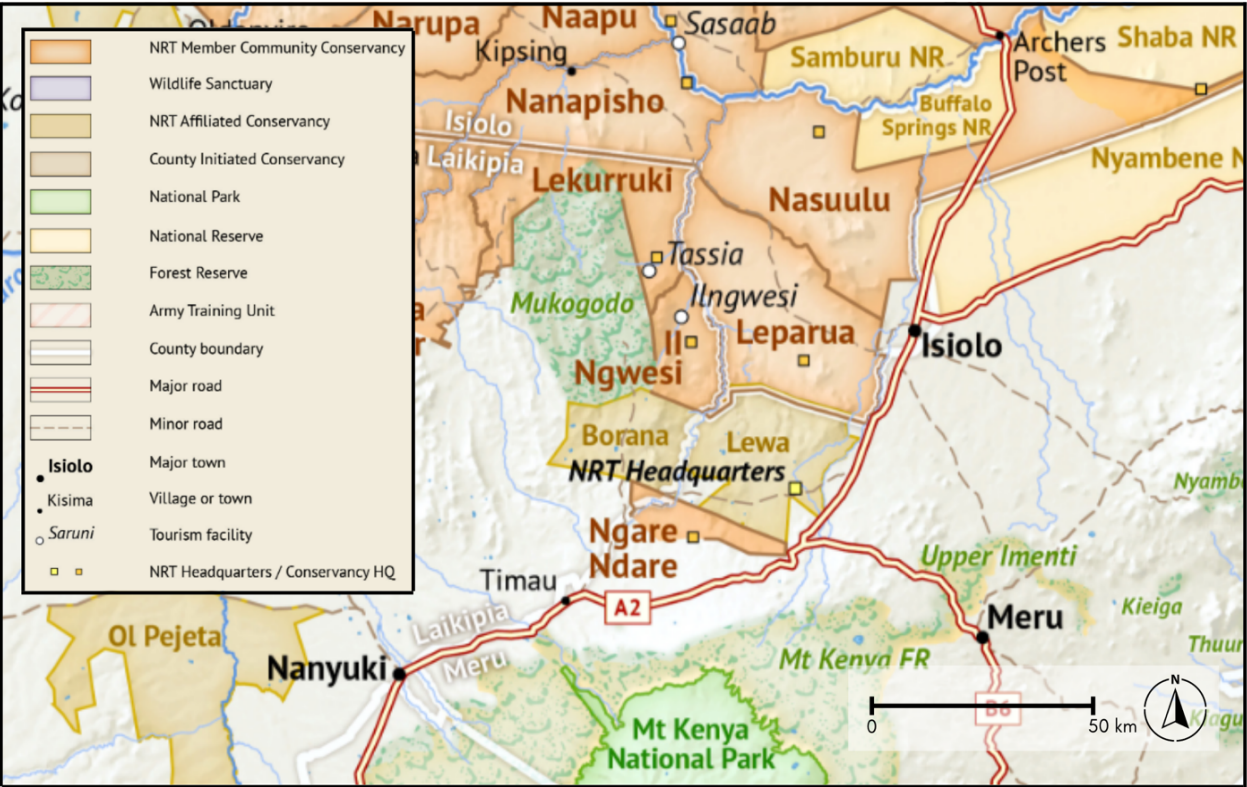
## 2.2.2 The Leparua Community Conservancy



**Figure 1:** view on the valley of Leparua and its village with some agricultural fields on the edge of the Leparua river. In the background, the barrier of Lewa defining the borders of the Conservancy. (Picture by T. Raetzo).

The Leparua Community Conservancy, founded in 2011, begins at the northern edge of the LWC (map 1 and figure 1) and is home to 5 separate communities (Samburu, Tukarna, Somali, Borana and Maasai), but my fieldwork focused solely on the Massai community of about 2,500 people living directly beyond the LWC barrier. The land has not been recognized and the inhabitants have no land title. The 5 communities live in the Conservancy but no official boundaries or recognition of ownership exist between them. It is a hillier, rockier and more arid land with many trees and shrubs. Two rivers run through Leparua and have their source within the LWC and on Mount Kenya. The sparse settlements are spread over the two valleys of Leparua and Ntalaban. The people are predominantly pastoralist and rely on cattle for their livelihoods as well as on small-scale farming for subsistence. There is only one unpaved dirt road to reach the Maasai village of Leparua from the town of Isiolo, which takes about 45 minutes by motorbike; this is the least accessible of the three communities I visited, and there was no cellphone network.

As mentioned above, Leparua is a community conservancy, which is why communities live on this land. This conservancy is not fenced and is a member of the Northern Rangelands Trust (NRT), a local membership institution which helps the communities to establish conservancies and to enhance people’s lives (NRT, 2022). Globally, 43 conservancies are members of the NRT, whose objectives are to preserve wildlife as well as grassland and forest upon which livelihoods depend (map 2). The area covered by the NRT is 4.9 million ha, which is roughly equivalent to the area of Switzerland. The NRT's headquarters are at Lewa headquarters, but each community conservancy has its own elected broad. NRT rangers are expected to commute into the conservancy for the safety of both wildlife and residents: elephants can sometimes be dangerous to humans or raid their fields at night.



**Map 2 :** map which represents a part of the NRT member conservancies. Lewa and Borana are private affiliated conservancies. The other conservancies continue beyond this map to the north. (NRT, 2022, adapted by the T. Raetz)

### 2.2.3 The Ngare Ndare Community

The Ngare Ndare community lives in a fully fenced enclave between the Ngare Ndare Forest and the Lewa and Borana conservancies, where they can not go (map 1). Because of its history, it is a more cosmopolitan community: the houses are denser, and the inhabitants come from different ethnic groups, though during this fieldwork I met mainly Maasai. The inhabitants each have land titles where they live. The climate in Ngare Ndare is cooler, as it is situated at a higher altitude. In addition, the vegetation is lush due to the Ngare Ndare River running through the village, so besides having cattle, Maasai also practice farming and gardening.

Residents can cross southern Lewa or Ngare Ndare Forest to the nearby town of Timau via a minor public unpaved road: however, they cannot leave this road which has barriers on both sides.

Ngare Ndare Forest, next to the community, is also part of the NRT as is the Leparua Conservancy, to ensure the conservation of the indigenous trees, the rich biodiversity and the water resources. Members of the community cannot live inside the Ngare Ndare Forest, they have at least user rights: for example, they are allowed to collect dead wood (without cutting branches) or to graze their cattle during the day; they enter the forest through a gate and must leave at night (figure 2) (Ngare Dare Forest Trust, 2022).



**Figure 2:** The photo on the left is a view of the village of Ngare Dare. The photo on the right represents the gate between the village and the forest. A shepherd returns with his cattle to the village before the night. (Picture by T. Raetzo).



## 2.2.4 Subuiga Community



**Figure 3:** view of the community of Subuiga in the foreground, with its hill. The A2 national road run right in front of this hill to reach Isiolo (Picture by T. Raetz).

The community of Subuiga is located at the south-eastern edge of the LWC along its border (figure 3). It differs from the other two communities in that it is easily accessible via the A2 national major road, at the junction between the three towns of Nanyuki, Meru and Isiolo. The inhabitants each have land titles where they live. The climate is similar to that of Ngare Dare but slightly drier, as there are no watercourses but only tanks, which I will mention in the next chapters. I met people there who identify mainly with the Meru ethnic group. Many of them come from Meru town and have bought a piece of land in Subuiga to live on. While they sometimes have a few chickens, cows, goats or sheep, their main activity remains small-scale farming, as access to the road facilitates trade. You will find below a summary table with the main characteristics of the 3 communities.

	Subuiga	Leparua	Ngare Ndare
<b>County</b>	Meru County	Isiolo County	Straddling the Meru and Laikipia County border
<b>Land ownership</b>	Inhabitant has a land title for his land	The community has no land rights and lives here informally, it is a Community Conservancy with 5 different communities, I worked with Leparua community at the border of the LWC	Inhabitant has a land title for his land
<b>Ethnic group</b>	Mainly Meru	Only Maasai	Cosmopolitan community (Kikuyu, Merien etc.) but only Maasai interviewed
<b>Main livelihood</b>	Small-scale farming, some livestock, other work	Pastoralism, small-scale farming	Pastoralism, small-scale farming
<b>Access to the community</b>	Very good access to the major road	A small dirt road from Isiolo Town, poor access	Medium access through a dirt minor road accessible by motorbike and car

We will now review the theoretical framework used in this work to better understand under which angle the data was analyzed.

### **3 Theoretical considerations**

#### **3.1 Theoretical framework: political ecology and constructivism**

Some people will never have the opportunity in their lifetime to travel to East Africa or other continents. They form an imagery of the region based on their experiences, the discourses they hear about it, the museums or the exhibits they visit, the depictions they might see in documentaries etc. This imagery is called a mental schema, a concept formulated in 1943 by psychologist Kenneth Craik and later taken up by others in the field (Thevenot & Perret, 2009). According to him, humans develop mental patterns to understand and anticipate the world around them. Schemas are built up in the brain from childhood and are influenced by knowledge, experience and even by small inputs such as a photograph, movies, books etc. Although the patterns are often unconscious, it is what we consider typical and therefore expect from a phenomenon or a place (Thevenot & Perret, 2009). Thus, a schema is a “generic version of the world built up from experience and stored in memory” that, once established, stays relatively stable (Keller, 2015: p. 64). For example, the famous cartoon “The Lion King”, based on stereotypes of eastern Africa, fuels the ideal of a savannah full of wild animals, with no trace of any humans (Robbins, 2013). And this is just one of many examples that occur in early childhood. Throughout their lives, humans are constantly exposed to representations of other countries, discourses, exhibitions, travel guides, which help them to form a mental map. Thus, even people who have never been to Kenya can have a mental image of the country based on their life experience. From a psychological framework, an exhibition such as the Lewa Savannah at Zurich Zoo has an impact on the visitors' imagination and beliefs (Thevenot & Perret, 2009). Since a zoo feeds a collective imagination, it is important to analyze the discourses it carries.

The analysis of this work will use Political Ecology, an approach which includes the fields of development, environment, geography, and anthropology (Benjaminsen & Svarstad, 2009). Political ecology scholarship often argues that dominant ideas and truths about the environment influence political decisions and actions. Thus, the environment is “shaped” by political decisions, and these political decisions are influenced by the

discourses conveyed, such as scientific discourses. For example, a forest is not just a neutral natural feature, but depending on how it is viewed, very different political decisions can be made, to preserve it, or not (Robbins, 2020). In the next chapter, we will see that during the colonial era, declinist scientific theories about communities in Africa combined with the idea of a pristine nature led politicians to create large unmanned protected areas. Depending on which words are used, the decision will not be the same. Thus, “political ecologists commonly argue that the environment we take for granted is actually constructed” (Robbins, 2013: p. 135). As said, discourses are important because they influence political decisions and environment, it is therefore necessary to ask how they are constructed. I will use a Foucauldian view of constructivism.

Foucault was a twentieth century philosopher whose theories are often mobilized in Political Ecology. One of them, Constructivism, can be summarized as follows: the truth we usually take for granted without questioning it is an effect of power and discourses and is therefore constructed (Robbins, 2013). The discourses conveyed are those of the institutions that control our social systems and of groups that have the most power. Indeed, powerful groups are more likely to communicate their interpretation of nature than others. For example, while scientific discourses are deemed credible and will be published in journals, local pastoralist discourses and knowledge are passed on informally from generation to generation, according to practices, but will hardly have any influence on a larger scale (Robbins, 2013). Everyone has their own truth about nature, but one will be passed on more than the other and can potentially become a hegemonic discourse. All ideas and concepts are born in a particular social, historical, or political context and can therefore be questionable (Robbins, 2020). Political Ecology and the constructivist approach allow us to explore situated discourses and knowledge. It offers a framework for recognizing the place of power in discourses about conservation and makes us aware of the importance of discourse deconstruction.

Attended by thousands of visitors each year, zoos can be considered as powerful and influential institutions. They also contribute to scientific research on conservation, have a high legitimacy in the eyes of the public and have an educational role (EAZA, European Association of Zoos and Aquaria, 2018). Thus, as we will see in the next chapter, many theories of conservation were born during the colonial era, a very specific context, and remain in the discourse today. All these discourses, then constructed in a very particular

historical context, continue to feed the mental schemes of visitors today. According to Pascal Janovjak, author of the book "The Zoo of Rome", zoos are precisely a staging of our myths and symbols of nature.

Estebanez researched the geography of zoos and their infrastructures (2010). He sees the zoo as a constructed space, a staging from the elsewhere that he describes as a "spatial device", inspired by a Foucauldian vision: the zoo materially inscribes distinct power relations and norms in a specific space. In conclusion, for this research work I will define the zoo according to constructivist approach of Estebanez<sup>2</sup> as a

"Model of division of the living and the situated world (produced essentially in the West), globalized (this division was disseminated in zoos all over the world, especially during colonization) but which takes on the traits of the universal (by never being presented, nor questioned as a situated model)." (2010: p. 174)

This master's thesis uses the political ecology approach deconstructing discourse; a rigorous analysis of texts and the interpretations they imply will be used to better understand how particular truths are constituted, what impact it has on the mental patterns of visitors, who has the most power and what picture it paints of Lewa communities. The next chapter will explain how the theoretical framework was used empirically for this work.

### **3.2 Methods and data acquisition**

This chapter describes the methodology and the different stages of this Master's thesis in order to clarify how the research object was studied. The aim is to explain in a concrete way how and according to which methods the data was collected and then analyzed. In social sciences, there are several methods for conducting research and it is necessary to choose the most adapted one to the research objectives (Aktouf, 2006). As mentioned above, the data collection was done on two different geographical sites. The aim of the research was to obtain qualitative data to do a content analysis as well as a comparative analysis.

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<sup>2</sup> Translated from French to English by the author: "modèle de découpage du vivant et du monde situé (produit essentiellement en Occident), mondialisé (ce découpage a été diffusé dans les zoos du monde entier, surtout durant la colonisation) mais qui prend les traits de l'universel (en étant jamais présenté, ni interrogé comme un modèle situé »

The first step before collecting data is to carry out an exploratory phase to delimit the research theme and to have a clear and well-established theoretical framework (Jones et al., 2000). To this end, I used the documentalist method, which consists of consulting documents specific to the subject of the research such as books, articles, study reports and films (Aktouf, 2006). This preparatory stage allowed me to gain a deeper understanding of the subject of this work, to plan my field research and to determine my approaches.

### **3.2.1 Data acquisition**

For the first part of the data collection, I visited the "Lewa Savannah" exhibit at Zurich Zoo in May 2021. Since the aim of my research is to compare the discourses in the zoo with the data obtained in the field, I examined all the explanatory signs and photographed the infrastructure. To answer my question, I was mainly interested in texts and infrastructures concerning communities. Certain themes emerged from these texts and I transcribed all the discourses under different themes such as 'role of communities in conservation', 'benefits to communities', 'safety of Lewa', 'poaching' etc. This thematic database allows me to compare the discourses of the zoo with the field data and guided me in the further work in Kenya.

For the second part of the data collection, I travelled to Kenya to investigate the different themes presented in the zoo. Considering the terrain, the time available and the planned study, it was decided to combine two social science methods, namely participant observation complemented by informal, unstructured and semi-structured interviews. The combination of these methods not only provides data, but also helps to capture the contextual, cultural and symbolic meaning surrounding the data (Aktouf, 2006).

Participant observation is an "unstructured interactive method for studying people as they go about their daily routines and activities" (Puri, 2011: p. 85) (Puri, 2011). Often used by anthropologists, this method requires living and immersing oneself in the community under study to better apprehend the field context on the one hand, and to establish a relationship of trust on the other. It is used to collect information about the activities of one or more people, their way of life, the social processes that bind them and their view of the world. Moreover, Jacobs (1970) states that it is the only method in the social sciences that makes it possible to grasp the meaning of the phenomena observed and to understand the meanings of the data collected.

All notes, interactions, observations, conversations, and diagrams were recorded in a detailed field notebook, which also documents the activities carried out during the day to keep a written record for data analysis. These notes can be supplemented with photographs, audio, video and drawings (Jones et al., 2000). For example, when the activities went on during the day and I did not have time to take notes, I made long voice recordings in the evening describing my day and the interesting facts. Alongside the field notebook, I kept a daily diary with my thoughts, feelings and judgements in a spirit of introspection to give more meaning to the data collected.

During my stay in Kenya, I visited 3 different communities around Lewa Conservancy. I spent about 4 weeks in Leparua (non-consecutive), 6 days in Ngare Dare and 3 days in Subuiga. I also spent a day at the Conservancy and went on 2 guided tours of the Ngare Dare Forest.

I chose to start with Leparua community for several reasons. First, it is the oldest community in this region, established before colonialism, therefore providing relevant historical aspects. Secondly, they live near the Lewa fences and therefore have interactions with the Conservancy which has built infrastructures for the community. Thirdly, it is a pastoralist and agricultural community and I could learn more about the overgrazing problems presented in the Zurich Zoo. I was lucky enough to stay with Wilson Lemillion Lerantilly, a community member who acted as a translator and guide, with a wealth of knowledge about conservation. In general, all the local people speak and understand English which allowed me to interact with them. However, Wilson would step in and translate when the person spoke only the Ma language or Kiswahili. It was also Wilson who put me in touch with the other communities in Ngare Dare and Subuiga. Ngare Ndare is cosmopolitan with many ethnicities, but I stayed with a Maasai family. Finally, in Subuiga, I met mainly Meru people and I had another translator for the Meru language.

I participated in cultural activities, ceremonies, church services, political meetings or small-scale farming activities. Because of my female gender, among the Maasai I also helped with cooking, housework and participated in some discussion groups.

Participatory observation was complemented by about 50 interviews with different actors, always with the help of Wilson or my other translator. The interview is “an oral, face-to-face relationship between two people, one of whom conveys information to the other on a predetermined subject” (Aktouf, 2006: p. 87), allowing for a deeper

understanding of certain aspects observed in the field and of how a situation is interpreted by the people involved. The difference between the three categories of interviews (informal, structured and semi-structured) lies in the degree of freedom left to the respondent. An informal interview is more like a discussion around a central theme, whereas a semi-structured interview will address more detailed questions in a specific order, still leaving some spontaneity to the respondent. The researcher retains control over the discussion to lead the informant towards the research objectives. In contrast, the informal interview is a free and spontaneous discussion found in everyday life that does not respond to any order of questions. These interview methods allow a lot of flexibility, and the researcher is free to choose how and when to ask the questions.

To have the most representative sample possible, the surveyed population is composed of actors from different geographical, economic, and social backgrounds, which must be considered. Lejeune (2017: p.212) insists that "discourse analysis postulates that any text contains traces of its context of production"<sup>3</sup>. Therefore, I have always taken into account the person's gender, age, level of education and, in the Kenyan context, the ethnicity with which they identify. To analyze different perspectives on conservation, I interviewed people living in the communities bordering the Lewa Conservancy, but also people working in the protected area. At the beginning of the discussion, the photos of the Zurich Zoo exhibition were shown to the interviewees, to get their opinion of these photos to see if they were representative of the situation. However, very few people understood the question: they did not necessarily know what a zoo or an exhibition was in Europe, and whether these facilities were real or not. Therefore, places were visited in the field and photographed to make a comparative analysis of the facilities.

As we shall see, the fieldwork is taking place in an area where ethnic or political conflicts can break out, especially as 2022 was an election year in Kenya. On two occasions, it was forbidden to visit certain places because of clashes between communities. The climate was also tense because of the lack of rain and therefore of resources for livelihoods. Thus, in such a context, the qualitative data collected can be sensitive as it involves personal data on political opinions, social and ethnic relations as well as life difficulties. The investigator therefore has a responsibility towards the participants of his survey and their safety (Roca i Escoda, 2020). The whole methodology of this research was therefore

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<sup>3</sup> Translated from French to English by the author

guided by ethical issues. All interviewees were anonymized so that no link could be made with any person. This work made it possible to give a voice to people who have less power than some of the big institutions rooted in Kenya and in this sense are more vulnerable people who need to be protected. Thus, before each interview, the purpose of the research was explained in detail to the interviewee, and their consent to participate was clearly defined. In fact, before one interview, we had to explain at length to the interviewee that his name would not be used; the interviewee admitted to being afraid of the reprisals he might suffer if he shared out information. His words supported the importance of anonymity in this region. Secondly, almost all the structured and semi-structured interviews were recorded, except when more sensitive issues such as poaching were discussed. All oral data recorded during the interviews were then transcribed into 'verbatim' form to provide qualitative data for analysis, but always anonymized, using numbers instead of names. Finally, regarding the return of the results, this work will be sent to Kenya to the community of Leparua, to CETRAD (Centre for Training and Integrated Research in ASAL Development), the institution that affiliated this work and the Lewa Conservancy (Roca i Escoda, 2020)

### **3.2.2 Data processing and analysis**

The final part of the work is based on the processing, analysis and interpretation of qualitative data to answer the research question. This is a delicate task which consists of interrogating the data and sorting it to understand what it is responding to. The first step is a coding phase. The researcher classifies the relevant data into different categories by theme in order to facilitate their analysis (Lejeune, 2017). The data for this work consists of all interview transcripts, field observations, discourses and visual representations within the Zurich Zoo.

Finally, once the coding stage was completed, I analysed and interpreted the data to highlight its meaning and draw final conclusions. In the first instance, I conducted a qualitative content analysis. I therefore looked in depth at the different speeches, drawing out general opinions, themes, concepts and unexpected facts (Aktouf, 2006). In a second step, I carried out a comparative analysis of these discourses according to whether they came from the communities, the Lewa Conservancy actors or the Zurich Zoo. Grouping and coding the data on general themes facilitates the comparison: for example, I grouped



all the discourses on 'the benefits of conservation' and was able to compare the zoo's view with that of the Maasai.

However, before proceeding to the presentation of the results, it is necessary to clarify some aspects and thematic concepts.

### **3.3 History of the zoos and of nature conservation**

“Historical analyses are ultimately necessary to shed light on the moments of invention or transformation that fix what appear to be timeless concepts to historical moments of political and economic change” (Robbins, 2020: p. 132)

This chapter is based on a literature review traces the history of the invention of zoos and conservation. Understanding where certain concepts originated and the context in which they were developed allows for a better understanding of current discourses.

#### **3.3.1 Zoo: from exotic travel to nature conservation**

According to Malamud (1998), a visit to a zoo is an essential activity in a child's education, whether it is a school or family visit. Where does this interest come from and how has the role of zoos evolved over time?

Already in ancient Egypt, certain wild animals such as lions, vultures or crocodiles were kept in special areas because they were considered sacred. The Romans used certain mammals (tigers, lions, bears, etc.) for entertainment purposes in circuses to fight each other (Universalis, 2022). In the 16th century, royal courts and aristocratic collectors had menageries of exotic animals as a sign of power as well as private cabinets named “cabinets of curiosity” (Blanchard et al., 2011). These are rooms where inanimate objects are stacked on top of each other, as well as stuffed plants or animals that are considered rare and unusual, or even marvelous, brought back and collected during exploratory expeditions; these places constitute the founding elements of classification and taxonomy (Brisebarre, 1998).

From the beginning of the colonial era, in the 19th century, several European cities such as London, Berlin and Antwerp opened "zoological gardens" which became public: the animals, often exotic and wild, were exhibited in cages and lined up in parks reminiscent of the inventory logic of curiosity cabinets (Chavot, 1996). At that time, zoological gardens had two founding principles. Firstly, they fulfilled an educational function for the

population: they allowed visitors to admire unknown species that had previously only been accessible to a minority of colonial and exploratory elites. Secondly, they allow scientists to improve their knowledge. Indeed, since they are confronted with species from all over the world, scientists are very interested in the hierarchy and classification of living things. Thus, zoos are like "an encyclopedia whose pages you turn as you move from cage to cage"<sup>4</sup> (Servais, 2012: p. 631); however they have many veterinary problems and many animals die.

In the mid-19th century, the naturalist Charles Darwin wrote about the theory of evolution<sup>5</sup>. From then on, the idea of a kinship between the great apes and humans was increasingly accepted; anthropologists analyzed the anatomy of humans using craniometry and cephalometry. Between 1840 and 1860, scientists began to classify modern humans according to physical, moral, historical and cultural characteristics, and according to their geographical origin, in order to determine which of them is closer to the ape (Patou-Mathis, 2013). The "civilized man", mainly European, was considered superior and was classified at the top of the hierarchy, while the "savage", often the "black races" were at the bottom. They reinforce the concept of "race" which was "used to divide humanity into different species, leading to the emergence of a new doctrine, racism, an ideology that inferiorizes the foreigner, the distant Other"<sup>6</sup> (Patou-Mathis, 2013: p. 32). When, in addition to exotic animals, zoos begin to exhibit humans of different origins alongside animal cages, scientific racism becomes ordinary and popular racism (Blanchard et al., 2011). In human zoos, for example, African villages were recreated and people were exhibited: they were separated from visitors by barriers and live in pens that are staged as their natural habitat. Records show that food could be thrown to children. Visitors could watch the natives in traditional dress performing cultural dances and shows. In addition, women who were exposed often appeared topless in a Western society that was very prudish at the time. Thus, this accentuated the creation of otherness between Western women and the "others", non-Western and "without morals"

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<sup>4</sup> translated from French to English by the author

<sup>5</sup> Charles Darwin's concept of evolution was first presented in his book *The Origin of Species* in 1859. He argues that living species are in perpetual transformation over time: generations change genetically and morphologically. These changes are due to mutations and then selection: it is the organisms that are the best adapted to their environment that survive and reproduce. These writings challenge the paradigm of creationism and revolutionize the scientific world and will open the debate on the origins of Man (Patou-Mathis, 2013).

<sup>6</sup> Translated from French to English by the author

(Blanchard et al., 2011). The 1889 Paris World's Fair featured 400 indigenous people, attracting an estimated 28 million visitors (Staff, 2014).

Although many authors agree that human exhibits and racial devices disappeared around the time of the First World War, such exhibitions remained in Switzerland until 1950; according to Putschert (2015), the fact that Switzerland never had an official colony explains why it kept such exhibitions until the middle of the twentieth century, without adopting a decolonization approach. Moreover, the Zurich Zoo organized an exhibition of indigenous people in 1935, hosting a group of 65 Kabyles (from Algeria) presenting their customs (Zoo Zurich, 2022). Although it is difficult to count the total number of visitors to all these exhibitions, circus and shows, it is estimated to be over one billion worldwide over a century (Blanchard et al., 2011). Thus, through their high attendance and educational function, one can ask what impact zoos had on the Western collective imagination.

First, zoos and scientific theories have fed a common Western imagination: *a geographical imaginary of the elsewhere*<sup>7</sup> (IGA), as opposed to the *here* (Staszak, 2012). This IGA is made up of all the representations transmitted to a common group and often stereotyped. During the industrial revolution, zoos show visitors an "elsewhere" that is still preserved and wild. Human zoos also assumed a polarisation of the world: on one side of the fence were the white, civilized people *here* and on the other the exotic, wild, distant exhibits from *elsewhere*. The problem with these exhibitions was that visitors often did not realize that the communities presented were merely actors performing dances or customs (Blanchard & Victor-Pujebet, 2019).

Secondly, Western countries used zoos to show their domination of other races and to justify their colonization policies; they wanted to civilize indigenous populations. In this sense, the zoos of the 19th and first half of the 20th century could be seen as the 'showcases' of colonialism, helping to promote an imperialist ideology (Brisebarre, 1998). Human zoos have thus forged a popular racism and crystallized a barrier between the "civilized" and the "savage", between the "modern" and the "archaic". According to Blanchard et al (2011: p. 54), these distinctions are still relevant, and their deconstruction is not fully completed today. Thus, Western sensibilities towards nature have evolved

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<sup>7</sup> Translated from French to English by the author. In French: "Imaginaire géographique de l'Ailleurs" (IGA)

over the last two centuries. The study of the political, historical, social, and cultural evolution of zoos allows us to better understand the Westerners' view of the "Other".

At the beginning of the 20th century, scientists warned of the decline in biodiversity and several public movements questioned the respect of zoos for the animals and the conditions in which they live (Brisebarre, 1998). As a result, zoos are increasingly taking into account the well-being of the animals: they reconstitute the original biotopes and the species are sometimes kept in semi-free areas (Chavot, 1996). Global ecological awareness has given zoos a new argument for their usefulness: the conservation and reintroduction of endangered species into the wild. Zoos had a pioneering role in conservation as they have moved from a purely recreational role to integrating scientific research into their programme. For example, New York's famous Bronx Zoo, first known as the New York Zoological Park, was founded in 1899 precisely to promote the study and preservation of wildlife (WCS, 2022). It was under the impetus of the New York Zoological Society, then founded in 1895, that the park was opened: this society still exists today as the Wildlife Conservation Society (WCS). Thus, the history of conservation revolves around Western zoos, which gradually became platforms for scientific research and wildlife preservation.

Today, in its Deed of Amendment, the European Association of Zoos and Aquaria (EAZA, 2018: p. 3) defines zoos as "Permanent establishments open to and administered for the public where animals of wild species are kept to promote in situ nature conservation, through the provision of education, information and recreation and the facilitation of research". With more than 700 million visitors annually, they have a strong educational role and create a "culture of conservation" (WAZA, 2015: p. 13). Then, zoos support field-conservation efforts financially with the funds they raise: they are the third largest funder of conservation. Zoos participate in protection and conservation research which is fundamental to better understand the dynamic and behavior of wildlife. Finally, in addition to their key role in education and conservation, zoos have public credibility: they therefore have a responsibility to communicate accurately and fairly within their exhibitions. These roles and responsibilities are guided by several standards and strategies of the WAZA, thus World Zoo and Aquarium Conservation Strategy (EAZA, 2016).

### **3.3.2 Conservation: from the colonial rule to the protection of nature**

The role of zoos has therefore evolved over time: they were linked to movements of colonialism in the past, but nowadays, they are responding to the threat to biodiversity with a commitment to species conservation. To better understand the links between zoo institutions and conservation parks, it is also essential to look at the history of conservation.

The first environmental movements had their roots in the mid-19th century (Billé & Chabason, 2007). In Western countries, the industrial revolution and the increasing exploitation of natural resources revealed the fragility of nature in an alarming way. Yellowstone National Park is the world's first national park, founded in 1872 and promoted by the preservationist movement founded by John Muir: it supports the importance of protecting and preserving the “wilderness” from human activity (Oravec, 1981). This movement assumes that nature is necessary for the renewal of human life, but that people should not settle there. In Switzerland, interest in the wilderness of the Alps was growing, and in 1914 the first and only national park was established in the Engadine: the primary objective was to maintain this area in a "pristine" state (Billé & Chabason, 2007). Even then, the main tool of the new nature protection policies was the creation of protected areas.

The end of the 19th century also marked the time when the great European powers shared a large part of the African continent: this was the period of colonization. Kenya was colonized by the United Kingdom, a subject that will be developed in more detail later. Upon arrival, the settlers appropriated land to make it productive. They extracted and produced resources to enrich themselves and support industrialization in Europe (Domínguez & Luoma, 2020). Between 1850 and 1920, forest clearance was five times higher than in the previous century and Europeans had plans to expand agriculture for which zoological gardens were important. Regarding wildlife, at the end of the 19th century, European and African hunters killed 65,000 elephants per year, notably for the ivory trade (Blanc, 2020). In addition, during the expansion of the railways, the workers were often fed from the nearby hunt.

At the beginning of the 20th century, Europeans became aware of the degradation of the African continent. A new approach developed in the colonies of European countries:

nature conservation became scientific and went beyond aesthetic and artistic objectives (Billé & Chabason, 2007). A conference on the conservation of African species was held in London in 1900: the aim was to protect large mammals and bird species. The first conservation strategies were put in place, in response to American ideological influences: large territories and reserves previously dedicated to hunting were transformed into national parks or nature reserves, where all human exploitation was prohibited. Surveillance systems were set up and access to the parks was limited to a few privileged people: hunting safaris, tourism, and scientific research (Blanc, 2020). Thus, the arrival of the settlers imposed first a vision of intensive exploitation, then of strict preservation of nature. At that time, many African animals were sent to Western zoos through a commercial supply chain in order to be studied, preserved, and exhibited; this was the beginning of the role of zoos in conservation. The first actor in the supply chain is the hunter capturing the wild animals, which are then placed in local transit menageries to undergo quarantine and become accustomed to captivity before being shipped to Europe. This is often a "scientific mission" for doing research about wildlife (Bondaz, 2020).

As scientists became more interested in conservation, new institutions were created, like the IUCN in 1948: it inventoried and categorized protected areas. In June 1960, in Warsaw, the IUCN launched the "Special Project for Africa", the final phase of which was to send ecologists into the field to help governments while preserving their natural resources (Blanc, 2020). The second half of the 20th century was marked by the development of numerous international conventions for the protection of nature. The concept of "protected areas" became part of international law and the Convention on Biological Diversity was signed in Rio in 1992 (Billé & Chabason, 2007). All these environmental conservation movements emerged in response to a decline in biodiversity as early as the mid-19th century.

Thus, the World Association of Zoos and Aquariums defines *conservation* as the action of securing populations of species in their natural habitat over the long term (WAZA, 2015). Today, the creation of protected areas has positive effects and has proven to be effective, particularly in the protection of large fauna and birds, both in Europe and in Africa. For example, in Kenya, the establishment of protected areas combined with a ban on trade in ivory, furs and rhino horns contributed to the protection of elephants, rhinos and big cats' population, while in other countries they have disappeared (Billé & Chabason, 2007).

However, despite their effectiveness on wildlife to date, strict protected areas as a conservation tool remain controversial when it comes to local communities and their integration into conservation projects, as we will see in the following chapter.

### **3.4 Communities, conservation, and wilderness**

#### **3.4.1 From fortress conservation to community conservation**

Since the emergence of environmental movements, conservation policies have evolved, both in Africa and in Europe. Their impact on local communities is nevertheless still perceptible today, since some protected areas are located on ancestral lands that belonged to communities in the past. The purpose of this chapter is not to diminish the value of strict protected areas, but to trace the history of conservation, in order to better understand the Kenyan context thereafter.

Before colonialism, indigenous communities generally used land for the collective good, without formally defined boundaries. The Europeans then imported the notion of private land ownership and started to exploit the land they now owned. Then came the prevailing view of conservation within the African colonies: it is known as “fortress conservation”. This model assumes that natural resources are being used destructively and irrationally and that defense-based conservation is needed: the natural environment must be protected from human intrusion and disturbance. Its policy is based on three principles. Firstly, no human habitation or exploitation is allowed. Secondly, the borders of these parks are guarded by rangers to ensure that no one crosses the fence. Finally, only tourists or scientists are allowed to enter. Therefore, places are protected and the inhabitants are excluded, because traditional practices, habits and customs are blamed and considered harmful for the environment. For example, slash-and-burn farming or subsistence hunting, which have been practiced for centuries by local communities, are prohibited and punishable by fines and prison sentences. On the one hand we have militarized protected areas and on the other hand local people are perceived as criminals, poachers or squatters. Domínguez and Luoma (2020: p.5) summarize this period as follows:

“This brought about early attempts by colonizers to preserve indigenous lands – notwithstanding the fact that indigenous peoples have been conserving their own traditional territories for centuries prior to European contact. Yet the ideology that emerged was that nature was something that should be first exploited, then

preserved, but all without the input, involvement or participation of indigenous populations”.

Many local communities are affected by the establishment of protected areas in their living space: the number of people driven from African protected areas in the 20th century is estimated to be at least 1 million (Blanc, 2020).

However, from the second half of the 20th century, under the influence of emancipatory ideas of the time, this elitist ecological vision became less and less accepted (Billé & Chabason, 2007) as it was accused of neglecting the fundamental rights of local communities. In consequence, the conservation paradigm is evolving and is more and more interested in community development. The protected areas are run with social and economic objectives for the surrounding communities. For example, in 1968, in its *Man and the Biosphere* programme, UNESCO proposed planning for the rational use of natural resources by communities. Henceforth, the reserves are divided into three zones: a protected zone, a buffer zone, and a sustainable development zone (Billé & Chabason, 2007). The buffer zone is situated outside a protected area and people have the right to live and benefit from resources but in a way that respects nature and provides a habitat for wildlife. This concept aimed to encourage a more community-friendly approach than the exclusions of the past (Butt, 2016). In the 1980s, a new holistic approach was created with a direct involvement and participation of communities: this is called “Community-based conservation” (CBC) (Murphee, 2000). This governance model is meant to include communities in the decision-making and planning of the protected area. Unlike in the past, socio-cultural practices and indigenous knowledge are no longer ignored. Finally, at the fourth World Parks Congress in Caracas, the IUCN President recognized the importance of local people by saying that if protected areas did not support them, then they simply could not last (Brockington, 2004).

Nature conservation and the governance of its protected areas has therefore evolved over time to better respect the rights of people. However, in 2016, less than 5% of protected areas are managed by indigenous groups and local communities (Blanc, 2020). Some protected areas involve communities in projects such as education or development programs, but they have no decision-making power. Even today, conservation practices continue to cause forced exodus in developing countries. An exclusive ideology seems to



remain, which could be explained, among other things, by the perpetuation of a myth, that of the African Eden and its pristine nature.

### 3.4.2 The myth of Wild Africa and pristine nature

Guillaume Blanc (2020) traces the construction of a myth, which he calls the *Myth of the African Eden*. He evokes all the consequences that this myth has had on Western imaginations and conservation policies, while noting that it is still present in the current discourse.

During the colonial era, Europeans described the African continent as a heaven for wild fauna and flora, an original Eden with untouched primary forests. This imagery thus contrasts central areas such as Europe and the USA whose landscapes are “ravaged” by humans, with the politico-economic peripheries, such as Africa or tropical Asia, which are home to an original nature (Robbins, 2013). These discourses have been fueled by travelogues, stories, or exhibitions like the zoos where the wilderness symbolizes a sacred place. In one of his speeches in 1909, Franklin D. Roosevelt defined the African continent as a “vast garden” (Blanc, 2020: p. 56).

There is another reason why some territories were “empty” during the colonial era: epidemics (Hymas et al., 2021). Historians have long reported that human encroachment or transition into new environments results in the subsequent appearance of new diseases. For example, the viral disease rinderpest appeared in Africa when the British imported cattle into Egypt from India in 1868 and then into Eritrea (Ford, 1971). Despite numerous attempts to stop the spread of the disease, it spread rapidly in East Africa with a mortality rate of 90%. Ruminant fauna (eland, wildebeest, buffalo, giraffe etc.) were also affected. Thus, these epidemics condemned human populations and their pastoral and agricultural livelihoods, also leading to famines. Without livestock and grazing, some grassy savannahs have become dense thickets and more wooded areas, providing a favorable ecosystem for the development of the tsetse fly, which is responsible for trypanosomiasis, a disease also called “sleeping sickness” that kills livestock and humans. Ford (1971) studied the role of this fly in shaping the environment and ecology. The chain of these diseases reduced the size of the human population and their livestock, which moved away from these areas. In the Lewa region, in the early 20th century, the British were losing many cattle to disease (Breed, 2011). At that time, many reserves were

created on what was considered virgin and uninhabited land, which later became protected areas (Hymas et al., 2021). Thus, many of Africa's great national parks, such as the Serengeti, Maasai Mara or Tsavo, are the result of a history of disease that slowed down human activity at the end of the 19th century. In the 1940s and 1950s, the colonial administrations launched vaccinations of cattle against the disease and pastoralists wanted to return to these areas, feeling that they were out of danger. This territorial return led to numerous conflicts between environmentalists who had transformed large areas into nature parks and pastoralists who claimed these territories. The epidemics that led to "empty" regions therefore reinforced the myths of virgin and wild landscapes without humans.

With the beginning of the conservationist movements, institutions wanted to preserve this "pristine and untouched" nature, feeding the "fortress conservation" approach mentioned above. To this end, Western experts were sent on missions to better understand and conserve species. At that time, scientists began to accuse Africans of destroying nature. For example, they developed the theory of "primary forests": French botanists studied trees in West Africa and discovered thin forest belts surrounding certain villages. They therefore wrongly deduced that the people had destroyed the once dense forest that covered the savannah; the single remaining trees were proof of the damage caused by the Africans. On the contrary, it was humans who planted these trees. When they needed land, they burned some trees; the soil was covered with ashes and fertilised. The more people there are, the more forests there are (Fairhead & Leach, 1996). According to another theory, scientists believe that agropastoralism is at the origin of the great African desert because of soil erosion. These declinist and misinterpretation-based theories spread rapidly, not least because of the "network texts"; scientists relied on the reports of their colleagues (Blanc, 2020). During the colonial era, the discourse of scientists was taken as true and fed into environmental policies. Thus, "colonial beliefs have been turned into scientific truths", because "only science can bridge the gap between myth and reality" (Blanc, 2020 : p. 95 et p. 128). Scientific discourses condition the decisions and measures taken by engineers, who move populations by rationalizing land use. This is a concrete example of the theoretical framework developed above. The people and institutions with the most power are spreading a discourse and will have an impact on the environment through their decisions.

Even after the colonial era, the myth of the African wilderness continued to influence Western imaginations and discourses. How has it persisted over time?

After Independence, many unemployed colonial administrators became park rangers in conservation parks and joined local institutions, as was the case for many British people in Kenya after its independence in 1963. They are committed to and fight for the protection of what they call "Pleistocene Africa": they want to restore the original state of the continent, before the arrival of man and agriculture, i.e. a pristine and untouched nature. Forty years later, in 2001, this opinion does not seem to have changed and these former European rangers express themselves as follows (Blanc, 2020 : p. 79):

"This Pleistocene Africa that we have so much appreciated and tried to preserve, but which is no more. It was an impossible dream".

Thus, long after independence, some Europeans continue to believe in these declinist theories and want to see Africa emptied of its inhabitants. Today, these views are still maintained by nature magazines, documentary reports that only show wildlife, and films. This is the case of the cartoon "Madagascar", released in 2005. It features animals from the Central Park Zoo who end up on the island of Madagascar to find "the wild". Once again, many wild animals are featured in a rainforest without humans. Although these are only films, they nevertheless feed the imagination and a mental schema of a wild Africa without humans, early in children's education.

According to Pascal Janovjak, author of the book "The Zoo of Rome", zoos are precisely a staging of our myths and symbols of nature. He thinks that the ecological crisis would have led us to a sacralization of the nature that we represent within the zoos, which feed this discourse of a "lost paradise". They put in scene a wild and original nature that man would not have damaged (Raboud, Thierry, 2020). Thus, various factors during the colonial era nurtured the myth of a wild and untouched Africa where the inhabitants were not recognised. It does not seem to be fully deconstructed but perpetuated today. This brings us to the next concept, the dichotomy between nature and culture.

### **3.4.3 Nature/culture dichotomy**

As we saw in a precedent chapter, in the mid-19<sup>th</sup> century, the naturalist Charles Darwin developed the theory of the evolution of species. Before him, natural scientists such as Humboldt or Lamarck had already begun to classify species into different categories.

These scientists progressively made science prevail over religion (Descola, 2001). Progressively, the human being was no longer considered a creation of God but was placed among the other species. At that time, we began to distinguish humankind and all its creations as culture, and the rest of the species as nature. In this, zoos have reinforced this dichotomy by separating by a barrier the wild world and the Western culture. The human did not see himself as an integral part of nature, but he saw nature as a place apart, mysterious, and essential to his well-being. On the contrary, other more traditional societies around the world have a more holistic vision of nature and consider themselves to be a part of it; there is no precise separation between culture and nature. Besides, in most African languages, there is no specific word for "nature". For example, in Ethiopia they say "Täfätro" which means "what is created" (Kelbessa, 2022).

Thus, historically, the Western vision separates nature from culture, and sees the African continent as the shelter of an intact nature. The 2019 UNESCO heritage list is a testament to this naturalizing vision of the African continent: Europe was home to half of the world's cultural heritage, 414 sites, while Africa has barely 54. On the other hand, Africa is home to a quarter of the Earth's natural heritage (Blanc, 2020).

However, at present, this Western distinction between nature and culture tends to crumble, since, in the age of climate change, mankind is becoming aware of its impact on the environment and can no longer consider it as a separate sphere. The future of society is linked to the evolution of natural environments and nature is impacted by this society. Scientific articles assert that the dichotomy between nature and culture is no longer relevant: the two are intimately linked and interdependent (Descola, 2001). Yet, this distinction goes back hundreds of years and remains ingrained in people's mind.

### **3.5 Hypothesis**

The visit to the Lewa Savanna exhibition as well as the study of existing literature allow us to establish hypotheses on which this research work is based. Studies have shown that Western exhibitions often tend to represent indigenous populations, the "others", as different, apart, and less modern. This tendency to represent "the other" in this way is inherited from the colonial era and sometimes persists today. Taking these considerations into account, the present work is based on the following three assumptions.

First, both in its rhetoric and infrastructure, the Zurich Zoo tends to portray communities in Kenya as non-modern and threatening to biodiversity. By placing them as beneficiaries of conservation, it minimizes the negative impacts that communities may experience.

Secondly, the Lewa Conservancy in Kenya as well as the surrounding communities hold a different position. Communities seem to be integrated and have a role in conservation for it to be effective.

Finally, there is a lack of coherence between the representation in Zurich and in Kenya.

The second part of this work focuses on the presentation of the results and their analysis.

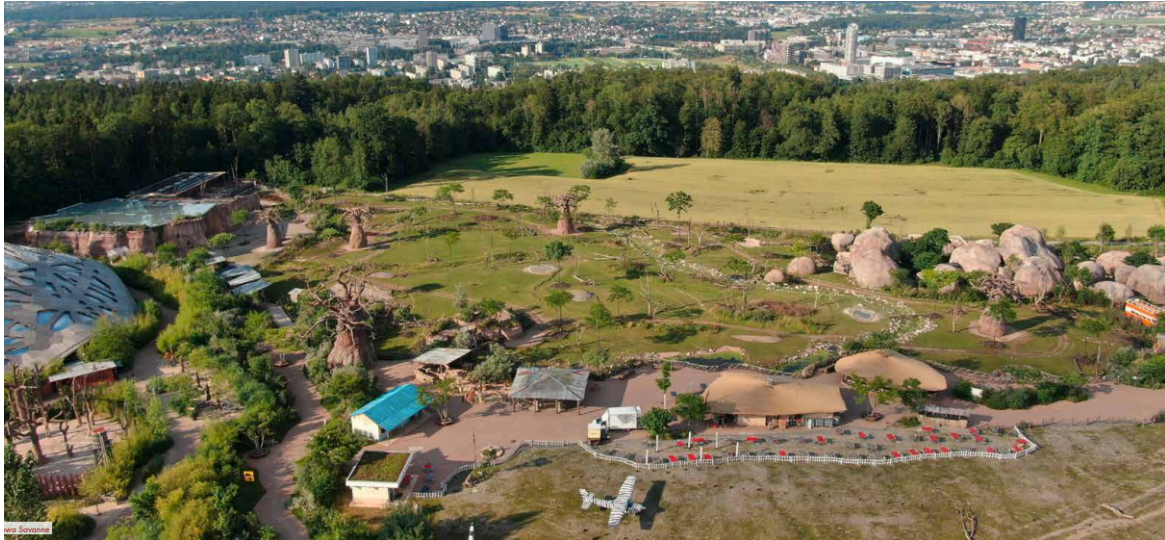
## **4 Presentation of results and analysis**

This chapter of the work consists of presenting and analyzing the results of the study. The first part consists of a comparative analysis of the infrastructures presented in the Lewa exhibition in Zurich with those observed in Kenya in the Lewa Conservancy area. The second part is a comparative discourse analysis between what is written in the zoo and the accounts and testimonies of the communities and the Conservancy. In this way, this part allows for a better understanding of the gap between the different narratives. Finally, the third chapter discusses some potential consequences of the zoo's discourses on the conservation model in Kenya.

### **4.1 Infrastructure analysis**

The zoo is divided into geographical regions which visitors can explore freely with the help of a map. The WAZA have discovered that visitors and donors' support increases dramatically if they understand the connection with conservation in the wild (WAZA, 2015: p. 12). It was with this in mind that the Zurich Zoo created the Lewa Savannah. According to an employee of the Lewa Conservancy in Kenya, the Zurich exhibit reassures donors and visitors that their financial contribution supports a real, specific place in Kenya (Interview 34, 2022).

The Lewa exhibition is in the African part of the zoo. The visitor first arrives in the Simien Mountains, which represent Ethiopia, and then descends to Lewa. When arriving in the Kenyan region, visitors are greeted by a sign that tells them they are crossing the equator line. This same sign exists in the town of Nanyuki in Kenya, an hour's drive south of the Lewa Conservancy. Then there is the Lewa "community" village on one side, with a large baobab tree, and below that, an animal park for visitors to observe (fig 5).



**Figure 5:** Lewa's exhibition from the air. In the foreground we can see the buildings of the "Lewa community" and in the background the park with large baobabs that have a system to distribute food to the animals (Zoo Zurich, 2022)

Next to the animal park, the zoo has created an “authentic scenography of a village in the Kenyan savannah”: the Lewa Village (Zoo Zurich, 2022). Visitors can wander through the place and see a school, a hairdresser, and a small airport with duty free and a replica of Grzimek's Serengeti plane, which we will discuss in a later chapter. At the entrance to the village, the school wall reads "Lewa Community School".

As we saw at the beginning of this work, there are many different communities around the Conservancy which also belong to different tribes whose customs may vary. Thus, the community or village “Lewa” does not exist in Kenya, Lewa being the name of the Conservancy with a lot of people living around the boundaries, but they are not “Lewa people”; each village or community has its own name.

In the reproduction of the Kenyan savannah village, the zoo has placed a village school: “The Lewa Community School” is written on the wall (fig 6). The school was placed there to remind us of the zoo's commitment not only to nature conservation, but also to socio-cultural projects. Above all, as will be seen in the discourse analysis, Zurich Zoo places great importance on improving the education of children. The schools are platforms to pass on the values of conservation and coexistence to future generations. The presence of this school in the Lewa village makes visitors aware of the importance of this education for the success of conservation (Zoo Zurich, 2022). But all the justifications and explanations for the school are available on the Zoo's website and not on signs visible to visitors.

The interior of the building is rustic with wooden desks and computers for the students (fig 6). Against the walls there are drawings for learning and bottles of alcohol with messages to prevent alcoholism in relation to tourism. Finally, the positive and negative points of ecotourism are written against the blackboard at the back of the classroom to raise awareness. Inside the school, the visitor can also watch a film on the computer: it introduces the Conservancy in Kenya by showing the protected animals and giving further explanations about conservation and wilderness of Africa but no message about the communities.



**Figure 6:** The Lewa "community" school at Zurich Zoo. (Picture by T. Raetz).

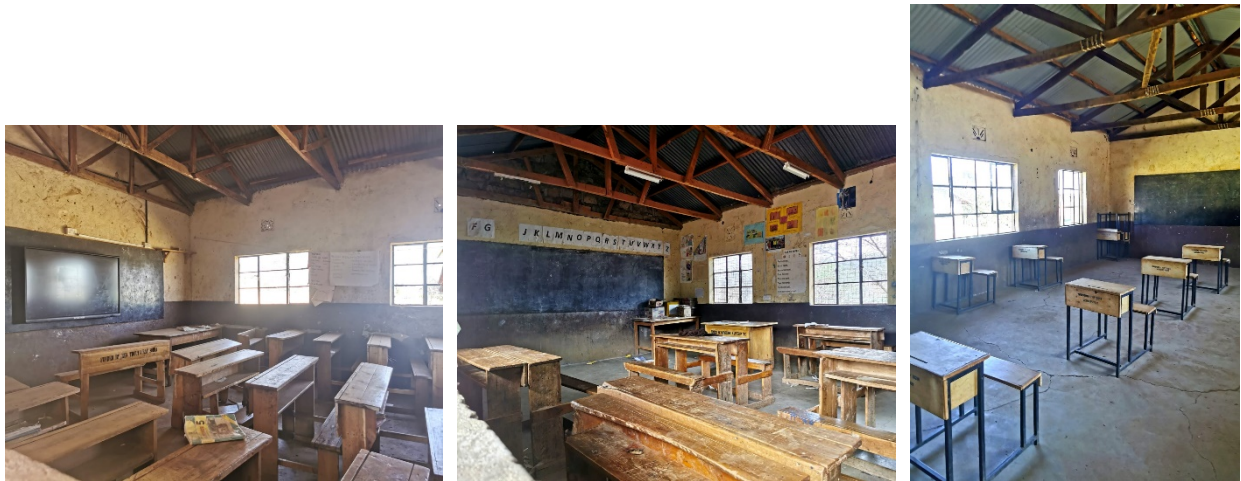
In Kenya, various schools were visited around the Conservancy, all supported by Lewa and its donors: the Primary school of "Lewa Downs" in Manyangalo, the Primary school of Subuiga and the Primary school of Leparua. All infrastructure built or financed by the Conservancy has a green roof and is therefore easily identifiable. In general, the address and the name of the school are written on the front of the school. If a classroom has been funded by a Lewa donor, there is a plaque against the wall with the Conservancy logo and the names of the donors. Finally, the schools are on one floor and the classrooms are usually lined up next to each other (fig 7). The exterior of the Zurich Zoo School looks very similar to the schools visited around the LWC, except that the Zoo School has a blue roof and not a green one.





**Figure 7:** On the left, the entrance to Lewa Downs Primary School, in the center a sign with the names of the donors and on the right, Subuiga Primary School. (Picture by T. Raetzo).

As far as the interior of the classrooms is concerned, the reproduction of the Zurich Zoo is very faithful to reality. In the community's school, the desks are also made of wood and each classroom has a blackboard (fig 8). Some classrooms have "smartscreens": the rooms equipped with these technological screens can be used by all the students who rotate through the classes. Tablets, computers and books were not visible in the classrooms. All the technological equipment or books offered by Lewa and its education programme is stored in the digital technology centers or in the Library next to the school.



**Figure 8:** The photos on the left and right are of classes in Subuiga with a smartscreen and the centre photo was taken in Leparua. (Picture by T. Raetzo).

The architecture of the Zurich Zoo school is very similar to that found in the Lewa Conservancy area. However, the Zoo does not show the technology available to the students through the Conservancy and therefore projects a less modern vision: the visitor does not know that the children have access to this technology.

In its discourse, Zurich Zoo states that the school consists of only one class because children of all ages are mixed and attend classes together. This does not correspond to reality, as primary schools always had several classes, and the children are separated according to grades. Sometimes the ages of children can vary within the same class as children are sent to school by their parents and may start later in their childhood. However, the school system is structured according to grades until a final examination: not all children in a village are in the same classroom.

Finally, Kenya is an unequal country and the differences in education are clearly visible: the most remote and arid regions have poor educational conditions while the cities have better schools (Panara, 2021). It is also for this reason that the Conservancy has founded its own Education Programme by building new infrastructures and providing better conditions for the children, especially by introducing them to technology (LWC, 2022).

For example, on seeing pictures of the Zurich Zoo School, a respondent living in Nanyuki City said:

“The school from outside it seems similar. But I think children don’t seat on those old banks. Oh, and why they put some alcohol inside? [Explanation that it is for prevention]. Ah, but we don’t have alcohol in school. Yeah, maybe we had schools like that but in the 80” (Interview 38)

Also, this urban respondent did not seem aware that some schools in more remote villages look like this. A resident of Kenya's capital, Nairobi, was visiting his family in Ngare Ndare, and on seeing photos of the zoo, he said:

“If you go to the city, in Nairobi anyway, the school is not like that. These are the schools in the more remote areas” (Interview 16).

The "Lewa school" at Zurich Zoo is very realistic, both inside and out, even if the messages it conveys are not necessarily true to life, such as the fact that all the children in the village attend the same class. However, it is necessary to understand that these schools are built by the Conservancy because this is a remote and arid region and the government does not provide quality educational conditions there.

Back in the zoo, opposite the Lewa school, there is a reconstruction of a hairdressing salon. The building is very colorful with faces drawn on the walls. The visitor can look inside: there are pictures of a football team and many pictures with faces and haircut

models. There is an old radio, hair extensions and a seat that is supposed to be for the customer (fig 9).



**Figure 9:** The hair salon/barbershop in the Lewa Village at Zurich Zoo. On the right is the interior of the salon. (Picture by T. Raetzo).

The exhibition at Zurich Zoo does not give the visitor any explanation of the hair salon. The visitor can simply observe the installation, but there is no explanatory panel to question or justify the presence of this infrastructure. Through this infrastructure, the exhibition offers a window into the culture of "Kenyan villages" (Zoo Zurich, 2022). According to the Zoo's website, hair salons are places for social encounters, especially when the women have their hair braided, which takes time and leads to "deep discussions".

If we look at the infrastructure itself, the "traditional" hairdressing salons is very similar to what can be found in Kenya in the Lewa area. As the figure shows, the buildings are often small and very colourful (fig 10). Furthermore, the beauty shop also has model faces in front of the door on the wall. The interior of these buildings also resembles the one shown in the exhibition. However, I did not manage to photograph a salon in the communities studied. Often, in the village, women helped each other with the braids. According to a Lewa employee, the hair salon is represented in the zoo to show that thanks to the micro-credit the conservancy offers to women in the communities, they can set up their own business (Interview 33). Often, they develop small-scale farming or open

their own hair salon. In this way, the salon shows the impact of the conservancy on the surrounding communities. However, in the exhibition itself, there are no signs that make this link and justify the presence of this infrastructure.



**Figure 10:** These three photos were taken in Nanyuki. On the left is a pharmacy and a "typical" local café. In the centre, an m-pesa shop and on the right, a beauty shop. (Picture by T. Raetzo).

In the Zoo, next to the barber shop, in the same building, the visitor can visit the "Lewa Airstrip". This is a small airport with a dirt runway, a zebra plane, a duty-free shop with wild animal bones for sale and an office which the visitor can enter. Inside this office there are different maps of the area and different objects stored (fig 11). Among these objects, the visitor can see a red wire telephone on the desk, a computer and a small Kenyan flag.



**Figure 11:** On the left, the zebra plane on the runway of the Lewa exhibition. On the right, the interior of the airport. (Picture by T. Raetzo).

In Kenya, many Conservancies have their own airport. As I also observed at Il Ngwesi (Conservancy next to Lewa) and Maasai Mara (national park in the south of Kenya), the runways are often strips of land where trees have been removed or grass cut. Indeed, the distances between the different parks are often great and tourists travel by small propeller plane from one park to another. Thus, the airstrip of the Lewa exhibition in Zurich is very similar to what can be seen in the Conservancies of Kenya and even in Lewa (Figure 12).



**Figure 12:** photos of the runway at the Lewa Conservancy airport (Worldwide Elevation Finder, 2022).

However, the depiction of the rather old-fashioned landline phone contrasts with the observed reality. During the fieldwork, almost everyone had a cell phone with which it is even possible to pay through M-PESA. It is a mobile money service and the largest fintech platform in the region. This application allows payments to be made for both people with and without bank accounts. Thus, during the research field, everything was paid through this technological and highly secure means of payment, which has existed since 2007. In fact, this mobile banking service was introduced in Kenya long before it arrived in Switzerland (Iman, 2018).

Next to the airport there is a large camp with military-colored tents and a fire pit. Indeed, a sign of the exhibition tells visitors that there is the possibility of experiencing a safari in "original Kenyan safari tents" (explanatory sign of the zoo) (figure 13). Indeed, after the zoo closes, visitors can go on a safari inside the park and then sleep in the camp tents to live the "safari experience" (zoo explanatory panel).



**Figure 13:** safari camp set up within the Zurich exhibition. (Picture by T. Raetzo).

The safari experience presented at Zurich Zoo is not at all the same as that offered by the Lewa Conservancy. Together, Lewa and Borana offer 10 different and luxurious accommodations. For example, to stay at Lewa Safari Camp (figure 14), you will have to pay 1,834 Swiss francs per night for a standard tent and 2,945 Swiss francs per night for a family tent (prices as of October 2, 2022) (LWC, 2022). This price includes only the meal and overnight stay at the camp, plus about 150 Swiss francs per person for park fees and a certain amount if the client wishes to do a game drive to see the wildlife. The Lewa and Borana Conservancies also have large luxury homes or lodges with pools and views.



**Figure 14:** The tent offered by Lewa Safari camp as well as the outdoor pool (Elewana Lewa Safari Camp, 2022)

The Lewa is a private and very exclusive Conservancy and unlike Ol Pejeta Conservancy or Massai Mara, it is not possible to do a day game drive inside the park. To access the park, visitors must stay overnight in one of the accommodations. Thus, Conservancy safaris are only frequented by luxury tourists. It is in this Conservancy that Prince William proposed Kate Middleton in October 2010. The Lewa Conservancy has strong links with the royal family of England, since it was here that Elizabeth was when she learned that she became Queen of England (Foley, 2015). Thus, the rustic tents presented at Zurich Zoo do not represent the standing of Lewa, a private and exclusive conservancy reserved for an elite.

Finally, inside the Lewa village is a huge baobab tree, reconstructed from artificial stones. It is presented as one of the most characteristic and typical trees in Africa (explanatory panel). Other baobabs are placed in the animal park and recreate an "African" landscape. In reality, in the area of the Lewa Conservancy, there are no baobab trees as it is not a suitable climate. We can observe more arid plains or forests like Ngare Ndare with shrubs or acacia, but no baobab trees.

In its exhibition, Zurich Zoo has tried to accurately depict the landscape of the Lewa Conservancy. A Lewa employee explained the presence of the infrastructure as follows:

“It is like to create a story because it’s an exhibit. You can find this infrastructure in reality here. And the money they get with the entrance or other things comes back to support conservation. So we support communities program, this is what the zoo says with the barbershop, we also support conservation, that is what they show with the animals. Also we support a school or bursaries, so you have a school to show that [...]. So the idea was showing the way of engaging communities to conservation, bringing up development to communities.” (Interview 33).

The Conservancy employee, working in the field, seems to have a clear idea of the purpose of the exhibition. What about the Swiss visitor who has never visited Kenya? Does he make the connection between a barbershop and the conservation project since there is no indication of this in the zoo? The infrastructures sit in one place, as if suspended in time, but there is no explanation for their presence: each visitor is free to interpret them according to his or her own schemas, knowledge, and myths, which are then reinforced or not. The exhibition offers a window into the traditional culture of the Lewa region, but

the Western culture of the visitors remains a point of reference for judging African knowledge and ways of life.

Furthermore, given the historical and racist context of human zoos, one may question the legitimacy of such facilities in a zoo designed to house animals. The history of these human zoos is not so distant in time. In 1994, the French village of Port-Saint-Père and its theme park on the African Safari were the subject of a controversy (Cazzola, 2022). The director of the park had an Ivorian village built by workers who had come specially from the Ivory Coast. This village was intended to host Ivorian craftsmen, dancers and musicians, who were exhibited in traditional dress to entertain visitors: they danced (the women topless) and made typical objects. Even though the Ivorian Prime Minister was present at the inauguration and consented to this project, the exhibition shocked public opinion from the start: the Ivorians were underpaid, housed in difficult conditions, worked 6 days a week without social security coverage, remained subject to Ivorian law and the children were in school to work. Finally, the display of humans next to safari animals was considered inappropriate. Under pressure from associations and public opinion, the village closed its doors six months after opening. In 1997, the court recognizes the violation of human dignity (Cazzola, 2022). The exhibition of Lewa at the Zurich Zoo does not host any human actors and is not intended for that purpose. However, just as in Port-Saint-Père, Kenyan culture and human infrastructures are exhibited in a safari atmosphere and there is a will to present Kenyan culture... within a zoo.

Conservation actions, like those of the Lewa Conservancy, take place in populated areas where certain communities live. Consequently, a conservation project is a balance between the natural sciences and social sciences such as anthropology, which must be called upon more during such conservation projects, both in the development of discourses about communities and in the implementation of actions that take place on the lands of those communities (Bennett & Roth, 2019). Indeed, "conservation actions are ultimately human behaviors" (Fox et al., 2006: 1817). So if human elements are to be represented, they need to be justified and clearly connected to the conservation project, not just presented as a cultural distraction. Furthermore, according to Estebanez's framework, zoos as a staged environment represent how humans think about their place and role in nature. These representations feed into the mental schemas of visitors. Beyond the realism of the zoo's infrastructures, it is necessary to question the impact they have



on visitors and the image of Kenya that they spread. How do visitors relate to Kenyan communities?

Moreover, during the fieldwork, when talking about tourism with a Nanyuki stakeholder, he shared:

“Once I was with American tourists. They were completely shocked that we had roads in Africa. They were all confused to see that some people had 4WD cars. They told me they were sorry, but they thought everyone was living in poverty. Imagine when I took them out for pizza” (Interview 38).

This quote shows how Africa is often described as a poor and technologically deprived country in Western discourses and these myths are perpetuated in films, books and exhibitions such as the one in Zurich.

After the analysis of these infrastructures, it is necessary to compare the discourses that are held in the zoo with what has been heard in the field.

## **4.2 Discourse analysis**

The aim of this chapter is to analyze the narratives of Zurich Zoo, but also of the Conservancy and the communities. The first part discusses the history of Lewa and colonialism which, although not included in the zoo's narrative, still has an impact in the Lewa area today and is therefore necessary to better understand local discourses. The second part is divided into four main chapters. The first chapter analyses how communities are presented as a threat to biodiversity by the zoo. The second discusses the role of communities in conservation. The third chapter analyses how communities are presented as beneficiaries of conservation actions and finally, the last establishes what the consequences of these discourses are on the ground in Kenya.

Each chapter follows the same structure: first the discourses of the zoo are analyzed, then those of the Lewa Conservancy and finally those of the different communities.

### **4.2.1 What the zoo doesn't say**

In the Zurich Zoo, many conservation topics are briefly touched on like the problem with the poachers, the importance of security, cattle in competition with wildlife for the grass etc. However, the zoo does not mention the history of the region which is essential to

understand the current conflicts. Indeed, the colonial history and the arrival of the English has upset the dynamics of land ownership.

Since the 15th century, many explorers sailed along the African coasts and established trading posts or ports to promote trade. However, the colonization began at the end of the 19th century under the pretext of a civilizing mission from Europe (*The Colonization of Kenya*, 2020). In Europe, we are at the time in the middle of an industrial era and Africa has a lot of raw materials such as gold, tea, tin, etc. The Berlin Conference that took place between 1884 and 1885 marked the division of Africa between the European powers and draw precise limits on the continent. In 1895, the British government controlled a large area of East Africa under the name of British East Africa Protectorate. White immigrants settled mainly in the Rift Valley and on the fertile high plains in the central uplands of Kenya for agriculture, known as the "White Highlands" from which Kenyans were excluded. In 1913, the government gave white British settlers 999-year leases on land stretching from western Kenya to the Laikipia Plateau: one of the only countries in the world to grant such long leases (Médard & Duvail, 2020). In 1920, the Colony and Protectorate of Kenya is officially established and covers approximately the territory of present Kenya: Kenyans are no longer allowed to participate in the political system (*The Colonization of Kenya*, 2020).

The British government wanted to develop an export market economy based on livestock production. They also invested heavily in the development of railways and road networks. This development and new economy required labor. For this reason, certain taxes were imposed on the local people, who then had to pay money and were forced to become agricultural employees for the settlers. Non-payment of taxes led to forced labor, providing cheap work force (*The Colonization of Kenya*, 2020). More locally, in Laikipia, around Lewa it is said that until the arrival of settlers the Maasai pastoralists mainly occupied these lands. The most common means of livelihood is nomadic pastoralism; herders move with their cattle according to the seasons and weather conditions. Land and resources were shared among communities according to customary and communal traditions without formal land ownership. When the settlers came, they did a first Anglo-Maasai Treaty in 1904: Maasai People were gathered in a Northern Reserve. But in 1911, they were evicted from the Reserve under the second treaty to support white immigration. The region which is part of the "White Highlands" is divided into large

parcels from 100 acres to 5'000 acres, depending on its perceived fertility and likely productivity, which are distributed to European settlers (Breed, 2011).

Kenya regained its independence in 1963, supported by the rebel movement known as Mau-Mau. All land and territorial policies were taken back from the settlers and returned to the new government chaired by Jomo Kenyatta. Thus, even after Independence, land used informally by communities before colonization was not returned to them officially but belonged to the government. The New Constitution revised its regulations and limited long leases to 99 years (Médard & Duvail, 2020). While some settlers returned to England, many stayed and bought up the land at low prices: the largest British commercial ranches remained.

For a long time, Kenya had no national land policy and the land was sold and allocated by the government. But from the 1990s onwards, ethnic groups began to take violent action against what they saw as land grabbing (Médard & Duvail, 2020). Indeed, since 1950, all land managed under the customary and traditional pastoral regime became private or government land so that the land tenure system was formal: “an estimated 3.5 million people have been unable to register their communal land [...] or 67 percent of Kenya’s landmass” (Mittal et al., 2021: p. 21). During the research, many people felt an injustice, as noted by a resident of Nanyuki:

“The problem is not the colonization, but the way everything was settled afterwards. The government made a huge mistake in 1963, they took all the land and sold it, without considering the people who lived there before. Even today we have not been compensated. And we pass on this history to not forget that we were here.” (Interview 44)

She added that it is difficult to trace the history of the land and the communities, since they managed everything informally without any official property documents. It was therefore almost impossible to prove that a land was used by a certain community before the colonial period (Interview 44).

Therefore in 2009 the country adopted a new regulation that proved important for pastoralists: first, it recognizes community land as a land category and second, it legitimizes pastoralism as a livelihood (Médard & Duvail, 2020). Since 2016, thanks to the "Community Land Act," communities can legally register and own communal land. In 2019, 50 representatives from 11 communities in Laikipia County, became the first to

attempt to register their land under the Community Land Act. By the end of 2020, the Ministry of Lands had registered the land titles of two communities and the others are still waiting (Mittal et al., 2021). Despite this, as we will see, many tensions and conflicts are taking place in northern Kenya over land. In 2007, more than half of the Laikipia region, formerly known as the White Highlands, was owned by non-Africans. The region can be considered as a “spatially chaotic mosaic” shaped by colonial and post-colonial land policies, “where humans, wildlife, and livestock share land and resources among multi-use parcels” (Yurco, 2017: p.3). Even today, large properties are fenced for agriculture, cattle breeding etc.

#### *4.2.1.1 Lewa: from cattle ranch to Conservancy*

Like other parcels given to settlers, the current Lewa Conservancy was a cattle ranch during the 20th century. In 1920, the British Alex Douglas was granted a plot of land of 2'500 acres on the lower slopes of Mount Kenya, as a reward for his contribution to the war effort. He married Elizabeth in 1923 and together they had children. Over time, Douglas acquired more land and Lewa grew. In 1952, the couple's first daughter, Delia, took over the Lewa ranch with her husband, David Craig, then an officer in Nanyuki. Lewa has quadrupled since 1920: the ranching land covers 13'000 acres and Top Lewa is spread over 5'500 acres of rolling pasture. The couple is in charge of 8,000 sheep and have three children together: Susan, Ian and William (Breed, 2011).

After independence, the family applied for Kenyan citizenship to stay. In 1967, Top Lewa, in the South was taken over by the government like many parcels, but the Craigs bought some lands in the North which redefined the boundaries of the Lewa Ranch, which by then covers 40'000 acres (Breed, 2011). In the 1970s, the Craig family founded Wilderness Trails with an Englishman, Peter Hankin. In 1982, Anna Merz, an English conservationist, approached David Craig: she wanted to invest funds to protect the wildlife but did not own any land. In a context of rapidly declining wildlife populations and many diseases on livestock the Craig family agreed. Thus, Lewa became the "Ngare Sergoi Rhino Sanctuary", for rhinos, highly threatened because of their horn. An electric fence was built around the park. In 1995, the Lewa Wildlife Conservancy was founded and one of the sons, Ian Craig, headed the Conservancy until 2009. The Lewa Conservancy was then sold to the LWC organization. The Craig family retains some private parcels within the Conservancy for living quarters. Over time, the Conservancy has gained notoriety and is a UNESCO World

Heritage Site. Today, Ngare Ndare Forest, Borana Conservancy and Lewa Conservancy have merged and cover 93,000 acres (map 1): a fenced conservation area reserved for rhinos and many other animals. At the end of the 20<sup>th</sup> century, many ranches and farms were converted into Conservancies and safari destinations that made Laikipia County famous for wildlife (Bersaglio & Margulies, 2022). As mentioned above, the Conservancy model differs from national parks in that it is not government owned but privately owned. The Lewa region has experienced a period of colonization that has greatly influenced the land management of the area. As we saw in Chapter 3.4.1 on the concept of fortress conservation, the Europeans imported the notion of private land ownership which now prevails over traditional land management. Even if the Zurich exhibition does not focus on this historical part, understanding the context of the region is a key factor for the rest of this work and to explain the current conflicts between humans but also between humans and wildlife. Even if the country is independent since more than 50 years, a resentment is felt in the rhetoric of Kenyan communities. The next chapters are devoted to a comparative analysis of the rhetoric of the zoo, the Conservancy and the local communities.

#### **4.2.2 Communities as a threat**

The Zurich Zoo plays a key role in the species conservation especially by bringing environmental awareness to visitors to raise funds to support projects. We have seen that donor support increases significantly if they understand the context on the ground as well as the conservation issues. The visitor can therefore read what threatens biodiversity and the objectives of the Lewa Conservancy on the explanatory panels. The main threats presented are competition for resources and poaching. As we will see, it is often the local population that is singled out in the discourses. It then explains the means implemented to face these challenges and thus protect biodiversity, hence the importance of donations.

##### **4.2.2.1 Overgrazing**

Livestock herding is one of the world's most ancient livelihood, which occupies over 268 million people in Africa (Kessler, 2021). Shepherds raise cows, goats, sheep or camels on grasslands to produce meat and milk. The productivity of grasslands varies enormously in time and space, often influenced by severe dry seasons. For this reason, traditionally, pastoralists and their herds were often nomadic or semi-nomadic: mobility is a

fundamental factor for resilience. Today, pastoralism has evolved in response to various factors such as changes in land management, but it remains very traditional in Kenya. German et al. (2017: p. 2) defines pastoralism as a “successful adaptation to a rainfall regime in arid and semi-arid lands that is highly variable both spatially and temporally, where mobility is essential for ensuring access to critical resources such as forage and water while also providing space for the rangeland to regenerate”. The Zurich Zoo, the Lewa Conservancy and the communities adopt however varying discourses about this livelihood.

The zoo recognizes the Maasai traditions that have lasted for a "very long time". However, it presents it as a threat as families own more and more livestock. Specifically, it targets the Maasai community:

“The Maasai is an ethnic group of shepherds with a traditional lifestyle. For a very long time, they have used the natural landscape of the savannah for their cattle breeding. Increasing herd sizes, up to 300 animals per family, can lead to over-exploitation of the savannah.” (Explanatory board)

Here, the threat presented is the increase in the size of the herds. According to these explanations, it would cause the over-exploitation of the savannah, thus of the natural resources which are water and grass. In ecology and conservation discourse, we talk about "overgrazing": the fact that too many livestock graze and therefore cause damage to the grasslands by feeding. Since wild herbivores also need to drink and feed, there can potentially be competition for resources, especially during droughts.

The Lewa Wildlife Conservancy shares the zoo's position that large herds of cattle can be detrimental to the ecosystem and compete for resources with wildlife. A decade ago, the LWC still allowed a limited number of cattle to graze within the protected area, under a supervised grazing management plan: they hosted about 1000 cows within Lewa (Interview 34). Today, shepherds are no longer allowed to enter the protected area with their livestock. A speaker from the LWC gives the following reason. If at the beginning the grazing plan worked, gradually more and more pastoralists wanted to come and graze their cattle inside the Conservancy, which became under pressure. People came from faraway places such as Samburu or from north of Isiolo rather than from surrounding communities: “Lewa has never expanded in any boundary. Lewa stayed the same. And

with the grazers, we reached a point where everyone wanted to graze in Lewa” (Interview 34). Thus, LWC felt pressure from pastoralism and saw it as a threat to the Lewa ecosystem.

Firstly, the protected area is concerned about the increasing size of the herds and the pressure they put on the space. Various wildlife species, including rhinos, have increased in number in recent years. These large mammals need large territories to live. It is for these reasons that LWC has merged with Borana and is linked to the Ngare Ndare forest. The Conservancy reserves all its space and resources for the rapidly growing wildlife. This wildlife, and more particularly the herbivores, would compete with livestock for water and grass:

“Let's imagine a scenario: we have a limited rainfall and green grass grows. The first animal to come and graze is a sheep, immediately after the rain. The sheep grazes in such a way as to pull the golden blades of grass out of the ground. The buffaloes and elephants that come after have nothing left to eat. So we need to bring awareness to the communities about climate change and they need to understand that there is not enough land for everyone.”(Interview 33)

According to this quote, LWC fears competition between wildlife and livestock for resources and is also concerned about overgrazing. In addition, climate change is also cited as a threat, as rainfall in the region is reportedly becoming more erratic.

Finally, the excess of livestock has a direct impact on landscapes that can no longer be described as "pristine state of nature" (Interview 33). Overgrazing leads to the loss of species, too many livestock disturb wildlife which would migrate and the landscape that Lewa protects would be totally different: "finally, we are a UNESCO site and we have a role to play" (Interview 33). The latter reasons seem to have more to do with the aesthetics of the landscape, which the LWC needs to keep as natural as possible as it welcomes many tourists every year. Indeed tourists often do not appreciate seeing livestock in protected areas. Thus, cattle are no longer allowed to enter Lewa because there is not enough space for a good coexistence with wildlife, it creates a conflict for resources and finally, it threatens the natural and intact state of the ecosystem.

To raise awareness of these issues, LWC would like to educate people: “communities need to be educated about pastoralism and conservation, they need to be aware of the need for proper grazing” (Interview 33). Yet, during the interview, it was acknowledged that

pastoralism can be perfectly compatible with conservation, provided it is well and sustainably managed: they therefore organize community members meetings to move in this direction. To do this, pastoralists would have to reduce the number of their livestock but increase the quality. However, it often comes up against a "cultural struggle", especially with the Maasai for whom livestock is very important (Interview 33). In addition, LWC is trying to introduce new alternatives to pastoralism: the creation of small businesses such as tree nurseries, agriculture, production of sustainable energy like biogas etc.

In terms of communities, the issue of overgrazing was discussed in detail with the Maasai of Ngare Ndare and Leparua, but less so with the community of Subuiga. The Meru community sometimes owns a few cows or sheep but was more systematically engaged in farming or other occupations. On the contrary, owning livestock is a cultural tradition for the Maasai community:

“Cattle is our belief. Maasai came from heaven with cows. We had cows and you can not separate a Maasai from cows, sorry [...]. If you want to see a Maasai get ready to see cows. The Maasai are the image of Kenya.” (Interview 13)

Cattle represent their wealth, insurance, food and a symbol (Interview 45). All the members interviewed from the Maasai communities of Leparua or Ngare Ndare own livestock: goats, sheeps or cows. During the day, they go to the plains to graze their herds, which they gather in the evening in "bomas" next to their houses to protect them from the wild predators: these are enclosures made with branches or fences (figure 15).



**Figure 15:** On the left, a typical Massai bomas of Leparua made of branches where cattle are stored at night. On the right, a Ngare Ndare bomas made of wooden fences. (Picture by T. Raetzo).



The Maasai community has its own "grazing management", which is an ancient land allocation system eroded by all the changes in land legislation of the 20th century. However, previously the territories were managed in an informal and traditional way. For example, the Maasai herders had established different sections with cooperative mechanisms for allocating grazing land and water (German et al., 2017). Since they were nomadic, they met in camps that provided a platform for coordination of herding. Even today, they have a social hierarchy in the form of age-sets: a set gathers all men of the same age and the oldest are the leaders of the group. Thus, the last age-set provided certain areas of land as a "drought reserve" where cattle were allowed to graze only in times of severe drought (German et al., 2017). Thus, as we have seen, ethnic mobility was paramount to compensate the spatiotemporal variability: rainfall is not homogeneous throughout the territory and some areas receive more rain than others and this varies periodically. These movements also allowed the vegetation to recover. In 1930, colonial administrators noted the degradation of the land and believed that common ownership of land was the main cause. This gradually eroded the social institutions of the pastoral heritage: the mobility and free access of herders was limited, as was access to resources.

During my fieldwork, we were in the middle of the dry season. The rainy season, which was supposed to arrive at the end of March, did not come and everything remained very dry. As a result, the ground in Leparua had no grass left, forcing the herders to move far away during the day. The community of Ngare Ndare has access to the forest during the day to graze their cattle, but there was also very little grass. Thus, the various stakeholders recognize this problem of lack of grass and even overgrazing of the soil in certain areas, especially as the dry season lengthens. They give several reasons for those issues.

Firstly, as mentioned above, community has a "grazing management" system: "here in Leparua the Hills are for the dry season and the plains are for the wet season [...] otherwise the grass is finished very quickly" (Interview 39). However, during the last wet season, only the area of Leparua has received sufficient rainfall allowing the grass to grow, forcing the community to allow more distant pastures to graze. As a result, the grass supply was already consumed during the dry season.

"You realize sometimes there is no rain on the other side, so we cannot tell them to turn back to their places. Because at other times you realize that we don't have

grass and we rush to them. We are nice to these people because it changes.”  
(Interview 2)

According to this quote, informal allocation systems are still relevant and seem to be based on mutual exchange. Thus, the initial plan is not always respected.

There is also another reason that is seen as a real problem: in the Leparua Community Conservancy, 5 distinct communities have been brought together in one large territory without separate recognition of their identity. As a result, none of these five communities own land legally and this poses a problem in land management: no one can formally claim ownership of a parcel. If informal property worked in the 19th century, however, as we have seen in the evolution of land policies in Kenya, owning land guarantees power and control over it: “Leparua is a no man's land, that's why everybody can come and graze freely” (Interview 39). In their article “Green appropriations through shifting contours of authority and property on a pastoralist commons”, German and al. state that “many drought reserves have been lost to conservation areas, private ranches and farms”(German et al., 2017: p. 6). The space available for pasture has decreased significantly in recent decades and the privatization of the land of Lewa for a Conservancy has a role to play. Furthermore, like LWC, the Maasai perceive population growth and shrinking space as a threat and as a source of future great conflict: “the population of grazing wildlife increases because they have a good protection. But the population of people is also growing. They will be facing the grazing competition” (Interview 1).

Then, the Zurich Zoo writes that the main cause of the lack of grass is the increase in the size of the Maasai herds to over 300 animals per family. To better understand this issue, the topic of herd size is therefore discussed in the interviews. Exceptionally, one person owned a hundred goats and sheeps and this is the largest herd encountered during this fieldwork. A shepherd adds:

“Nobody has more than 300 cows or it is very rare. Those who have these heads are the big families in the Conservancy of Borana of Lewa like the Craig for example with several hundred heads of cattle. They buy the cattle during the dry season at very low prices and graze them in the Conservancy. And they're going to sell it for a lot of money to Ol Pejeta for example. So these big families make a lot of money with the cattle” (Interview 16).

Indeed, I often saw herds of cattle in the protected area, driven by employed herders: these were not the cattle of the surrounding communities. The latter perceive this as an injustice and do not understand why Lewa does not let them graze in the protected area as well, at least during the drought. In fact, the Maasai were losing cows due to lack of grass while there was plenty of grass for private herds on the other side of the fence. Yet during major droughts, LWC also regrets losing wild animals due to the lack of resources (interview 33). Furthermore, one speaker qualifies as a “waste” the fact of leaving all the grass not grazed inside the protected area. According to him, it becomes dry and gray, the cellulose is transformed and it is no longer consumable, neither by wildlife nor by livestock. In addition, it prevents tree seeds from reaching the ground and germinating which is not good (Interview 16). A non-livestock environmentalist, on the other hand, argues that the old grass is a ground cover that protects the soil. Opinions are different according to interests (figure 16).



**Figure 14:** on the last hill in the background of the picture, you can see the difference between the right side, the Borana Conservancy, rather grey because of the high and dry grass, with few trees, and the left side, which is more bare ground but with more tree. (Picture by T. Raetzo).

During periods of drought and when resources are scarce, relations between communities and the Conservancy deteriorate and lead to conflict: at the end of 2021, members of the Leparua community set fire to the grass at two-week intervals within the LWC to show their displeasure. From the night of March 17 to 18, 2022 some herders from Samburu (a faraway area) came with their cattle to Lewa, broke the fence to enter the protected area and graze their herd. They were directly arrested by the rangers.

According to the Maasai, the first solution to reduce overgrazing is to establish a new grazing management plan. To do this, it is necessary to bring together the different tribes that own livestock as well as conservationists to reach a consensus. For communities to provide strict resource allocation plans, they need to be recognized as owners of their territory. According to them, this is the biggest limitation and the main cause of these land management problems: “if we are doing conservation from a community land we must recognize that there is a community there” (Interview 17). Finally, some pastoralists stated that it would be appropriate to decrease the number of livestock as the wildlife population is increasing this puts pressure on resources and competition is occurring between livestock and wild herbivores, accentuated by climate change. Maasai have a role in the evolution of pastoralism. But the condition for them to accept to decrease the number of livestock is that they benefit directly from the conservation of the wildlife, at a value equivalent to the livestock and this is not the case at the moment (Interview 17). LWC would like to offer new livelihoods to communities as an alternative to pastoralism. However, pastoralism is the most traditional means of livelihood and concerns a large part of the population.:

“Pastoralism is a huge economy here, it is the main activity of many people, especially the Maasai. So if they ban pastoralism and want to provide more sustainable livelihoods, it will have to be done with so many people. We will have a huge problem, because it is the direct economy of hundreds of people.”  
(Interview 16)

In conclusion, the problem of overgrazing is present in the Lewa area and this opinion is shared by the zoo, the Conservancy and the communities of Leparua and Ngare Ndare. However, narratives about the causes of the overgrazing issue differ from group to group. The Zoo mainly blames the Maasai and their increasing herd size, while the Conservancy has felt pressure from herders who come from far away, and since the number of wild animals is increasing, it prefers to keep the land for wildlife as well as wilderness. Finally, the communities still feel confined to smaller areas that are also unrecognized lands. This makes it difficult for them to establish grazing plan management between communities, especially in times of drought.

Thus, in Zurich Zoo, pastoralism is rather presented as negative for biodiversity, whereas we will discover in the next chapter how beneficial it can be for biodiversity if it is

managed in a sustainable way. Moreover, the discourse adopted is very reductive and only cites the Maasai as the cause of the problem. Firstly, the Maasai are one of the minority communities among more than 40 tribes in Kenya, some of which also have livestock. Susanne Vetter, a plant ecologist at Rhodes University in South Africa, thinks that some western myths and narratives like the “Tragedy of the Commons” of Hardin<sup>8</sup> have led “to the widespread assumption that pastoralists aim to amass livestock for the individual gain on a shared resource, which inevitably becomes overused” (Kessler, 2021). This myth, which supports private property, does not correspond at all to Maasai pastoralism and ignores the complexities of the traditional land management. On the contrary, we have seen that it is often the large ranches or the Conservancies themselves that own the largest herds of cattle for milk and meat production, like the LWC. The communities therefore find it unfair to be accused of having too many cattle.

Also, it is true that some portions of the territories were totally overgrazed within the communities and the communities recognize this. However, this is not only due to the increase in livestock, but many different factors have limited the space and the mobility for both wildlife and pastoralists who are then forced to share ever smaller plots: the privatization and segmentation of land by fences like the ones of the Lewa Conservancy, extractive industries and agriculture, increasing urbanization and changing tenure policies. In addition, as mentioned above, they are gradually abandoning nomadism by settling in communities, for example to stay close to schools and services, to cope with mobility difficulties, or because some have also started to practice small-scale agriculture which also poses conflicts.

#### ***4.2.2.2 Poaching and security***

The illegal trade in ivory and rhino horn is putting pressure on wildlife in Africa, especially black and white rhinos and elephants. The Convention on International Trade in Endangered Species of Wild Fauna and Flora has been in force in Kenya since 1975 and

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<sup>8</sup> “The tragedy of the commons is an economics problem in which every individual has an incentive to consume a resource, but at the expense of every other individual—with no way to exclude anyone from consuming. Initially it was formulated by asking what would happen if every shepherd, acting in their own self-interest, allowed their flock to graze on the common field. If everybody does act in their apparent own best interest, it results in harmful over-consumption (all the grass is eaten, to the detriment of everyone). Solutions to the tragedy of the commons include the imposition of private property rights or government regulation. (*Tragedy Of The Commons Definition*, 2022)

hunting was banned in the country in 1977. However, wildlife crime has caused a large decline in the species, especially in the period before the Kenyan Wildlife Service (KWS) was established in 1989 (Warinwa et al., 2022). In response to this challenge, the KWS improved the security of wildlife. While these actions have contributed to the decline of poaching and illegal hunting, they have not completely eradicated illegal crime against these species, which still poses a serious threat. Today, rhinos are endangered and are mainly concentrated in national parks, protected areas and conservancies. Elephants are freer and can move from one park to another through migration corridors but they are monitored.

Besides the lack of resources, the Zurich Zoo also speaks about poaching and illegal hunting as a threat to biodiversity in Kenya, reminding that the black rhino remains threatened with extinction according to the IUCN red list. For this reason, it finances and supports Lewa's security teams, which will be presented in more detail later. Since poachers' attacks mainly occur at night, the zoo's contributions were used to equip a helicopter with lights so that it can take off at any time: this allows the security teams to be deployed quickly to reinforce the defense. According to the zoo, thanks to protection and ecological management efforts, the rhino population is growing again. In 1990, the African continent was home to only about 2,500 rhinos, 400 of them in Kenya (Zoo Zurich, 2022). Today, an estimated 800 black and 600 white rhinos live in Kenya, 15% of which are native to Lewa. As mentioned above, rhinos are regularly relocated from Lewa to other protected parks.

To fight poaching effectively, it is interesting to know more about the dynamics of crime and who the illegal hunters are. According to the Zurich Zoo, it is mainly poor people who are likely to attack wild animals to earn money. To counter this trend, it is therefore necessary to invest in means of subsistence to improve the living conditions of these people.

“Fertile land is scarce, access to water and food is not assured. For many people, it is impossible to have a regular income. Misery, hunger and poverty drive people to turn to illegal hunters and traffickers. This is why Lewa invests heavily in new livelihoods that improve the quality of life.” (Explanatory panel)

According to this quote, misery, poverty and hunger are the main causes of poaching: people are not really at fault since they are forced to hunt illegally to survive. Therefore,

Lewa invests in projects and livelihoods in the surrounding communities: for example, the park funds projects in Ngare Ndare, Manyangalo, Leparua, Subuiga etc. Thus, this quote states that Lewa invests in livelihoods to prevent people from hunting illegally and thus targets poor local communities. Further on in the display, another sign states:

“When processed into powder, the horn generates revenues of tens of thousands of US dollars per kilogram. It is therefore not surprising that people who have few prospects and who smell the easy money are exposing themselves to the risk of being killed during poaching.”(Explanatory panel)

Home to 14% of Kenya's rhino population on 93,000 acres, Lewa-Borana Landscape is also concerned about illegal hunting and is therefore investing heavily in ensuring wildlife safety (LWC, 2022). In the 1970s and 1980s, Kenya lost many rhinos and elephants. In response to this decline, the Craig family decided to turn their ranch into a sanctuary, to provide "a safe and suitable home for rhinos" (LWC, 2022). Thus, they distinguished themselves as pioneers in rhino conservation on private land. Even today, despite much stricter legislation, the threat remains. For example, in 2019, Lewa announced the loss of a rhino after an attack, after 6 years without incident: the horn had been removed. According to them, this kind of incident

“serves as a reminder that the threat of poaching is ever-present. With our partners and supporters, we continue to invest in the technology, equipment, and training needed to stop poaching and work closer with the communities who serve as our front line of defense.” (LWC, 2021: p. 35).

Thus, as will be seen in the chapter on the role of local communities, the Lewa Conservancy sees them as a "shield" against poacher attacks.

While the rhino is the flagship species of the protected area, it is also concerned about the safety of other less publicized species. For example, in 2019 they discovered pancake Tortoises within the conservancy, a highly endangered species: “we didn’t give it much attention before, but they are on the list of the highly poached species” (Interview 33). Speaking of poaching, the Conservancy does not give specific information on who these poachers are, but rather targets the countries that create the demand for this illegal trade:

“Some part of the eastern, Arabian countries even Europe. Appetite for wildlife products has increased. I mean poaching and killing illegal wildlife” (Interview 34).

In Vietnam and China, for example, rhinoceros horn powder is used to enhance social status and is believed to have medicinal powers (Braconnage, 2022). To mitigate poaching and provide a safe space for wildlife, LWC deploys enormous means in security with increasingly sophisticated technologies which proves to be effective if one looks at the poaching rate: in Kenya, the effectiveness of protected areas is often judged by this rate. The Conservancy has two units that operate in the field: a monitoring and an anti-poaching unit. The first one consists of field rangers who patrol the area according to assigned blocks, radio operators, a communication center that receives information from Lewa but also from all northern Kenya, and gatekeepers, who care for orphaned rhinos. The second team provides security for wildlife and operates in other parts of northern Kenya as a government police force. It consists of the anti-poaching rangers, who are equipped with military weapons, and the tracker dog unit, dogs that can follow a scent over long distances. Their main tool is technology: they are constantly aware of and alerted to events in northern Kenya. The rangers are trained by the Kenyan Wildlife Service (LWC, 2022). Finally, LWC has its own helicopter equipped with lighting to fly at night with 2 pilots who take turns. So, safety is very important to the LWC. The protected area is totally fenced with controlled gates and is monitored 24 hours a day by militarized security. The use of military methods in addition to security barriers to protect wildlife is commonly referred to as the "militarization of conservation" (Simlai, 2015).

Communities were asked if they perceived any threats to wildlife. Many interviewees mentioned poaching as a major threat to rhinos and sometimes elephants. Upon reflection, others mentioned competition for resources as a threat to herbivores, primarily. However, according to the 3 communities, unlike the zoo, poverty or hunger is not the cause of illegal hunting.

“The poachers are not poor people who live in the communities here. They are the very rich people, often from the cities, who have connections to the big markets. They don’t know how to poach so they hire middlemen to do the work and they pay them well. But the poor people don’t really have those connections.”  
(Interview 39)

Indeed, it is difficult to make the link between poverty and poaching. Conservation NGOs rather argue that this is a "stereotypical" argument, as poverty is not necessarily the main driver of poaching. Furthermore, "major legal and illegal importers of wildlife have been



wealthy industrial economies" (Simlai, 2015: p. 41). Instead, poachers attack in organized criminal gangs with sophisticated weapons such as night vision rifles and belong to well established networks (Braconnage, 2022). The communities are aware of the threat of poaching but rule out any possibility that the illegal traffickers come from their village. One inhabitant of Ngare Ndare tells: "we don't do anything with rhinos, the meat is not good and we don't even know what market to use the horn for" (Interview 16). One of them says that this business came with the settlers:

"Maasai is the last group of people to learn of the Western Business and that culture of business came with the Westerners: selling the tusk, the horn of the rhino, we don't even know for what they use it. So we completely ignore." (Interview 13)

The Ngare Ndare Forest is linked to the Lewa Conservancy and is therefore home to black rhinos, which tend to live in dense scrubland feeding on shrubs. As mentioned in the chapter on Ngare Ndare, communities have access to the forest and have land use rights to graze livestock or harvest timber. One argues (Interview 16) that although humans frequent the forest, there are no reported incidents of poaching in the forest, indicating that the local community does not participate in illegal hunting.

In terms of security and poaching, in general, communities appreciate the work of rangers and recognize their usefulness, especially in protecting and securing wildlife. Communities cooperate closely with ranger units by reporting to them if an animal is injured or if they suspect a person is trying to attack. As for the Lewa helicopter, while one former ranger acknowledges its effectiveness in anti-poaching operations (Interview 13), the surrounding communities do not like to see it flying over the village. When the helicopter flies at night, it is equipped with a big flashlight that it can direct on the ground. The communities don't like the helicopter because the light is too bright (Interview 12) and it flies too low which makes noise:

"This helicopter is a challenge for us [...]. You will see, soon it will come flying over the village and it will light up our houses with its huge beam of light. I don't understand why it lights up our houses. Our goats and cattle are scared at night. Can you imagine a helicopter coming and aiming a searchlight at your house? They are scared. We ask them to patrol along their perimeter, along the fence line and leave our property. But they keep coming, it's very strange. Tell them that the

helicopter is oppressing the communities. Even our children are afraid of the helicopter. We don't feel good." (Interview 15)

This view was shared by all three communities, namely Subuiga, Ngare Ndare and Leparua. Two times during fieldwork, it flew over the community of Ngare Ndare, illuminating the village and once over Leparua. The militarization of anti-poaching efforts dates to colonial times when game wardens were often former British military personnel. However, as poaching networks have become increasingly sophisticated, militarization has spread and this has led to "shoot to kill" strategies and an evolution of force and violence (Neumann, 2014 in Simlai, 2015). More and more conservationists are drawing an analogy to "waging war" to save endangered species. This has led to sometimes intimidating and even violent approaches to local communities (Simlai, 2015). Moreover, it creates antagonism towards indigenous communities, who are then seen as criminals, or squatters on land that they have traditionally occupied for a long time (Domínguez & Luoma, 2020: p. 7).

In summary, poaching or illegal markets are a major threat to wildlife and this view is shared by the zoo, the LWC and the communities. This threat has led to the militarization of conservation and the evolution of ever more effective technology to protect nature. On the ground, poaching statistics prove that these methods are effective, but can be resented by local communities. The zoo's link between misery, poverty and poaching as a means of survival is a stereotype and a hasty conclusion that cannot be verified and once again blames the local people (Simlai, 2015). From the discourses in the zoo, the visitor learns that Maasai pastoralism erodes the soil and that poor people are potential poachers.

During the 20th century, settlers in Africa contributed to the rapid decline of wildlife by hunting animals in large numbers. But as explained (chapter 4.2.1), the discourse in the zoo leaves out a whole part of the colonial history. Historically, Douglas settled in Lewa in 1920 and enjoyed watching wildlife. In fact, when he established his farm in Lewa, he always left a certain area for wildlife. However, after a few years, Douglas had already noticed with sadness the decline of the wildlife, while the local people had always known how to coexist with it (Breed, 2011). In the book on the history of Lewa, Breed writes (p. 253): « At the turn of the twentieth century, the early explorers and then the settlers had all arrived with their rifles and had looked upon the savannahs of East Africa as their own personal hunting grounds with a never-ending supply of game. There were accounts of

men shooting several rhinos in a single day”. The concept of conservation was not yet born and wildlife that damaged crops or attacked livestock was considered vermin. Thousands of zebras were killed so that their skins could be sold in the USA. Ian Craig, later to head the Conservancy, was a hunter and killed wild game: rhinoceroses, buffaloes or lions, among others (Breed, 2011). It was another era: ecological awareness and policies were totally different.

To conclude, the biodiversity crisis is a global fact and the result of many interrelated factors. Despite all conservation efforts, many species remain highly threatened and are under constant security in the Lewa Conservancy. However, given the above, telling only part of the story is a lack of understanding of the historical as well as the local context and risks creating misunderstandings and negative narratives about the local people, who also have a role to play in nature conservation.

#### **4.2.3 Role of the communities**

While the Lewa Savannah exhibition presents communities as a potential threat to biodiversity and conservation goals, it also does give them a role to play.

“Lewa Wildlife Conservancy owes its success to close cooperation with the local population.” (Fold-out brochure of the zoo).

With these words, the zoo recognizes the importance of local communities and credits them with the Conservancy's success. It does not specify what this cooperation consists of and what actions are carried out by the communities. A sign on the exhibition states that to guard the approximately 4,500 wild animals on the Lewa grounds and specially to protect the rhinos, 150 gamekeepers equipped with radios watch over the park all day and all night. Then, we read: “In order to ensure the sustainability of this project, external help is needed. The Zurich Zoo wants to contribute to the monitoring of the black rhinos with the active help of the local population”. Monitoring is the act of actively watching an animal and measuring its activities. In order to protect and conserve a threatened species, it is necessary to know its distribution, its behaviors as well as the threats to which it is exposed through monitoring. However, the monitoring of species is often insufficient and the necessary data are not always available for various reasons (Moreno et al., 2022). In this sense, by living in contact with wildlife, one can imagine that local communities keep an attentive eye on the fauna that surrounds them and participate in monitoring. These

two sentences are the only indications that local people are helping with conservation actions. They remain relatively evasive on the actions carried out but stress that conservation would not be possible without them.

In Kenya, the Lewa Conservancy goes further and says: "the first line of defense is actually the communities" (interview 34). For example, during their attacks, poachers enter the conservancy from the surrounding areas and the communities are the first witnesses who could report information to the rangers. For this reason, Lewa places great importance on good relations with the neighboring villages as they are the first line of defense before the army of rangers and their equipment.

For their part, the three communities were asked about their role in the conservation and actions of the Lewa Conservancy. Three main topics emerged from these discussions.

#### *4.2.3.1 People as "the front soldier"<sup>9</sup>*

In the first place, several stakeholders from Leparua and one from Subuiga see themselves as a safety zone around the Conservancy. The inhabitants of the areas surrounding the protected area all know each other very well. Thus, they notice when a stranger enters their land: a pastoral Maasai said that they would even recognize abnormal tire tracks on the ground or in the vicinity of the park (Interview 5). If this happens, they inform the Conservancy rangers directly so that they can take protective measures in case it is a poacher. In addition, when they notice an animal being injured, either on the ground inside the park or even on their land, they also call the rangers to inform them. Thus, this first role is mainly about the security and the surveillance around the Conservancy. As Zurich Zoo stated, communities are key to wildlife monitoring. As mentioned above, wild animals (except rhinos) can migrate from Lewa to Leparua Conservancy through gates and move beyond the Conservancy's barriers. Safety therefore covers a wide area well beyond the protected area: "I think 90% of the security of Lewa is from the communities, because many of the wildlife is outside and we take care of them" (Interview 3). The elders organize many meetings on conservation and safety rules each year and these initiatives come from the villagers (Interview 20). Furthermore, as the Lewa Conservancy stated, maintaining good relations with the surrounding villages must be a priority. Indeed, some

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<sup>9</sup> (Interview 1)

interviewees feared that if the relationship between Lewa and them deteriorated too much, they would no longer cooperate in this way (Interview 5, 39 and others).

#### *4.2.3.2 People as “conservationist” from past to present<sup>10</sup>*

If communities are involved in wildlife security, they are also doing conservation "beyond" the borders and in doing so have an important role in providing a healthy ecosystem for wildlife.

As mentioned above, the community of Leparua is included in the Leparua Community Conservancy under the NRT since 2011 and therefore shares its territory with a large population of wildlife (map 1). By living in the Conservancy, the communities are expected to protect that wildlife and manage their livelihoods in a sustainable manner. Because the community of Leparua participates in the security of wildlife and conserves the habitat in which it lives, it can be considered as a “buffer zone” of LWC. In Kenya, the buffer zones occupied by the Maasai are often well conserved and rich in biodiversity (Homewood et al., 2001). The Maasai of Ngare Ndare have also used the forest for decades for its resources and it is home to a rich native flora: as such, it provides a home for wildlife. However, the Maasai claimed that they were conserving nature by tradition long before the Conservancies were established: "we are used to live with all the wildlife. Even when the concept of conservation came it didn't change" (Interview 9). Indeed, living from subsistence agriculture and using resources in a limited way (swamps, forests, water points), the Maasai have coexisted for many years with wildlife. It is often on their ancestral lands that many conservancies or national parks are found today (Homewood et al., 2001).

Thus, in their way of life, the Maasai stakeholders of Ngare Ndare and Leparua consider that they participate daily in the objectives of the LWC since their tradition is to respect the fauna and flora. They have a holistic view of conservation as the protection and respect of a whole: "our system is inclusive" (Interview 13). They use the natural resources of their environment in a sustainable way: they use the savannah to graze their cattle, harvest wood to build bomas, houses and for fire, some cultivate the land on a small scale for the production of food. The Maasai have a great botanical knowledge and use many medicinal plants to heal themselves (though this custom tends to be lost with the

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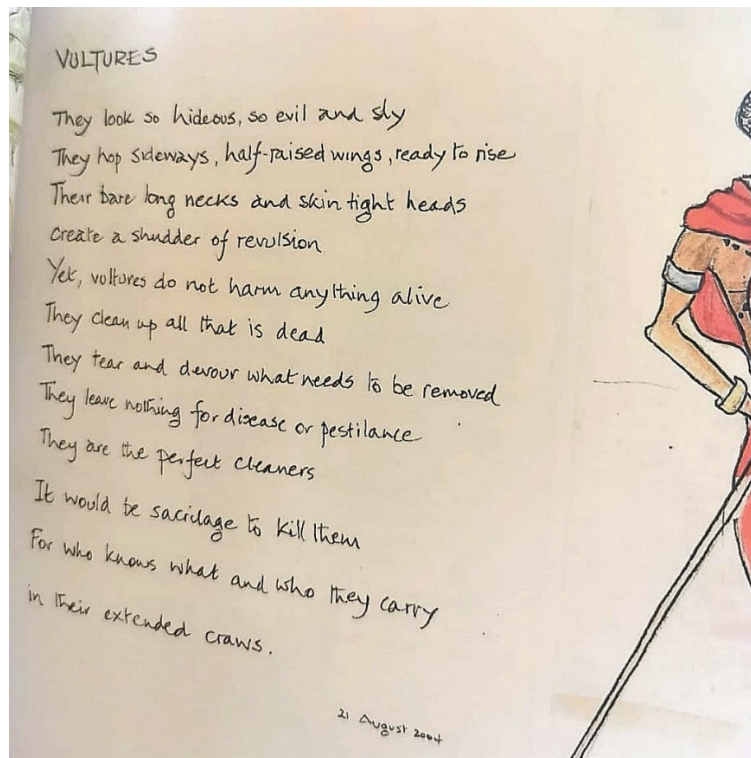
<sup>10</sup> (Interview 4)

arrival of pharmaceutical drugs). This is why many stakeholders are concerned about the loss of trees or bushes when the elephant population is too important. Concerned about this decline, one villager planted many native trees in his garden:

“I have planted more than 20 different indigenous species and most of them are medicinal. I conserve it because I am worried that with the problem in the forest and the savannah we can not find them in a near future. That’s my garden. This is conservation.” (Interview 13)

The Maasai community has some rules to govern natural resource management and access. The people with the authority to set the rules among the Massai are the elders, since they operate on an age-set system (German et al., 2017). For example, it is not allowed to cut the trees; but during severe drought, they may cut a few branches for livestock without endangering the life of the tree. Thus, they place great importance on the renewal of resources. The Maasai also have a deep knowledge about wildlife. For example, during my walks in Leparua, my guide and translator automatically knew how to read animal tracks in the sand. When grazing their cattle, herders observe the behavior of other herbivores to anticipate the arrival of predators: “When a zebra flees in a certain direction, it means it sees danger, a potential lion. It's the same thing with monkeys, if the baboons scream in a certain way, we know there is danger” (Interview 15).

Another glaring example demonstrates the contrast between the Conservancy's view and that of the Maasai. Indeed, in its 2019-2020 report (p. 14), the LWC notes the decline of the vulture population in Africa. According to the LWC, to prevent livestock attacks, farmers use poisoned meat to kill lions and hyenas, which in turn kills the vultures. The Conservancy is therefore doing prevention and education to teach communities about the importance of these animals. Again, this is a negative narrative towards communities, which are then seen as a threat to biodiversity. However, this version contrasts sharply with a poem found in a Maasai book in the lodge of Il Ngwesi, a lodge run by Maasai (fig. 17).



**Figure 17:** Poem found in a Maasai book in Il Ngwesi. (Picture by T. Raetzo).

This poem demonstrates the Maasai concept of conservation, which assigns a role to each species for an ecosystem to be balanced. Thus, by describing communities through bad narratives, this conservation culture is not fully recognised.

Then, when discussing the role of communities in LWC, a frequent response was that the biodiversity was so rich even before the Conservancy was established, precisely because the Massai are the custodians of the wildlife and have coexisted with it by tradition for decades. The following quote demonstrates how wildlife is seen as the heritage of a tradition:

“The giraffes we had them, the zebra we had them, the rhinos we had them. During my childhood there were a lot of black rhinos living here. So, conservation in its own sense is not that Lewa started conserving animals and teaches to people how to do. Communities protect animals from the very beginning [...]. So Lewa only changes the style of conservation. They started fencing and started conserving what was already there.” (Interview 4)

Here, the commenter simply thinks that the LWC is doing conservation in a different way. Thus, communities have played a role in the past in cohabiting with and preserving

wildlife for a long time before the first conservation movements arrived. The fact that the Maasai are so knowledgeable about wildlife and know how to coexist with it makes them excellent rangers within the LWC which recognizes it: “safeguarding wildlife is a practice deeply rooted in Maasai culture” (LWC, 2021: p. 36 )

#### ***4.2.3.3 The landscape of Lewa as a heritage of the Maasai***

Many Massai in Ngare Ndare and Leparua see the landscape and wildlife in the Lewa Conservancy as a heritage of their culture and a key reason for the success of Lewa today. Their livelihood, which was mainly pastoralism, was beneficial for wildlife and maintained open landscapes (Interview 15).

Before the arrival of the settlers and the establishment of the Conservancy, the surrounding communities, then nomadic, used to graze their cattle on the lands of the present Lewa Conservancy. Even though pastoralism is often singled out by conservationists, it can be of good not only to wildlife but also to the landscape as grazing helps to keep areas open and ensures a high diversity of fauna and flora (Kessler, 2021). Concerning landscapes, studies demonstrate the role of humans and their practices in shaping wildlife ecosystems. For example, according to plant ecologist Susanne Vetter, pastoralism is a highly ecological way of using land that sequesters large amounts of carbon. Even though lifestyles have changed in recent decades and competition for resources has increased, if properly regulated, pastoralism is fundamentally compatible with and beneficial for biodiversity. The vegetation cover of savannahs and other grasslands around the world is not only dependent on climate but is also maintained very often by fire and the herbivory of wildlife and livestock. A particular fauna and flora have adapted to these ecosystems of grasses and shrubs. Low-intensity grazing is one of the best ways to keep carbon stored in grasslands, whereas plowing or reforestation would disrupt this storage. Furthermore, the areas where the bomas were in the past are “nutrient hotspots” where many species of wildlife congregate. These areas are very fertile because of the old, accumulated dung.

Concerning wildlife, a former guide of Lewa Conservancy (Interview 15) insists on the role of pastoralism in maintaining herbivore populations. According to him, cattle herds and wild herbivores co-exist in a certain way because they graze the grasslands differently. Wild animals only graze the upper part of the grass blades, while cattle keep



the grass short. Gazelles, antelopes or zebras are much more vulnerable to predators when resting in tall grass as they cannot watch their surroundings well; they need short grass. Indeed, on a game drive in the Masai Mara, a lot of the herbivores I observed were in areas where the grass was shorter. Where the grasslands were not grazed at all or only lightly grazed, I saw lions, cheetahs or leopards. Thus, that former guide was concerned about the gradual disappearance of Thomson's gazelles inside Lewa, which had been more numerous in the past. In addition, the Jackson Hartebeest antelopes have been reintroduced as their numbers had greatly decreased. He believes that one of the factors could be that the grasslands are not grazed enough. Moreover, losing gazelles and antelopes has consequences on the trophic chain. Leopards and cheetahs feed on this small prey rather than large herbivores such as zebras. If they lack food, these carnivores are more likely to attack livestock in the surrounding villages (interview 15).

Much research has shown that there is no temporal or spatial correlation between pastoralism and wildlife decline. Homewood and al. (2001) have focused on the Serengeti Mara Ecosystem (SME), a protected area that stretches between Kenya and Tanzania. The core areas are reserved for tourism and are surrounded by a ring of buffer zones, consisting of private, community, protected areas etc. They found that the Kenyan side shows a rapid change in land cover and decline in wildlife since 1970, while these changes are not noted on the Tanzanian side. The migratory wildebeest population has declined by 75% over the last 20 years on the Kenyan side and has hardly fluctuated on the Tanzanian side. They found that this decline had nothing to do with changes in grazing habits, but rather with the transformation of private owners' plots into intensive agriculture. Fences are established and ecosystems are fragmented (Homewood et al., 2001).

To sum up, Zurich Zoo vaguely attributes a role to local communities as they participate in monitoring. The LWC sees them as indispensable actors as a first line of defense. However, the communities do see themselves as having a role today, but they see the Conservancies of today as legacies of their traditions. Landscapes are the result of the joint actions of wildlife, livestock, and humans. They have been shaped by both natural and anthropogenic factors. In this respect, the environment can be considered as a "cultural landscape": the testimony of human action on the space as well as of local land management practices (Zamant, 2017). There is additionally "widespread evidence to

suggest that pastoral livelihood practices actually produced the landscapes that became protected areas prior to the first and second waves of conservation in East Africa” (Butt, 2016: p. 95). These considerations can therefore significantly challenge the concept of "pristine nature" conveyed by conservationist ideologists.

#### 4.2.4 Pristine nature versus cultural landscape

As we saw in chapter 3.4.2. the idea of “pristine nature” or “wilderness” – a natural zone without people – is a typical Eurocentric concept conveyed in travel stories and which legitimized the first conservation’s actions with exclusion of communities.

The exhibition "Lewa Savannah" in Zurich describes the Kenyan savannah from the perspective of a pristine, untouched nature and an important source of biodiversity. The zoo emphasizes the importance of preserving this fragile ecosystem against external threats, which are often represented as the local population. The visitors can watch a video in the reconstructed school in which the Lewa Conservancy ecosystem is described as follows:

“However, this idyllic wilderness setting is challenged every day. Because here, as in many places, unfortunately, the wilderness or virgin nature is no longer respected.” (video of the zoo, 2021)

The term "virgin" means an area of land that has not yet been cultivated or used by people, while the term "wilderness" goes in the same direction, meaning that there is no road or human infrastructure (Cambridge Dictionary, 2022). “Idyllic wilderness” and “virgin nature” demonstrate the zoo's perspective on Lewa, which it portrays as an intact and fragile ecosystem, previously free of human presence but threatened by it, since overpopulation destroys the "original savannah" (explanation panel). It is the spokesperson for wildlife and serves as a platform to collect donations for these actions. The visitor then understands that this natural place must remain in its original state and therefore without human impact to protect the wildlife. .

On infrastructure, the zebra plane in the exhibition is a reference to Bernhard Grzimek. He was a veterinarian and then became the director of the Frankfurt Zoo. Since 1950, he has been involved in the protection of nature in the Serengeti National Park in Tanzania, on the border with Kenya. He promotes the creation of national parks. In 1959, he wrote a book and then made a documentary about it: “Serengeti shall not die” (Wagner, 2019).

The zoologist has been very involved in the protection of nature and is considered a precursor of conservation and tourism in East Africa. In his movie, Grzimeks depicted Africa as a “garden of Eden”, flying over huge wild plains in his plane. According to Lekan (2011) the author seems to adopt a developmentalist paradigm, claiming an immaturity among Africans who need to be modernized to better preserve their environment.

During my fieldwork in Kenya, the Lewa Wildlife Conservancy itself gives another definition of “pristine nature”. In that definition, human is not excluded from the landscape: to keep nature “pristine”, human must coexist with nature without negative interference. Indeed, according to a staff member at the Lewa office, pristine nature is a state where nature remains as it is without “bad” human modification as cutting or burning trees or hunting wildlife (Interview 34). Thus, the Conservancy Lewa is responsible for protecting the ecosystem from external threats.

As far as communities around Lewa are concerned, to compare views about the concept of “wilderness”, I asked them for their own definition of the concept. This question seemed to put them in a quandary: it was difficult to understand the question because there is no Maasai or Meru word for “wilderness”. The majority of those interviewed were unable to define the concept. As we have said, separating nature from the human species and culture is a typically Western invention that did not seem to prevail in communities that have a more holistic view of their environment. Only one person, a teacher, defined it as follows: “I think wilderness means an environment when there are no people living there. Only environment and the wildlife, there are no people living there” (interview 18). Furthermore, a body of evidence, as we will see below, prove that land was used by the communities before the LWC was established and it wasn’t uninhabited. The Maasai community claimed that before colonization, although they were nomads, their territory extended as far as the town of Meru and Nanyuki, on the current lands of the Conservancy. It is difficult to delimit the territories of the different tribes in the past as there was no formal ownership and some people from the Kikuyu tribes also gave another version about this land. However, according to the Maasai speakers, there is ample evidence that these lands were used by their tribe in the past.

Firstly, the names of the hills, rivers or valleys within and around the Conservancy are terms in the Maa language. “Lewa” itself means a place where men or Maasai warriors meet. Then, several people have referred to their ancestors, buried within the protected

area: "It wasn't empty, because in Lewa there are still graves of our ancestors" (interview 1). Elders listed ceremonial places or games engraved in the stones, traces of which can be found inside the park as well, demonstrating the passage of the Maasai. Because of their nomadic lifestyle, when they had a large traditional ceremony, they built many temporary manyattas. These were semi-permanent places where they gathered before continuing their rotation with livestock: some elders remember the places of these manyattas inside Lewa (Interview 13). Elders assume that when some settlers arrived, they found empty plains or uninhabited Manyattas precisely because the Maasai were nomads. This could be a reason why they thought that this large territory was not inhabited, since the Maasai were always on the move (Interview 8). However, gradually, as settlers moved into this territory, the Maasai also began to restrict their movement, to show that they were there and that the territory was theirs. At the same time, for multiple reasons and with the land modification, they started agriculture which required a daily care not compatible anymore with nomadism. (Lekan, 2011)

"When farming you cannot move with the land. You cannot leave your crops behind, and that is one reason of settlement. The other thing is that during this movement, people were moving around [...], they will come back and find some people have settled [...]. And then this guy will claim they found this place open like nobody is living there. But it's just that we are doing the rotation or grazing. So we say that now we need to settle. It was during the colonialism time". (Interview 8)

However, in the past, the village's manyattas were inside the current Lewa fences, which did not exist at the time. The pastoralists used to graze their cattle on these lands in the north of Lewa. This plot belonged to a settler who left Kenya after independence. However, the land was bought back by Craig after Kenya's independence as he had lost land in the South (Breed, 2011). The communities were thus evicted and the elders recall being chased away by the police, reporting that their manyatta were burned. Although the inhabitants tried to resist, they surrendered and migrated further north; the Lewa barriers were then erected, and they could no longer penetrate the land (Interview 31). Taken together, these testimonies remind us that the territory of Lewa was frequented by cattle and by men long before the establishment of the Conservancy. This version of events runs counter to that of the zoo, and communities do not refer to Lewa's land as an "original savannah" or "virgin nature". As mentioned in the previous chapter, several

points of view collected agree to depict these landscapes rather as "cultural landscapes" even if they did not precisely use this terminology.

Secondly, when communities were asked whether the LWC was an intact and protected nature, many stakeholders shared the same opinion: nature protection should protect all biodiversity, but there were many more shrubs and trees before the area was fenced off. As mentioned above, their holistic view of nature leads them to protect the totality of nature, i.e. fauna, flora, land, water etc. They do not see the Lewa Conservancy ecosystem as healthy and balanced. Many speakers mentioned the problem of the impact of the fences on the migration routes of the elephants and thus the destruction of the trees. Research has questioned the effectiveness of fenced protected areas on biodiversity conservation (Billé & Chabason, 2007). For example, fencing off an area to protect elephants will have a direct impact on woodlands, which are often destroyed by overpopulation of elephants (figure 17). Yet these areas are necessary for the nutrition of black rhinos, for example.

Recalling his memories of the area before Lewa was fenced off, one elder describes the landscape as being full of trees: "it was bushy, very bushy with so many trees. It was even difficult to reach the river" (interview 1). Today, the landscape of Lewa is rather a large plain and an open space with hills. For example, the fenced village of Manyangalo inside Lewa is green and full of trees, it is the same ecosystem as Lewa. However, on the other side of the village boundary, in the Conservancy, there are effectively no trees left (figure 18). A Lewa employee says that to protect trees around the lodges or the Lewa Headquarters area, they had to put up a barrier to keep the elephants out and preserve woodland areas (interview 35).



**Figure 18:** On the left, a Lewa tree along the minor road, which could not grow because of the elephants. On the right, Manyangalo village in the foreground, then a fence, and the Conservancy landscape in the background (the landscape is probably green because they have water for the crops but we can see the difference with the trees). (Picture by T. Raetzo).

LWC and Zurich Zoo recognize the problem of herd isolation. In response to this concern and to defuse conflicts between elephants and humans, they have established a corridor between the LWC and the Mount Kenya Reserve to the south. But once an elephant is in a closed area, it often takes some time for it to learn the gates through which it can move to another park: elephants therefore often stay for some time within a Conservancy (interview 31).

In conclusion, Zurich Zoo and the Conservancy associate conservation with a land reserved exclusively for wildlife, a pristine nature whose state must not be altered by human activities. The zoo fails to tell the story of the Maasai's place on the plains of Lewa and is using a degradation narrative blaming soil and wildlife reduction on local people. By reading the panels, the visitor can imagine that the plains have always been uninhabited and that they must now be protected because they are gradually being invaded by man and the increase in human population. On the contrary, communities accounts and scientific literature prove that these lands have been frequented by humans for a long time. This reality on the ground therefore contrasts with the "pristine and untouched" nature. However, tourists are often unaware of this reality and come to Kenya with a deep-rooted imagination which is not without consequences.

#### 4.2.5 Communities as beneficiaries: coexistence with wildlife

In its exhibition, the Zoo reports on some of the actions undertaken with the Conservancy in favour of the communities. The Zoo is committed to minimize conflicts between humans and wild animals thanks to the fences and corridors.

According to the zoo, conflicts occur because "humans are increasingly invading the wildlife habitat around the reserve" (Zoo Zurich, 2022). For example, in the Lewa region, since the development of agriculture, new conflicts emerged. Fields that have been built on elephant migration routes or near waterholes which are often visited by elephants. To alleviate this problem in the south, Zurich Zoo supported the construction of a wildlife corridor that links LWC to the Mount Kenya Reserve with a 15 km barrier that protects the surrounding communities (map 1). Wildlife can move freely without interfering with the crops and the main road.

Zurich Zoo believes that minimizing conflicts with wildlife is essential for communities to support the Conservancy and its conservation efforts.

"Peaceful coexistence will remain the key to Lewa's future success. Thanks to perseverance and a good dose of creativity, Lewa has taken many steps towards a peaceful coexistence between humans and animals" (video presented in the school of the exhibition)

A study on human-animal conflict, especially those with elephants was conducted in Laikipia County (Gadd, 2005). It confirms that conflicts can erode local support for conservation and even threaten the survival of some animals. Zurich Zoo's projects therefore aim to minimize these conflicts, in particular by means of a physical boundary that prevents interactions between wildlife and communities. The concrete actions that the zoo is proposing are therefore the construction of the wildlife corridor as well as fences to protect the livestock of the surrounding communities from wildlife (figure 19).



**Figure 19 :** In the picture on the left, the Lewa corridor under the road: the animals can reach Mount Kenya. On the right, the fences around the Lewa-Borana Conservancy. (Picture by T. Raetzo).

In its impact report, the LWC reports that human-wildlife conflict (HWC) "in neighboring agro-pastoral communities remains a challenge to wildlife and livelihoods" (LWC, 2021: p. 12). They assume that the increase in conflicts is due to the increase in population and urbanization and thus agree with Zurich Zoo: humans are increasingly meeting wildlife habitat. Although the Conservancy's goal is a peaceful coexistence between humans and animals, LWC recognizes that conflicts are still very present, especially during the dry season. Drought often causes wildlife to seek water or food from neighboring communities, which can result in fence-breaking, field damage, and livestock attacks. LWC deplores the fact that in the event of a repeated offence, wild animals are often killed by local people to prevent further damage to their livelihoods.

“Lewa currently hosts nearly 400 elephants and about 2000 buffalos, and about 250 rhinos. And given that, human-wildlife conflicts are inevitable. Lewa is fenced, you will see elephants trying to break the fence. For example in that time now with drought time, we are very busy”. (Interview 34)

In addition, LWC notes a large increase in predator populations such as hyenas and lions within the Lewa-Borana landscape, which puts pressure on herbivore populations as well as domestic livestock.

As noted above, the fences and wildlife corridors are erected with financial support from the zoo precisely to mitigate conflict. To anticipate these risks, KWS and the conservancies have also set up a monitoring system to manage the most problematic and dangerous animals and eventually translocate them to less populated areas (Interview 34). As the



Zurich Zoo states, LWC is being creative as it experiments with the installation of beehives along the fence at one place to keep the elephants away, because they don't like those insects (Interview 33). Thus, the LWC is responsive to conflicts and the rangers act quickly. In addition, when fences are destroyed, they are quickly repaired to limit further conflicts. For the LWC, it is very important that communities are aware of these intervention efforts so that they maintain a good relationship with Lewa (Interview 33).

#### *4.2.5.1 Human-animal conflicts in communities*

To better understand the subject of coexistence between people and wildlife, respondents from all three communities were first asked to explain how they live with wildlife and whether they encounter any conflicts. Whereas boundaries of Lewa creates a limit between the communities and the wildlife of the Conservancy, conflicts are still frequent in different geographical areas: it is therefore difficult to talk about a totally peaceful coexistence. But the frequency of attacks and damage varies between communities.

The conflicts are of two different kinds. First, farmers can lose their crops to certain primates such as baboons or to elephants. Elephants are most feared because they are difficult to hunt and dangerous: a month before I arrived in Ngare Ndare, a woman was killed in the forest while collecting firewood and another had been injured very recently (Interview 14). The second type of conflict is related to herders and predators such as lions, hyenas, leopards, cheetahs and, in the Leparua area, increasingly wild dogs which attack the herds, both during the day when the herd is grazing and at night when the animals are locked in a boma.

As mentioned above, Subuiga people live mainly from small-scale agriculture (fruits, grains, vegetables) and own some domestic animals but are less likely to have large herds like the Maasai. The Subuiga community experiences some conflicts with the crops but these are rare. Respondents said that rangers moved quickly when called. Subuiga is off the main road and is in a relatively densely populated area, so wildlife does not venture into the area very often.

The community of Ngare Ndare is fully fenced and well policed: conflicts are not frequent. It is difficult for elephants to reach the village unless they pass through a gate and the rangers react quickly (map 1). People with livestock may encounter conflicts with lion or leopards coming from the forest (Interview 14). Recently, a local man lost a dozen goats

because a leopard got into a boma during the night. He had chased some of the goats for food but the others died because leopards like to "play with their prey" (Interview 16).

The theme of human-animal conflict was explored in greater depth with respondents from Leparua because they have more problems with wildlife. As mentioned above, Leparua is isolated and a less densely populated village, not fenced in and located within a community conservancy: the inhabitants are therefore more often confronted with wildlife. In addition, children do not go to school too early in the morning because the road would be too dangerous because of the wildlife (Interview 3).

The Leparua River originates in the interior of Lewa and flows into the community of Leparua, next to the gate. A little further on, there is a water fountain where the cattle comes to drink. The main farmers are in this area which is naturally irrigated (see figure 1). This is therefore a conflict area, as elephants often come to drink from the fountain in the evening and it is close to the fields. Other community members have small gardens but are located on the higher ground in the village and do not encounter these conflicts. As the following comments confirm, conflicts with the fields along the river are recurrent.

"Last week for example, elephants came and destroyed everything. And I was left that way. To have crops is a big difficulty [...]. We don't sleep at night because we are guarding the animals to not destroy our crops and this is not our job. I stay awake every night. We are supposed to sleep at night [...]. Sometimes we plant maize and we'll work for 4 months and after 4 months an elephant comes and destroys everything. You can imagine how painful it is? Every resource is coming from that farm. I must sell that. I get money. I pay for my children's school. I need it. I felt so much pain. Because right now we have nothing to eat, so what will we do? We are just doing a job that has no profit." (Interview 2)(figure 20)



**Figure 20:** On the left, the destroyed Maize field and on the right, the feces left by the elephant during the night. (Picture by T. Raetzo).

In his study, Gadd (2005) argues that elephant damage is not just a direct loss of income and food. These conflicts have an indirect impact on the education of children who may not be able to attend school or participate in watching the fields during harvest. It also represents a psychological stress factor during the nightly rounds.

Shepherds, also face problems with predators. During an interview, many bones were on the ground and pieces of meat drying on the trees. These were the remains of animals after a wild dog attack during the day.

“Now we have a serious issue, that is the wild dogs. They have grown in numbers, so many. A day before yesterday, they killed our goats. They were grazing up there and they killed 20 of them. So you see these fresh bones and pieces of meat on the tree? They let that meat after leaving. Even the hyenas kill a big number of goats. When they get lost and find them in the bush, they will kill a number of them.”  
(Interview 8)

Those testimonies confirm that conflicts are still present and coexistence with wildlife has not yet been achieved. In its film, Zurich Zoo shows a corridor that has been made south of Lewa and the positive impacts of this infrastructure. However, this is only a very small part of the Conservancy. Conflicts remain all around the protected area, which the zoo does not mention. While the fences draw a boundary between communities and wildlife, many species venture beyond the fences through gates and come into conflict with the surrounding communities. The main problem is that people are never compensated by the government, the legal holder of wildlife. None of the respondents we met had ever

been compensated for damages, even when filling in the necessary forms (Interview 2 and others). Since it is their livelihood, these conflicts represent a considerable loss. The LWC seems not aware about this problematic, claiming that people are automatically compensated: "If there is a crop damage, we bring it to the KWS and the compensation process starts from there. So the wildlife belongs to the government, but we take the front line in human-wildlife interventions" (Interview 33). The problem is that if people feel that they are not adequately compensated for the damage, hostility can arise against the protected area (Gadd, 2005). For conservation to be successful local people should benefit from it.

When shepherds of Leparua or Ngare Ndare were asked about those conflicts, they hardly blame the Lewa Conservancy, as they were used to encountering predators long before the establishment of the protected area: "living among wild animals, you know it can happen" (Interview 1). However, farmers in the communities had greater animosity towards wildlife, especially elephants, and feel desperate about the loss of their crop. They call the rangers and rely on them to chase the elephants away, but damage is often inevitable. The blame is often put on the Government and on Lewa: one farmer accuses them of not monitoring their wildlife enough (Interview 2). In his study in Laikipia County, Gadd (2005) confirms this observation by founding that depending on land use, people have different attitudes towards wildlife and especially elephants: farmers seem to be much less tolerant than pastoralists.

Also, conflicts with elephants have increased as agriculture has developed in the whole country. Even the Maasai, who used to live mainly from pastoralism, have started small-scale subsistence farming. Many are living from agro-pastoralism for various reasons. The traditional Maasai depended on their livestock for meat, blood and milk to drink and were nomads (German et al., 2017). However, since 1980, East Africa has been increasingly affected by severe droughts which has led to severe famines also in Kenya where herders lost many animals. Changes in land and wildlife management as well as environmental changes have prompted the Maasai to start growing some crops to stock food and prevent famines. In addition, various projects have been set up to provide better access to water and irrigation, which allows crops to be watered in these arid landscapes. This is one of the factors that has led to the gradual spread of small-scale agriculture in the communities (Biovision, 2022).

Starting farming along the Leparua River naturally led to conflicts as there was a waterhole where elephants used to drink (Interview 39). It is necessary to take into account the migration routes that elephants have used for hundreds of years and not to build on these territories: "it is important to leave room for the wildlife which needs to be free" (Interview 39). Fencing off agricultural crop areas with electric fences as well as damages compensation could be a potential solution, although elephants sometimes break these fences too. These disadvantages that the population suffers because of wildlife are also not presented in the Zurich exhibition.

Yet, as we have seen, the Conservancy encourages alternatives to pastoralism. However, by motivating livelihoods such as agroforestry or agriculture, Gadd's study (2005) argues that the increase in conflict should be anticipated, especially as the elephant population increases. Indeed, the Conservancy claims that elephants' population has increased by 12% over five years due to the promotion of human-elephant coexistence (LWC, 2021: p. 11).

Pastoralism is an ancestral means of subsistence: the Maasai have been used to living with wildlife and conflicts with predators have existed for hundreds of years. Promoting new alternative livelihoods as proposed by the Conservancy's projects also increases the risk of conflict with elephants and reduces the land available for wildlife. Although small-scale farming has less impact on wildlife than industrial farming, farmers are even more vulnerable to conflict as they do not receive compensation and often do not have the means to protect themselves. Thus, "land conversion from pastoralism to agriculture threatens elephant survival, not only in terms of habitat loss, but also in terms of lost tolerance among people who have shifted to farming" (Gadd, 2005: p. 50). According to Gadd (2005) it is better not to promote agriculture in the vicinity of protected areas that are home to large numbers of elephants: "encouraging pastoralism or investing in more compatible land uses is likely to be more fruitful" (p. 60).

#### ***4.2.5.2 Fences as a prohibition of access by Maasai***

Secondly, still on the theme of coexistence with wildlife, respondents were asked about the usefulness of separating their territory from Lewa by a fence.

In the community of Subuiga, the barrier is seen as a boundary that provides a more secure space for the community and allows them to live from small-scale agriculture, even

if they still encounter some conflicts: “in the past, there was no agriculture in Subuiga, that began after. There were people but they could not make agriculture because there was no fence and now they began, it is better with that fence” (Interview 23).

Maasai people of Leparua and Ngare Ndare have more mixed views on the establishment of barriers. Like the people of Subuiga, many stakeholders saw the barriers as necessary for safety. They attribute two important roles to the fences. Firstly, boundaries are considered to be necessary for the protection and monitoring of wildlife, especially of the rhinos that they consider to be under threat (Interview 7). Since the space is reserved for wildlife, it avoids possible competition for resources. Secondly, they reduce the conflicts that communities may encounter with wildlife. For example, given the number of predators within the Conservancy, removing the fences would significantly increase livestock attacks (Interview 1). But often the fence is seen more negatively as a ban on access to Lewa land. For example, some stakeholders overlook the role of fences in protecting wildlife and consider that they are only erected to prevent herders from grazing their animals. The second reason can be explained by looking at the history of the communities: these places were connected by small paths or roads which are today inside the Conservancy and can therefore not be used anymore. The community of Leparua complained of feeling isolated and would like to pass through Lewa but are prevented to do so by the barriers. Indeed, this community is in the hills north of Lewa and does not have a main road. Some have family ties with other communities around the Conservancy such as Manyangalo or Ngare Ndare (map 1). The northern gate of Lewa, bordering the community of Leparua, is constantly guarded by rangers who do not allow motorized vehicles to enter and cross the Conservancy to not disturb wildlife. Because of this ban, to reach the other communities, Leparua residents have to bypass the Conservancy via Isiolo (see map 1 and map 2). Many people have complained about this lack of access, as the long journey takes over 3 hours and has a significant financial cost. To alleviate this problem, the Lewa Conservancy organizes a shuttle every 14 days (fig 21). A truck picks up the residents and takes them through Lewa to Matunda gate. I have sometimes seen people from Ngare Ndare coming to visit relatives in Leparua using this shuttle. Residents are allowed to walk the path if they wish. However, no one dares to venture through Lewa on foot due to the high number of wild animals living in the Conservancy. Moreover, it is engraved on a stone at the entrance to the Lewa gate that people walk on their own responsibility: "Warning. This is a protected area and entry is restricted. Visitors enter

the Conservancy entirely at their own risk. Management accepts no liability for loss of life, or damage, or injury to persons or property howsoever incurred. Please show due respect for the wildlife and habitat, speed limit 40 KPH" (figure 21).



**Figure 21:** Gate of the Lewa Conservancy which is located in the community of Leparua. In the picture, on the left, you can see the shuttle that picks up the residents every fortnight and goes back and forth in a day. We also see the LWC stone of warning. (Picture by T. Raetz).

Finally, the isolation of the community and its lack of access to other towns does not allow them to develop a small agricultural business. The small farmers therefore only produce for their own consumption:

“We have no access to the other side. If this road were open, we would even have some crops for business, like onions, tomatoes. Now they are only growing maize and beans for food, but not for a commercial purpose. Simply because this road is closed.” (Interview 10)

On the contrary, the people of Subuiga live directly next to the major road which has more traffic. This allows them to set up small roadside shops or even travel to the surrounding towns to sell their harvest crops. This community is much more recent and wasn't evicted,

people came to settle after Independence and developed their business there. Ngare Ndare is crossed by a minor road where motorized vehicles are allowed and can therefore easily cross Lewa to Matunda Gate (map 1). However, some people in the community of Leparua feel more isolated. Lewa Conservancy claims that communities have already fair access to the park: “It's a protected area, you can't allow access to lots of small roads with motorized vehicles, it's not sustainable. The access is fair enough” (Interview 33).

Finally, Zurich Zoo and the Conservancy claim to improve human-animal conflicts by using fences and corridors. As mentioned, visitors of the Zoo are predominantly western and share this culture of separation of nature and culture. The discourses and representation of the Lewa Savannah exhibition feeds into this dichotomous mental schema: at the zoo we have a barrier that separates the wild animals from the village and from the visitors. At Lewa, we have a fences that separates the Conservancy from the surrounding communities and a discourse that says this is the best way to co-exist. However, this barrier by far does not prevent all conflicts and this is not mentioned in the zoo. Secondly, although many people in the communities recognize the importance of the fence in protecting the rhinos, it is often seen by the Maasai as a barrier to human and livestock access and a means of controlling them. From a political ecology perspective, the demarcation of a “conservation territory” by barriers can be seen as an instrument of governance: “the creation of territorialization is a process reflecting the exercise of power, and the control of space, people and nature” (Evans & Adams, 2016: p. 215).

#### **4.2.6 Communities as beneficiaries: projects for the communities**

Communities living around the Conservancy are denied access to the land that is reserved for wildlife but are expected to tolerate wildlife that comes to graze or damage it without ever being compensated financially. That is why, for a conservation programme to be successful, it is necessary that the surrounding communities can benefit from the conservation (Gadd, 2005). Most importantly, the link between the benefits received and the wildlife resource and the tourism generated must be clear for communities (Gadd, 2005).

Thus, as we have seen, the zoo attaches great importance to human-animal coexistence, but it also finances projects to improve living conditions. Firstly, according to the zoo, the communities benefit from tourism:



“Income from tourism can improve the living conditions of the local population. People employed by hotels, restaurants and safari operators, as well as fishermen and farmers, benefit. The resident population also benefits from the development of tourism infrastructure such as roads, airports and medical care [...]” (Blackboard of the Lewa school in Zurich)

Indeed, the money generated by tourism, conservation fees and donors help support Lewa and its projects. Zurich Zoo supports various socio-cultural and medical projects as well as freshwater boreholes, that improve the living conditions of the local population.

Secondly, according to the Zurich Zoo, children in the communities benefit from a better education system and in order for conservation to be supported locally, it is necessary that children are educated in this sense: “it is particularly important that the notion of human-animal coexistence is also shared by the people living in the vicinity of the park” (Zoo Zurich, 2022). This is why it has supported the construction of an education center in the Conservancy “where children and adults can learn about the environment and nature conservation” (Zoo Zurich, 2022). Raising awareness about conservation and how to live with wildlife is a popular topic in schools.

LWC carries out numerous projects in local communities and beyond along 5 main lines: healthcare, education, women’s micro-credit, water, agriculture and agroforestry.

On healthcare, LWC supports four clinics with the help of the government and runs one of its own inside the boundary of the Conservancy near the headquarters (LWC, 2022). One small clinic is in the community of Leparua. These health centers carry out various actions such as diagnosis and treatment of physical and mental illness, immunization for children, but they also take care of pregnant mothers until they give birth. These clinics are the only health centers for the communities around the Conservancy who previously had to go to hospitals much further away: in Isiolo, Meru town or Nanyuki (Interview 33). They also have an ambulance.

The second major projects of the LWC concern the education of both children and adults: « children in rural communities face the same challenges of poor-quality education in under-resourced schools” (LWC, 2022). LWC supports 19 primary schools in the region and 5 secondary schools. They support infrastructure projects such as new classrooms and equipment, teachers’ houses, dormitory, laboratory, kitchen and a digital literacy centre for each school. For example, LWC has built libraries to ensure that children have

suitable books available and to encourage a reading culture. Digital literacy centers use technology to teach local communities. Teachers are trained by Lewa to use these tools effectively. Some schools also receive computers and tablets as well as a projector through a partnership with the government (LWC, 2022). In addition, each year at the school leaving examinations, Lewa Conservancy will sponsor the boy and girl with the best result to continue their studies (Interview 34). They also take in consideration other issues like family background. Lewa also has an education center near the Matunda gate. For example, if schools come from far away to visit the Conservancy, they will pass through this center to be made aware of Lewa's actions. There are different panels explaining the different species in Kenya, the threats, the importance of not throwing away plastic, etc. There is also a big mural against a wall: on one side, the mural represents what is bad for conservation and nature and on the other side, a healthy and flourishing nature (figure 22).



**Figure 22:** mural in the education centre. (Picture by T. Raetzo).

The left side of the mural is filled with grass, vegetation, wild animals and plenty of water. In the back is Mount Kenya. We see a yellow bus at the back and a person walking alone in the savannah. On the other side there are no more trees on the hills but houses, there are dead animals, a big elephant and no grass. Finally, we can see herders with their herds in the background. This mural shows that where communities live, the ecosystem is in a

bad state: indirectly, pastoralism is shown as one of the causes of this degradation. Thus, the negative narratives in Zurich Zoo are also taught to children in the Conservancy.

Lewa also has a WME (Women's Micro-Enterprise Programme), supported by the NGOs WMI (Womens' Microfinance Initiative) and KIVA. This system works a bit like a bank: women can borrow an amount from Lewa and must pay it back within a certain period with a certain interest. These loans can be used to start their own business, such as buying a small hairdressing salon, buying chickens or cows, buying a small shop etc. Since its creation, 1800 women have benefited from this project and the money they pay back is used then for other micro-finance projects (Lewa, 2022). A common project is for women to plant seeds and make a tree nursery or to invest in their farm (Interview 33).

To provide drinking water to the surrounding communities, LWC has various projects that include dams, water tanks, cisterns and boreholes. For example, to prevent people from drawing too much water from streams, they have made water boreholes where water is pumped through solar panels (Interview 33). On a hill in the village of Manyangalo, they installed a water supply tank for the crops providing an intermittent water supply: some days one part of the village receives water and the next day another part (Interview 35) (figure 23).



**Figure23:** Water reserve on Manyangalo hill, funded by Lewa. (Picture by T. Raetzo).

In the community of Ngare Ndare, there are 3 water tanks to which 2 distribution pipelines are connected for the village which still operates on the principle of sectionalized supply (Interview 34). In Leparua, the pipelines come from the Lewa spring into a large tank supplying the school and clinic with drinking water. There are then secondary tanks for the villagers. To improve water management, LWC offers training on sustainable water resource management and especially the protection of catchment areas such as the Ngare Ndare river spring within the forest. To date, "Lewa has built and overseen 17 water projects, providing a reliable water source to approximately 30'000 people" (LWC, 2022: p. 21). These irrigation systems can also be used to water gardens and small farms. In Ntumburi, for example, they have also built two irrigated drinkers of different heights for the herders to bring their goats and cows to drink. Such a drinker is also present in Leparua but the respondent could not tell me if it was funded by the LWC. The fourth activity that LWC supports is agriculture, as many people practice small-scale farming in the communities surrounding the park. LWC provides training to local farmers on preserving soil quality or on crop diversification. The community of Subuiga, for example, has been supported with an education programme on irrigation, farm management and planting methods (Lewa, 2022).

In addition, next to the Manyangalo school, a group of women grow vegetables in a garden to add nutritional value to school meals: "if children are sent home at noon they do not come back in the afternoon, so they are fed at school with these vegetables grown in an organic way without pesticides" (Interview 35). To prevent the crops from being attacked by monkeys, a tourist from Lewa provided money to build a greenhouse. Such a project was planned for the children of Leparua, but when they started to put up fences to demarcate the garden area, elephants came and destroyed them and the project remained on hold (Interview 39). This garden aims to teach children and teachers some skills they can use at home (figure 24).



**Figure 24:** Greenhouse garden in Manyangalo to feed the children of the Lewa school. (Picture by T. Raetzo).

Lewa also has three tree nurseries, one in Manyangalo and one in Ngare Ndare (Interview 33). According to the Food and Agriculture Organization of the UN, several million hectares of forest disappeared each year between 2000 and 2010. According to the LWC, the main threat is population growth and increasing land use for agriculture. With this tree nursery, they hope to resell trees and support the planting of trees in the surrounding forests (LWC, 2022).

Finally, LWC sees itself as an employment hub in the region. Indeed, they employ more than 300 people within the Conservancy and, of these, 95% are from the surrounding communities (Interview 33). According to the respondent, only a few people were hired from further away, in the Marsabit or Meru area. Some work in security, others in the offices or may also be employed in the lodges for the tourists.

Finally, the Lewa Conservancy understands that to maintain a good relationship and a high level of trust with the surrounding communities, they must benefit from Lewa. The Conservancy sees itself as a model and catalyst for conservation. As a relatively old institution, other Conservancies are inspired by their management and project system (Interview 33). And above all, like Zurich Zoo, Lewa believes that sustainable conservation will only work if communities are educated about it. Finally, according to a Lewa employee, the presence of the Conservancy is vital for the communities:

“If we remove Lewa from the picture, what would be the scenario? [...] Wildlife will be killed daily. Communities’ conflicts are enormous because they fight for grazing or for water. Employment would be different, maybe these 300 people might be in

Nairobi, or maybe criminals, or jobless. People would not be able to read and write. Just remove Lewa and it would be totally different.” (Interview 33)

Finally, communities themselves were asked to reflect on the positive impacts of the Conservancy and the projects from which they benefit: the various positive aspects cited by community members are summarized in the table below:

Subuiga	Leparua	Ngare Ndare
Primary and secondary school Lewa Marathon Water tanks Fencing	Hospital Primary school Water tanks Microfinance Providing security, helping with cattle raids	Microfinance for women Water tanks Lewa Marathon

The benefits perceived by the communities are often physical and visible infrastructure such as buildings or water pipelines. All buildings funded by LWC have a green roof and a plaque engraved with the names of the donors who supported the project: they are therefore easily identified. In contrast, none of the respondents mentioned the agroforestry, the tree nursery or agriculture training projects mentioned by the Conservancy.

Starting with the field of health, almost all respondents in Leparua mentioned the clinic as a great advantage of the LWC. Indeed, a clinic and a laboratory have been built in the upper part of the community, close to one of the primary schools. Next to the clinic, a small typical mud house has been built for women waiting to give birth (figure 25). The list of treatments offered by the establishment is displayed against the establishment with the prices of the services that each client must pay. The doctor at the clinic, a Lewa employee, says:

“The hospital opened in 2006 and I have been here for 6 years [...]. Before, the mortality during deliveries was very high in Isiolo County, so this clinic is great. Now we offer a lot of care.” (Interview 12)



Almost all respondents in Leparua and Subuiga cited school infrastructure as a direct benefit of the Conservancy. In Ngare Ndare, however, there are two schools, one of which is not supported by Lewa. Respondents in the study were close to this school and therefore do not perceive any academic support from Lewa, unlike the second. Again, like the clinic, this is a benefit symbolised by physical buildings in Leparua and Subuiga: the schools also have a green roof with the names of the donors on the walls and so the link is made directly with the Conservancy.

“It's good that Lewa sponsored the classes, otherwise the school would have a lower standing. Some of the classes have the interactive screens and they switch and alternate so that all the students have access.” (Interview 12)

Also, when there are end-of-primary-school exams, the LWC chooses the boy and girl with the best results: the LWC commits to pay the school fees for the rest of their secondary education. This was also often cited as an advantage of the LWC. However, some people experience this as an injustice and find the selection system unfair. For example, some households with more means can send their children to schools or boarding schools further away with a higher level of education. However, at the time of the final exams, the children take the exam in the local school and therefore get the best results, thus obtaining the Lewa sponsorship. This system would, in their view, reproduce the divide between poor and better-off families (Interview 14 and others).

Learning conditions are sometimes poor in schools, especially in arid and remote locations. For example, in Ngare Ndare school, which is not sponsored by Lewa, a grade 4 teacher reveals that she is responsible for 56 children of all ages: “because it depends when the parents started the school for the children” (Interview 49). In addition to poor conditions, there are cultural barriers to education. Sometimes Maasai parents claim that schooling has been imposed and are afraid that improved education will lead their children to gradually abandon pastoralism. As a result, they do not always support the education of children, as confirmed by a Maasai stakeholder:

“When the government took over the land of Ngare Ndare after independence, many Kikuyus came to buy the land, there were the first schools, and the Maasai moved away, because they believe in cattle and did not want their children to go to school and become educated ‘cattleless people’ who go to town.” (Interview 14)



In Leparua, examination results are therefore relatively poor compared to other schools in Kenya. To address this issue, the elders of Leparua met and wanted to organize a council with members of Lewa: together they hope to promote the benefits of education in the Maasai community and improving the exams' results (Interview 39). With regard to the Merien respondents from Subuiga, they all appreciate the education that Lewa provides, although some would like their children to be automatically sponsored by the Conservancy.

With regard to job creation, respondents in all three communities recognize that LWC provides employment, but they all complain that they do not have enough job opportunities from the Conservancy, particularly people from Subuiga. Furthermore, although the zoo claims that tourism offers many job opportunities, I have met very few people who have worked for Lewa. Communities really expect Lewa to give them an opportunity and complain that they are not engaged. In addition, they have the feeling that LWC is recruiting rangers or employees from further away, and not from the surrounding communities as in the past. A problem with rangers who are not from the same region or ethnicity is that they are not sensitive to local issues and do not build relationships with the communities (Butt, 2012).

“They take people from far away, so they are strangers and they don't want that relationship with us maybe [...]. They take people from far away, western Kenya. So there is no relationship. This person will deny your right, but this land was ours.” (Interview 15).

Yet Lewa claims that 95% of its employees are from the surrounding communities. Some rangers said they were not paid enough for such a dangerous and not recognized job (Interview 20).

“Being a ranger going inside and looking after the animals is dangerous and very hard, because you can be killed, and the salary is not good. We are payed 20'000 KES (160 CHF) per month, but it is not enough for the school fees of the children.” (Interview 19)

Finally, respondents recognize benefits such as security: when there are cattle raids by other communities, for example, Lewa can help them find the cattle by deploying rangers or the helicopter (Interview 5, 10 and al.). Since there is no police force, the rangers take on this role. Furthermore, the establishment of tanks and pipelines in communities allows

for the distribution of clean water to households (Interview 8, 10 and al.). The communities of Ngare Ndare and Subuiga also enjoy the annual marathon organized inside the Conservancy, as the communities receive an amount generated by the event (Interview 23).

Finally, the three communities studied recognize certain benefits from the presence of the Conservancy. Among the cited benefits, it is the buildings that are the most recognized. Indeed, these are easily recognizable physical elements as they all have the same layout with the donors' names on them. However, they often had comments about the projects that did not suit them. During the fieldwork, the three communities often claimed that the other villages were favored over them. Each community felt less supported than the other. Often, community projects were mentioned in the Conservancy's impact reports or verbally during interviews, but the communities did not seem to be aware of such projects and did not know they existed. The surrounding communities expect more from the Lewa Conservancy: some expect work, but others expect also support in all areas of their daily lives depending on the interests. One employee of Lewa responsible for projects was tired of hearing that Lewa could do more when some of the farming projects it has funded were quickly abandoned by the communities: people have a lot of varying expectations depending on their interests (Interview 35). In a discussion, a doctor in a clinic employed by Lewa said:

“You see, many people here blame Lewa. Lewa doesn't do this, Lewa doesn't do that. [...] But we should look at what Lewa is doing and what the government is doing. Because most of the projects that Lewa is proposing should be done by the government and by politicians. So I think you can blame Lewa for not doing everything perfect, but at least they do something, let's not forget that. I think people expect a lot from the Conservancy because it's the only one that is here and doing something.” (Interview 12)

Thus, on the whole, it seems that communities see LWC as a powerful local institution that should provide them with opportunities: beyond its conservation role for wildlife, Lewa is expected to help the communities around it. Thus, they expect more from LWC than from the Kenyan government, as one interviewee mentioned: “and even the Government is not efficient. That's why we are most looking at Lewa for support of work” (Interview 27). For example, another major source of dissatisfaction in the community of Ngare

Ngare concerns the village's freshwater source. For some years now, a suspension bridge over the Canopé has been installed in the Ngare Ndare forest for tourists. Tourists can also hike to the water source and bathe in it (fig 26). However, many village respondents are angry about this activity as the water is used by the villagers for their consumption: the tourist facility was burnt down in 2021 due to some tensions (Interview 15, 20 and al.). Since Ngare Ndare forest is next to Lewa, this activity is often offered to visitors to the Conservancy. Having also done this expedition twice, no guide ever said that the water was the communities.



**Figure 26:** On the left, tourists bathing in the Ngare Ndare spring. On the right, the walk above the Ngare Ndare canopy, also for tourists. (Picture by T. Raetzo).

Thus, projects are not always enough to gain the support of local communities, but, as we will see later, incorporating them into decisions leads to less disagreement. Furthermore, while the communities benefit from some of the Conservancy's projects, they also have some disadvantages related to the Conservancy and these are not mentioned within the zoo. Finally, communities have no decision-making power within the Conservancy.

#### *4.2.6.1 The example of Il Ngwesi*

During the fieldwork in Kenya, I visited the Conservancy of Il Ngwesi, which in Maa language means “People of wildlife”. The Conservancy has its own lodge and is adjacent to Lewa, Borana and Leparua. It currently is the only upmarket lodge both owned and run by the Maasai community and is a good example of community conservation (Il Ngwesi Conservancy, 2022).

In the late 20<sup>th</sup> century, the Craigs of the LWC understood that communities were important elements in effective conservation and in expanding protected areas (Breed, 2011). Il Ngwesi was a communal ranch owned by 6 Maasai villages. In 1996, the community elders agreed to set aside 8,675 ha of their grazing land for conservation. The Craigs helped the landowners' committee obtain a loan from the World Bank to build a tourist lodge (Breed, 2011). The infrastructure was built by local people with materials from their land (fig 27). Eighty men worked for ten months to build the lodge. Ten of them were selected to learn hotel management and hospitality while others became rangers (Il Ngwesi Conservancy, 2022). The Conservancy is managed by a committee of Maasai representatives who decide how to allocate the profits. This money helps them to pay for their children's schooling, to fund some school and health facilities, to buy land for grazing etc. Although the Conservancy is not fenced like Lewa, the pastoralists have decided to dedicate this land to tourism and do not come to graze cattle. The Conservancy has two white rhinos which are in a pen near the lodge and are under constant surveillance.



**Figure 27:** the Il Ngwesi lodge with the bed, the swimming-pool and the Maasai guide on the left and the translator on the right. (Picture by T. Raetzo).

This conservation model is a good example of the integration of local communities in conservation and its governance. Since they themselves decide on the allocation of financial resources to projects, there is no resistance or misunderstanding of decisions.

### **4.3 Potential consequences of the discourses in Kenya**

“You know, tourists don't come here to see human beings. No, they want to see nature and wildlife” (Member of Kenya Wildlife Service, interview 42)

The narratives perpetrated in Europe are not without consequences for the Kenyan landscape. Western tourists come to Kenya with their patterns, their preconceptions and above all, expectations: they want to see the charismatic megafauna in the typical African landscape and are willing to pay a lot to live the authentic safari experience (see chapter 4.1 for the price of boxes). Carrier and Manclod call this experience an “ecotourist bubble” which “focuses attention on the interaction between ecotourists and the particular nature or culture that they are visiting”, without giving details on the historical and social context (Carrier & Macleod, 2005: p. 316).

In a study conducted at Masai Mara in Kenya, Butt (2012) demonstrates the surprise and even dissatisfaction of tourists when they see livestock or human beings within the protected area. This contrasts with the idea they had of safaris: they don't find grazing cattle natural, accuse it of disturbing the wildlife and damaging the ecosystem. In the survey, grazing cattle was more of a concern to park officials for customer satisfaction than for the ecosystem. In an interview, talking about the problem of access inside Lewa, someone said: “the animals in the Conservancy are the same ones that come to our land in Leparua, they are used to us and we don't bother them, so I think it's clear that they (Lewa Conservancy) want to keep it (the land) for the tourists” (interview 39).

The tourism dynamic I have seen in Kenya, also within Lewa, fits Carrier and Manclod's ecotourism bubble logic: tourists move through landscapes that are presented as natural and wild and can view wildlife without being disturbed by interactions with other humans within the parks. Kenya is a huge country, so if tourists don't travel by car, they fly from park to park in small planes. Thus, many Conservancies have their own airstrip, and so does the Lewa Conservancy too. Tourists often see little or no towns or villages between the Conservancies but move from plain to plain looking for wildlife. In Lewa, they stay in luxury lodges or campsites with a view of the savannah and the wilderness. Besides, one of the lodges is called “Lewa Wilderness”. Artificial watering holes are maintained at strategic locations so that wildlife can come and drink and be admired by tourists. As mentioned above, this is a fenced park that communities are not allowed to enter. However, the Conservancy offers more cultural activities such as visits to the villages and its projects in the local communities outside the fences. However, Butt (2012) notes that these cultural visits often occur during the day, when Maasai livestock are not in the

villages as they graze outside. This could also be an explanation for the fact that tourists are not aware of pastoralism as a mean of livelihood.

Finally, if we analyze the map of Lewa (map 1), we can see the names of the communities in red that I have added. The original map shows only the red dashed minority road. As explained, inside the conservancy there is a fenced village of Manyangalo with hundreds of inhabitants practicing agriculture and some pastoralism. The community of Ngare Dare has thousands of inhabitants. However, these villages do not appear on the Conservancy's maps: "it is as if our villages do not exist" (interview 16).

The social construction of an idealized nature and wilderness coupled with the demonization of local communities influences the imagination of tourists as well as conservation policies. Communities are perceived as a threat to the conservation of biodiversity and according to these discourses, are damaging a "pristine wilderness". This has led to a commoditized form of nature tourism in a form of a "bubble" (Butt, 2012). Tourists are unaware that to experience a safari that they deem "authentic", communities may have lost access to the resources of the land. The story we tell influences the landscape. According to our theoretical framework, myths and discourses have an impact mental pattern, and therefore on state policies, norms and in turn on the environment. The concept of protected areas dedicated to wildlife stems from western notions of pristine nature untouched by humans.

## 5 Interpretation of results

The aim of this chapter is to answer the three hypotheses that were formulated at the beginning of the thesis. The first hypothesis stated that both in its rhetoric and infrastructure, the Zurich Zoo tends to portray communities in Kenya as non-modern and threatening to biodiversity. By placing them as beneficiaries of conservation, it minimizes the negative impacts that communities may experience. Secondly, the Lewa Conservancy in Kenya as well as the surrounding communities hold a different position. Communities seem to be integrated and have a role in conservation for it to be effective. The last hypothesis raised that there is a lack of coherence between the representation in Zurich and in Kenya.

### 5.1 Negative narrative on local communities

The first assumption of this work was that the zoo portrays communities as non-modern, presenting them as threats to biodiversity as well as beneficiaries of the projects, while minimizing the impact of conservation on their lives.

Taking into account the previous chapters, we can validate this hypothesis. Firstly, Kenya represented at the Zurich Zoo exhibition is effectively represented as “backward” compared to our Western countries and communities in need of education. The zoo is located in Zurich, a Wealthy western city, the economic capital of Switzerland. It is mainly frequented by Western visitors. Although the reconstruction of the Kenyan infrastructures in the zoo is in line with the reality on the ground, no context is provided and they seem out of place and even look like they are from another era. As mentioned above, living conditions and infrastructure in Kenya vary enormously from place to place: while the cities are exposed to globalization, the more remote and arid areas are more traditional and resemble more closely what is presented in the Zurich Zoo. In its exhibition, the Zoo has chosen to show this part of Kenya, the Lewa region and has therefore erected various infrastructures which feed the mental schema of the visitor: a zebra plane, an old telephone with a wire, a school, a hairdresser’s salon, a safari bus that visitors can climb on, a rudimentary safari camp site in comparison with the lodge in Lewa, etc. The zoo tells a story to the visitor who, seeing only this part, might generalize what he sees to the whole country. The same visitor does not know that many people own a mobile phone in Kenya or that the lodges provided for tourists are very luxurious and

high end. Unless they research it proactively, they will not know that the rangers use the most sophisticated equipment to protect the wildlife and that the helicopter can fly around the park at night. The infrastructure of Zurich Zoo therefore perpetuates an image that is not modern and that one imagines to be “traditional”. However, these representations are not surprising; the discourses adopted by European countries about Africa often follow “an old fashioned, romanticized ideology of a nature untouched by humans” (Weissman in Haller et al., 2019).

Secondly, as we have seen, communities are effectively perceived as a threat to biodiversity for two main reasons: poaching and overgrazing by pastoralist that cause land degradation. Johnson and Lewis (1995: p. 2) define land degradation as “the substantial decrease in either or both of an area’s biological productivity or usefulness due to human interference”. This concept leaves room for multiple interpretations. For example, if a country wants to farm to export products in quantity, the replacement of forest by agricultural land would not be considered as degradation: the land would become more productive (from an agricultural and economic point of view). In this sense, the selection of degradation criteria is a specifically political and therefore power choice (Robbins, 2013). This selection will have an impact on the state resources invested either in protecting the forest or in eradicating it. The environment we take for granted is constructed and the result of political decisions. In the Zurich exhibition, pastoralists are thus mentioned as a threat because of their activity, while the drastic decrease of trees since the establishment of the Lewa Conservancy is not mentioned. Furthermore, the representation of communities as a threat is conveyed in the Conservancy itself, within its education center. Indeed, in the mural painted against the wall (figure 22) the traditional way of life and pastoralism are associated with the death of animals and aridity. This mural is a good representation of the Western distinction between nature and culture that could not coexist together. Yet many of the people from the surrounding communities had a wealth of knowledge about the nature around them: they could read the tracks of all the animals in the sand, they knew about medicinal plants, etc. Scientists or decision-makers often give little importance to local knowledge. However, this trend is changing internationally. For example, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has adopted a new approach that is based on local indigenous knowledge to integrate the different knowledge systems on nature and ecosystems (Hill et al., 2020). Then, the Conservancy warns of the danger of men



poisoning meat and endangering vultures. But no discourse emphasizes the great respect the Maasai have for those vultures, as evidenced by their way of life and their books. While based on animal husbandry practices and orally transmitted knowledge, environmental science discourse is rooted in internationally recognized academic papers and articles. Even though this knowledge deals with the same subject, it is difficult to place it on the same scale and scientists are considered more legitimate. Again, whoever has the most power will influence political decisions which in turn determine the environmental landscape and rules. According to Robbins (2020, p. 128), “official and scientific managers continue to dismiss local environmental knowledge as politically interested, not objective, and poorly informed, even and especially in the first world”. Thus, in Western discourses, communities are perceived as a threat, while local knowledge about the environment is often ignored.

Then, communities are indeed represented as beneficiaries of tourism, donations and projects. The Zoo only briefly mentions some of the disadvantages of tourism. The zoo completely omits the colonial history of the region, the injustices when it comes to grazing policies, and the eviction of populations that are still made today in the name of conservation. The zoo uses the biological conservation perspective only, omitting the view of some Maasai, who see the Conservancy as a bell that has been placed on their ancestral lands, cutting them off from each other.

To summarize, the discourses conveyed and the infrastructures erected in the zoo convey the following message to the visitor: 1) wild animals in Kenya are threatened and need to be protected. 2) The local communities are too poor and do not have the means or knowledge to ensure their conservation. 3) Donations are therefore needed to help them, to support conservation and the education of these communities to ensure the preservation of biodiversity. Thus, the zoo does not mention the role of these communities who have lived here for hundreds of years. They are not valued within the exhibition, which adopts pejorative narratives towards them, which is often the case in Western exhibitions (Blanc, 2020).

Eric Desautels (2013) has studied the evolution of social representations of Africa in French-Canadian missionary discourse between 1900 and 1968. At the beginning of the twentieth century, the representation of Africa was based on archetypes erected from novels and missionary discourses. This external view associates Africa with the exotic, the

unknown, the adventurous and the savannah, while describing its people as ‘unenlightened’ and ‘primitive’ (Desautels, 2013). Then, gradually, African peoples became associated with poverty, suffering and misery in the 1960s. These changes in representation mark the beginning of the charity, humanitarian aid and international cooperation movements: Africa lacks capital and technology. Discourses serve to legitimize the policies put in place. Today, the most modern development projects often remain rooted in these colonial binary logics that divide the us/modern from them/primitive. Thus, “these distinctions and confluences [...] stem from logics of domination, suggesting ideological controls of both environmental systems and local people” and they have persisted in the postcolonial era (Robbins, 2020: p. 70). And this logic is present in the Zurich exhibition, where visitors can make donations to the Lewa Conservancy, a distant land that needs help to preserve its biodiversity: would Africans not be able to do this without the West? No, because the zoo portrays the communities as needing education and living in “misery, hunger and poverty” (film in the school of the exhibition).

## **5.2 Non-inclusion of communities in decision-making**

Secondly, the Lewa Conservancy in Kenya as well as the surrounding communities hold a different position. Communities seem to be integrated and have a role in conservation for it to be effective.

As we have seen, the Lewa Conservancy develops many projects for the surrounding communities. However, the communities are not included in decision-making about the Conservancy or the projects that benefit them. Lewa is governed by a Kenyan Board of Directors responsible for the strategic direction, governance, and fiduciary oversight of the Conservancy (LWC, 2022). Leadership is provided by the Lewa management team. Thus, the communities may benefit from the projects but they do not have any decisional power compared to the Conservancy which is internationally supported by donors such as Zurich Zoo: they see no alternative but to follow the main guidelines. Brockington (2002) would rather define the Lewa Conservancy as “Conservation with Development” rather than “community-based conservation”, a model in which communities should be involved in the decision-making process (chapter 3.4.1). For example, the Il Ngwesi Conservancy model in Chapter 4.2.6.1 is more inclusive of local communities and seems to encounter less resistance from them. The Conservancy is managed by the Maasai

community and the money raised is dedicated to the Maasai community, which decides on the projects.

As we have seen, it is important that the communities surrounding the parks benefit directly from them (Brockington, 2004). Including local communities in decision making and proactively engage with them could avoid the conflicts between the LWC and communities. Thus, it would have been interesting to represent a Conservancy like Il Ngwesi in Zurich Zoo to show the role of communities in conservation.

### **5.3 Contrasting points of view**

The last hypothesis states that there is a lack of coherence between the representation in Zurich and in Kenya.

In view of all the above, it can be confirmed that indeed, the views and discourses are different between the discourses in Switzerland and those of local communities in Kenya. The Lewa Savannah exhibition is in Europe, more precisely in Switzerland in Zurich, the most populated city in the country. This is probably one of the reasons why they use a typically Eurocentric discourse about conservation, where the myth of a pristine nature is not deconstructed. Moreover, as Blanc (2020) said, even today, the urbanization and industrialization of Europe has led to a nostalgia for the wilderness that many people think they will find in Africa or elsewhere when they travel. As we have said, zoos contribute to this staging and perpetuate these discourses and myths. Thus, the contrast is strong for the visitors: they are in the urban environment of Zurich, visiting an exhibition about the Lewa Savannah. The exhibition feeds the mental schema of the visitors by presenting a wild, romantic, immense Africa that is threatened by its own inhabitants. It emphasizes the nature-culture dichotomy (chapter 3.4.3). This principle of cultural duality is reminiscent of Edward Said's book *Orientalism* (1971), in which he describes the culture of the Other, that of the East, seen rather negatively, from a rather positive Western perspective. Thus, a cultural distinction is made between the East and the West. These interpretations are based on prejudices and may be false or true, but when they are conveyed, they crystallize in the social imagination and lead to collective myths. However, all ideas and concepts are born in a particular context and are therefore debatable (Blanc, 2020). The zoo's rhetoric makes it clear that the conservancy's ecosystem is pristine and pure and must be protected from the ever-increasing human encroachment.

Thus, by analyzing all these different points of view, we can ask ourselves who holds the truth and especially what is the dominant and accepted truth. Indeed, there is probably no objective truth, but rather different narratives and discourses that depend on the context in which they are created. However, as we have seen, these discourses have an impact on the policies implemented on a large scale. In political ecology, Robbins emphasizes the importance of seeking “truth” in conservation. By this he means “a formal process in which conservation actors, especially state actors, come forward to acknowledge past wrongdoing, violence, and exclusion, in the hope that survivors might feel their experiences are heard and injustices acknowledged. The intention is to achieve reconciliation” (Robbins, 2013: p. 182). The history of colonization cannot be changed as it is rooted in the past, but today, it is necessary to re-establish uncover marginalized truths to move forward and for communities to be recognized. For example, to say that rhinos need to be protected from Kenya’s poor and destitute poachers, or that the Maasai should not be allowed to have too many cattle, or that Lewa has been a virgin land for a long time, is to willfully fail to recognize the historical facts and the consequences of colonialism on local communities. Within the Lewa exhibition, some information has been completely omitted and some has been added without context, and this gives a bad image of the communities in the minds of visitors.

As a consequence, this thesis is part of a strong desire to give communities a voice to temper Western hegemonic discourses about them– it however does in no way question the legitimacy or need for conservation efforts in the context of the current climate crisis. We can sincerely rejoice to see the population of rhinoceros or elephants recovering thanks to conservation efforts, but we also have a duty to clearly explain the causes of their decline before the establishment of protected areas. One may also ask why this wildlife must be locked up in pens under 24-hour surveillance to avoid being killed? This is the consequence of a globalized society all around the world, and not just the local communities around the Conservancy, who are the main ones blamed in this exhibition.

## **6 Recommendations for future exhibitions**

Around the world, the so-called “fortress” style of conservation is still perpetuated and is harming indigenous communities who have often lived on the land for decades. Experience and history have taught us that separating indigenous people from their lands

removes effective and sustainable protection of these territories. Indeed, indigenous territories cover about 22% of the earth's surface while harboring 80% of the world's biodiversity and scarce resources (Domínguez & Luoma, 2020). This conservation model is a direct legacy of the colonial era and must now be abolished.

An analysis of 165 protected areas around the world found that those that enhance human well-being and enable sustainable land use have better conservation outcomes (Oldekop et al., 2016). In the context of the present climate crisis, countries around the world are coming together with the goal of protecting more and more space. It is therefore necessary today to set up a post-colonial integrative conservation regime and begin the "Decolonization of Conservation" (Germond-Duret, 2022). Local communities must be included as the main actors in conservation and granted rights. Henceforth, protected areas must be managed and led by indigenous scientists who know the context of their country and whose work is supported by Western countries. Thus, to implement fair and effective egalitarian conservation policies, it is important to be aware of all the misleading narratives about "others". As this work has shown, narratives of the colonial era have not been fully deconstructed and persist in Western countries (Blanchard and al., 2011). Robbins (2013) argues that saving species and carrying out conservation projects in a world with a heavy colonial past must start with setting the record straight and changing the discourse.

In this sense, Zurich Zoo and all nature conservation exhibitions have a key role to play in decolonizing their exhibitions. Firstly, the social and human sciences must be integrated in addition to the natural and ecological sciences (Bennett & Roth, 2019). Indeed, protected lands are often located in areas inhabited by humans and communities and it is necessary to know the local and cultural context before constructing discourses about them. According to Sithole and al. (p. 106), "the clear lack of integrating the social dimensions by the zoo in their exhibition is not only spreading myths but is actively harming conservation around the world". Furthermore, it may be beneficial to co-create exhibitions with local people who are represented. Since zoos have a role in education, their educational messages must be based on scientific facts and include traditional knowledge. If they want to include cultural aspects, they have to be explained as closely to reality as possible and contextualized appropriately. Protected areas should not be considered separately and locally. Biodiversity decline is the result of the over-

consumption of natural resources and the destruction of natural habitats in a global and worldwide system, not just a local one (Germond-Duret, 2022). Thus, blaming local communities and their traditional systems is a reductive discourse and demonstrates a lack of understanding of their global systems. Consequently, this new vision of conservation requires a paradigm shift and a complete rethinking of conservation practices.

In their article on the Zurich Zoo, Sithole et al. argue that to engage current zoos in the decolonization of their exhibitions and to guide future exhibitions, WAZA could establish a best practice guide in collaboration with natural and social scientists. According to them, the zoo needs to learn from other European institutions that have gone through a decolonization process. The working groups could draw inspiration from recent exhibitions of the Museum of Ethnography in Geneva (MEG), the Africa Museum in Brussels or the “Musée des Confluences” in Lyon. The latter has become the first decolonized museum in Europe (Bourgaux, 2021). Inaugurated in 2021, its exhibition looks back at the origins of racism in Europe, conveyed by the “Human Zoos”. It looks back at the origin of “otherness” and the difference between Westerners and non-Westerners that has been integrated in the collective unconscious. The MEG in Geneva also has exhibitions on these themes. For example, in 2022, the temporary exhibition “Helvécia. Une histoire coloniale oubliée” (Helvetia: A Forgotten Colonial History) highlights Switzerland's role in colonial history (MEG, 2022). Although Switzerland never had a colony, it collaborated with colonial powers in the appropriation of foreign lands, notably in Brazil. MEG also presented the exhibition “Environmental Injustice - Indigenous Alternatives” between 2021 and 2022 (MEG, 2022). It highlighted the know-how of indigenous peoples in nature conservation, but also their vulnerability to climate change. In 2021 and 2022, the “Musée des Confluences” in Lyon presented a temporary exhibition on the Sioux and their representation in our collective imagination. The exhibition explains how travelogues, shows such as Buffalo Bill's Wild West Show and the cinema have contributed to shaping the image of what is commonly called the “American Indians”. Thus, many museums and exhibitions are challenging the classical narrative patterns. Such exhibitions help to better understand the origin of racism, to deconstruct negative narratives about local communities as they play an important role in conserving the planet's biodiversity, and finally, to stop talking about “us” as the civilized, and “them” as savages.

## 7 Positionality and limitations of the research

This research is the result of qualitative data collected from Kenyan communities, in a place that was totally unknown to me. It is important to consider that arriving as a European in a foreign context can have both advantages and disadvantages for the research. Firstly, not knowing the local culture allowed me to take a fresh, neutral and curious look at the customs and conservation done by the Lewa Conservancy; as everything was new, no cognitive bias was present to distort the research. However, in order to get to know and understand the customs, master the local language and to build better trust with the communities, the fieldwork would have had to take place over a longer period of time than three months and would have required to live constantly in the same community. Nevertheless, staying with local people and being accompanied by a translator from their village all the time made it easier for me to gain the trust of the respondents.

Secondly, the majority of respondents in the communities (about two-thirds) were of Maasai ethnicity. As there are many different ethnic groups in Kenya, this research is not representative of the entire Kenyan population, but of the Maasai and some Meru around the Lewa Conservancy. Since only the Maasai are mentioned in the exhibition, it seemed to me a priority to give them a voice. If the respondents had belonged to a different ethnic group for whom cattle were not so important in the culture, for example, the results would have been different: they might have had less conflicts over territory to graze their cattle, or less conflicts between predators and their herd.

Finally, all interviews were conducted with Kenyan communities or employees of the Lewa Conservancy. Thus, all stakeholders have different interests. For example, this master thesis mainly reports on the interests of the Maasai pastoralists and their villages surrounding the Conservancy. In contrast, almost all the data and discourse about the Zurich Zoo exhibition comes from my observations, from reading their website and from my visit. However, to confront the point of view of the zoo, whose primary interest is the conservation of biodiversity, with that of the communities, it would have been judicious to interview Zurich employees. Such an interview would have allowed me to better understand the development of the exhibition, the origin of its discourses and the choices of scenography. Even if the Zurich Zoo was contacted for some questions, no answer from them has been received so far.

Future research could look at the development of the exhibition and the visitors. In order to better understand what mental patterns are fed to them, it might be interesting to interview them after their visit. What do they remember about the exhibition? How do they perceive the Lewa Conservancy and the communities? And since mental patterns are established at an early age, it would be relevant to interview the school classes that visit, as in Eva Keller's study of the Malagasy exhibition at Zurich Zoo (2015).

## 8 Conclusion

Zurich Zoo is one of the major donors to the Lewa Conservancy in Kenya, supporting local conservation to the tune of millions of francs. Its financial support not only helps to protect endangered species such as the black rhino or the Grevy's zebra, but also improves the living conditions of the local communities in certain aspects. Such an exhibition allows visitors to better understand some of the serious threats that are pressing on the local biodiversity. Indeed, the miniature ecosystem reconstructed in Zurich exists thousands of kilometers away from Lewa Conservancy in Kenya and is home to majestic species alongside local communities. The three months spent in this beautiful Kenyan region have however allowed us to highlight the gaps that exist between the western imagination and the life of indigenous communities.

This work has attempted to unravel the discourses of the Zurich Zoo exhibition to identify their origin. As we have seen, many myths inherited from colonial history are discreetly perpetuated in the zoo's discourse and shape our unconscious: the idea of a virgin and wild Africa frozen in the colonial era, the idea that Africa must be protected from Africans, and the idea of an otherness between us and them. Today, many environmentalists have finally recognized that these stories are just that, myths. Yet these ancient stories are part of the way many understand nature and ecosystems even today (Hymas et al., 2021).

Why question these myths? The Lewa Savannah exhibit is located within a Western Zoo that is thoughtfully designed by scientists and species conservationists. These scientific and legitimate discourses are therefore integrated by thousands of visitors each year. Then, if the visitor goes to Kenya, he will realize that there are roads, cities, livestock, humans who even have cell phones and that rhinos are only found in parks that are monitored 24 hours a day. Although it is a beautiful country, its reality is far from the pristine ecosystems and vast wild savannahs seen in *The Lion King*.



To conclude, even though the former colonies have been independent for many years, there are still some myths or preconceptions of that time in the discourses and institutions of today. One can speak of a more subtle colonialism, one that colonizes minds rather than land (Fanon et al., 2010). Discourses aimed at proving the superiority of the White Man and his civilizing mission were not fully deconstructed and a racism that still exists. The murder of George Floyd, a black man killed in Minneapolis by a white police officer in May 2020, triggered a wave of indignation and a global mobilization shaking public opinion (Alimahomed-Wilson & Habart, 2022). Such an event had the effect of a catalyst for anti-racist associations and actions. For example, in Belgium, a special parliamentary commission was created to deal with Belgium's colonial past. The commission planned to come up with recommendations and apologies to former colonies Rwanda, Burundi and the DRC to acknowledge human rights violations during colonization (AFP, 2022b). However, after more than two years of deliberations, at the end of 2022, the political parties did not reach a consensus on the apology and the matter was not even put to a vote. In 2021, the historian Benjamin Stora submitted his Report on Memorial Questions on Colonization and the Algerian War to the President of France, Emmanuel Macron. The President visited Algeria in August 2022 to meet with the President and send a message of brotherhood to the Algerian people as a gesture of recognition and apology (AFP, 2022a). Thus, these ongoing struggles for recognition and accountability for all wrongdoings during the colonial period prove that we are only at the beginning of the decolonization process. As Albert Memmi has argued, the responsibilities for decolonization lie as much with the colonizers as with the colonized in a collective effort (Langdon, 2013). The West must set the record straight and acknowledge its share of responsibility for the global inequalities of the past and present, and not just in conservation. Once this has been done, it is time to move forward, towards reconciliation based on equality and justice which can be seen in future exhibitions.

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Photo of the title page (LWC, 2022)

# 11 Appendix: list of interviews

no	time	language	gender	community	tribe	Recorded	type of interview	age	livelihood	special function	date
1	54 min	Maasai	m	Leparua	Maasai	yes	semi-structured	58	farmer/livestock		21.02.22
2	46 min	English	f	Leparua	Maasai	yes	semi-structured	35	farmer/livestock		22.02.22
3	38 min	English	m	Leparua	Maasai	yes	semi-structured	46	farmer/livestock		23.02.22
4	53 min	English	m	Leparua	Maasai	yes	semi-structured	about 55	farmer/livestock	chief of the Location Leparua	24.02.22
5	45 min	English	m	Leparua	Maasai	yes	semi-structured	?	livestock		25.02.22
6	12 min	English	f	Leparua	Maasai	yes	semi-structured	22	mother - teacher Primary (+livestock and garden)		26.02.22
7	24 min	English	f	Leparua	Maasai	yes	semi-structured	35	farmer/livestock		27.02.22
8	51 min	Maasai	f	Leparua	Maasai	yes	semi-structured	80-85	farmer/livestock		28.02.22
9	22 min	Maasai	m	Leparua	Maasai	yes	semi-structured	45	livestock		01.03.22
10	15 min	English	f	Leparua	Maasai	yes	semi-structured	70	don't know		02.03.22
11	x	English	f	Leparua	Maasai	no	free	about 45	nurse/ administration for Lewa clinic		03.03.22
12	x	English	m	Meru	Meru	no	free	about 35	nurse for Lewa Clinic		04.03.22
13	1h07	English	m	Ngare Dare	Maasai	yes + (informal discussion no)	free	44	pastoralism/garden. Worked for II Nwgesi Loge		05.03.22
14	environ 1h	English	m	Ngare Dare	Maasai	yes a few + (informal discussion no)	free	about 45	pastoralism	researcher assistant for Lewa	06.03.22
15	55 min	English	m	Ngare Dare	Maasai	yes	free	35	pastoralism	ancien guide for Lewa but was hired	07.03.22
16	x	English	m	Ngare Dare	Kikuyu	no	free	about 50	software i think		08.03.22
17	1h17	English	m	Manyangalo	Maasai	yes	semi-structured	45			09.03.22
18	45 min	English	m	Mutungji	Maasai	yes	semi-structured	43		i am a representative of Manyangalo, a board member, of the land community.	10.03.22
19	59 min	English	f	Ngare Dare	Maasai	yes	free/ semi-structured	40	beady work, crops	leader of a group of women chairman + the board of community land	11.03.22
20	1h11	English	m	Ngare Dare	Maasai	yes	free	46			12.03.22
21	26 min	Meru	f	Subuga	Meru	yes	semi-structured	70	farmer (few animals)		13.03.22
22	22 min	English/ Meru	m	Subuga	Meru	yes	semi-structured	30	farmer (few animals)		14.03.22
23	27 min	English/ Meru	m	Subuga	Meru	yes	semi-structured	70	farmer (few animals)		15.03.22
24	20 min	English	f	Subuga	Meru	yes	free/ semi-structured	42	housewife/ farmer		16.03.22
25	30 min	English	m	Subuga	Meru	no	free and informal discussion	36	trade unions and livestock	ancient rangers, my translator for Subuga	17.03.22
26	23 min	English	m	Subuga	Meru	yes	semi-structured	27	jobless/ farmer (few)	internship in Lewa before	18.03.22
27	30 min	English	m	Subuga	Meru	yes	semi-structured	54		Leader in the Subuga community	19.03.22
28	8 min	English	m	Subuga	Meru	yes	free	34	farmer	Chairman for peoples with disability	20.03.22
29	10 min	Meru	f	Subuga	Meru	yes	semi-structured	47	farmer		21.03.22
30	10 min	English	f	Subuga	Meru	yes	semi-structured	23	student		22.03.22
31	1h16 min	Maasai	m	Leparua	Maasai	yes	free	about 80	livestock student, works at IUCN until December 2021	elder specialist about the Greenlist	23.03.22
32	1h	French	f	Nairobi	X	no	free	?			24.03.22
33	2h05 min	English	h	Lewa	?	yes	semi-structured	about 35	works in Lewa office		25.03.22
34	25 min	English	h	Lewa Conservancy	?	yes	informal discussion + visit of the center	about 40	works for the educational program of Lewa		26.03.22
35	1h15	English	h	Lewa Conservancy	Meru	no	informal discussion + visit of Lewa's project	about 35	works for the communities program on the ground		27.03.22

Interviews

no	time	language	gender	community	tribe	Recorded	type of interview	age	livelihood	special function	date
	5h (visit and observation)	english	m	Ngare Dare	Kikuyu	no	visit of the Ngare Dare Forest	?	works since 15 years as a guide in Ngare Dare Forest		09.04.22
37	?	english	m	Nanyuki	Kikuyu	no	informal discussion	37	works in the software		
38	?	english	m	Leparua	Maasai	no	informal discussion	about 40	my host, translator, small-scale farming and cattle		
39	?	english	m	Nanyuki	Swiss-Kenyan	no	informal discussion	?	neighbour in Nanyuki International career in Agriculture products		12.02.22
40	?	french	m	Leparua	Maasai	no	informal discussion	about 35	housewife, wife of Wilson small-scale farming and cattle		
41	?	english	f	Nanyuki	Kikuyu	no	informal discussion	58	retreat, military and security career, was the chief of Lewa		
42	?	english	m	Nanyuki	Kikuyu	no	informal discussion	about 60	has a campsite for tourists		09.04.22
43	?	english	m	Nanyuki	Kikuyu	no	informal discussion	about 35	lawyer		
44	35 min	english	f	Leparua	Swiss	no	informal discussion	?	doctorant		
45	?	english	m	Il Ngwesi	Maasai	No	visit of the lodge and informal discussion	about 40	guide and chief of the lodge		
46	3h	english	m	Conservancy	?	no	informal discussion	about 40	head of security Lewa		
47	15 min	english	m	Nanyuki	Kikuyu	no	informal discussion	about 60	teacher in private primary school of Nieri		
48	?	english	f	Ngare Dare	Maasai	no	informal discussion	about 30	teacher in primary school of Ngare Dare		
49	?	english	f			no	informal discussion				

Informal stakeholders