Walking the tight rope of local conservation practices

- The challenge of both preserving wildlife and increasing human well-being simultaneously

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Abstract

Wildlife conservation is a critical global environmental challenge. Understanding the local community's perceptions about wildlife is crucial for any wildlife conservation project. This thesis studies the environmental values and practices of the pastoralist community in Ethiopia that has established wildlife preservation practices of its own and preserved wildlife in its area, a rarity among the pastoralist communities in the Horn of African region. The research looked at community perception and understandings towards wildlife and traditional institutions, norms, and values that have helped preserve wildlife resources. The study uses ethnography as a method of understanding this community's perception of wildlife. Because of the COVID-19 pandemic that restricted travel to the site in 2020/21, the study undertook remote data collection with the support of two field assistants utilizing C*yber-ethnography.*

This study finds that the members of the community perceive wildlife as a common"group" property. It also finds that people perceive that wildlife has multiple values, and some wildlife species have special meaning to the community, such as the prediction journey safety. Yet, although the community has strong norms of *not killing* wildlife, its conservation practices marginalize some subsections of the society. In addition, it does not have a legally recognized system of governance with formal rules that regulate the resource sustainably. Therefore, the study points to creating multilevel organizations such as national, regional, and district level institutions to manage the resources equitably and sustainably.

For research, some wildlife has socio-cultural significance, and others have ecological, ethical significance for the community, and this calls for deeper understanding and insights into the relation of the community and wildlife in the wider region.

For policy implications, the study revealed the vulnerability of the wildlife as development projects and human settlement increase in the area. Also, the climate change effects such as recycling droughts, floods, and traditionally unknown diseases are rising. Commercialization of wildlife meat was also reported in some

places. These call for conservation intervention to save the wildlife from disappearing. The study recommends creating a multi-stakeholder intervention based on community needs and involvement in managing the resources. These interventions should note and promote the community's cultural, ecological, and ethical wildlife values.

Keywords: Wildlife, community-based conservation, pastoralists, tribal elders, values, norms, Somalia, Ethiopia.

Table of Contents

List of tables

List of figures

Section one: Introduction

1.1 Research problem

Wildlife preservation is seen by many as among the most critical global environmental issues. Wildlife conservation started with"fortress conservation" (Berkes 2004). Accordingly, the"*fortress conservation"* was a wildlife conservation management approach that prioritized wildlife conservation over community benefits established by the colonials," which alienated communities from the wildlife resource through hunting licensing controls, the establishment of exclusive, protected areas and punitive policing" (Mackenzie, 1987; Hackel, 1999 cited in Infield 2001, p. 48). As a solution to that problem, community-based conservations approaches were deemed crucial to accommodating better community needs and interests (Reid *et al.*, 2016). Community-based conservation seeks to enable the local community members to participate in wildlife and other natural resources about"decisions that affect their lives" **(**Berkes 2004, p. 622**)**. Many scholars see local participation in conserving and preserving wildlife as vital (Bartholdson et al., 2019; Berkes, 2004; Fischer, 2016; Pierotti & Wildcat, 2000; Ribot, 2003; Stern, 2000;). The awareness and the community's understanding of the conservation goals and acceptances play a significant role in conserving wildlife, particularly in the fragile pastoral ecosystem (Lankester and Davis, 2016). The relationship between pastoralist communities and wildlife has been both negative and positive, and at times, mutually beneficial (Lankester and Davis, 2016).

Pastoralists chose pastoralism as a production and livelihood mode (Dong et al., 2016) within the ecosystems traditionally more suitable for animal rearing than crop farming. The Horn of Africa is known for its pastoralist communities and relatively harsh climate (Von Keyserlingk and Kopfmüller, 2006, p. 43-44). Pastoralist communities in the eastern part of Ethiopia have suffered from a lack of social stability during the last half-century (ibid, p. 40). The prolonged conflicts between Ethiopia and Somalia in the 1970s resulted in hundreds of thousands of refugees fleeing from Ethiopia hosted by Somalia (Michalopoulos and Papaioannou, 2016, p. 1809). Later on, in 1990, the collapse of the Somali central government and the civil war (Von Keyserlingk and Kopfmüller, 2006, p. 40) further enflamed the situation creating new refugees and returnees coming to Ethiopia to seek shelter and the means to survive. Climate change effects also hit this region harder, weakening "the traditional capacity of pastoral systems to cope with the environmental stress intrinsic to these regions" (Von

Keyserlingk and Kopfmüller, 2006, p. 46). Recycling droughts and floods happened, affecting many livelihoods.

Environmental degradation and loss of livelihood, often leading to famine, further worsened the situation. Many depended on wildlife for nutrition, cutting trees for building new shelters, and selling them as wood or charcoal. All these natural and human-made calamities have degraded the region's environment and natural resources (*https://www.unep.org/news-and-stories/story/how-somalias-charcoal-trade-fuelling-acacias-demise*)[1]. Wildlife was notably the most affected by these calamities due to multiple root causes, including poverty, ineffective state institutions, the absence of local governance systems, and lack of financial capacity. The availability and proliferation of automatic weapons have also facilitated the easy killing and driving of wildlife away (Jabs, 2007; Leff *et al.*, 2009). Many locals and policymakers were worried about the diminishing wildlife population of the region. Saving the remaining wildlife and restoring the environment, in general, is an issue that many in the regional governments and locals are considering but hesitant to face due to challenges. However, this question is complex and involves several collective actors with different perspectives and opinions on dealing with this issue. A major challenge is how to create policies that can deal with these challenges and then how these policies shall be implemented and assessed. This study seeks to identify community practices that can support the conservation of wildlife.

1.2 Aim and research question:

This research deals with a pastoralist community with pro-wildlife traditional practices in the eastern Ethiopian region known as the Somali regional state of Ethiopia. This region, in the past, has suffered prolonged political upheavals, poverty, and environmental degradation. The study explores the relation Chereti (Diilhara) community has with the wildlife in the surroundings and how it copes with wildlife. Specifically, the research looks at how people within the community have experienced and perceived wildlife in their area and dealt with wildlife through community institutions.

The study focuses on people's perceptions of the wildlife and how that perception was born and remained in pastoralist settings where resource competition occurs between the livestock and the wildlife. The study will also explore what is unique for the Chereti (Diilhara) community who has shown friendly practices and pro-wildlife cultural attitudes. The study also

[1] UN report indicating how cutting trees and making charcoal destroyed the accacia trees.

aims to recommend development policies and strategies suitable for this specific pastoralist context to consider the conservation of wildlife resources. These strategies will attempt to reconcile development programs and conservation of wildlife that often clash. It will also pave the way for future research in the pastoralist community's cultural practices that positively contributes to preserving wildlife.

1.3The research questions:

Accordingly, this study is guided by two central research questions:

- *How do the pastoralists in the Chereti (Diilhara)community experience and perceive wildlife in their area?*
- *How do they cope with wildlife through institutions of the pastoralists?*

1.3 Synopses (thesis outline)

This thesis consists of seven sections. *Section two* presents theoretical concepts that frame the discussion and the analyses of the study. *Section three* presents the methods used, selected sites and respondents, data collection and sending methods, and research limitations. *Section four* introduces a background that details the study area's location and the current wildlife conservation practices. *Section five* presents the empirical data and main findings of the study. *Section six* is about the discussion and analyses of the study. Section seven talks about the conclusion of the study and its implications.

Section two: Theoretical framework and concepts

In this section, I will explore the theory and concepts that frame the research.

The theory of common-pool resources management by Ostrom and colleagues helps us understand factors and conditions that local people use to conserve common resources such as water, forests, wildlife, fisheries, etc. It also helps us look at structures of social organizations and the local institutions that enable communities to use and conserve common resources.

Similarly, the concept of community-based conservation advocated by Berkes and others helps us understand how local communities manage their natural resources through traditional ecological knowledge, environmental ethics, environmental history (see their area of interest in the table below), resource values, and social norms. Both of these authors inspired this study to understand how communities manage and conserving their natural resources. I will particularly draw on Berkes to look at traditional ecological knowledge of the community in

conserving the wildlife, their environmental ethics, environmental history, wildlife values, and norms that play a role in preserving wildlife.

Also, as part of *environmental history (in the table below), and* since the community under the study is pastoralist, I see it is essential to define pastoralism and the pastoral way of life of the people by describing their socio-economic characteristics concerning the conservation of wildlife resources. Therefore, the following table further explains *the fields and areas of interest* for considering the conservation of natural resources and will assist us in understanding the intentions of the above terms.

Table 6:Integrative subfields that explore new approaches to social-ecological systems (summarized from Berkes et al., 2003).

Field	Area of Interest
Common property	Examines the links between resource management and social organization; analyzes how institutions and property-rights systems can deal with the "tragedy of the commons."
Traditional ecological knowledge	Refers to a local or traditional knowledge base built not by experts but by resource users. Questions expert science and argues for diverse kinds of knowledge.
Environmental ethic	Recognizes a wide diversity of spiritual and ethical traditions in the world that offer alternatives to current Western views of the place of humans in the ecosystem.
Environmental history	Interprets landscapes in terms of their history and analyzes their dynamics, making ecological sense of resource-use practices that have created these landscapes.

2.1 Community and conservation

Community-based conservation is an approach that attempts to solve the *"failures of exclusionary conservation, in the world in which social and economic factors are increasingly seen as key to conservation success (Ghimire & Pimbert 1997, cited in Berkes,2004. P.622)."* It is a solution to the "*expert-based approach*" problem that does not understand local socio-economic systems, values, norms, and local knowledge. According to (Berkes, 2004)it is an approach that brings the local people and stakeholders together for better collaboration and understanding in the local dynamics. It also brings local communities closer to the management and decision-making process of natural resources. Literature on community-based

conservation promotes understanding among conservation actors and seeks to accommodate local interests and needs (Berkes, 2004). This approach is different from "the command-and-control style" management that alienates the local community from the local resources. The fortress conservation was criticized for not benefiting the local people, which resulted in the local people going against the conservation. Scholars have argued that conservation of natural resources can best be sustained with context-specific, locally managed, and multi-institutional participatory (Ostrom *et al.*, 1999; Berkes, 2004, 2007; Acheson, 2011).

Similarly, Ellinor Ostrom *Governing the commons* (Acheson, 2011) discusses successful management styles and ways to achieve. Classification of rules and effective local institutions is critical for managing the shared natural resources. Locally produced rules accepted by the resource users are essential in managing natural resources to conserve and prevent over-exploitation of the common-pool resources (ibid). This pastoralist community, close to nature, values, and respects nature, livestock, and wildlife. One cannot simply destroy nature or kill wildlife at will. For example, in conservation wildlife, as depletable resources, institutions regulate what users need to use, how to use, and when to use the resource; for example, sharing water during dry seasons are some of the community's informal rules applied everyone understands the reasons. *Homogeneity* of the tribe or community also enables a community to come together and agree on rules and norms that govern the use of the resource as they "share interest and understanding." (Ostrom *et al.*, 1999, p.281).

These concepts help us analyze the Diilhara conservation practices, local institutions, and the institutions' capacity to manage the resources sustainably. They further help us focus on local institutions, traditions, values, and norms that preserve the environment, particularly the wildlife.

2.2 Pastoralism and pastoral way of life

The study deals with communities whose members mostly derive their economies from livestock rearing and pastoral life. This is because the *theory of commons* and managing the shared resources, advanced by Ostrom and colleagues, has practical relation with how pastoral communities manage their natural resources such as pasture, water, wildlife, etc. Smith (2021) defined pastoralism as: "Pastoralism' refers to specialized pastoralists, who have stock-keeping as their principal economic activity, are usually highly mobile, and obtain crops through exchange relations with farmers." (Smith, 2021,p. 145).

(Dong *et al.*, 2016) defined pastoralism based on two different perspectives, namely "the production perspective" and "the livelihood perspective."

"In the dimension of production, pastoralism is animal husbandry, the branch of agriculture concerned with the care, tending, and use of grazing livestock in dry or cold rangeland areas."

"In the dimension of livelihood, pastoralism is a subsistence living pattern of tending herds of large animals (Blench 2001) or a successful livelihood strategy on less productive lands through livestock herding (IFAD 2008 in S. Don. P. 2). Therefore, pastoralism can be understood as one of the coupled human-natural systems in the developing world (including remote and marginalized areas of developed countries) (S Dong. P.2). (Dong et al., 2016, p.2).

This study mainly deals with the mode of production aspects of pastoralism to understand local systems of natural conservation practices.

2.3 Pastoralist and closeness to nature

Scholars warn us to understand *the linkage between the community's social and ecological systems* (Berkes, 2004, p. 624). For example, in pastoralist communities, the livestock's well-being, a healthy environment, and stability are valued. The rainy season represents this wealth, while the dry season represents resource depletion, hardship, and conflict over the resources. As a result, the livestock produces less milk and meat during the latter period, and life becomes difficult for pastoralists.

A pastoralist community "*as a set of shared norms"* is characterized as people who depend on nature in general, including livestock and wildlife. The community shares a common way of perceiving different wildlife species, such as giraffe, eagle, lion in their area, livestock even plants (Agrawal and Gibson, 1999, p. 635). In keeping livestock as a livelihood and production system, pastoralists interact with the wildlife, which is also found in the nearby environment, and competes for resources. While pastoralists' relations with herbivores are positive (Gadd, 2005; Lankester et al., 2019), their relationships with predators are often antagonistic because of livestock depredations.

Killing an herbivore without good reason is not tolerated and is seen as a waste of resources while killing a carnivore is appreciated. Killing hyenas, for example, is seen as revenge because it kills livestock and for its harmfulness. A pastoralist recounted a story of an unguarded herd of 157 sheep and goats where a few hyenas killed 123 of them in one night. They did not kill what they could eat but killed many others and left them dead. Everyone who heard the story was angry about the hyenas' mercilessness to the pastoralists, which shows that retaliation is a reciprocal norm. Nevertheless, the local people believe their practices of preserving the herbivores are suitable for the ecology.

2.3 Social taboo

In the past, this community perceived killing herbivore wildlife for subsistence as *taboo*. Cambridge English dictionary defines *taboo*(n) as: *"something (a subject, word or action) that is avoided for religious or social reasons."*

However, with increasing and changing livelihood diversification among pastoralists (Smith, 2021, p. 307-309), the study looks at how historical *taboo labeling* impacted the livelihood of the people who might have depended on hunting and how it contributed to wildlife preservation in Diilhara.

Section three: Methodology

The study uses ethnography to understand this community's perception of the wildlife and as a process of translating it. In addition, the study uses open-ended questions as a method of data collection from the field by field assistants.

This qualitative study seeks to understand the respondent's perception and worldview (Creswell, J. D. 2018) of the wildlife in a pastoralist context and environment. The study uses ethnography as a "process of translating experiences into the text" (Clifford, 1983). The data collection method was designed to be open-ended questions, group discussions, interviews, and secondary data from the study area, if possible. Because Covid-19 restricted travel to fieldwork, I was forced to rely on field assistants for all the study's data collection process and receive through email, WhatsApp, Messenger, and other possible means.

As this area was where I worked and knew some people, I communicated with them to help me collect the data. Two men agreed to do the work, despite the challenges we foresaw. Before starting the work, we discussed the research expectations, the reliability of the technology, and how best to utilize scarce resources like time. Understandably, data collection was not simple, particularly in a rural pastoralist community in a hot Ethiopian low environment during a dry season. The Months of January-March are the hottest months of the year, with the temperature reaching around 40^0C in the research area. Assistants started the work on January 5, 2021, and continued till the first week of March. Meeting target participants in remote villages off roads required long hours of the walk were some of the challenges they mentioned, and for

convenience, they confined themselves to villages on the main road with an internet net network, electricity, and transport. Therefore, there could be bias in the data in the way they selected the interviewees and places. There is no way I could verify who these interviewees were, but I could understand what they are talking about and how they describe it. But, let me mention that relatively few respondents were community elders with positional powers and influence in the community that could twist the community's perception; most of the respondents were ordinary people of pastoralist backgrounds who could express their views freely. Assistants introduced each person before the interview. The word elder implies two categories: age (someone older in age) and, second, someone in a position of community influence.

Since I established the field assistants, our communications were good, despite technological and few other setbacks, but we were always hoping to finish the fieldwork data collection well and on time. I prepared questionnaires for the interview, and the field assistants based their interviews on these questionnaires that I sent to them, but I also followed them for more clarification, if and when needed.

I attempted to guide my field assistants to do some ethnographic activities, but that was not easy. The field assistants have long experience in the research community area and worked for NGOs involved in social development projects, where they carried out field surveys. They knew how to conduct interviews to obtain qualitative data. They both speak the local languages and English, and the community knows them well as they are both from that area. However, I reminded both about research ethics and the importance of inclusive and representative data on community social status.

The questionnaires were composed of the history, respondents' meaning of the wildlife, wildlife utility for the respondents, and how they see the future of wildlife in their area. These answers aimed to reveal the respondents' memories, perceptions of wildlife, and future intentions. Questions included those that deal with institutions that govern and the customary rules that apply to wildlife. I then transcribed all data, translated it into English, and coded them into themes using a word table. My past work experience in this area and my knowledge of the community's cultures, traditions, and language helped me understand everything said or described in its cultural context. Watching the videos, listening to tape recorders, and reading the manuscript helped me *observe* the respondents' real meaning about wildlife. Hence, analyzing and interpreting data and information from the field was an easy task. However, my assumptions and perceptions also play a role in the data interpretations. With the new findings

in the study, I was able to gain a deeper understanding of the community's meaning, new things which I did not experience during my extended stay with the community.

3.1 People and places interviewed

Communities that do not tolerate hunting

Table 7: Places and people interviewed

Sn	Village name	Elder/men	youth	women	Total
1	Beer ijaabo	**3**	**2**	**2**	**7**
2	Hamoburis	**3**	**2**	**2**	**7**
3	Calan	**3**	**3**	**2**	**8**
4	Hara Arba	**4**	**3**	**3**	**10**
5	Baallawareen	**3**	**2**	**2**	**7**
6	Dhabiley	**3**	**2**	**2**	**7**
7	Xagar moqor	**4**	**4**	**2**	**10**
8	Calan	**4**	**3**	**2**	**9**
total		**27(42%)**	**21(32%**	**17(26%)**	**65(100%**

Most of the youth category are young men under 35 years, and in the elder category, it is both in terms of age and responsibility.

Total respondents were from 10 villages (8 Diilhara or non-hunter villages and two hunters villages). *Seventy-four* individual participants in total were interviewed. From the eight non-hunting villages, a total of 64 people were interviewed. Non-hunter village refers to Diilhara(Chereti) community, while hunter village refers to the community that tolerates hunting in its area. In terms of tribe, they are two different tribes, but they are all Somalis whose social statuses and pastoralist backgrounds were similar. This is to compare and contrast the perceptions of both tribes towards wildlife.

Community that tolerates hunting

Table 8: places and people interviewed

Sn	Village name	Elder and men	Youth	Women	Total
1	Harafamo	1	2		3
2	Hargadab	2	3	1	6

	Total	3	5	1	9

Table 9: Total participants and their % of the total samples.

sn	Total	Elder and men	Youth	women	Total
1	10 villages	30	26	18	74
In %	100%	40%Apprx	35% apprx	24% Apprx.	100% apprx.

In the two hunter villages, eight men and one woman were interviewed, of which 3 were elders. Materials received from the field were as follows: *Videos 9, Audio 5, Transcribed material 5.* Videos were short, with the longest at 5:09 minutes and the shortest at 4:28 minutes. In the videos, two men were identified as community elders; the rest were identified as ordinary people of pastoralists background. Respondents in videos and audio recorders are all men, questioning why women's videos or voices were not captured. However, in the transcribed materials, several women were included.

Apart from these materials, I have had continually spoken to other knowledgeable people in the area on the phone to clarify things that the interviews might not have captured, and I made many *telephone conversations* with such people.

" Interviews can elicit the beliefs and values of the participants, whereas systematically observing their actual behavior is more difficult." Robert (1986. p. 1097).

The respondent's information and the data revealed the pastoralists' perceptions and feelings about the wildlife. Videos and audio records, in particular, indicated participants' real meaning about the wildlife. This served as a *cyber-ethnographic* data collection and interpretation for me. This refers to "*how an ethnographer studies human and social settings that do not have face-to-face interactions*." (Madden 2010, p. 2). All the information and data transfer from the field occurred in this way. However, the field assistances had to work face-to-face with the respondents. It is also important to mention that Covid-19 restrictions and cases were lower in fieldwork during the data collection process.

Some o*nline searches* enabled me to get "*Federal laws: Ethiopian Constitution, Proclamation (541/2007) provide Development Conservation and wildlife utilization"* and other reading materials as secondary data. Data also revealed the local perception of the wildlife, social norms, and values that the community complies with.

3.2 Limitations of the Study

As I was not there in research sites, many data assumed to get through personal observations were impossible. The obtained data were interview responses, audiovisual material, and written materials by the assistants. Many other materials could not be sent due to data weight and transcribed, losing some of its contents.

According to (Swedberg 2012) the observation is "anything that provides knowledge, information, associations, and ideas for what something is like is acceptable at this stage of the inquiry." You cannot get things unless present in the research site and with research subjects, among other things, the "sight, hearing, smell, touch, and taste."

The data collection time coincided with a dry season in the study area where the respondents' availability was constrained because of the pastoralists' dispersal as they prioritize their livestock rather than stay at home. So, the assistants were compelled to interview those found at settlements (kebele centers or villages) than livestock herders that often move during dry seasons. However, all these have a pastoralist background, and all were part of the community. The telephone networks did not cover all the places, and it was challenging to reach my assistants at all times. In addition, capturing interview data on a telephone has limitations in terms of duration and content.

Usually, including women in the interviews is difficult in rural pastoralist settings, for women often hesitate because of the dominant male culture. Data obtained through assistants and only interview responses can hide the research's intentions about the subject's perception and meaning despite time and effort. Similarly, the study lacks secondary data and information as reaching state institutions like the region (zone) or district authorities were minimal or data available on the internet. However, as the Somali proverb goes, *"I have not broken, the heavier (taller or the worst) I fell," meaning the study survived despite Covid-19 effects and fight.*

Section four: Background

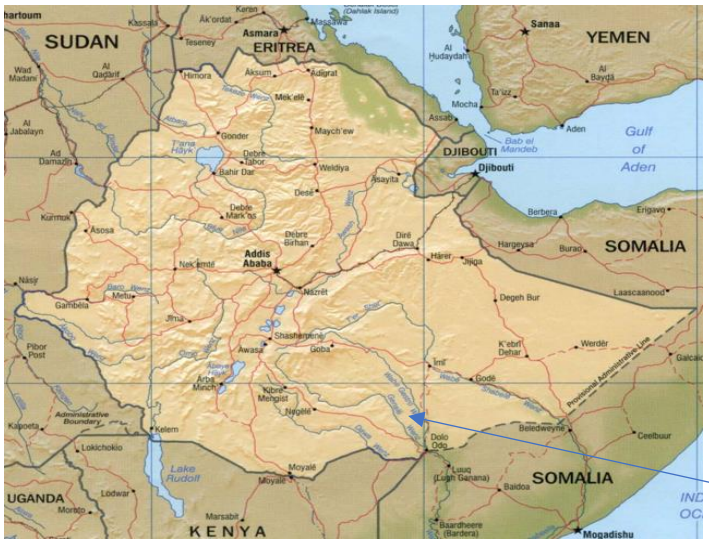
This section will discuss the historical background and contextual information of the research area, the pastoralist characteristics of the community under the study, and some information about the conservation parks in Ethiopia.

4.1 The area study covers

This study covers the predominantly pastoralist community in southeastern Ethiopia located under the Chereti and Goro Bakeksa districts, Afder zone (region). According to the Ethiopian Central Statistics Agency (Ethiopia Central Statistical Agency, 2013) population projection values 2017, the Chereti district population is 121,380, with only 6,933 (6%) urban and 114,447 rural inhabitants. On the other hand, Gorobakesa's total population is 66,045. Of this, 5,520 are urban, and 60,525 are rural. In the Ethiopian administrative structures, *kebele* is akin to a village, and it is the least unit under a district (woreda), where the population is estimated to be ranging from 500-2000 house units ("Treiber_-_The_Kebele_System_Ethiopia_21," no date). The study covered ten kebelys under both districts (woredas), with an estimated population ranging from 5000-10,000.
The inhabitants of both districts are Somali pastoralist ethnic groups, and the above figures show the rurality of both districts. These districts are mainly located in the area between the Ganale and Weyb rivers in the southwest of the Somali regional state of Ethiopia (see the map), with an elevation estimation of 400- 1000 meters above sea level. Still, the altitude increases as one travel to the northwest. According to interviewees, the shortest distance between the rivers is about 130km (no official information from the district). These rivers mark the community's geographical boundary while also freely facilitating livestock and wildlife's seasonal movements, partially protecting wildlife from outside intruders. Pastoralist community' social organizations are based on tribes and clans, with each tribe supposedly owns a specified area for grazing and browsing its livestock in geographically unmarked but known to all (Ellis and Swift, 1988).

Resources such as water and grazing are shared during good times, but priority is given to the tribe that claims the area during scarcity. Ganale and Weyb rivers house the community while also providing ample water during dry seasons, eliminating water scarcity conflicts between livestock and wildlife. However, it is not a cut-off community but trades and interacts

with all other communities, its environs, and beyond. These districts border with the Bale region (zone) of Oromia to the northwest in the Ethiopian highland. The two rivers mentioned above partially enclose the area, making the peninsula shape and water flow from the highland to low land southwardly. These rivers meet at the Ethio-Kenya-Somalia border, down streaming to become the Jubba river contributing to Somalia's agricultural economy.



(Source: File: Ethiopia shaded relief map 1999-cropped.png - Wikimedia Commons)

Figure 1: Ethiopian map and arrow show the direction of the research site under Chereti-Goro districts (weredas).

This pastoralist community rears mainly camel, goat, sheep, and to a lesser degree cattle. The browsing and grazing areas are dry woodland habitats (Chidumayo & Gumbo, 2010.; Marunda & Bouda, 2010) with pockets of savannah near river basins. Camel and goats are dominant livestock that can stay without water for a more extended period than cattle. With the climate change effects, people are increasingly replacing cattle with camels or goats as an adaptive strategy (Lee, 2013), and cattle decrease; the community experienced repeated droughts these years in this region. Donkeys and mules are also used for transport purposes. Livestock trade within Ethiopian highland and across Kenya-Somalia borders is some of the livelihood activities this community has practiced for a long time. Rainfed small-scale farming or on river spillovers produced maize and sorghum, the area's traditional stables foods.

However, since the early 1990s, international NGOs introduced motor pumps and other farm machines to utilize river waters and encouraged smallholder farmers to produce food. As

a result, some families trained and chose to farm, changing their livelihood to crop farmers from pastoralists. This community has yet to practice fishing from the rivers, as traditionally, fish is not consumed food in the pastoralist community context. However, few families try to use it for low-level consumption among the crop farmers at river banks.

Apart from the rivers that provide abundant water (during the drought in the highland, rivers dry up), large water ponds in the rangeland sustain livestock and wildlife. People in the area mentioned that these water ponds are natural, while others differ by asserting them as human-made. Still, some water ponds are huge to sustain pastoralists, livestock, and wildlife more than a month after the rain. In addition, these water ponds are places that wildlife and livestock, and people meet and watch each other. When water ponds dried up during the dry seasons, livestock and wildlife go for water to the rivers. These pastoralist movements based on the seasons are believed healthy for the environment and fodder selection suitability (Lee, 2013). Livestock and people have not yet overpopulated in Diilhara, but that day is not far away. Already, settlements have taken up areas that, for example, giraffes used to browse. However, the asphalt road from Chereti to Goro Bakeksa, now under construction that goes through *the* community and rangeland, is the one that will have a lasting impact on the wildlife in *Diilhara*. Villages are increasingly being formed along the asphalt road to serve as trade centers and "*market and exchange,"* one of the "adaptive strategies to respond to socio-environmental change" (Lee, 2013). Before the current road construction, the roads were minor and difficult to travel during the rainy seasons, so traffic was minimal, but changing to an all-weather road will scare away wildlife or kill them in traffic accidents.

Since half a century ago, the arrival and availability of firearms benefited local pastoralists as they found it suitable for their lifestyle. They found the weapons convenient in protecting their livestock from predators and animal raids from other tribes (Lee, 2013). But, this has negatively affected wildlife as killing them using firearms became straightforward, and so many wildlife species, such as elephants, disappeared earlier than others. *Diilhara* is a few places where wildlife that vanished from the rest of the region remains concentrated because of communal protection. For example, giraffes disappeared from eastern Ethiopia and neighboring Somalia for hunting and killing but endured at Diilhara. The pastoralist community under the study has established conservation practices and preserves wildlife in its area, a rarity among the pastoralist communities in the region. This community preserved its wildlife resources without outsiders' assistance in minimizing the killing of the wildlife. Chereti (Diilhara) community, through its conservation practices, has attracted many wildlife species from surrounding areas and formed what seems to be an open wildlife sanctuary-like

environment. The community perceptions of a wildlife-friendly attitude were not induced by state policy or NGO interventions experienced in many parts of Africa but locally developed. These cultural attitudes differ from the neighboring communities with the same ethnicity, language, and religion (I will explain this in the coming sections).

4.1 The Wildlife's Current Situation in Diilhara (Ethiopia)

Ethiopia is an African state that was never colonized, but its wildlife conservation performance is far worse than many African countries. According to Debella (2019, p. 34), many existing Ethiopian National Parks are only "*Paper Parks,"* places that are not conserved according to the rules. Debella (2019) reviewed "75 years of legal documents in three regimes in Ethiopia." He compared and contrasted the wildlife conservations in other African countries established by the European colonizers, such as Kenya (Samburu National Reserve), Tanzania (Serengeti National Park), Uganda (Kidepo Valley National Park), Botswana (Kalahari Desert), etc. with Ethiopia and argued that ineffective natural resource management and inadequate conservation measures have severely impacted wildlife in the country.

The creation of Awash National Park in the Afar pastoralist (Afar are neighbor to Somalis and share similar pastoralist culture) area along Addis-Djibouti main road can be an example. A large area of savannah land was reserved for wildlife, where pastoralists are not supposed to graze their livestock, "but with no or little control" (Debella, 2019, p. 37) of the Ethiopian authority; pastoralists can access it when they need it, particularly in the dry seasons.

The Ethiopian Federal Constitution (article 51, sub-article 5) places wildlife and natural resources management under the Federal government's jurisdiction. Also, Article 52 sub-art. 2(d), which indicates *powers and functions* of the states (regional states), mentions that "*states administer land and other natural resources in accordance with Federal Law (Federal Democratic Republic Ethiopia, August 8, 1994 constitution).*"

This implies that if regional authorities want to administer the activities related to wildlife and conservation, they can only do so as federal government agents and exercise Federal laws, awareness, and permissions. The Proclamation N.541/2007 that "*provides for the development, conservation,* and *utilization of the wildlife"* mentions the importance of local people and the land in which conservation happens. However, it does not specify the community's role in managing the administration and well-being of wildlife and conservation areas.

Nevertheless, it acknowledges and permits investment in the conservation areas by investors, both outsider and local. The above proclamation (article 4) describes four categories of the wildlife conservation types and the body designated to administer. These conservation places are "*National Parks, Wildlife Sanctuaries, wildlife reserves, and wildlife controlled hunting areas*" (ibid). These are federally designated conservation areas, according to the proclamation. But, these same categories, according to article 5(1), can also be administered by the regions subject to designation. In article 6 of this proclamation, investors "*may be authorized to administer the wildlife conservation areas."* Often, outsiders are understood as investors in the wildlife projects than locals who could have the capacity to invest, if allowed. In this proclamation, the local community is given the mandate to administer outside of these designations area, and it is not clear what these are meant and what sort of resources they are supposed to administer. Diilhara wildlife is under non these categorizations.

There are many conservation areas in Ethiopia, even though their effectiveness is contested (Debella, 2019). These are supposed to preserve endangered wildlife species, for example, the Red Fox in Bali, Oromia. However, the existing conservation laws of Ethiopia, state policies, and wildlife management system was mainly based on the command and control (Debella, 2019) that alienated local people from the resources use. Scholars believe community involvement and participation in wildlife conservation management as the solution to those problems (Infield and Namara, 2001),(Berkes, 2004). Similarly, the necessary community development should not contravene the conservation of wildlife(ibid). Recently constructed roads and other development projects in the Diilhara area seem to have exposed the vulnerability of the wildlife in the area. Wildlife in Diilhara, as an unrecognized and uncategorized area, has survived and still struggles in the face of many challenges. Its endurance was due to the community's wildlife practices of not killing it and cultural norms that preserved the wildlife. It struggles in a broader region affected by increasingly deteriorating ecological degradation and climate change but surviving unsustainable community preservation practices.

4.2 the social organization and livelihood of the tribe (community)

To facilitate understanding, I see it essential to discuss the social organization and socio-economic lifestyles of the tribe. Scholars inform us that to establish a conservation program, we must first understand the characteristics of the local people involved, institutions, and cohesiveness. "To ground conservation efforts, we need a more nuanced understanding of the

nature of people, communities, institutions, and their interrelations at various levels." (Berkes, 2004, p. 628).

Authors often argue that Somali pastoralists are a homogenous ethnic group who "speak one language, adhere to a single faith, and share a common cultural heritage, which is an integral part of their nomadic way of life." Abdi sheik-Abdi[2]. Similarly, in the Somali context, clan and tribe classifications are the community's usual characterizations. The tribal arrangements are of two types; an arrangement through kin relationship and the other is through contractual treaty (xeer) or Diya (blood-money) paying groups (Lewis, I. M. 1994, p. 84) by different tribal groups who agree on living together and sharing burdens and other social interests. The former is seen as homogeneous while the latter as heterogeneous arrangement. The heterogeneity of the tribe is understood as the composition of the tribe consisting of many constituents or elements that might join the tribe by contract (Jama Mohamed[3]) and live with it in the tribal areas. These are not believed to be from a single ancestral father but agreed to live together in a specific area and share a common tribal name; one can quickly join such arrangement for personal protection.

The community in the study identified itself as a relatively homogenous tribe with some specific traditions and practices and headed by one Ugaas (a principal tribal leader) and subordinate elders at different structural positions in place. The tribe believes it is connected through kin and an agnate relationship and that the tribe descended from genealogically a single father lineage. And "..unlike many other patrilinear systems, here (Somalis) people derive both their blood and their bones from their father and his ancestors" (Lewis, I. M. 1994. p.vii).

Traditionally, leaders were seen as independent of any outside influence other than the loyalty of their tribe. However, historically that has been eroding as governments tried to influence tribal leaders by providing them resources. Many accepted the governments' offers and sought more powers and influences in the governments. These conditions often put such leaders into political crises, resulting in losing the good name and honor among the tribe members. The authority of the principal leader (the ugaas) comes through the hereditary from the father, while section leadership (Jilib) is gained through qualities such as oratory, warrior, generosity, wealth(livestock), etc. The most active in these qualities will lead the section or the

[2]Somali Nationalism: Its Origin and future by Abdi Sheik-Abdi, Department of African/Afro-American Studies, State University of New York at Albany.

[3] Kinship and Contract in Somali Politics Author(s): Jama Mohamed Source: Africa: Journal of the International African Institute , 2007, Vol. 77, No. 2 (2007), pp. 226-249 Published by: Cambridge University Press on behalf of the International African Institute
Stable URL: https://www.jstor.org/stable/40026707

branch (sub-jilib) of the tribe under the principal leader. Leadership in sections and sub-sections go on like that until the family level.

As sources of wisdom and leadership, the community elders (age) manage the grazing land and the natural resources, often selecting the best" *traditional pastoral strategies"* (Ellis and Swift, 1988). They also solve the potential conflicts of scarce resources. The state and outsiders often deal first with elders (both in age and in traditional leadership positions) in their interventional activities in the community. Tribal elders or traditional leaders were the genuine community leaders that had the most influence within the community. Religious leaders also have significant roles in the community in matters relating to morality and spiritual issues.

Historically, the tribe depended on purely livestock rearing and moved from place to place within what was perceived as its territory, pursuing grazing and water available for the livestock. Before the 1990s, there were no settlements or villages near grazing rangelands, but that has been gradually changing because of the established kebeles systems (discussed in the background section). Kebeles serve as centers for local administrations, animal markets, and food aid distributions, and therefore, human settlements increased in the rangeland areas. Still, the majority of the people are nomad pastoralist that moves around with their livestock. The state and international NGO interventions started with constructions of lower schools and health posts for humans and livestock in the kebele centers or these settlements. Many of these infrastructures provided weak services to the community but improving at a low pace with the new arrivals of short-time trained staff to serve the community. Police personnel also came in, reducing the tribal and religious elders' mediation involvement in community conflicts. Mainly the task of the police is to handle criminals beyond the capacity of the traditional solution. Still, elders have huge social responsibilities to play in the community. As a result, many in this community still rely on the traditional norms than state rules. N*ot hunting the wildlife for food* was one norm that community members practiced and upheld for a long time. This norm has relation and roots in the wildlife hunting *taboo* common for all Somalis (see in the cultural taboo in the discussion section) nomad pastoralist culture but remained firmly with this community because of the livestock they own. Others with less livestock loosened this taboo because of economic needs.

These villages (or kebels) enabled families to sell some of their livestock without traveling long distances and helped them get supplies nearby, such as clothing, food, and other necessary things for them.

In this study, I purposely omitted to mention tribal names as appropriate because tribal names associated with certain things often carry sensitivities that sometimes result in

misunderstandings and conflicts among the communities. Instead, I used the "Chereti community" or Diilhara community. *Diilhara* is the area name that the specific tribe under the research found, and Chereti is the district under which this community comes. I prefer to use Diilhara instead of Chereti. I use words tribe and community exchangeably despite their differences in meaning.

To sum up, this section attempted to give background information about the research area's location, the community's livelihoods, and the conditions of conservation parks in Ethiopia.

Section five: Empirical Data (findings)

This section presents the community's meaning and worldview about wildlife in the Diilhara area. The study finds the following theme as the main findings of the study. These are the singleness (homogeneity) of the tribe, the norms of not killing wildlife, types of wildlife that have special meaning to the community. The community understands wildlife in their area as their second livestock, group property, and has different values. The community has a cultural taboo in wildlife hunting. The current traditionally based conservation is not sustainable as wildlife killings increased due to multiple reasons, including economic, availability of weapons, lack of formal institutions that control them.

Historically, this community was not affected by the so-called "conventional conservation thinking*"* (Infield and Namara, 2001) introduced in most eastern Africa since the colonial era in the 19th century (Lankester and Davis, 2016). This was a *command and control* management style of wildlife conservation system introduced during the colonial era that kept the wildlife resources away from local users. These policies were believed to have alienated the local pastoralist from their natural resources by gazetting the land, creating different antagonistic feelings towards conservations (Infield and Namara, 2001). This community did not fall into that category but established norms and values and continued living with the wildlife.

5.1 Singleness of the community (tribe)

The following paragraph best describes the importance of the tribe for both individuals and groups in the Somali culture.

"The evocative power of kinship as the axiomatic "natural" basis for all forms of social cooperation and as the ultimate guarantee of personal and collective security is deeply and pervasively rooted in Somali culture. As the

foundation of social cooperation, kinship enters into all transections between and amongst individuals. There is no significant area of Somali social activity where the influence of kinship is absent" Lewis, I. M. 1994, p. vii).

As most respondents confirmed, this pastoralist tribe perceives itself as a homogenous tribe and settled here around 80 years ago. Thus, elders said, "we are only the Diilhara tribe that live in Diilhara" Scholars inform us of the necessity of understanding the "context (history, politics, and culture) in understanding a particular case" (Berkes, 2007, p. 15188). Here, I will explain the context that created the singleness of the tribe, according to the recounts of elders of the area.

Experience has shown that pastoralists in the horn of African tribes behave like small states with territorial borders, neighbors, and conflicts over various issues, including resources. Colonials exploited these tribal differences in terms of political or geographical importance and the interests of the tribal leaders too to advance their goals. National governments also do similar tactics when it suits them. In this process, the existing social way of life is affected and changed. Diilhara tribe was one of such tribes affected by such dynamics in the past. According to the elders, around 1940/42 British replaced the Italian and occupied the area. In their strategy of dividing and ruling policies, the British inspired a young leader to lead his tribe by getting out of an umbrella tribal arrangement under which he and his tribe lived. He accepted the suggestion and declared himself as a new leader of the Diilhara tribe. Initially, the British supported that young man as the new leader of the Diilhara tribe, and the tribe stood by itself, independent of others. Soon after a while, the British left the area, handing it over to Ethiopia in 1943-44 as part of an earlier deal. As expected, there were wars on multiple fronts, including the former union members and other neighboring tribes, but they survived and, in that process, acquired this area since then. In standing alone, the tribe felt it could be more secure than under tribal union arrangements. According to elders, the constituents (members) of this tribe are believed to be from one family root. Near all, the respondents repeated and stressed the tribe's agnation(kinships) and its norm of not killing wildlife, not shared by others in the area.

*"*If you are not part of the family root, you cannot be a member of this tribe or community," remarked one elder. " After nearly a century, we are here in the Diilhara." But, he said, "Thank God," he added.

This statement demonstrates inclusivity in members whose roots are the same while excluding others who are not. According to the elders, the tribe's singularity*(singleness)* in Diilhara comes from the thinking that it is from a single ancestral father and has one tribal leader, fought for its land, established its identity, recognized the territory as their land by themselves, and others, including those who fought with them. This *singleness* has nothing to

do with social stratification, such as class, economic levels, gender, etc. These social stratifications exist as long as it is a community and cannot be like one *family or unit* from this aspect. The community could have relatively wealthy, middle, and low-income families regarding the livestock they possess or other means of income/ wealth or even links in the urban economy. Some families have family members who earlier migrated to major cities in the region that established professional careers and wealth. These may send money in remittances and buy more livestock, increasing family wealth in the area. The remittances are individual and family-based, not an organized way. Others trade livestock in the markets, such as Kenya or Somalia, depending on the demand of the livestock type. Others may lose livestock and get livestock replenished by other close relatives and depend on insufficient livestock for survival. While others, when they lose livestock, either change lifestyle to crop farming or migrate to somewhere else.

International NGOs supported in the 1990s those who lost their livestock and migrated to owns by either restocking them or help them in another possible way for survival, like training them to do labor works such as constructing houses and other manual works. In this way, this community is not a homogeneous or unified body with one voice but a rather ordinary community with its stratified sections.

In terms of the social organization of the tribe, the central part is pastoralists who directly depend on livestock and are found around rangeland. Traders involved in the livestock trade connect to both local and international markets. In urban centers, people of the tribe either work for the state or involve in petty trade activity but are still connected to their kinship in the pastoral life. There are also small-scale but growing crop farmers along the rivers who sell their produce locally and beyond.

Similarly, the tribe may have various cultural practices and norms specific to certain areas, like family issues, wars, peace with others, care for livestock and wildlife. The norm of not killing ungulates wildlife is among such norms that the community has, and it is specific to the wildlife and its conservations. It is this aspect of cultural norm that conserved the wildlife that this study was concerned about.

The *homogeneity* of the tribe in terms of its origin facilitates collective norm sharing of the tribe and action against norm violators than multiple tribal umbrella arrangements (discussed earlier). It is more to do with cultural understanding and cultural values deeply connected and rooted within the tribe's identity. This, in part, answers why it is different from the other tribes that it shares many things. In responding to the question of what makes this community different from the neighboring tribes that it shares ethnicity, language, and culture, one

respondent stated that they are “Diilhara tribe and nobody else mixes us and have a tradition of not killing the wildlife.”

5.2 Community (tribes) established norm

Social norms shape how individuals behave and act and guide principles that differentiate expectations, acceptable and abnormal. Similar, communities exist under what they believe normal allowed by their established norms and reject what they see as unacceptable and abnormal. Robert (, 1986. p. 1098) reminds us of mechanisms that support social norms. As discussed above, the dominant group of the community is pastoralist that directly depends on livestock and who interact with wildlife daily. A community can have *established norms*, supported by *a dominant group, internalized* by all, have *deterrence power* and action or revenge against norm violators, which have *social proof* and support, *member*s of the community or group with supporting law in place well-*reputed*. In the context of the community in the study, its established norm is “*not to kill herbivore wildlife”* in its area. Most of the above norms mechanisms are prevalent in the community. They are used to punish social norm violators, the herbivore wildlife killers, in the Diilhara; norm violators like sneaking poachers cannot continue doing so as they face community rejections; the community does not appreciate the subsistence hunting.

The interviewee in the study mentioned that *not killing wildlife* comes from the forefather that passed on to them and will continue to the next generations. “It is hereditary traditions that need to keep on.” Said one man. “I received this tradition from my father, who died at 90 years, and I will pass it to my sons and daughters,” said one elder.

Moreover, some young interviewees noted that elders (age) in a general meeting discussed the prohibition of killing wildlife in the area by other tribe members. “Other tribe members are not allowed to kill a wild animal at our place,” said one of the respondents. Thus, this tribe has a well-established norm of not killing wildlife in its area and *meta norms*.

Elders mentioned a case of a giraffe hit and tumbled by a passing truck and attempted to escape from the scene but was caught by young men on the site and compelled to compensate. In settlements and villages of this community, herbivore wildlife is seen very close to people because nobody hunts it. In the other neighboring communities of Diilhara, you would find no wildlife close to villages or smaller settlement places; it maintains a distance.

Elders in the community hold public meetings to inform and educate the young generations and pass the norm to the young who might not have grasped wildlife’s values. Such transfer of traditional practices and tribal norms seems to have been received by the young generation.

Many young men and women from Chereti (Diilhara) in schools who live in urban centers that use social media such as Facebook technology have a giraffe picture in their picture profiles. These young generations widely used a picture of a well-fed mother giraffe kissing its baby claimed to be from Diilhara. One elder, I had a telephone conversation informing me that the young generation was doing more than the old generations for the wildlife now. Social media users from Diilhara widely share stories and pictures of wildlife. This wildlife recognition and awareness are deepening among the young community members both in the area and outside. Preserving wildlife seems to become the identity of the tribe. This highlights how the established social norms can impact many socials lives and including identity formation.

5.3 Types of Wildlife

The wildlife found in today's study area is many, but the named animals are 27 species that range from elephant down to rabbit, both herbivores and carnivores. These include carnivores such as lion, hyena, fox, cheetah, leopard, honey badger as they live with the community and, to some degree, tolerated. The study did not focus on fish, crocodiles, birds(except the eagle mentioned), nor reptiles. From my conversations with people, snakes are not disturbed for fear of revenge because of their venom*("awoowe kuma daaree ha i daarin-Oh grandfather, I will not bother you not hurt me*").

Table 10: All the wildlife known in the Diilhara as identified by the community.

Sn	English name	Somali name	remarks	sn	English	Somali name	Remarks
1	Elephant	Maroodi	extinct	15	Gerenuk	Garanuug	
2	Giraffe	Geri		16	Dik-dik	sagaaro	
3	Rhino	Wiyil	extinct	17	Goodir	Kudu	
4	Hippo	Jeer		18	Monkey	Daanyeer	
5	Oryx(antelope)	Biciid		19	Gazeele	Cawl	
6	Wild beast	Lo kinsi	extinct	20	Lion	Libaax	
7	Ostrich	Gorayo	rare	21	Hyena	Dhurwaa	
8	Zebra	Da farow	extinct	22	Cheetah	M.shabeel	
9	Rabbit	Bakeyle		23	Leopard	Haramcad	

10	Tortoise	Diin		24	Wildcat	Gudadane	
11	Porcupine	Kashiito		25	Warthog	Doofaar	
12	Gunea fowl	Dagiiran		26	Fox(shakel)	Dawaco	
13	Aardvark	Walo sd		27	Eagle	Gorgor	
14	Honeybadger	xoor					

The elephants, wild beasts, and zebra disappeared earlier, and ostriches were on the verge of extinction.

5.4 The special meaning of wildlife

Some wildlife species and birds have important cultural significance to the community. These include the giraffe, *gerenu*k (a type of gazelle whose name originates from the Somali language), and a type of eagles (mandad). Both gerenuk and the eagle are believed to carry good news and good luck (good omen) to the viewers when they meet. An elderly man stressed that these animals "are glad signs (abshireysi) for us in that day."

These are highly valued wildlife from the community's perspectives, and some are linked to special meaning. This agrees with the assessment given by the scholars that wildlife has *"..*nutritional values, the ecological role as well as the socio-cultural significance of wildlife for human societies of both the developed and the developing worlds*." (Chardonnet et al., 2002).* Giraffe is considered suitable for the well-being of the rangeland and ecosystem (ecological value). It also has direct monetary values established by the community to control its killings. For example, in the livestock, the camel is the most valued monetary-wise, and interviewees equated the giraffe as a camel in their assumption of the money values. "I consider the giraffe as my camel, and I have a stake in it," said respondent. No one can simply kill a camel other than his, and if he kills will be asked to pay its value in cash. Likewise, one cannot kill a giraffe in Diilhara and stays without question but eventually pays its prize in monetary value by the community members. Otherwise, he will be punished by the social norms in place, which are disapproval and rejection.

5.5 Group property claims and state functions

The community considers wildlife in its area a shared resource by the tribe and as a tribe's property as long as it is found within the tribal boundaries that no one should use other than tribe members. "I have a stake in the giraffe*,"* said one of the interviewees. Meaning he feels

giraffe in Diilhara as part of his own livestock. When asked if they have legal property rights to support their claims with state recognition, most of the respondents said, "No, because the state never came and discussed anything with us about the wildlife in Diilhara*."* But, who else it belongs to? Asked one respondent. Community claims of group property cannot be established legally in the eyes of state law. Ethiopian Federal Constitution (FDRE, 1995). Article 40 (sub-article 3) states that natural resources, including wildlife, are property owned by the Ethiopian state:

"The right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the state and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange."

However, in sub-article 5, the constitution assured the pastoralist the right to grazing, cultivation without fear of eviction or displacement.

"Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own lands. The implementation shall be specified by law."(ibid).

So far, no laws or regulations specifying this article enacted by the state as to the rights of the pastoralist to own wildlife in Diilhar, and therefore, the tribe's claims are not legally based.

Nonetheless, the tribe treats wildlife in Diilhara as its group property. Respondents recounted cases of people who came from other places harmed wild animals and community members' reactions. For example, a truck killed a giraffe and attempted to escape in one incident, but young community members stopped the truck and asked for compensation. Elders rewarded that payment to the men who took the initiative as a gesture of encouragement. They also recount a story of a man who recently came from a neighboring country, met with a well-respected religious leader in the community, and asked for kudu meat for medical reasons. The leader could not refuse the man's request and asked some young men to kill a kudu for him. When the news spread and others heard about the case, both the man and religious leader were informed by community members that *"*it was impossible to happen," and the man was told to leave the area. These are some of the actions by the people of the community to control the wildlife in Diilhara.

Article 50 of the Ethiopian constitution *structures* the power and functions of government into Federal government and the State members. State members are often called regional states, and the Somali regional state is one of nine regional states in the Ethiopian federal system. According to the constitution, the federal system is meant to devolve the power and financial resource to the local people to improve services at local levels. The structure of the regional states goes down from region, district, and kebele (the local level organ). Line offices represent

ministries at the district to implement federal and regional governments' development programs and policies and facilitate services at local levels.

Nominally, the wildlife management *goes under* the bureau of agriculture at the district level, and there was no wildlife office at the *kebele* level (at community level). The bureau seems to suffer from a lack of personnel capacity and financial resources. I was told there was one political nominee (Abdullah), but he left to study a university program elsewhere. I tried to reach him on the phone, but he could not provide me with any data about the Chereti district's wildlife nor gave me information on how to obtain it. My conclusion is that it is too weak to render any service to the community at present, even if it exists.

Similarly, I attempted to know if NGOs operate in that area, which involves natural resource conservation projects. But, I was informed there were none.

To sum up, the community claims of wildlife in Diilhar as their property have helped preserve wildlife but do not have the state's legal recognition. State institutions at the Chereti district and kebele levels concerning wildlife conservation and development are too weak to provide any service to the community. Also, no NGOs were operating in the area focused on wildlife and natural resource management in Cheret and Goro Bakaksa districts.

5.6 Reasons for not killing wildlife

When it comes to its permissibility (halaal) from the Islamic point of view, apart from warthogs and carnivores, the rest is permissible to kill and eat, subject to the need for livelihood or nutrition. Based on Islamic teachings, respondents stressed that wildlife is "Allah's (God) bounty," much like the livestock, and different interviewees in some of the videos stressed that wildlife is "second livestock*"* that can be used if needed. It is seen instead for future consumption, either for consumptive or non-consumptive purposes. The interviewees in the study widely described dire repercussions resulting from wildlife's wrongful killing or without reasonable justification stressed by the religion. It is perceived that it is not good to kill wildlife if people do not need to for a good reason, raising ethical issues in line with faith. In Islam, hunting is allowed for subsistence but as wasteful if it is not for subsistence purposes. For example, if someone with livestock kills wildlife that he/she does not need food, the interpretation this is a wasted resource. Killing wildlife in such circumstances has consequences and carries "bad luck or a curse." "If you kill it, there is bad luck associated with its killing by losing your livestock and become poor*."* Stressed one man.

Similarly, people believe that Allah (God) brings them the rain because of this wildlife. *"*There were many occasions that only Diilhara got rain than neighboring districts." Said one man confidently. "Because of wildlife," he added. They believe that killing wild animals with a baby has "negative consequences," said one man. This seems both from a religious perspective and an ethical view of the wildlife. Only poor people were traditionally known to have hunted wild animals for food, but such people no longer exist now and migrated elsewhere, such as urban centers for work. This implies that this community has sufficient nutritional food that helped prevent them from hunting wildlife for food.

The interviewees mentioned that wildlife was their *pride* as some wildlife such as giraffes is not found in places other than Diilhara, giving them honor. Availability of Oryx, Kudu, and plenty of gerenuk in the savannah part of Diilhara make many respondents happy and hopeful in their land, as they expressed(future economy). "It is like gold; it looks good and beautifies the land," said one respondent in one of the videos. This represents the aesthetic view of the wildlife by the local people in Diilhara. Large ungulates in the area save community livestock from predator killings like lions, cheetahs, hyenas, etc. An elder talked about how this wildlife is saving the livestock from predator hunting. "Warthogs are regular food for the lions and cheetah; otherwise, they would have turned their face to our livestock," he said. "Every day, we come across carnivores eating wildlife."

Apart from these factors, the underlying factor for not killing wildlife in Diilhara is an economic one; people do not need wildlife for meat, nutrition, or survival, as stated by most respondents. Many of the interviewees mentioned meat preference and preferred the livestock meat over the wildlife, as livestock is plenty in the area and people get used to livestock products. *"*We feel livestock meat is better than wildlife*,"* concluded one man.

5.7 The cultural taboo associated with hunting

Hunting wildlife is perceived as a *taboo* and disgracing act in this community's eyes, and it ranks the hunters as lowcast and ostracized from the tribe (see in the taboo discussion section). Historically, when someone lost his/ her livestock and did not have family kin or friends that supported them by restocking, the only means they could survive was hunting the wildlife for livelihood. Today, people who depend on wildlife for subsistence do not exist because people can migrate somewhere else and establish a livelihood that can support his or her family.

The Diilhara community has an established norm of not killing wildlife, deeply rooted in the community's identity. Anyone that breaks that norm is seen as a violator of the norm. Therefore, hunting wildlife in Diilhara is seen as abnormal, and the community's rejection results. In disapproval, the community uses *taboo* to voice against the killing of the wildlife in Diilhara. This is a powerful sentiment in the community and a significant reason hindering community members from killing wildlife for livelihood. Instead of living under a taboo, one rather leaves the area and migrates to somewhere else, as stated by the respondents. *"*Diilhara is a difficult place to live without livestock and cousins(close relatives) by your side*,"* said one man. Cousins support each other in livestock replenishment and other personal security.

5.8 Those who kill the wildlife and reasons

The interview also covered two villages where community members kill the wildlife and the main reasons. Killing wild animals happens where relatively different *tribes* exist and where the traditional leadership of the tribe is not in strict control and respecting traditional norms and values is loose.

*"*Hunting wildlife started during insurgencies(Jabhadihii) led by Waku Guto, who sought hiding places in our area in the 1960s; since then, people practiced but at a low pace level*."* One respondent stated this. Waku Guto was an Oromo rebel leader who fought with the Ethiopian government in the 1960s and used this area to recruit fighters and launch the attack against the government in the Bali region, and his men were said to have hunted larger wildlife species; both Oromos and Somalis share the area. *"*Since then, you find camel herders far from homes that kill wildlife for occasional meat consumption instead of killing young camel."

They were asked if they knew any rules that govern the killing of wildlife. One respondent said, " even if rules exist, no one can stop us from using our wildlife." Another respondent said, "No, I do not know government rules that can stop me from using wildlife in our land."

This indicates no rules govern resource use in this locality as per the respondents' knowledge, nor did they want to abide if rules existed. This community consists of multiple tribes that are often not controlled by strong norms like Diilhara, and they behave like open and access resource use. In the commons, having rules, norms and enforcing them is essential. In Common resources, "cultural diversity can decrease the likelihood of finding shared interest and understanding" (Ostrom et al., 1999, p. 281). This applies to such the relatively multi-tribal

communities in whose areas are hunted and tolerates hunting wildlife to happen in its land. The union of the tribe is understood as the compositional elements of the tribes are from diverse backgrounds. They can share a common name but consist of many diverse origins that agree to live together. It is more like united tribes under one umbrella name. In a multi-tribal situation, agreeing on things is not quick or takes a long time to convince member constituents than a single tribe situation. Different groups may have different goals and interests in resource use. However, this also highlights the nonexistence of government institutions that would have enforced the rules, and regulated resource uses. The social organization of these multitribal arrangements is similar to the Diilhara tribe, where the majority are pastoralists, but the difference is that they may not have a common norm for all of them or common leadership that stands to enforce what they see as socially significant. Internally, there are differences when it comes to social life but superficially seem to be united.

The use of wildlife demand is changing. According to respondents, “many people are coming from urban centers by demanding wildlife meat of curing diseases.” said one young man. Many people from other places, mainly from urban centers, demand wildlife products like meat, oil, and fat for traditional, medical purposes.

An elder told me by the phone that killing wildlife is for commercial purposes and selling meat in villages. Others kill wildlife for the meat to spare their livestock during dry seasons when they come across one or two. In some cases, respondents noted that killing also happens as automatic weapons available in many young men’s hands; shooting at wildlife became fun for them.

5.8 The unsustainable situation of the wildlife in Diilhara

The community worries that wildlife might disappear as human settlement increases, roads are constructed, climate change affects the environment, including many traditionally unknown animal diseases. These are driving wildlife away, according to some respondents. “There is noise everywhere that drives the wildlife away,” said one of them. “Road accidents kill wildlife these days because of the road.”He added. Another respondent mentioned that they saw giraffes dying of disease, where they could not cure it.

Undeniably, we are at times of social, economic, and technological transformations. Technological changes have impacted the ways the community uses its natural resources and particularly wildlife resources. The availability of automatic weapons in some places has had a negative impact on wildlife in the last several decades. The Diilhara community had shown practices more than mere co-existence and traditional conserving methods but protected it.

Respondents say, “we defended it when outsiders attempted to take advantage of wildlife.” Partly because of the tribe's norm of *not killing wildlife* in what is perceived as its land.

To sum up the empirical findings, the community responses identify social and cultural homogeneity that enabled the tribe to establish deeply rooted norms of not killing wildlife in Diilhara. The community perceives wildlife in Diilhara as group property, excluding others from using it. There are no legal grounds for that, neither state recognition. Elders and religious leaders have roles to play in running the community affairs. Pastoralist male domination is prevalent in the community. Formal institutions such as districts and community levels are too weak or nonexistent to handle resource use. The community believes that wildlife has a profound meaning in their lives. It recognizes that wildlife has aesthetic, ecological, ethical, and economic values. Hunting wildlife is seen as against the social norm of the tribe and *taboo*, and hunters are seen as low-class people, often force them to move from the area. Recently introduced commercialization of wildlife meat practices is treat to the wildlife in the study area, as stressed by the community elders.

Section six: Discussion and Analyses

Data have shown several thematic areas: community considers itself a social and culturally homogenous tribe, some wildlife (eagle, gerenuk) have a deeper meaning for the community, wildlife is considered group property, wildlife has aesthetic, ecological, ethical, and economic values to society. Formal institutions are too weak to provide services needed to conserve the wildlife in the study area. The elders fulfill a role in passing the social norms and traditions to the young generation and running the community's affairs. Hunting is perceived as a *taboo* and degrading act in the Dillhara. These are themes that I will analyze in this section.

6.1 The tribes established norm

This tribe identifies itself as a social and culturally homogenous tribe originating from the belief that they all descend from a single father and are kin related. Respondents expressed how they constructed what they believed was “their history” of establishing themselves in Diilhara with difficulties, including wars. “We now feel proud of our land,” said one of them confidently, thinking everyone knows about them.

This is a robust narrative that this community has built and used for its survival. The norms such as *not killing the wildlife* have further helped them established "we-ness." Respondents stated that they "do not kill; others kill wildlife." The norm of not killing wildlife is formed well in the community, and it became the "*meta norms"(*Robert, 1986, p.1101) of the community. It became the lenses they see with, and social practice community uses with the wildlife in the area, in which they need to defend it against potential killers. This norm became dominant among the community members and in the community. Once dominant, the community then *internalized (ibid)* the norm and attached it with its existence and well-being, creating, for example, meaning to some wildlife types. "*Internalized norms of behavior among members of communities can guide resource management outcomes in desired directions*."(Agrawal and Gibson, 1999, p. 635).

For example, the Diilhara community treats wildlife like gerenuk and eagle as good news and happiness signs. Harming such animals that the community values as culturally important means confronting the community with unpleasant conflict. This internalized norm becomes part of the community's everyday life, and they enjoy having it. This, therefore, became a socially acceptable and approved norm that the community owns. And, therefore, Diilhara formed practices and social norms specific to it.

With the "*characteristics of the community*," scholars state that pastoralists are often conservation-friendly people and coexisted with the wildlife (Gadd, 2005; Barua, Bhagwat and Jadhav, 2013; Lankester and Davis, 2016; Lankester *et al.*, 2019). This is true, particularly if the habitual way of pastoralists is not interrupted. The Diilhara community shares this description because, as a pastoralist community, it established social norms that protect wildlife found in its area.

6.2 The role of informal institutions

In the context of pastoralist communities, understanding the complexity of social structures and institutions, customs, values, and traditions is very important. According to (Berkes, 2004, p. 624), the common property looks at "the links between resource management and social organization."

As discussed earlier, this is a pastoralist community whose socio-economic is mainly based on livestock rearing and livestock-related trade activities with itself and external. Some community members who migrated elsewhere are still connected to the community's socio-economic activities, such as the livestock trade and remittances. Customary rules and

leadership dominate the community's social cultures. Community leaders are social structures that facilitate and enable certain social customs to revive and restage. Elders customarily lead and educate local practices and norms, transfer social memories of the past, and attempt to hand them over to the young generations, who often challenge avoiding some and seeking to explore something new. Educating the young about past historical memories, social norms that evolved, and the tradition of the community are some of the things the elder do. They also warn the young about the risk that may lie in the future. In the absence of proper state functions in the area, elders filled the gap and traditionally held a substantial role in the community. The elders' hierarchical functions run through the community to execute day-to-day social issues, depending on the level of the tribal structure one finds himself or herself. Earlier, I mentioned two types of elders, the age and culturally formed elder like tribal leader or section. Both have respect and recognition in the community. For example, young and able men listen and learn from their experiences where older adults are present. Their advice is also taken. For example, when it comes to wildlife resource management in Diilhar, they advise what not to do, firmly behind the norms implementing through practices such as naming and shaming the norm violators (see in the taboo section below*)*. Tribal structures are often arranged as top, middle, and lower levels, reaching the family unit level in mixed and complex relations.

In Diilhara, the following descriptions best identify elders' roles in conserving wildlife and the environment in general.

"In the pastoralist case, the people with the most power are also those most interested in conservation*."(Mulder, 1999, p. 633)*

The interviewee in the study mentioned that the tradition of not killing the wildlife comes from the *forefather* that passed on to them and will continue to young generations. "It is hereditary traditions that need to keep on." Moreover, some young interviewees noted that elders in a general meeting discussed the prohibition of killing wildlife in the area by other tribe members. "Other tribes members are not allowed to kill a wild animal within us," said one of the respondents. These were public meetings to inform and educate the young generations and the elders to pass the practices to the young who might not have grasped, for example, wildlife's values. This highlights the role of traditional leaders, including religious leaders. The elders do most of the community's day-to-day issues by supporting the social norms and practices. The state's presence and formal institutions in rulemaking and enforcement were not yet experienced in this pastoralist context. These customary leaders help enable local norms and customs on how resources should be preserved and utilized. The religious leaders also administer family and spiritual matters and how some resources are

utilized. They base their views on religious perspectives, prohibiting some resources while permitting others to use them. For example, according to the Islamic faith, warthog, which is plenty in the area, is not religious allowed to eat (not halaal). Thus, religious leaders teach and enforce such prohibitions. As part of social structures, both elders and religious leaders enable activities and social interactions like educating the young to take over social values, norms, and religious obligations.

On the community side, many depend on the local leaders as sources of wisdom and hope because they mold aspirations as institutions (Hodgson, 2006. p.7). In this process, they shaped social perception, such as wildlife preservations practices of the tribe in Diilhara. Some respondents expressed that "we as a tribe do not kill wildlife; others kill it*."* This perception and discourse represent that this tribe was not known for hunting wildlife and make wildlife hunting unwanted work. It meant too proud to hunt for food, a perception shared by the whole tribe. It then became shared norms and values that are transmitted to the younger generations and beyond. From the preservation point of view, this worldview or perception of the community help conserves wildlife in Diilhara. All Somali pastoralists widely share the negative perception about hunting and depending on hunting as a livelihood. Bad names were historically labeled to those seeking livelihood from hunting (see the taboo discussion section).

Nevertheless, that negative perception is gradually fading away in some communities. For example, this practice is seen in multi-tribal arrangements communities that now tolerate hunting in their areas. In most pastoralist communities, dominating male voices are widely visible, sidelining other groups to play a role. However, this does not mean females, the youth, etc., are idle sitting somewhere saying nothing. On the contrary, they have roles and responsibilities in the community to play, despite elder male dominations. Pastoralism as a social system with its internal coherence—knowing more about the nestedness of this community needs further investigation and more in-depth research in the community institutions.

My interpretation is that community leaders have shown leadership in conserving wildlife in Diilhara. Also, I argue that the community preservation practices worked in Diilhara compared to other pastoralist settings in the region because Diilhara became the center that attracted wildlife in the area. However, that is not sustainable because of changing socio-economy needs of the people.

6.3 Wildlife has deep cultural meaning for the community

Respondents in the interviews have indicated that wildlife is the *second livestock* they may use when needed. Most respondents agree that the community has enough livestock, and there is no need for its consumption now. However, they also indicated that some species have a deeper meaning to the community. Such particular species are not for consumption purposes but other culturally valuable services. For example, some species are associated with happiness, others with luck, etc. "Eagle and gerenuk represent good news and happiness," said one elder. He stated:

"for example, if you lost some of your livestock, and while looking for it, you come across either eagle or gerenuk, you become happy believing that you will get your lost livestock unharmed."

This belief originates from values established in the concept of the value as "a guiding principle," directing the community/person that this animal has these values for them. By seeing the eagle or gerenuk, this community believes that the lost animals will be found unharmed. Seeing an eagle at a time, you needed the information of your lost livestock, and the belief that this eagle predicts and tells good news for the viewer makes the eagle valuable in the believer's perception. In practice, though, it may happen or may not happen, but when it happens, it positively makes the person more profoundly believing in the eagle more than before. Through this experience, he/she tells others its accuracy, making others believe in increasing the value of the eagle. It is a way of communicating with nature and understanding local meaning and knowledge.

One leader explained that for any reason, "if you travel and meet these animals on your way, you perceive your journey will end peacefully." The travel on foot and alone in the Ethiopian lowland countryside, which often happens, involves risks and uncertainty as there can be danger from wildlife, such as lions and poisonous snakes. The travelers take well any perception that helps inform the risk of the journey, and seeing these animals in your journey serves you like the weather forecast; you believe and rely on it, but it may not happen as predicted.

The eagle species is one type of eagle locally called *mandad* found in that environment, and it is a beautiful bird, not a big one, but small in size with a red mouth and strong claws. It often hunts snakes, reptiles, and birds. "If it comes to the fence of your livestock*,"* said one elder, " it is predicting more livestock for you," something pastoralist wish to achieve.

Similarly, gerenuk is seen as having luck and a good chance of getting something you want to get. Or an imminent danger to your life you wished to miss. In the local language, this is called “abshireys*i,”* which means “it bears good news and luck.” According to an elder, both species, the eagle and gerenuk, are beautiful creatures that one would want to watch.

Wildlife's non-consumptive values are part of cultural values that community respondents expressed widely. "We believe that anyone who kills wildlife (without good reason)will lose his/her livestock," said an elderly man in connection with the particular meaning of wildlife. In this community, as elsewhere, religion has a significant influence on their worldview and values.

“Many resist the idea (or do not realize) that religion is a key contributor to a consumer's core values, which then contribute to consumption decisions, voting practices, reaction to pro-social messages and public policy, as well as donating behavior. All cultures have a concept of God and of spirituality, although definitions and acceptance of those concepts vary.” (Minton et al. 2013. P. 1)

This community believes that Allah (God) will punish those who mistreat wildlife and the environment. The Islamic perception of “the meaning of the creation and the relationship between nature and the Creator” puts individuals in a position that needs balance and caution in life. According to teachings, it is believed that Allah (God) watches the doer of the action, which can be neither lied to nor denied. One respondent stated that“wildlife is harmless that should not be killed.” Harmless wildlife is often believed to result in dire consequences in losing one's capital, social wealth. People whose family is affected by some calamity link the misfortune with their livestock and wildlife or other powerless creatures they harmed. This is believed to be Allah's retribution when an individual mistreats wildlife or the environment, such as setting fire into the bush. Respondents also stated that ″ending the wildlife from the environment (area)has negative consequences on all, like lack of rain, drought, land degradation.” This is, according to one respondent*, ‘’*Allahs broader vengeance to the communities.” The implication is that animals and nature should be used properly, not in a manner of wastefulness and abuse.

"..human beings (1) are encouraged to think critically, through a rational process, the meaning in the creation and the relationship between nature and the Creator, Sustainer, and Protector" (citing from another source BRILL, 2009. P. 6).

The community understands this as Allah's (God)s punishment associated with wrongly hunting the wildlife and its consequences. Respondents expressed that those who lost their livestock were a consequence of their ill action by, for example, killing wildlife or harming Allah's(God) creatures without good reason. According to the community respondents, there are conditions and circumstances that Allah (God) permitted the killing of ungulate that will

not cause retribution to the doer of the action. For example, if it is for food, one can kill wildlife only for survival, which is permitted(halaal).

Similarly, many in this community believe that the wildlife's presence "has positive in their life by helping get more rain, more wildlife, and prosperity" because of Allahs (Gods) mercy on all, including the wildlife. "Be kind to the one on earth; Allah will be kind to you." said one of them.

Giraffe as a flag bearer for other ungulates in the area symbolizes the presence of large wildlife and an indicator of a healthy environment; if it is there, other wildlife is also there. They are comparing and contrasting with other places that are deprived of wildlife. That is the feeling that some elders stated in the interview. "Watching and seeing them(giraffe) in here heals my soul," said one respondent, indicating giraffe as environmental meaning bearing animal. These communities' perceptions about wildlife combine traditional ecological knowledge, environmental ethics, and ecological economics. Accordingly, these have to do with local people's *Traditional knowledge* of their environment and recognizing its benefits.

6.4 The feeling of the group property

The community understands wildlife as *a group property* that excludes others from hunting within the Diilhara area. According to (Ostrom et al., 1999, p. 279), one solution to the commons problem is to restrict access to the resource by "assigning individual rights" *or* group rights to feel the ownership of the resources and therefore invest or develop it. In this manner, resources are believed to be used sensibly, but it is not guaranteed to be used sustainably. Therefore, there is a need for rules restricting its use. Respondents also consider the wildlife in their area as common property, which everyone within the community belongs to, and no one has extra rights to use it. "It is our wealth," said one of the respondents, indicating community resource ownership. Another solution for solving the common pool resources problem is "creating an incentive for users to invest in the resource instead of overexploiting it."(ibid).

The respondents expressed that he has a stake in the wildlife in Diilhara. "I have a stake in the giraffe, and no one can kill it in my presence," said one respondent. This community does not allow others to come and kill wildlife in this area. A case of a man from another place who was prevented from killing a kudu for medical purposes illustrated that community members monitor and take action accordingly. Likewise, a giraffe was mistakenly killed in a truck accident, and the community reacted by forcing the killers to pay compensations for deterrence purposes. Killing the giraffe means losing them forever, but since the action was from a non-

community member, excluding them from using the resource or harming them was easy, and no one could do anything about it.

Nevertheless, if the request came from a community member or group member, it would have been difficult to refuse him. Community members or activists who refused to kill animals for an outsider and medical purposes acted according to the community's existing norms of not killing the wildlife. Others compensated for killing giraffes, as wildlife stakeholders felt threatened by outsiders and protected their animals. Both of these examples deterred the potential killers of wildlife in Diilhara.

Despite its legality problems, the perception of group property in Diilhara, where others cannot access wildlife, with the norm of not killing it, might have contributed to preserving and attracting more wildlife into Diilhara. However, this cannot guarantee to keep it preserved forever, and norms cannot function continuously. Moreover, as seen in empirics, this community lacks legal ground that supports their claim and recognition of the state concerning their rights of the resources, nor were there rules set for the resource use.

6.5 Environmental and Ecological values

Wildlife values are some of the themes that shaped the community's perception of wildlife, in general. The wildlife's environmental or ecological, cultural, economic, and Aesthetic values are some of the themes identified in the empirics.

According to (Chardonnet *et al.*, 2002), for many rural communities, wildlife has: **"**economic importance, through consumptive and non-consumptive uses, but also the present and potential nutritional value, the ecological role as well as the socio-cultural significance of wildlife for human societies of both the developed and the developing worlds.**"**

Wildlife contributes to the ecosystem that they graze or browse by participating in the regeneration and renewal of the environment (Berkes, 2006, p. 489) after disturbances, thereby enabling a suitable environment for living. They also take part in "seed dispersal, pollination, the translocation of various fruit-bearing species of tree." (Chardonnet *et al.*, 2002, p. 36). Similarly, as part of Traditional ecological knowledge (TEK), people understand and communicate with wildlife. Some wildlife warn people of dangers; for example, some birds and monkeys make a particular noise to warn you about lions ahead of you. According to some I had conversations with, there are understandings between the local people and the wildlife in the rural communities, particularly the pastoralist.

The honey-guide bird may lead you to honey in a tree somewhere, hoping you will understand it by providing some of the harvested honey; in doing so, it demonstrates a particular behavior (specific chirps) (ibid). The same bird warns about a lion or snake ahead of you, and people understand the bird's behavior in both cases.

Respondents in this study have indicated practices of not harming the wildlife and protecting it. The interviewee does not want to hunt wildlife for food because "we have livestock and do not need to kill wildlife for meat." This view has some animal welfare and ethical considerations (Minteer and Collins, 2005)). This community believes that animals must not be killed without good reason, and killing it without good reason is seen as a "*wrong one*." Some respondents expressed the beauty of the wildlife, such as the giraffe, Oryx, the Kudus, the Gazelle, etc., in Diilhara. The community respondents, for example, perceive giraffes as good for the well-being of the environment and a symbol of a healthy environment. The day it disappears from the environment, they believe, have some severe things to look out for. Here, people compare Diilhara with other places that giraffes disappeared first, followed by tall acacia trees destroyed for charcoal business. Saving part of environmental constituents contributes to a healthy ecosystem.

The overall community's practices are anthropocentric, as it is directly dependent on livestock, its product and can utilize the wildlife if and when needed. Wildlife in Diilhara is not that much unaffected, and there could be some killing happening within the community by community members for one reason or another. Nevertheless, the general perception and feeling among the community members are that killers should not continue to doing so and normally live within the community unquestioned. The end of these locally established traditional practices is favorable to the environment. Such practice seems to have served as conservation arrangements with religion and culture in the background that seems to stay behind longer. This does not mean that things will remain fixed there and nothing will change.

On the contrary, change is inevitable in today's communities and the environment they are living in. Social values, norms, and practices are subject to changes and transformations with time and conditions. Wildlife killing and consumption are contingent more on the economic conditions of the users (Chardonnet *et al.*, 2002). In Diilhara, wildlife conservation practices, according to the respondents, are threatened by the growing social and cultural changing needs of the people, including the demand for medical use of wildlife. One of the wildlife consumptions mentioned these days is increasing demand for medical purposes in the community.

6.6 Aesthetic values of the wildlife

Scholars indicate that wildlife values vary according to the interest of “the respective interests of the stakeholders involved.” (Chardonnet *et al.*, 2002, p. 16). One respondent expressed that he could not imagine Diilhara without giraffe bull strolling around and a group of gerenuks running away fast when they see people. Indeed, the perspective of such respondents is not to hunt the wildlife and depend on it for food. Instead, it is *the aesthetic* perspective of the wildlife he was talking about, and his interest was to see them living there undisturbed. He was answering the question of “if he could imagine Diilhara where wildlife no longer exists.” He says, "no, I cannot imagine that." Others would want to see available wildlife that they can easily hunt for food. Such a perspective is an economic one. The values of wildlife differ according to the different interests of the stakeholders. The Diilhara community holds a perspective of aesthetic values for the wildlife. The non-consumptive aspect of wildlife also includes "option value: the value of maintaining options available for the future" and" existence value**:** the value of ethical feelings of the existence of wildlife." (ibid p. 16-17). Both aspects of values appeared in the interview of the community. Some respondents stated that "wildlife as part of the second livestock," implying that if they do not use now, they will use in the future directly if they lose their livestock or benefit indirectly in the form of nonconsumptive like tourism income.

Some others expressed by saying it "our wealth that needs to preserve as conserved by our forefathers." They stated this "will be passed to the younger generations." "It became now part of our identity," said one of them about how wildlife disappeared nearby because of the earlier killing. On the aspect of *existence value* towards livestock, most respondents expressed this as not hunting wildlife in Diilhara. The people's understanding of ungulate species in the area resembles this deeply related to their existence. Most of the respondents mentioned that they would rather preserve all wildlife than kill them because of wildlife's value for their existence and well-being. Many respondents said, "if wildlife disappears, livestock also will disappear" and, therefore, end their existence. The community highly appreciates the giraffe as non-consumptive (Tarrant, Bright and Cordell, 1997; Chardonnet *et al.*, 2002) but a symbol of environmental well-being and beauty. That beauty has now been translated into social pride because it disappeared from the surrounding districts. The respondents expressed the pleasure of preserving its wildlife and browsing land, increasing wildlife's aesthetic value.

6.7 Reasons for killing wildlife

The wildlife values for community and high-level decision-makers include "financial profitability, economic yield, and environmental sustainability" (Chardonnet *et al.*, 2002, p. 16). There is a widely held belief that the consumption of wildlife should be sustainable. In the pastoralist socio-economic lifestyle, livestock values are very profoundly established in the behavior of the individuals and communities, as livestock is mainly the backbone of their economy. People depend on livestock directly to gain milk and meat and enable financial income by selling them to cover other family needs. These consist of livestock nutritional and economic values.

Similarly, wildlife has nutritional value by consuming its meat and even economical by selling its meat. Individuals may hunt for survival and sometimes to save livestock from slaughtering. Selling the meat of wildlife is a growing market experienced in the research area. In developing countries, "the wildlife industry forms a major part of informal activities" (Chardonnet *et al.*, 2002, p. 16). Economic value can also include non-consumptive of the wildlife like income earned in tourism, for example. However, this area has yet to develop its wildlife conservation in order to attract tourism income.

In the research area, the individuals who hunt do so for economic reasons, and some community members see them as exploiting and using the resource (Ostrom *et al.*, 1999; Ostrom and Cox, 2010; Acheson, 2011) because there are no state-enforced formal rules or norms that control them. Hunting wildlife takes place in the community (multi-tribal arrangement explained earlier) of multiple tribes which are neighbors to the Diilhara. Firstly, the leadership of such an arrangement is not unified and does not have shared norms that constrain individuals to hunt like the Diilhara. Secondly, this tribal arrangement shares border with Oromo and intermarry, where one finds a mixture of Somalis-Oromos cultures in them. Thirdly, the area they share with Oromos receives relatively more rain as it is close to the Ethiopian highland, and many who live in this area are crop farmers than pastoralists, so they often rear less livestock than the Diilhara. Crop farmers often need meat to supplement their diet, and therefore, this may have resulted in hunting for meat practices. Contrary to that, the Diilhara, whose majority rear livestock, do not need to hunt for meat. Secondly, Diilhara has unified customary leadership with a strong norm of *not hunting wildlife*.

Moreover, these days killing wildlife is for commercial purposes and selling meat in villages, and it is a new phenomenon that is increasing, according to some respondents. Increased movements of people and trucks in the area enabled some in the community to see

opportunities to do business in the wildlife meat. In the past, a relatively small number of pastoralists killed the wildlife for the meat to spare their livestock during dry seasons, but there were no wildlife killings for pure subsistence. According to respondents, there were newly emerging demands for ″medicinal cures in the wildlife.″ Wildlife demand for medical use by outsiders exists in both the Diilhara and this community. "Many people came from urban centers claiming to have diseases that only wild meat or body parts cure their diseases,″ said one respondent. According to the respondents, "these people request wildlife products like meat, oil, and fat for medical reasons.” People claim that, for example, giraffe meat is a cure for diseases such as diabetes, hypertension, and erectile dysfunction. Kudu and Oryx are believed to cure infertility in women and Hemorrhoids with their meat, oil, intestines. Respondent also mentioned that Porcupine meat is searched for the "cure for asthma" but not eaten by the community in normal conditions, as it includes prohibited species to eat (by the religion).

Historically, in rare situations, a giraffe was killed for nutrition to fix broken bones by eating its meat (locally known as *Baan*). In addition, there were practices of killing wildlife for livestock; for example, one man mentioned that kudu was also killed to cure some camel diseases, but these long ago were abandoned because of the availability of veterinary services. In the community where hunting is tolerated, they mentioned that giraffe is outside their territory and only found in Diilhara, beyond their reach. The lack of significant wildlife in their area worries this community because now they understand they are losing valuable wildlife in their land.

6.8 Cultural Taboos and hunter punishments

Talking about a cultural *taboo* associated with hunting, I will explain the cultural context that might have created the *taboo*. Pastoralists have been an oral society that passed many traditional practices into word of mouth, which continues today. My writing is also based on orally passed recounts about the taboo's origin, as I did not encounter material for references. Many of the things Somalis use today, including tribal names and the origins of social stratification, came through word of mouth, but they were well adapted and hard to leave. The formation of these social stratifications and tribal names was believed to be much earlier than colonial periods. However, colonials used these as soft entry points to exploit and divide the communities deeper to weaken their unity.

Like the rest of the world, pastoralists valued material wealth. However, that wealth in pastoralists' eyes was the livestock: Somalis rear camel, cattle, goats, and sheep with their values going respectively. Having much livestock was considered a rich person with respect and high social status in the community. The prestige and good social status go with the type of animal and number. Having sheep and goats is lower than having cattle. Camel was seen as the highly valued animal one could own, and having as many camels earned the owner respect in the community and even could take to the position of leadership. Losing livestock amounted to losing wealth, social prestige, and status and becoming destitute in the community. If kin could help replenish the livestock, which was/is the case most of the time, that person would likely remain in the community(or in the tribe). The other possibility is that one could stay in the community working as an employee that tends the livestock for others but is paid in kind. This was called *"Qowsaar."* Labeled with this name means identifying a lower status name and was not good in the pastoralist community, but still could remain within the community and accepted. Before the colonial period and before urbanization, people could not migrate for employment. This is not the case now, and people can migrate to urban centers for labor work. However, kin support in giving livestock to sustain and remain among the pastoralist communities is important and exists even today. If one could not get the two options mentioned, the only option for survival was to hunt, as migration was non-option. The names given to this category were both derogatory and downgrading. It is called *midgaan, boon, tabato, ugaarsato,* depending on the region and dialect. These names indicate people who depended on hunting and the lowest class status that pastoralists could not interact with within ordinary social life, such as intermarriage and social life. Marriage in the pastoralist involved paying too much livestock and other socially valued items to the women's family as dowry, which continues. A culture established and driven by the livestock owners pushed the hunters to a corner by labeling them as lower class. The other class formed and pushed to the corner are those who manufactured the household tools and traditional weapons such as daggers, spears, arrows, hoes, etc. These people grouped themselves to survive and developed minority tribal names against hostile human-made laminations towards them over time. During state formation and modern economic systems, these social laminations survived, continued, and even amplified within Somali politics.

Cultural *taboos* exist nearly in all societies. The dictionary definition (see in the theory section) sets two *reasons* for the taboo in the community: *the religious and social aspects*. In the religious aspect, even though hunting is not taboo in the Islamic view, wildlife killing modes were conditioned, and some wildlife is not permitted to consume. For example, warthog

includes this category. Others are permitted to kill with the condition of "only for food to survive." These conditions have influenced and constrained the community from hunting because they do not need it for survival. It also implies that those who possess livestock are not supposed to kill wildlife for meat, and in our case, nearly all have livestock. Respondents stressed that eating wildlife is religiously permitted and Halaal, but they prefer to eat livestock instead. This could be the taste preference for those who have livestock. It also implies following religious obligations.

The cultural *taboo* that respondents mentioned involved hunting the wildlife for food and depending on wildlife killing. Some respondents expressed that "it is low caste people that kill wildlife, not us." The community sees hunting as a degrading act that ordinary people like them should not do. This implies the community's rejection of both the people who hunt for livelihood and the hunting profession, forcing community members to migrate from the area.

This created perception is different from the religious reasoning of killing. Not killing wildlife has to do with the view that makes the community more respectable by not hunting for food. This is not intentionally saving the animal but rather retaining and sustaining a good name for the individuals and the tribe. Two elders with whom I had a telephone conversation confirmed this strongly. If, for example, a community member is seen hunting wildlife, he or she is considered someone who deviates from the social norm of the tribe. The tribe believes such members could be shaming and dishonoring the tribe, so the tribe must take action against them. "Those who kill the wildlife are named differently (allied with the low caste people)," stated one elderly man. Next to the "naming," the person is *ostracized* from the tribe if he /she does not stop killing wildlife. One powerful cultural tool that positively impacted wildlife conservation is the sanction by the tribe against hunters. In addition to naming and ostracization, the tribe members would not marry the daughters and sons of such people. This is a firmly held norm that lasts long, and as this exists, wildlife will have allies that protect it against killing.

The cultural taboo legacy impacted this community's behavior towards wildlife hunting (Olsson and Folke, 2001). Furthermore, that behavior positively contributed to the preservation of wildlife in Diilhara. Thus, this cultural *taboo* seems to have helped preserve the wildlife in Diilhara but alienated the needy community members.

6.9 Unsustainability of the wildlife

(Berkes, 2004) highlights that if the local institutions, traditions, ethics, and historical events align with *conservation objectives*, that program will likely succeed, as experienced in other parts of the world.

The author further discusses conditions under which conservation programs can be successfully managed. "These include common property, traditional ecological knowledge, environmental ethics, environmental history, etc." (p.625). From the community perspective, looking at the wildlife in Diilhara in each of these lenses gives us the following condition:

In the lens of *common property*, the community considers the wildlife in Diilhara as their group property (under commons) that excludes others from using it and, therefore, preserves its wildlife resources somewhat. However, the community does not have state recognition and legal grounds for that or means to manage the resources sustainably. In the lens of *traditional ecological knowledge,* this community preserved the wildlife resources in adherence to its norms and values. Community see some wildlife as culturally valuable and need to preserve them. In the lens of *environmental ethics,* some wildlife species have special meaning to the community, and therefore harming them is seen as a harmful act against them. Finally, in the lens of *environmental history,* this community attaches its history with wildlife in the area, and it is identified as a wildlife preserving community by itself and by neighbors. Therefore, community practices and behaviors can support conservation goals and projects.

Concerning the ongoing community development projects, the community felt its wildlife practice was being challenged. Community respondents were answering the question of "if they could foresee future wildlife presence in Diilhara." The community worries that wildlife might soon disappear as human settlement increases, wildlife economic demand increases, roads are constructed through the rangeland exposing wildlife further, climate change effects worsen, and many unknown animal diseases increase.

Community developments such as roads, telecommunication, electricity, mining, etc., are necessary to help create better economic and social interactions. However, scholars warn that community development risks jeopardizing the conservation of natural resources (Redford & Sanderson 2000 cited in Berkes 2004). For example, a recently constructed road in the area seems to have already affected wildlife due to increased new settlements along the road. These settlements have created commercial activities in the area, such as restaurants, small shops, due to the movement of people and trucks. Some of these restaurants started serving wildlife meat to their clients (this happened in the villages that tolerated hunting). Many see these activities as "penetration of market forces"(Agrawal and Gibson, 1999, p.631) into the area that can have a prolonged impact on wildlife resources in the future. Even in the river areas, "clearing of the

land for farming and fencing farmland drives wildlife into corners," stressed one respondent. This depicts the future of unsustainable wildlife conditions and unpredictable environmental situations for the Diilhara community. Devising conservation institutional rules, norms, and conservation management systems is necessary for the resources to be helpful to the community. Community norms and practices can then support such efforts.

Section seven: Conclusion

The study attempted to explore how the community understands the wildlife in Diilhara. As an answer to that, the community perceives wildlife as group property, God's bounty that can be used at any time, but more specifically, when the community needs it (future use wealth), and wildlife has multiple values. These values include ecological, aesthetic, cultural and meaning, and economical. Social norms, availability of livestock played a role in preserving the wildlife in Diilhara. Therefore, the Diilhara community has strong norms of *not killing* the wildlife, holds multiple values for the wildlife, and seeks to keep it and pass it to the coming generations.

However, according to conservation concepts discussed earlier, its current practices of preserving wildlife cannot realize that dream. First, it is not "fortress conservation" led by an authority with a "*command and control system"* of management. Secondly, it is not community-based conservation that considers all local conditions, stakeholders' interests, etc. Furthermore, in the community where hunting takes place, there are no established formal institutions with rules regulating resource use; therefore, it is not sustainable resources but prone to overuse. Finally, it is not a system that seeks equity and empowerment for the community. Instead, the study finds the community culture preserving wildlife and marginalizing its needy members forced to migrate. The study finds specifically following community perception:

- Wildlife is seen as good for both the environment and the livestock's well-being; if wildlife disappears, livestock will also disappear, and community existence will be lost.

- Some wildlife species have special meaning to the community(giraffe, eagle, and gerenuk).
- The majority of the community has livestock and prefers livestock meat to wildlife meat.
- Community marginalizes its needy members who would have depended on hunting by labeling them and ostracising them while preserving the wildlife.
- The commercialization of wildlife meat started with the increment of human settlements in the area. The recently introduced development projects, such as roads, mobile networks, and electricity, have enabled these commercial activities.

7.1 The implication of the study

The study exposed the lack of property ownership other than the claims of the tribe. It also highlighted the lack of institutions and rules that govern resource use, for example, in the community that hunts the wildlife. Therefore, it points to the need to create multilevel organizations such as national, regional, district, and kebele level institutions to manage the resources equitably and sustainably.

For research, some wildlife has socio-cultural significance, and others have ecological, ethical significance for the community, and this calls for deeper understanding and insights into the relation of the community and wildlife in the pastoralist areas.

For policy implications, the study revealed the vulnerability of the wildlife as development projects and human settlement increase in the area. Also, the climate change effects such as recycling droughts, floods, and traditionally unknown diseases are rising. Commercialization of wildlife meat was also reported in some places. These call for conservation intervention to save the wildlife from disappearing. The study recommends creating a multi-stakeholder intervention based on community needs and involvement in managing the resources. These interventions should note and promote the community's cultural, ecological, and ethical wildlife values.

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