# HUMANNATURE

*From interaction to strategy; exploring the intertwinement of human-nature relations and ecosystem restoration strategies in Trans Nzoia, Kenya*

**Master Thesis**

**Cultural Anthropology: Sustainable Citizenship**

By Isabel Romijnders          6407471

Supervised by: Evina van Marrewijk

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Utrecht University

*Abstract*

In Trans Nzoia County, the bread-basket of Kenya, the interplay between human society and nature is guided through precarious realities and the increasing recognition of the dependency on nature. The dynamics between the precarious lives in Trans Nzoia, and nature, can be understood through what Tsing (2015) describes as an interconnected approach to human society and ecological systems. Nature is perceived as a service provider, being inherently part of both human economy and ecological livelihoods. Due to the complex socio-economic-, and political- dynamics, and the sense of precarity intertwined with poverty, human livelihood strategies in fragile natural environments are threatening the ecosystems. Conservation organizations aim to not only 'save' the natural environment, but rather to create a more stable and secure environment for all the precarious lives that are present, including that of society. However, the context in which discursive human-nature relations are constructed (Pálsson 2016), simultaneously shapes and challenge ecosystem restoration strategies.

**Key words:** *Human-nature relations, Conservation Management, Precarity and Precariousness, Community Engagement and Participation, Commodification of Nature, Power dynamics*

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*Photo: My home in Sirende, the shamba of the Walala family, viewing the farm. (21.03.2024).*

# Table of Contents

*"Everyone on this earth must learn how to conserve the environment. Because currently we are all in danger. And unless we come together, and work hard to conserve the environment, we are not going to survive. There is a quote of the late Wangari Maathai, 'me and you, can forgive one another, but the environment is very unforgiving. Once you damage it, you have to pay for the consequences.'"[1]- Bob*

*Photo: Saiwa National Park, viewing the last 7 km of Wetland, home to the endangered Sitatunga Antelope, 02.04.2024*

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[1] Bob, semi-structured interview, 05.04.2024

## Introduction

Four months ago, on the 27th of January, I arrived in Kitale town, the county capital of Trans-Nzoia. I was picked up with the car by a family member of my main gatekeeper and he would immediately drop me off at my first meeting with other conservationists. In the first view minutes, we were passing a rural landscape that was characterized by forests, large-, and small-scale farmers, and plain areas with lower vegetation. As we drove closer to the outskirts of the city, we passed various large gates that led to the compound of County organizations, like 'The Plant Health Society' or ADC (Agricultural Development Corporation). Giant trees emerged along the main road, kids playing football on dusty fields, and right next to the parallel train tracks, I could see people cultivating land. As we came closer to the center of Kitale town, the natural vegetation slowly disappeared and was replaced with long-stretched tree nurseries with little sheds where the owners were waiting or chatting with customers. More cars came from various directions and we were surrounded by a chaotic orchestra of honking tuk-tuks and piki pikis.[2] Close to the exit of the main road to the city center, big billboards emerged with companies like Kenya Seed Company LTD promoting 'top quality fertilizers', or slogans like *mbegu bora, mavuno bora, maisha bora* (meaning better seed, better harvest, better life). Entering the city center, I had to accumulate to the busy streets, the high stores, various local businesses, and the strong smell of vehicle emissions and disposed waste next to pedestrian walks. We turned the corner and parked on the gated compound of the office building. A view street kids were 'slashing'[3] the grass with machetes outside of the office, and stopped for a moment when we stepped out of the car. The office was the home of environmental organizations in Kitale town, officing NEMA and Community Alliance for Change (CAC) among others. After brief contact in the last weeks over the mail, I then met my host, Mr. Walala, for the first time in person. "You are falling immediately into an important meeting with FAO, let us walk, they are waiting for us"[4] he said, laughing.[5]

The County of Trans Nzoia holds the national image of 'the Bread Basket', due to the main economic activity in agriculture. As I had gained the impression during my arrival, the landscape is characterized by small-scale farmers who cultivate crops like maize, beans, and

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[2] Motor taxi

[3] Slashing: cutting down vegetation or lower grass.

[4] Quote informal conversation, Mr.Walala, 27.01.2024.

[5] Kitale, field notes, 27.01.2024.

collard greens, and large-scale farmers focusing on sugarcane, tea, and wheat cultivation (Kipkulei et al. 2022). What is more important to the county's characteristics, Trans Nzoia hosts two of the five prominent water towers in Kenya; the Cherangany Hills and Mt. Elgon. These crucial water towers are catchments for the Nzoia and Suam rivers, which are the main water suppliers for Lake Victoria and Turkana, and feed the county's agricultural zone. However, the county's leading role as the central food basket has taken its toll over time. Due to factors like climate change and population growth, the county is facing serious challenges to food security and environmental sustainability (Kipkulei et al. 2022). The study of Kipkulei et al. (2022), shows the rapid expansion of croplands in Trans-Nzoia from 1990 to 2020, with an increase of 33% to 72%. Over this period, cropland has been growing at the cost of forestland (33%), wetland (71%), and grassland (50%). The County thus faces a rapid decline in the welfare of its natural ecosystems and many environmental organizations have been increasingly initiating restoration and conservation efforts in the past decades.

On my first day, I might not have understood the underlying meanings and paradoxes of my observation then, however, that carried had shown me complex social, economic, and political dynamics that shape and challenge the interrelated human-nature interactions and conservation management in Trans Nzoia. As well as this thesis will show, the lived reality of precarity, intertwined with the County's high poverty rate, a distrustful political climate, and the influences of Westernization, had made conservation "not just about planting trees."[6]


# Problem statement and debate

The lived reality in Trans Nzoia is a striking example of how humanity has created socio-ecological crises due to social, economic, and political mechanisms that have driven humanity into the Anthropocene, as discussed by Spash (2022). The coming of the Anthropocene, which included the forces of capitalism and neoliberal thought (Tsing 2015), has caused over time major biodiversity loss, massive species extinction, severe resource exploitation, and rapid climate change with life-threatening consequences (Spash 2022). Particularly, in the Global South the effects of climate change have induced precarious environments (Tsing 2015), including Trans Nzoia. In the last decades, anthropocentric threats have turned the condition of natural ecosystems into a critical condition, and therefore have made conservation efforts

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[6] Quote informal conversation, Mr.Walala, 19.03.2024.

increasingly important and an interdisciplinary field of research (Rülke et al. 2020) (this will be further highlighted in chapter one). It has triggered many debates and antagonistic positions: nature vs human; anthropocentric vs ecocentrism; poverty alleviation vs wildlife protection; or bottom-up vs top-down approach (Spash 2022). Mirroring the interdisciplinarity of this topic, environmental ecologist Spash (2022), development sociologist Büscher and Fletcher (2019), and environmental anthropologist Carpenter (2020), stress the need for a progressive transition towards sustainable practices and climate change mitigation and adaptation strategies, a call to restore and conserve nature. In academic literature, the concepts of restoring and conserving often suggest different meanings. However, my interlocutors have used these terms interchangeably, with a preference for the term conservation. Therefore, in this thesis, I likewise will use these concepts synonymously, while my focus was not on the meaning or differences of these concepts, rather the anthropological approach to them.

Nevertheless, the same societal structures that caused the need for conservation also challenge the development and implementation of conservation efforts (Spash 2022). As mentioned, the discourse of conservation holds many debates, and opinions are divided on whether the efforts should focus on nature or human society (Pálsson 1996). Scholars like Rülke et al. (2020) have engaged in this debate by arguing that the modern epoch of the Anthropocene, has created a dichotomy of humanity and nature (Rülke et al. 2020). Responding to this, scholars like Latour (2017) and Tsing (2015), counter this human vs nature dichotomy and emphasize the need to recognize the complex, interconnected relations between human society and the more-than-human world. In this approach, the conceptual term of human-nature relations was coined as a critique and studied in the interdisciplinary field of anthropology (Latour 2017; Rülke et al. 2020; Tsing 2015). As explained by Pálsson (1996), the study of human-nature relations focuses on the complex connection between human societies, cultural practices, economic systems, and their natural environment (Descola and Pálsson 1996: Descola 2013; Pálsson 2016). Anthropologists have attempted to move beyond an anthropocentric perspective by shedding more light on human-nature relations in local ethnographic research (O'Reilly et al. 2020).


As mentioned before, in Trans Nzoia, the precarious reality had led to high pressures of human impact on natural ecosystems and thereby a high activity in conservation initiatives. This illustrates an intertwined relation between human society, with in particular economic

livelihood strategies, and the natural world. In this light, ecosystem restoration efforts are not only a matter of 'saving nature', however also of creating a more stable and secure environment for all the precarious lives that are present, including that of society. Therefore, adhering to the class of anthropologists like Latour (2017), Tsing (2015), Descola (2013), and Descola and Pálsson (1996), I position this research in a more interconnected approach while it creates a relevant perspective to critically unpack human-nature relations. With this local ethnography in Trans Nzoia, I likewise attempt to move beyond an anthropocentric perspective and engage in the discourse of political ecology and environmental anthropology by focusing on the intertwined dynamics of the socio-, economic-, political-, and ecological dynamics.

 I argue that using an anthropological lens to explore human-nature relations in Trans Nzoia, can entangle these interconnected complex dynamics between the human and natural world, which accordingly can provide unique insights into how conservation is challenged and shaped through society's relation to nature. By doing so this research aims to provide valuable anthropological insights into the interdisciplinary field of ecosystem restoration (and conservation) as well as to contribute to the debate on the relation between the human-, and natural world through an interconnected approach (Latour 2017; Tsing 2015). Furthermore, by seeing precarity from a more-than-human perspective I foreground, similar to Barbier (2011) and Sullivan (2009), the interconnectedness of the human economy and ecology. Therefore, this thesis also aims to explore how human-nature relations are constructed in the context of a precarious environment and lives (Tsing 2015), which accordingly shape ecosystem restoration strategies. The central question guiding this thesis is thereby:


*How do human-nature relationships* **shape the ecosystem restoration strategies in Trans Nzoia County, Kenya?**


To answer this central research question, I will look at the socio-ecological challenges my research populations face through the approach of political ecology (Carpenter 2020; Roberts 2020) and environmental anthropology (Brosius and Russell 2003; Orlove and Brush 1996). Furthermore, I will explore how the precarious realities (Tsing 2015) navigate the interaction with nature and accordingly how people give meaning to nature (Pálsson 2016). With these discursive notions, I will also question the meaning of what it means to be human (Pálsson 1996; Descola 2013) and how people translate this into taking care of their environment. I will

focus on individuals who participate in conservation management, as well as the recipients of those efforts that experience precarious realities. For the aim of my thesis, I will approach the concepts of human-nature relations and ecosystem restoration strategies separately as well as interconnected, adhering to my position in the anthropological debate.

# Into the field

I conducted my research in the County of Trans Nzoia, located in the northwestern part of Kenya, between the 27th of January and the 20th of April 2024. To answer my research question, I used the qualitative research methods of participant observation, semi-structured interviews, informal conversation, and collaborative film-making. While conservation activities happen in various settings and on diverse levels, which will be further explained throughout chapters one to four, my empirical data resembles this diversity. Access to my research field was enabled through my main gatekeeper Mr. Walala. I lived with him and his family in the village Sirende, on the outskirts of Kitale Town. Mr. Walala is an environmentalist by profession, owns an environment consultancy firm, and is the director of the community-based organization 'Community Alliance for Change' (hereafter CAC). He was my key informant and due to his long history in Trans Nzoia, growing up next to Saiwa National Park, his long work in conservation, and his enthusiastic personality, he was well-connected in the County. Next to being my gatekeeper, he was also one of the various people who taught me a lot about ecology, the agricultural discourse in Trans Nzoia, and the art of conservation. This has been highly beneficial to gain a deeper understanding of the relationship between nature and my interlocutors.

As my research aims to gain a deeper understanding of the relationality between human society and nature, the method of Participant Observation (hereafter PO) enabled me to understand 'the most fundamental processes of social life' (DeWalt and DeWalt 2010, 3) and helped me to unfold these interactions. Walking with Mr.Walala was one of my main PO activities and enabled me to gain insight into the daily routine of conservationists and to build trust and rapport within various communities (DeWalt and DeWalt 2010), schools, or at the office in Kitale town. PO activities with Mr. Walala thus included field trips to conservation projects, community meetings, or working at the office in town. In this way, I was able to build up my network and meet my interlocutors whom I later had further contact with. I was present

in a variety of settings and activities; tree-planting activities during International Forest Day, Wiyeta Wetland Restoration Day, ADC land restoration; school restoration initiative of Wiyeta School for girls and Saint Patrick school; climate change and food security panel; bamboo workshop; community engagement meetings with farmers at Wiyeta; mapping water resources and eucalyptus trees in Wiyeta; attending various meetings with diverse conservation organizations; check-up of planted trees at Kapolet forest; or working on the farm at home. On top of that, I stayed for four nights with one of my interlocutors Florence, and her family, and for three nights with Bob and his wife. Florence owns an organic shamba and my stay provided me with a deeper understanding of the daily routines and realities of a livelihood strategy that is constructed with complete sustainability and conservation values. Bob lives in Wiyeta and has set up the large tree nursery 'Wiyetamok Saiwa' next to his shamba. My staying with him enabled me to conduct more intensive and consistent PO in the Wiyeta community and gain a deeper understanding of the precarious lives within the Wiyeta community. Alongside the method of PO, I conducted 16 semi-structured interviews. I have interviewed members of CBOs, tree nursery owners, farmers, county officials, and other conservationist experts. My interlocutors included conservationists at various levels, ranging from professional employment to personal interest. The method of semi-structured interview allowed me to gain a more in-depth understanding of the human-nature interactions of my interlocutors and a comprehensive perspective on the complex context (DeWalt and DeWalt 2010).

Besides PO and semi-structured interviews, the method of 'informal talks' was highly valuable not only for the empirical data but most of all as a method to build trust and rapport with my interlocutors and community. To be able to participate and take part in informal conversations, or even to understand jokes, knowing the language is crucial for 'talking the talk', as DeWalt and DeWalt state (2011). As English is the second native language of Kenya, I did not often find difficulties with communicating with my interlocutors. Even in the most rural areas where I conducted interviews and PO, I could communicate in English, or when not receive a translation of community members. I learned some of the local Swahili slang, how to introduce myself, and got familiar with the multifaced meaning and therefore consistent use of *sawa* and *sasa*[7] or *pole pole*.[8] These small uses of the first native language helped me with building trust and engagement processes with local communities. In some cases, when I would

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[7] Sawa, or sasa: Swahili words used interchangeably, meaning oké, welcome, equal, or the same.

[8] Pole pole: Swahili for slowly, relax, with time, patience, and is used often in informal conversations.

join farmer meetings that were held in Swahili, I would take observational notes and later on discuss with Mr. Walala the goals and important notes of that meeting. Sometimes there was the possibility of using a recording, which I would then later translate with the help of a translator.

In addition to more classical forms of PO, I also participated in a podcast about climate change awareness in Kitale; film festival Kitale screenings; CAC short film project. For the latter two mentioned activities, is where the visual method of 'filmmaking' comes in. I regarded the method of filmmaking highly relevant for two reasons. First of all, in the second week of my arrival, Kitale held a film festival with the theme of climate change and food security. For the entire week, there were various film screenings and discussion panels at the National Museum of Kitale. Not only have I attended various screenings and panels, but I also followed one of my important interlocutors, Guti, that week by showcasing documentaries about climate change and forest conservation at diverse schools. These PO activities were highly relevant, as they showed how the film was being used as a way of creating awareness with the youth to participate in conservation and community engagement. Secondly, during that week, I also followed a Ugandan filmmaker, Dennis Onyondi, who started a collaboration with CAC to make a short film about the encroachment of the Wiyeta Wetland. The aim of this film was to capture the impact of climate change and human activities on the Wetland, and showcase it next year at the Kitale Film Festival to create awareness. In the second month, documenting the restoration efforts in the Wiyeta community through the means of film, became part of the ecosystem restoration initiative that I had followed for two months. Therefore, the method of film in this research did not focus on capturing nuances, emotions, and other sensory elements that complement the written text about human-nature relations and ecosystem restoration strategies. Instead, collaborative filmmaking was used as a conservation strategy to open doors for community participation and engagement. Echoing the words of Pink (2007), collaborative filmmaking increased the involvement of the community in the restoration efforts and provided a platform for individuals to tell their stories. During these activities, I moreover participated as an observer and took notes for my research, however sometimes took part in documenting the story with the camera, as my phone was often used due to its quality. The film materials of this method are added in part of this thesis while I argue that the visual data gives more context to an the written word of an event or interview (Pink 2007), and encapsulates a strategy in conservation.

As my network grew gradually, my research interests led me to shift my focus more toward specific areas around Saiwa National Park, the Wiyeta Valley, and Kitale Town. The Saiwa Swamp National Park is the smallest in Kenya. The wetland area is known to hold a conflict between conservationists and the people living around the park (Ogutu 1996). Many NGOs, CBOs, and county policies aim to restore the wetland area, including the Community-based organizations (hereafter CBO) I have followed during this research. To gain more contextual understanding, my interlocutors provided me with a valuable, yet unreleased report on the environmental decline of the Park and a development plan for community restoration efforts. The wetland catchment area is located in the east of the county, 27 km from the county capital, Kitale town. Gradually, the wetland has been encroached due to human activities. It is a critical ecological area as it is the home to culturally popular, however now endangered, species like the Sitatunga antelope, the gray crowned crane, and the Debrazza monkey ("Trans Nzoia County Integrated Development Plan: 2018-2022" n.d.). Due to intensive and unsustainable agricultural practices, the park is selected for various restoration and conservation efforts ("Trans Nzoia County Integrated Development Plan: 2018-2022" n.d.). In the north of the Saiwa National Park, where the Kapenguria River flows into the Park, the Wiyeta community is located. In the Wiyeta Valley, members of the community have encroached the Wetland for agricultural purposes directly up until the river. The community holds in the area moreover small-scale farmers, and large-scale farmers, a primary and secondary school, a local hospital and health center, and a village center. Although I was not able to detect the specific number of residences, the Wiyeta Valley around the Kapenguria River houses not more than 100 farmers. Important research places in this area, where for this research the tree nursery 'Wiyetamok Saiwa', and the Wiyeta Girls Secondary School. In chapters two and three, the relevance of these places will be further explained.

## Ethics and Positionality

In, and outside of the field, it was important to acknowledge my position as a white, highly educated, Dutch, atheist, and young adult woman, which contrasted highly with the general population of my research field. The residents in Trans Nzoia are predominantly Christian Kenyans, with, in comparison to my Western position, more limited access to social or

geographic mobility and access to higher education. While I was aware of my positionality and present cultural differences, despite my critical reflection on potential biases and stereotypes (DeWalt and DeWalt 2011) I had often found myself falling into historical patterns of colonialism and biases around Western educated women. Although I attempted to distance myself from this stereotype, I acknowledge the economic and social expectations that were implicitly, and sometimes explicitly, attached to the presence of my female European position and highly educated, not-married status. On the one hand, my position and being have resulted in the field and outside the field sometimes more open access to my interlocutors. I have experienced that my 'status' in Trans Nzoia is considered as 'prosperous', and 'well connected', and respected my effort to travel 'to Trans Nzoia'. Therefore, I was on many occasions openly welcomed to various homes, PO activities, and interviews, and had many informal conversations, which made my data collection in the majority of the cases with ease. On the other hand, on some occasions my position did challenge my access in the field, and outside the field. In the field, my position could prevent me from truly understanding the meanings of the deep underlying socio-economic and political dynamics. Biases or a lack of trust (due to these colonial patterns) could have led to missing important details of mapping the underlying paradoxes and complex dilemmas within ERS. Also, the socio-economic expectations that came with my position, and being constantly referred to as 'the Muzungu' meaning European person, affected processing the data and feeling at ease during the data collection.

Furthermore, living with the community, and my main gatekeeper, had its pros and cons. I had the honor to fully emerge into the everyday life of a Kenyan household and lived with an amazing warm family. I have gotten to interact with many individuals in various communities, experienced the sense of community in Sirende, and learned the apprentice of cooking 'ugali'. However, I was therefore also constantly tested in my role in the field, blurring sometimes the line between Isabel as the researcher, a member of the family, a friend, or a Western visitor. Nevertheless, I also learned that in Kenyan customs, everyone carries these roles simultaneously, especially in the field of conservation. Luckily, I was quickly known as the 'Isabel the anthropologist', and interlocutors were open-minded in knowing that our 'informal conversations' could sometimes be part of my empirical data collection.

Lastly, all my interlocutors had given written or oral consent to use their real names and thus freely participated in my research (DeWalt and DeWalt 2011). This also includes in the recorded film materials and pictures, in which they have given me consent to use it for my

thesis research. However, an ethical consideration I have made is to use pseudonyms for some of my interlocutors while my research takes place a field with political and socio-cultural tensions. I thereby decided to use pseudonyms to respect the privacy of county officials. Although, the profession and personal background of my interlocutors are part of my empirical data, and therefore the individual's real identity could be revealed, I attempt to use pseudonym names to increase their privacy.

# Outline

This thesis is situated in a broad and complex context that approaches the two, yet intertwined, concepts of human-nature relations and conservation. Before delving into the empirical analysis, chapter one will provide a theoretical framework that helps to situate my research in the larger body of the context. In that chapter, I will first explore the discipline of political ecology and environmental anthropology, and clarify and discuss the key concepts of precarity and precariousness to gain a better understanding of the specific context of Trans Nzoia. I will present the concept of human-nature relations from an anthropological perspective, and explain the relevance of exploring the view of nature as a service provider. This theoretical framework functions as a critical lens for the empirical chapters, starting with analyzing the socio-economic-, and political- field of Trans Nzoia in chapter two. In this chapter, I will first explore the influences of a precarious environment and socio-historical patterns, that set the tone of human-nature interactions. Deriving from these influences, I will argue how the complicated meaning of land ownership in Kenya, including land fragmentation, and the interlinked shift towards individualism, contributes to human-nature relations and the challenges in natural resource management. The context of this field sets the foundation to explore the different notions and influences on the construction of human-nature relations in chapter three. In this chapter, I aim to unpack different meanings of nature, based on the approach of Pálsson (2016) and the lens of precarity by Tsing (2015), and explore how the precarious reality and ecological livelihoods have led to a reproduction of commodifying nature. I will further examine the interrelation between the two topics of this thesis with the access to educations and social patterns like social status and distrust. This latter will function as a bridge to the last chapter, where I will expand further on the interplay of the previous chapters in the field of conservation at an organizational level. I will unfold this by looking at the multifaceted meaning of tree planting. After that I will make a bridge to the meaning of monetary valuing of nature and how

this reflects in both topics. I will conclude by referring back to the key players in the field of conservation, and illustrate how human relations with one another have led in this context to socio-political distrust, thereby shaping the organization of conservation and the interaction with nature.

*Chapter 1*

# Theoretical framework

I was told that "conservation is about politics and money,"[9] and I had experienced how power dynamics and competition were part of the field of conservation actors. One day, Mr.Walala and I visited the lower stream of the Saiwa National Park to check up on some tree seedlings that were planted there some time ago. During this activity, he explained that one of the issues in conservation is monitoring the critical maturity phase of tree seedlings. I was told that often, seedlings get stolen, to resell or to plant at their shamba. On other occasions, they were removed by the locals just out of frustration, or farmers had let their livestock graze in the field consequently damaging or entirely eating the tree seedlings.[10] Not because they are against restoring the environment, but because 'who' had planted it there. Mr. Walala explained: "In the past, many NGOs just came, donated trees, and left. They did not talk with the locals, there was no education or dialogue with the community. So, people became angry and frustrated. Now they don't trust projects easily. You need to connect with them and don't just come there, dump the materials, and leave!"[11] This fragment demonstrates how this research is placed in a field that is challenged with power dynamics and structures, economic inequalities, and socio-cultural challenges or misconceptions. NGOs planting trees, and locals removing them, illustrate the power struggles and control over the impact on the land. As well as interpreting the feeling of frustration among community members, comes not only from an ineffective restoration strategy rather also a perceived lack of care from organizational powers about the community that, like nature, needs engagement and wants to be heard. People stealing the tree seedlings is an example of the effect of poverty and economic struggles. Deriving from this fragment, in this Chapter I aim to demonstrate how these specific power dynamics and socio-economic structures are part of human-nature interactions and can lead to ecosystem degradation. Accordingly, I argue that gaining a deeper insight into the power dynamics and socio-economic structures in Trans Nzoia gives a more comprehensive understanding of the interconnected approach to the field of conservation.

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[9] Mr. Walala, informal conversation, 21.02.2024.

[10] PO diary, visit Kapolet forest, 10.03.2024.

[11] Mr. Walala, informal conversation, 10.03.2024.

First, to further unfold the power dynamics, I will use the discipline of political ecology and environmental anthropology. These disciplines focus on the link between the condition of the environment and political economy and can guide us in unpacking human-nature relations that are constructed in a field that is laden with power dynamics. Secondly, I will elaborate on how the anthropological lens of 'precarity' helps us to understand the interconnectedness between socio-economic inequalities, intertwined with the effects of poverty, and the natural environment. Building on this, I argue that these socio-historical and economic structures have an impact on shaping society's perspective of the value of nature. Therefore, thirdly I will explore why the approach of nature as a 'service provider', offers a crucial perspective to understand the effects of the County's socio-economic and political structures.

## Political Ecology and Environmental Anthropology

Political ecology is a critical research field that explores environmental change in an increasingly interconnected world through power dynamics and economic structures (Roberts 2020). Anthropologist Roberts (2020), engages in the discipline by highlighting the relevance of studying ecosystem restoration strategies as it focuses on the relation between environmental degradation and social marginalization and explores the causes of environmental conflicts and changing structures in natural resource management. Moreover, Roberts (2020) also addresses that political ecology studies nature-society relations by foregrounding the role of capitalism and state forces that cause ecosystem degradation and local dispossession. In light of my research, this latter is relevant as it also touches upon the role of the County government in conservation management, and the effects of the national political discourse and global capitalism (further elaborated in chapter two).

In line with these latter two focus points, Carpenter (2020) explores in her research the role of the government and the meanings of 'power' in conservation. Similar to Roberts (2020), Carpenter (2020) stresses the idea and practice of conservation is inherently 'laden' with power structures and dynamics. However, the scholar attempts to move a step further than the traditional approach of political ecology, by approaching conservation with the concept of 'power', deriving from the definition of Foucault. In the words of Carpenter (2020), in our Anthropocene-shaped world, we need to focus on the discourse of power and the discipline of governmentality. While the Anthropocene started not with the beginning of humanity, however rather with the coming of modern capitalism which has developed this idea that 'progress and

with the spread of techniques of alienation that turn both humans and other beings into resources' (Tsing 2015, 19). In the last centuries, society has created the idea that the ultimate goal of humanity is growth through economic systems and monetary wealth, accumulating capital, and promoting individual utility (Spash 2022). This neoliberal thought, as Carpenter (2020) describes it, contributes to the commodification of nature. In this light, Carpenter (2020) illustrates how political ecology is highly relevant in the approach to conservation, as it explores how human history shapes the notion of nature and its relation to people (Carpenter 2020).

Similar to the focus of political ecology, is the discipline environmental anthropology. Demonstrated by Orlove and Brush (1996), their studies in environmental anthropology draws on a diversity of approaches including political economy, cultural ecology, and interpretive anthropology. Their perspective is relevant as it adds to the discourse of Carpenter (2020) and Roberts (2020), a more in-depth view on the development of ecosystem restoration strategy from a cultural anthropological point of view. Orlove and Brush (1996) explain; when environmentalism became an interest in the field of anthropology, anthropologists strongly advocated for the participation of local communities in the management of protected areas. Since the 1970s, this anthropological perspective on ecosystem conservation has evolved strategies in which anthropologists stress the need for local community participation and the organizational and communicative incompatibilities between the actors in play (Orlove and Brush 1996). Orlove and Brush (1996) state further that anthropologists have advocated that within conservation management, there are organizational challenges between the bureaucratic structures of NGOs, CSO, and state agencies, versus the more decentralized organizations within local communities. Local restoration and conservation efforts in protected areas therefore often face many challenges of mistrust and ineffectiveness because of the collaboration between these actors. Conservationists also face risks in being alienated from their communities because of their engagements with external organizations (Orlove and Brush 1996).

An example of anthropologists that Orlove and Brush (1996) are referring to, are Brosius and Russell (2003). Their study on transboundary protected areas shows that community engagement and participation are crucial aspects of future approaches to environmental issues. Or in their words; 'no species, no habitat, no place or piece of land can

be 'saved' without a community' (Brosius and Russell 2003, 42). Deriving from this quote, the two scholars also contribute to the debate of the human-nature dichotomy, a perspective that human society and the natural world are interconnected and mutually dependent. Their perspective is relevant to my research, as some of my interlocutors have expressed, similar to Brosius and Russell (2003), their perspective towards nature as a codependent relationship. These perspectives in environmental anthropology by Orlove and Brush (1996) and Brosius and Russell (2003) are relevant as I will explore in chapter four the challenges and dynamics between the involved actors in conservation.

To understand these complex dynamics in the discipline of political ecology and environmental anthropology, we need to dive deeper into the lived realities that reproduce these dynamics. This brings us to the concepts of precarity and precariousness.

## Precarity and precariousness

The activity of stolen trees, as illustrated in the previous vignette, could be interpreted as an effect due to economic insecurities, or related to the effects of poverty. The concept of precarity can help us to further unfold these lived realities and effects, as it refers to a condition of uncertainty and vulnerability that is particularly experienced by people who undergo social and economic instability, and a loss of welfare state (Han 2018; Hinkson 2017). The lens of precarity has become a widespread concern in the field of anthropology and humanity (Hinkson 2017) and supports therefore the anthropological approach to the study of conservation in this research. As explained by Hinkson (2017), precarity originates from various groups from diverse social contexts that all had the common theme of working in precarious forms of labor. It also acknowledges the historical processes of colonialism and capitalism that have perpetuated the unequal resource distributions and opportunities of contemporary society (Hinkson 2017). Han (2018), adds to this, that precarity is not only an experience on an individual level, however is also shaped in broader economic, social, and political structures.

In relation to my research, Tsing (2015) provides a more interconnected approach to the concept of precarity and introduces the term precariousness. The scholar uses the concepts of 'precarity' and 'precarious' interchangeably, and explores through this lens how human-nature interactions are constructed in the socio-ecological environment of vulnerability and instability, as 'precarity is the condition of our time', Tsing states (2015, 20). According to

Tsing (2015), we are all subject to changing ecosystems, disturbances of climate change, and human impacts. The concept of precarity underscores the unpredictable and unstable conditions in which humans and non-humans live. This is relevant to the context of my research field which is characterized by socio-economic instabilities and political power dynamics. Tsing (2015), thus addresses a reflection on how we, as humans, can not always be in control of life and can encounter unpredictable events and conditions. On top of that, the scholar stresses that by approaching the concept of precarity we can learn that indeterminacy holds the potential for new life and adaptation (Tsing 2015), emphasizing that there is an interconnectedness between all living and non-living entities.

Hinkson (2017) adds to the interconnected approach that 'precariousness' is key to every exchange, a continuous condition of being dependent on another. It implies that relationships are unstable and always in changing conditions. This also means that for me as an anthropologist not only are the relationships I study precarious, but my anthropological encounters while doing so are of precarious nature. In summary, while 'precarity' refers to the condition of insecurity and instability in contemporary society, 'precariousness' refers to a more fundamental aspect of dependency and vulnerability in relationships. Together, these concepts will provide a lens to explore how the vulnerable socio-economic context reproduces human-nature interactions and shapes ecosystem restoration strategies.

## Human-nature relationships

Tsing (2015) further engages in the interconnected approach by stressing a more intertwined system of human society and ecology. In the multi-species study of Tsing (2015), the scholar uses the conceptual term of human-environment relations. As mentioned in the introduction, this term was coined as a critique of the traditional perspective of the separation of humans-, versus the natural- world. Similar to the complex dynamics of conservation, the study of the relations between human society and the environment is also placed within an interdisciplinary field, and various conceptual debates and theories have been developed around the interaction between human and non-human entities (Rülke et al. 2020). One could argue that the concept itself reproduces the dichotomous disposition that it inherently tries to dismantle by focusing on the terms in the concept. However, in accordance with Tsing (2015), and other anthropologists like Latour (2017), Descola (2013), and Pálsson (2016), in this subchapter I will counter this point of view by arguing that the concept of human-nature relations can be

used to move beyond an anthropocentric perspective and emphasize the interconnectedness of the human-, and natural world.

While in some fields, humans are considered to be part of nature, or nature is considered to be part of the environment, other definitions divide 'nature' into living and non-living nature (Rülke et al. 2020). Anthropologists like Tsing (2015) and Latour (2017), stress with their multispecies theory and relational theory, the need to redefine our notion of nature and offer fundamental insights into human-nature relations by emphasizing the interconnectedness from a planetary perspective. According to Tsing (2013), the coming of the Anthropocene forces us to 'sophisticatedly' analyze how nature comes into being, rather than viewing it separately and submissive to the human world. Human-environment interactions are part of a multispecies field of histories, an assemblage of all living and non-living entities consistently negotiating in collaborative survival, thus Tsing (2013). In line with the multispecies theory of Tsing (2015), is the relational theory of Latour (2017). However, Latour (2017) adds to the approach of interconnectedness a need to challenge the notion of human exceptionalism. His theory raises questions about the need for human responsibility due to their impact, as humans have become part of the 'geostory of the Anthropocene' (Latour 2017). If we concentrate too much on the human, neglecting or refusing our connection to other systems and roles we fulfill, it risks our idea of what it actually means to 'be human' (Latour 2017). His theory is relevant as it aims to unfold within the conceptual term of human-nature relation, the meaning and translation of 'human'. In the study of ecosystem restoration strategy, understanding the meaning of 'the human' can be highly relevant as it can unfold the human agency and incentives when interacting with the environment.

Engaging in this question of translation are Anthropologist Pálsson (1996) and Descola (2013), by giving meaning to what 'human society' means; 'human history is the continuous product of diverse modes of human-environmental relations' (Descola and Pálsson 1996, 13-14). Descola approaches human-nature relations with a more socio-cultural perspective, by examining different cultures in which the interactions between the human and natural world are perceived: 'Relations between humans and non-humans in fact appear to be no different from the relations that obtain between one human community and another' (Descola 2013, 9). By exploring the notion of 'nature' in different cultures, Descola argues that the modern dichotomy between nature and culture does not apply universally. Taking this approach highlights the dimension of how the socio-cultural environment is part of the context in which conservation management takes place. The concept of 'nature' is only given meaning when set

in contrast with human activity, which is sometimes referred to as 'culture', 'society', or 'history'. In that regard he also argues that Western modern thought separates 'nature' from human society and 'culture' (Descola 2013). All three anthropologists above highlight the Western thought of the separation between nature and society (Descola 2013), imposed by global capitalism (Tsing 2013), and modernity (Latour 2017), and argue how these forces have created views on society's interaction with nature which accordingly contributes to the human impact on the environment.

As the previous scholars demonstrate the complex dynamics in which human-nature relations can be shaped, anthropologist Pálsson allows us to gain a deeper understanding of how these various relations can be analyzed. The approach of Pálsson offers an environmental anthropology perspective in the study of ecosystem restoration strategy. Pálsson focuses on the complex dynamic of human societies, cultural practices, economic systems, and their natural environment. The lens of Pálsson studies the relationship between nature and society through three key concepts: orientalism, paternalism, and communalism (Descola and Pálsson 1996). With these concepts, Pálsson attempts to address the social, cultural, and economic contexts that shape the variety of interactions between human society and the natural world. The first concept of orientalism describes a negative reciprocity between nature and society, 'people are masters of nature, in charge of the world' (Pálsson 1996, 67). Environmental issues are absent, and there is no need for ecological, scientific, or social expertise. Slightly relatable to the position of humans above nature, is paternalism, which emphasizes a relation of protection, rather than exploitation. Paternalist holds a balanced reciprocity relationship. However, by emphasizing the protection of nature, the separation between humans and the natural world is being highlighted. And in this process, as Pálsson describes, conflicts over resource use and conservation management can emerge. The last paradigm of Pálsson, communalism, rejects the distinct separation of humans and nature. It suggests generalized reciprocity, involving personal or intimate relations with nature. In essence, communalism argues the interconnectedness between human society and the ecological system (Descola and Pálsson 1996), demonstrating its relevance for the position of this thesis.

# Nature as a service provider

*"Our people, when they look around, they need money,*
*and the money they must get from the environment."* [12] *- Elly*

I have mentioned how our Anthropocene-shaped world has created unequal socio-economic structures, and that neoliberal thought has encouraged the alienation of turning nature into commodification (Tsing 2015). With the quote above, Elly highlights how these effects of the global forces of the Anthropocene are present in my research field. Elly, a good friend of Mr.Walala, is the County Forest Conservator and works primarily with local communities to develop management plants, and implement policies. He explained how his interaction and cooperation are moreover with people who are living in poor communities, and who experience severe livelihood challenges. He continues later: "We see challenges because of capitalism, urbanization …. We grab more than we need, and in that process, we deny the availability for others to use nature as well … From that we have created climate change."[13] Elly illustrates what Barbier (2011) would refer to as society, or individuals, giving meaning to nature by economically valuing its services. The translation of nature by Elly, as 'monetary valued', was one of the key themes in my research. Therefore, I deem it relevant to explore the theoretical debate on nature's commodification. In chapters three and four, I will unfold how the precarious environment in Trans Nzoia has reproduced the perspective of nature as an economic resource.

During the 1970s, conservationists labeled nature as a 'service provider' for humans. Over time, 'ecosystem services' gained an increasing monetary value, and created global markets (Sullivan 2009). Although opinions are divided over the benefits of commodifying nature, Economists like Barbier (2011), stress that by giving monetary value to nature, a stronger case can be built for conservation. I argue this perspective is useful for understanding ecosystem restoration strategy. Environmental anthropologist Sullivan (2009) counters this by stating that if money is the mediator of our relationship with the non-human world, then the meaning of being human has become critically impoverished. Both contrasting perspectives

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[12] Elly, semi-structured interview, 18.02.2024.

[13] Elly, 18.02.2024.

contribute to the interconnected positionality that my research is placed in, while the approach emphasizes how the human economy is deeply integrated with the welfare of the natural ecosystems (Barbier 2011), and by giving critique to the commodification of nature underscores the urge for a more holistic understanding of human-nature relations (Sullivan 2009).

According to Barbier (2011), the question arises here, who decides the pricing of nature? While, as the scholar continues, there is a growing realization that the economic valuation of ecosystem goods and services must be approached with interdisciplinary collaboration. Barbier (2011) critically argues that with 'pricing nature' comes the determination of how much society is willing to pay for changes that have a positive livelihood impact, or the price in willingness to accept as compensation for potential damages. Thus, the value of an ecosystem and its service is determined by how much it benefits society, which can be measured on a societal or individual level (Barbier 2011). In line with this, Sullivan (2009) explains from a green capitalist point of view, that if nature can be priced into services and goods, then the risk of environmental degradation can also be measured. However, she adds, this also creates a market in which these risks or negative environmental impacts can be exchanged, generally minimized, or unequally distributed. These, sometimes contrasting, perspective of both authors provides a critical perspective towards the approach of nature as a service provider, especially in the field of conservation where 'nature' is the primary resource focus.

Delving further into the field of conservation, environmental thinkers Gibson-Graham and Miller (2015) provide with their approach to 'ecological livelihood' a more specific lens that can help us to understand the context of Trans Nzoia, where agricultural in the main activity of the County. Their theory reenacts the connection between the human economy and ecology and accordingly advocates that the activities of human society are inherently dependent on the natural systems. In light of the Anthropocene-shaped world, scholars criticize the perspective of how the agricultural and industrial revolution society has 'naturalized' the economy and accordingly have separated the economic sphere of human activity. Rather, they challenge this traditional view by emphasizing that the human economy can not be understood without its connection and dependency on ecology. Furthermore, they propose that the economy must be approached as an ecological livelihood that recognizes the interactions with the more-than-human world (Gibson-Graham and Miller 2015). Not only provide Gibson-Graham and Miller (2015) a relevant connection to understand how the main economic activity

of agriculture reproduces specific human-nature interactions, however also sheds light on why environmental degradation takes place and the conservation efforts are increasingly necessary in Trans Nzoia.

In this chapter I have set out and explained a comprehensive theoretical framework that can help to understand the following empirical chapters. Through the integration of political ecology and environmental anthropology, the framework includes the building blocks for analysis of the interplay between human-nature relations, socio-, economic-, and political dynamics. In this interplay, I will focus on the meaning and presence of power dynamics (Carpenter 2020; Roberts 2020) in my research field. Furthermore, I have elaborated the concept of precarity and precariousness that provides a critical lens to analyse the lived realities and socio-economic insecurities. Tsing's (2015) notion of the concept extends this lens to the interconnectedness of the human and more-than-human world and helps to understands the vulnerability and adaptability in the socio-ecological environment of Trans Nzoia. Lastly, the theoretical component of exploring the perception of nature as a service provider, will give us a more comprehensive understanding of the role and challenges regarding money (Barbier 2011; Gibson-Graham and Miller 2015; Sullivan 2009), and capitalism, in the field of conservation. In the next chapter we will start with a broad approach to the complex socio-, economic, and political-, context of Trans Nzoia, and use this theoretical framework as building blocks for the analysis.

*Chapter Two*

# Exploring the Complex Context

As mentioned, the way locals in Trans Nzoia relate to nature is heavily influenced by their socio-economic and political realities, which in turn affects the development and implementation of ecosystem restoration strategies. In this chapter, I will delve into the context of the precarious realities, by specifically looking at the labour activities and the intertwinement with poverty. After that, I will unpack this in a broader socio-historical context, and further engage in the relevance of looking at land ownership and the transformation from community to individualism.

## Interrelation of Precarity and Poverty

It was my second day staying at Bob's shamba in the Wiyeta Valley. Bob is a charismatic and small Kenyan, and whenever I met him, he always wore rain boots and a buckethead. I highly enjoyed spending time with Bob, as he had a non-nuanced opinion and was eager to teach me about the art of conservation. Bob had started the 'Wiyetamok Saiwa' tree nursery close to his shamba and the dam of Wiyeta school for girls, six years ago. The tree nursery aims to educate the community on the importance of conserving the environment and is therefore also managed by the community itself. During my stay at Bob, he taught me about the challenges of managing a tree nursery "It takes knowledge and perseverance! Every tree seedling is different in germination and needs different propagation. So, one needs education."[14] Bob was not always a conservationist. He had told me under a beer telling strong stories about his time in Somalia, how he had worked tirelessly in the construction sector to make money and send home to his family. When he came back to Wiyeta, and continued to work as a farmer, he was approached by the Green Belt movement to join a course in Nairobi about the management of tree nursery. Bob had noticed the decline of the environment over the past decade in his home area, and decided to learn more about the importance of conserving, and while so also saw an economic opportunity in starting a tree nursery. He now made a living, besides his farm, by selling tree seedlings from his tree nursery surrounding areas in the County and to Green Belt Movement.

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[14] Bob, semi-structured interview, 05.04.2024.

In the afternoon I went with Bob to visit one of his friends, Hugo, a considered big-scale farmer, who owns large acres of land right next to the Saiwa National Park. We walked past one of the water resources where Bob had taken me earlier to show some of the issues the water resource is facing. It is one of the protected water resources that an organization had built for the community members to secure clean drinking water. However now, the source is only letting out a weak stream of water from the lower pipe. Right next to the source was not only a small acre of sukuma wiki being cultivated, but ten meters away from the water source were around 200 middle-sized eucalyptus trees planted. Bob had told me, that in the Wetland areas, eucalyptus trees are a common enemy to the natural ecosystem, as one tree can take up twenty Liters of water a day. I asked Bob who owns the land, to which he responded: "Just another rich person that is not from here, probably lives in Nairobi and just plants some trees here as an investment and goes, he does not care!"[15] Continuing with the walk to Bob's friend, we walked on a small path into a wild growing forest. After a couple of meters, we stumbled upon a large dug pit of 20 by 10 meters. Inside the pit, a gigantic block of small bricks was placed on top of each other. Ten male youngsters, ranging in age from approximately 9 till 18, were working in a well-coordinated manner, almost production chain-like, passing baked bricks from one person to another. Their cut off trousers showed legs covered in mud and most of them were walking barefoot. As we passed, they stopped for a moment with their chain and waved to us. I felt a little uncomfortable, not because I had ten eyes staring at me and I was used to the surprised faces of people seeing a *Muzungu*[16]. Instead, my feeling of unease at that moment came from the sight of these young men engaging in this physically demanding labor in this natural environment. It was a reminder of the harsh economic realities that had forced them into these activities.[17] Though this was the second time I had seen the construction site of brick making, though. Close to my host's home in Sirende, there was also a water source where people from the community came to fill up their yellow tanks. Whenever the water pump of our own house was not working, which was at least once every two weeks, we had to get our water from the same resource as well. Denno and Weta, who quickly had become my two 'Kenyan brothers' in my host family, would go back and forth with the wheelbarrow and carry six yellow tanks with water to the house. Although it is a ten-minute walk, this activity could

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[15] Bob, informal conversation, 03.03.2024.

[16] Muzungu: an African term referring to European persons. This was the most used nickname for me by not only strangers on the streets, however also for my interlocutors.

[17] Field notes, walking with Bob, 03.03.2024.

sometimes take two hours to completely fill the water barrel at the house because of the queue at the water source, and the heavy lifting.[18] The first time I went with them I noticed the large stacks of brick making next to the source. Denno explained to me the strategic place next to the water resource. "Brick making needs a lot of water and space to dig holes for soil. It is a tiring and tough job, and it makes very little money.''[19] With this vignette, I will unpack and analyze the present power dynamics and socio-economic structures that are at play and can tell us more about the reproduction of specific human-nature interactions.

As the vignette shows, the brickmaking was taking place in the middle of the forest area, which means deforestation had taken place. Its strategic place, close to a water resource to extract the necessary water and enough space to extract soil, is causing a damaging effect on the natural ecosystem. Its strategic place, also far away from city law enforcement, and Denno's explanation of brick-making being a tiring and low-income job, implicates that brick-making is considered a 'last resort' option to make a living. This is also supported by (Hashemi, Cruickshank, and Cheshmehzangi 2015), who explain that current environmental conditions have resulted in a decline in agricultural production, and consequently, people in rural communities turn to clay brick-making as a source of income. The ten young men, Bob and I came across in the forest working in the pit, engaging in a labor-intensive and low-income activity, show a lack of employment possibilities. Interpreting this through the perspective of Tsing (2015), brick-making is an example of how in a precarious environment people encounter unpredictable events and conditions such as the unpredictability of agricultural production, leading them to turn to this precarious job.

The farmer who had cultivated sukuma wiki next to the water resource illustrates an effect of socio-economic insecurities, intertwined with poverty. I was told that the Wetland's ecosystem was endangered because people had invaded the area for agricultural purposes and set up shamba's, hence the term encroaching[20]. The complexity was, however, that in some cases people were given land as an encouragement to combat the county's food insecurities. On the other hand, due to a growing population, poverty, and unstable employment possibilities

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[18] Field notes, fetching water Sirende, 18.02.2024.

[19] Denno, informal conversation, 22.02.2024.

[20] Elly, 18.02.2024; Stanley, 01.04.2024; Mr. Walala, 08.02.2024; Maurice, semi-structured interview 16.02.2024; PO observations, Wiyeta Wetland Restoration Day, 09.03.2024.

elsewhere, people started to encroach on the wetland in order to make a living as a farmer (the complexity of this land management will be later elaborated).[21] From the latter, we can now understand why the example of the sukuma wiki farm in the vignette, is an example of a precarious job. How this reproduces a relation to nature that emphasizes a form of orientalism and paternalism (Pálsson 2016), is because these agricultural activities come with the use of chemicals and cause pollution, and therefore negatively impact the ecosystems (this will be further elaborated in chapter three). People invading and affecting the natural ecosystem had led to endangering indigenous species such as DeBrazza Monkey, Sitatunga Antelope, and Gray Crowned Crane; depletion of natural water resources; decreased the health quality of the soil; and due to humans bringing in non-indigenous plant species in the wetland, has caused biodiversity loss of indigenous species[22]. Analyzing these facts through the lens of precarity, we can now understand that the destruction of the natural ecosystems in the Wetland is caused by economic precarity. The two examples of precarious jobs also highlight by Han (2018), that precarity is not merely an experience felt on an individual level, but is also part of larger economic, social, and political structures, such as a community like Wiyeta. As well as demonstrating how the human economy is intertwined with the welfare of the ecological systems (Gibson-Graham and Miller 2015). This we can further critically examine, by looking at Bob his perspective on precarity and his incentive to start his tree nursery.



*Photo 2: Wiyetamok Tree Nursery, viewing various tree seedlings of Indigenous trees, (03.03.2024).*



*Film 1: Clip of documentation 'the story of Bob', at Wiyetamok tree nursery, 05.04.2024.*

*Link: https://drive.google.com/file/d/1D3H8CXYAJfrY-yOMV25RvXuHsOFp0uDK/view?usp=drive_link*

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[21] Field notes, Wiyeta Valley visits diary, 15.02.2024.

[22] Mr.Walala, 08.02.2024.

Bob had expressed his concern about the environment, however also his economic instability as a farmer, whose success is linked to the decline of natural resources. The interaction of Bob with nature can be interpreted through the lens of viewing nature as a 'service provider'. However, at the same time, from the interconnected approach the tree nursery economy echoes Tsing (2015) argument that economic activities are not only about money, rather also are embedded in social networks and ecological systems. Bob had shown me that his motivation to start the Wiyetamok tree nursery was to improve his economic instability in a precarious environment, whilst taking care of the environment, and include the community in doing so. As later will be explained, the Wiyetamok tree nursery was an important social network place for community members and surrounding schools, to learn about the importance of conservation. At the same time, echoing Gibson-Graham and Miller (2015), the adaptive response of Bob to his experience with precarity demonstrates the connection between human livelihoods, or economy for that matter, and the natural world. Also from the perspective of Tsing (2015), the precarity of Bob teaches us how indeterminacy also holds the potential for adaptation and highlights an 'ecological livelihood' (Gibson-Graham and Miller 2015) that is paternalistic (Pálsson 2016). His concern about the environment is intertwined with his acknowledgment of the economic importance of conserving the environment for the sake of his own livelihood and that of the community. Whether this link between human economy and natural resource dependency also challenges the traditional thinking in the separation of the human and natural world, will be further explained in chapter three. However, as mentioned by Bob, the local community is faced with people from outside of the community buying land and planting crops that have a long-term investment. Bob had explained to me that in the majority of these cases, these non-community people often did not know how their land management was damaging the environment.[23] For instance, in and around Wiyeta, I had spotted huge numbers of eucalyptus trees.[24] The underlying meaning of Bob saying that the trees were planted by 'just another rich person not from around here', highlight in accordance with Roberts (2020), how economic marginalization leads to conflict about land resources in the rural areas of Trans Nzoia. The presence of these trees, planted by unknown landholders, shows us with the approach of Hinkson (2017) how the community is, directly and indirectly, faced with the unequal distribution of resources and socio-economic inequalities. Arguing that

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[23] Bob, 03.03.2024.

[24] Field notes, 15.02.2024.

those who face poverty and struggle on a daily basis, are not only confronted with their individual or community's hardship, however also faced with the 'wealth' and negligence of responsibility of their impact on the environment, by others. With this analysis, I want to refer back to the intertwinement between precarious reality and poverty, which in Trans Nzoia goes hand in hand.

> *"The real issue is poverty. People here are very poor, and you will find them surviving in fragile environments ... And when people are poor, it is very difficult to implement the environmental regulations ... People want to survive at all costs."[25]– Stanley.*

In one of my first weeks at the office in Kitale town, I met Stanley. He is the County Director of National Environment Management Authority (NEMA), and shares the same office building as Mr.Walala's environment consultancy firm. In the parking lot of our office, we had various informal conversations about how our day was in the field, laughed about some cultural differences, and him asking frequently about the Dutch dike systems. I was told by my other interlocutors that if I wanted to know more about the environmental challenges and interlinked issues the county has been facing, Stanely was the man to talk to. NEMA is a coordinating state body that is responsible for the environmental issues in the country. Stanley once stressed the importance of a state body like NEMA, especially in a country like Kenya where many cross-cutting issues take place. In the quote above, Stanley tells us about one of the core socio-economic issues and driving forces of environmental degradation in Trans Nzoia: 'poverty'. The World Bank (2023) shows that the poverty rate in Trans Nzoia 2021, was estimated between 30-40%. However, presenting 'poverty' as a statistical number would do injustice to the definition of poverty, as Stanley later comes back to: "Poverty does not only mean money, it encompasses many things. Poverty is a result of a lack of social amenities, education, and more. People are lacking so many things, they are trying to use all means to get something and to keep on going. So, you will find doing very odd jobs, such as farming that is not appropriate or in areas that are not the right place."[26] Stanley explains here the intertwinement of poverty with precarity, and how this has created a condition of insecure labour (Hinkson 2017). The

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[25] Stanley, semi-structured interview, 01.04.2024.

[26] Stanley, 01.04.2024.

result of this, as I have previously shown, is that people fall in to 'odd jobs' like brickmaking or unsustainable farming in fragile nature environment.

However, interestingly, I felt that the view of conservationists towards people that degrade natural ecosystems due to their livelihood strategy, was rather with empathy than frustration, because they understood socio-economic hardship under which people had to make choices to 'survive', as Stanley emphasized. Accordingly, this state of 'surviving', reproduces a relation to nature that has gained the meaning of a service provider (which will be further elaborated in chapter three). By understanding how humans give meaning to nature, we have to take into account the meaning of being human (Descola and Pálsson 1996; Latour 2017) in a context of continues precarity, that is intertwined with the effects of poverty. Bob and Stanley's perspective regarding the effects of poverty and a precarious environment suggest a definition of 'human' that is "idle" and "ignorant". This was shown to me during another walk with Bob in Wiyeta. We had passed a group four children carrying sugar canes, which is not an uncommon sight[27]. However, Bob turned to me and explained his frustration of the scene that I could not have understood from mere observation: "You see them carrying those sugar canes? It is not theirs. They just took it from that farm, which is not theirs either! You see those women over there in the woods gathering firewood? Also, not their farm,"[28] as he pointed to our left to a group of women in the eucalyptus forest. I had noticed that Bob was careful with not using the word 'thieves', rather instead he explained it as "people do things out of idleness and carelessness"[29]. We have to interpret that, the meaning of being human in a context that is shaped by the interrelation between poverty and precarity, reproduces a relation with nature in which human demands over exceeds a 'care of nature'. Therefore, we are first going to dive a little bit deeper demonstrating the connection between precarious jobs and poverty and the socio-historical context.

To further understand how the interrelation between poverty and precarity reproduces human-nature relations, we need to take a step back and explore the broader socio-historical context. This will help us to further unfold the complex socio-, economic-, and political dynamics that influence, and in this case challenge, ecosystem restoration strategies in Trans Nzoia.

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[27] Field notes, 04.03.2024.

[28] Bob, 04.03.2024.

[29] Bob, 04.03.2024.

# Socio-historical context

Part of the socio-historical context of Kenya that I deem important, involves understanding the historical influences of the colonial period, that have shaped present-day governmental structures and power dynamics. During the pre-colonial era, Kenya had a chiefdom system with leadership vested in elders (Onyango and Hydén 2021). When entering the colonial period, the traditional governance system was significantly changed by the British imposing a more Westernized system (Onyango and Hydén 2021). However, the post-colonial times have now ended into a government system that is driven among others by unequal power relations, lack of government accountability and transparency, and conflicts over resource management (Onyango and Hydén 2021). Deriving from this, two key points need to be further understood; first, the socio-historical context has led to on the one hand a lack of law enforcement, and second, a political discourse that was characterized by unequal power dynamics and governmental structures. During my fieldwork, I was shown that both these socio-historical effects reproduce precarious livelihoods and contribute to challenges in ecosystem restoration strategies. I will analyze this by unpacking the effects of the declining authority of the Chief system on ecosystem restoration strategies. After that, I will briefly highlight how the governmental discourse in Kenya challenges conservation efforts by looking at the perception of the government. The latter will further be elaborated on in chapter four.

Mid-February, Mr.Walala had invited his friend Dennis Oyondi over from Uganda. As a filmmaker, he was interested in helping to document the stories around the Wetland of Saiwa National Park. Dennis saw potential in this project for a future documentary that addresses climate change and the meaning of local community engagement in conservation. Four days long, I had joined him and Mr.Walala in shooting this film by visiting various important Elders in the Wiyeta community. As mentioned before, Mr.Walala hoped to use the film next year at Kitale Film Festival, to create more climate change awareness and shed light on the human impact in the natural areas. One very early morning, we were heading towards Sinyeri to visit Evelien who is the local Chief in Michayi. I was explained that a Chief historically held significant authority within local communities, functioning as a governing system that could guide law enforcement or implement policies. They are highly respected individuals in their communities and they have among others the ability to mobilize community members and address and mediate community issues. In terms of conservation on a local level, the Chief system has been important in managing natural resources and overseeing the human impact on the ecosystems. The chiefdom of Evelyn is part of a subdivided region of Sinyereri, which was split up in 2014 under different chief systems because of population growth and to gain better access to government services. The purpose of our visit with Evelyn, was to film a dialogue between her and Mr. Walala as they both had grown up next to Saiwa National Park and had seen the rapid environmental change. In the dialogue, Chief Evelyn and Mr.Walala talked about the past and present challenges of climate change and human impact on the Wetland ecosystem. They continued about the prospects for the community and the Wetland, emphasizing the interconnectedness that both the humans and natural ecosystems are going to

be part of the same negative faith might restoration efforts not be successful.[30] Chief Evelyn added "Restoration of the Wetland is very possible. It can be done by sensitizing the community, through the chief *baraza*. I suggest to hold the *baraza* not in the sublocation but in the villages near the Wetland areas … Than people are able to see what Wetland means and the importance to take care."[31] The Chief *baraza* means the public meetings where the community discusses matters of issues or share information. Chief Evelyn suggests here a strategy through community meetings, led by chiefs, can stimulate community engagement and participation in restoration efforts if properly executed and recognized. Nevertheless, this example emphasizes the pattern of unequal power structures and the role of state forces (Robbert 2020). For instance, I was later also told that a couple of decades ago Chiefs were stripped away from their power by the government while there was an accusation of Chiefs misusing their authority. The environmental issue that flows out from this, is a lack of law enforcement and the role of the state. These patterns, in combination with emerging forces such as climate change and capitalism, have led to human activity in fragile environments that are rarely controlled and secure. This is shown by the declining authority of the Chief system, and how Chief Evelyn and Mr.Walala emphasize the importance of controlling the community over natural resource impact. The precarious jobs mentioned earlier, are an example of this. While these activities are knowingly harmful to the environment, the lack of stable governmental structures has developed unequal, and insecure, power relations (Carpenter 2020) that reproduce the precarious livelihoods and at the same time challenge conservation efforts (a connecting argument regarding socio-political distrust will be further elaborated in chapter four).

To elaborate, this example also argues similar to the approach of Brosius and Russell (2003), that for effective conservation management, one needs the participation and engagement of a community. I had learned that most of the non-governmental organizations, among CBOs, in Trans Nzoia prefer to work with a bottom-up approach. This means that the strategy is primarily based to stimulate and include the community in the conservation initiatives. The precarious environment and socio-historical context influence this choice of strategy, as Mr.Walala explained: "We are using a community-based approach because there is no law enforcement. Unless power goes back to the people and the chiefs, it is very difficult to get things done."[32] To 'get things done', unfortunately, would include more than rebalancing power dynamics and enhancing local governance structures. In the next subchapter, I will delve further into this and argue how the socio-historical context has constructed a discourse in land management that; challenges conservation efforts; is inherently connected to the reproduction of the precarious environment; and affects the human-nature interactions due to the complex dynamics in land ownership and fragmentation.

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[30] PO activity, collaborative filmmaking, 13.02.2024.

[31] Chief Evelyn, collaborative filmmaking, 13.02.2024.

[32] Mr.Walala, informal conversation, 13.02.2024.

*photo 3*

*Film 2 Link:*
*https://drive.google.com/file/d/1ujMyc0673F0LoTMRowg0q0sBZ51pfvpz/view?usp=drive_link*



*photo 4*



*photo 5*

*Film 3 First edited film version of Dennis his project. Other pictures view shots of the film, showing key places of the Wiyeta initiative.*

*Photo 3 showing the river Kapenguria, where the area used to be wetland, now is being used on the left and right side of the river as farming land.*

*Photo 4: the football team of Wiyeta Secondary School for Girls. The team plays for the environment.*

*Photo 5: Mr. Walala during one of the field trips in the Wiyeta Valley, talking with the farmers to build trust and social capital.*

# Land Ownership and Fragmentation

*"If you look at our constitution, it gives people power to own land. And when somebody owns land, he has certain rights ... If you allow people to have rights over the land, people will misuse that right. Because, you can use your land in the way you want." [33] - Stanley*

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[33] Stanley, 01.04.2024.

Natural resource management is a difficult theme in Kenyan politics and environmental policies. The ownership over the natural resource of land, as Stanley elaborated later, contains more private rights than public natural resources such as forests and water. To understand this, we have to look at the post-colonial context that had installed a discourse in land management that now in the present day is challenging conservation efforts. In an interview with Mr. Walala, he explained that between 1980 and 1990, Kenyan President Moi gave away land as a political strategy, to "gain votes"[34]. Forests were cut down to make room for new settlements of communities. The ecological response to this deforestation influenced the cold and wet climate in Trans Nzoia towards more warm and dry temperatures. Ecosystems were faced with new diseases and non-indigenous invasive species, and for society, new normality's like dust roads and mosquitoes became part of life. Nevertheless, I was shown that owning land meant a great deal in terms of increasing livelihood stability and security, and also can be linked to one's individual identity and status. For instance, my experience living with the Walala family, engaging with their friends and family members in the country areas, had shown me how they valued their shamba's and the cultural-value of inheriting it their ancestral land. On top of that, in the case of Trans Nzoia, owning land is fundamentally tied to the perspective of a stable and more secure livelihood, hence nature providing a service (Gibson-Graham and Miller 2015; Sullivan 2009), while a part of the shamba is used for agricultural purposes. Another example was shown to me by Flora, during an informal talk about my experience in the Netherlands in not being used to people inheriting land, nor I from my parents. Flora replied with: "in Kenya, you are only really Kenyan when you own land!"[35] Understanding from Flora's perspective, the meaning of nature (Descola and Pálsson 1996), or in this sense land, is inherently valued by means of ownership.

However, I have to point out here that 'owning land' in Kenya is a very complex system in terms of legal ownership, and as far as I have understood, the spectrum was very broad. As I had earlier mentioned the term 'encroachment', I had gained the understanding that even though this form of land grabbing is not legally obtained, in custom the ownership was pardoned. Stanley clarified this to me when explaining that the reason why for the county it is difficult to evict people from those Wetlands, is because "it is not fair to evict one, then we

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[34] Mr.Walala, semi-structured interview, 08.02.2024.

[35] Flora, informal conversation, 20.03.2024.

need to evict everyone. And for that we simply do not have the resources."[36] This also refers back to the socio-historical patterns of a lack in the role of a state (Robert 2020). Therefore, the combination of owning land in a precarious environment, a high poverty rate, and a lack of governmental structures, results into threats to the welfare of land resources while people can utilize their land according to personal interest.

Closely linked to owning land is that inheritance invites the process of 'fragmentation' that challenges conservation efforts. The inheritance of land, I was told, is a form of customary law in which older male members of the family inherit the land of female and junior family members. The effect of this, however, is that with a growing population, the land is increasingly subdivided. This is highlighted in a brief interview I had with King David. He works for Kenya Wildlife Services (KWS), which is a state corporation that conserves and manages Kenya's wildlife conservation areas and national parks. I had met him on a couple of occasions, and in those times he always wore a military suit and carried a one-meter black 'staff' with a silver nod on top. King David explained from his work experience, that sustainable land management and conservation efforts are extremely difficult to control, while nowadays one hectare can be fragmented by five people. Therefore, the process of implementing or monitoring conservation policies faces a challenge due to the increasing amount of people that need to be approached and controlled.[37]

The fragmentation of land was paired with the transformation from a sense of community to an individualistic society. My experience living in Sirende with the Walala family had given me a strong sense of community. We got our eggs and drinking water from the neighbor across, Denno and Wetta had friends here and there in the community, and it happened almost daily that Mr.Walala would give a lift to a community member. However, this personal experience comes from my Western point of view, and Stanley showed me the underlying contradiction: "In the old days, community used to be a thing. If you had problems, you have members supporting you … If any member found you to be doing something wrong, they had the right to correct you … But now the society has changed. We are now fencing our compound, becoming individualistic. … Our traditional norm is changing … We are becoming

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[36] Stanley, 01.04.2024.

[37] King David, informal conversation, 12.02.2024.

Westernised."[38] In line with the approach of Brosius and Russell (2003), the interrelation of fragmentation and individualization, contributes as a challenge to conservation as it makes cooperation between community members and other actors in the conservationist field in play more difficult. Also, as Stanley points out afterward, the effect of people becoming more individualized decreases a sense of communal responsibility to take care of their shared natural resources, such as water. Similar to the earlier mentioned notion of people being 'idle' by Bob, land fragmentation contributes in this sense to this idea of individuals caring more about personal interest over communal interest, and in that process harm the environment.

In Kenya, due to culturally embedded African traditions and social norms, socio-political inequalities have marginalized women's access to and formal ownership over land (Njoh et al 2016). Additionally, the marginalization of women's agency in owning land has also limited decision-making processes in the land use (Njoh et al 2016). By unfolding the meanings of land management and ownership in relation to conservation, I have found in accordance with Njoh et al (2016) that the role of women in this discourse is marginalized. We can understand this better by looking at the marginalized position of a female farmer I had met, named Artlight. On Wiyeta Wetland Restoration Day (the meaning of this day will be further explained in chapter three), Artlight eagerly told me her story with a bright smile and connected her mixed English and Swahili words to an understandable story. I estimated her around to be end 40, and noticed the liveliness and strong muscles in the way she moved. Nevertheless, she explained her livelihood struggles as a widow, owning no land and facing economic difficulties and social challenges within the community. She continues to explain how this precarious condition influences her environmental stewardship; "we have a hard life because no one can support us, and there is nothing to do. So, we make ourselves employed, to keep busy … But they (meaning we) don't have the capacity to grow and plant trees, or to support conservatism."[39] The marginalized positions of Artlight, and expression of not being able 'to support conservation', tells us that the interrelations between precarity, owning land, and socio-cultural structures, steers the human-nature interaction. In the case of Artlight, her position in this context has reproduced a relation to nature in which she feels limited to engaging with conservation efforts. Additionally, to land-owning as a gendered endeavor, empowering women in this area also proves that women play a crucial role in the field of conservation. I

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[38] Stanley, 01.04.2024.

[39] Artlight, informal conversation, 09.03.2024.

conducted an interview with Linda, who is a member of CAC and active in working with women's groups on community empowerment in local business and food security. She has a strong passion for working with women, as women are "the center of the community", she had firmly stated. Linda explains the challenges women face in terms of the decision-making over land use and how her 'climate-friendly' women empowerment projects aim to create capacity building and agency among women. In one of the projects, Linda explains, married women are encouraged by utilizing a small portion of the shamba, that is traditionally appointed to them, with organic farming: "It may not look much to the husband, but at least this woman is able to produce her own vegetables, fruits, she can sell them, get an income and become more self-reliant."[40] Linda demonstrates how through empowerment initiatives like organic farming, women are stimulated to engage in a relation to nature, by encouraging the feeling of ownership and sustainable land use management.

In this chapter, I have explained the context of the field in which human-nature relations are reproduced and shape ecosystem restoration strategies. I have talked about the interrelations of precarity and poverty, and how this reproduces human-nature relations and accordingly describes the context in which conservation efforts are shaped and challenged. After that, I argued how this interrelation is clearer understood when analyzing from a broader socio-historical context, as this unfolds the interplay of present unstable political dynamics and lack in law enforcement. Then, I delved further into the socio-historical and explored how land ownership and fragmentation underline socio-cultural challenges of individualization and women marginalization, that are interlinked with the approach to, and challenges within, conservation implementations. In the next Chapter, I will build on this context and delve specifically into the concept of human-nature relations in the precarious setting of Trans Nzoia.

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[40] Linda, semi-structured interview, 27.02.2024.

*Chapter Three*

# Interconnected Relations; Humans and Nature

In this chapter, I will explore how the complex socio-economic-, and political context shapes the relations of my participants and nature. By this means, I will delve into the discursive notions of nature, and how people give meaning to nature. While these notions I have seen varied in their way of expressing it, I will use Pálsson's (2016) approach to human-nature relations to navigate them. Important to note, my interlocutors that participate in conservation came from a broad socio-economic spectrum. Due to the scope of this thesis, and foregrounding the importance of the precarious environment, I will mainly focus in this chapter on unfolding the human-nature relations of those who are the focus group of conservation initiatives. In doing so, I will touch upon the paradoxical interplay of the desire to take care of their environment and adapt to more sustainable livelihoods, and being dependent on their environmental stewardship within a precarious reality. I will argue how these discursive and complex relations are influenced by access to education, personal history, and socio-cultural patterns.

## Nature is my livelihood

Almost every week, I joined various meetings in which conservationists talked about the development of a conservation project. One of these weekly meetings was the Wiyeta Wetland Restoration initiative, set up by members of the Wiyeta community and Mr.Walala. The meetings were led by chairman Mr.Walala and chairwoman Principal Kate, who was the head of Wiyeta Secondary School for Girls and had made conservation a top priority of the school's curriculum. Her school's water supply was dependent on the local dam, located next to the 'Wiyetamok Saiwa' tree nursery. The dam was now endangered due to the water depletion of the wetland area and therefore this restoration project highly concerned the school as well. In the meeting, the community members, of whom were all farmers, would discuss the upcoming event 'Wiyeta Wetland Restoration Day', and the actual plans of restoring the area. Now on the latter, is why most of the farmers attended the meeting. As mentioned before in chapter two, farmers had encroached on the Wetland while the natural ecosystem could provide them

the opportunity to cultivate and generate an income. Bob had approached farmers in the Wiyeta Valley and encouraged them to attend the meetings. On the one hand, Wiyeta farmers were attending these meetings because they came with the hope that this initiative could be successful if they participated. However, on the other hand, some farmers attended the meeting because they felt like 'others' were deciding about, or intervening, their economic livelihood, future stability, and part of their identity. This is illustrated by one of the female farmers, and widow, Mama Gayo.[41] During the fifth meeting, she spoke about her relationship with the Wetland in response to Mr.Walala explaining about the substitute crops as a restoration initiative;

> *"The Wetlands is everything to me, it is my husband, my income, my home, everything. Because of my farm, I am able to send all my 11 children to university, it earns me 500.000 shillings every year. So, if you are telling me I need to leave the Wetland area, and change my way of life, you need to convince me and give me a very good substitute."[42]– Mama Gayo*

The other farmers nodded heavily in agreement with Mama Gayo. Her way of giving meaning to nature illustrates how multifaceted and interrelated the notion can be. Bringing this into dialogue with Sullivan (2009), the Wiyeta farmers see nature as a service provider. It is their economic subsistence that demonstrates like Graham-Gibson and Miller (2015) advocate, an ecological livelihood as their economy in agriculture is inherently intertwined with the natural resources of the Wetland. At the same time, like Pálsson (2016) approach to communalism, the Wetland nature had become part of their identity, a sense of kin that emphasizes an intimate connection. Together this definition of the Wetlands as being part of her livelihood and identity underscores the interconnected understanding of the human and natural world and challenges the human-nature dichotomy.

We can understand this way of giving meaning better when focusing more on how the meaning is integrated with the human economy. The fact remains, that their economic livelihood in the Wetlands has a negative impact on the natural area. The farm of Mama Gayo,

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[41] Mama Gayo, PO diary Wiyeta community meeting, 21.03.2024.

[42] The name reference of Mama Gayo comes from the cultural tradition that parents are often called by the name of their first-born child.

which I had visited later, is a relatively large small-scale farm and is located at the lower stream in the Wiyeta valley. Her eldest son, Gayo, who traditionally had inherited the farm and co-manages it with his mother, had shown us their acres where they cultivate among others Sukuma Wiki, Unions, and maize. Their acres are right next, or actually in, the water catchment of the Wetland. I was told that they take care, in contrast to most farmers, of their water resources by leaving important water-preserving trees around the water resources. Nevertheless, they had encroached on the fragile environment of the Wetland for many years.[43] Similar to the earlier mentioned precarious jobs, Mama Gayo and her family navigate their precarious reality by encroaching the Wetland for agricultural practices as their ecological livelihood strategy. The Wetland does not only provide them with food for own consumption and a market to sell their production, it also generates a high amount of money for school fees. This tells us how her notion of nature is, on the one hand, a multifaceted service provider (Gibson-Graham and Miller 2015; Sullivan 2009). On the other hand, she had expressed a more intimate relation to the natural area. However, on the latter, an underlying paradox emerges. As mentioned before, they express nature being 'everything', the core of their livelihood and identity, sketching a rather independent and intimate relationship (Pálsson 2016). However, at the same time, they show a negative reciprocity by harming the natural ecosystems due to their agricultural practices. Mama Gayo and her family had shown to me, like many other farmers around the valley, that the notion of nature is often not reflected back in how they take care of nature. We can understand this better when looking again at the precarious realities that force people to 'survive' at any cost (see chapter two). Due to precarity, intertwined with poverty, environmental stewardship is often limited leading to the degradation of ecosystems.

However, I noticed that some farmers in the Wiyeta Valley had expressed the same meaning of nature but had a more sustainable livelihood and were active in conservation efforts. Bob and Wesonga, one of the community leaders in Wiyeta, are two of these farmers whose notion of nature is very much reflected in their way of giving meaning to nature through sustainable land management and advocating the conservation of the Wetland. For instance, I had witnessed how Wesonga was a prominent and well-respected figure in the Wiyeta community as Elder and therefore carried a status of wisdom and had the social agency to mediate and address community issues. In the past, a carbon credit organization called Tiest,

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[43] Field notes, visit Mama Gayo, 04.04.2024.

had approached him and a view other member to participate in the carbon credit market. This had shown him not only another strategy of conservation but also how it could provide him with an income. In the last decades, Wesonga had educated and informed himself more about sustainable land management, and now has transformed his own shamba with more biodiversity and had a small tree nursery.[44] Both farmers express in the approach of Pálsson (2016), a more paternalistic or communalistic shape of their relation to nature. While they both recognize protection of the natural resources is necessary for their individual-, and, the community's- livelihood. Bob getting into contact with the Green Belt movement, and Wesonga with the carbon credit company Tiest, shows how network and access to education is influential to the reproduction of human-nature relations, in contrast to Mama Gayo. While these contacts had shaped their way of living and interacting with nature. They had shown to me how they continued in passing down their knowledge to the community, and were active in sensitizing their community to take care of their environment and transforming the damaging ecological livelihoods of the Wetlands ecosystem.[45] To understand more clearly how discursive human-nature relations are shaped, we need to look more critically to the influences of access to education and the aspect of network. In the next subchapter I will demonstrate how this is fundamental in the reproduction of human-nature relations, and inherently develop various approaches to conservation.

# Education and social-network are key

In mid-March, I traveled to Rafiki, a community located 20 minutes away by pikipiki, West of Kitale town. I was invited by Florence, a highly energetic woman with a strong voice, to stay for a couple of days with her and her family. I met Florence at a bamboo workshop at Manor House, where we learned about the sustainable values of cultivating bamboo. Manor House is a non-profit Trust that is a well-known agricultural center for farmers. The institute offers training programs on Ecological Agriculture and advocates education on sustainable agricultural practices to help communities improve food security and livelihoods ("Manor House Agricultural Centre | Empowering Communities Through Agroecology," n.d.). Florence and her husband Patrick, got acquainted with organic farming when they studied at Manor

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[44] Wesonga, semi-structured interview, 04.04.2024.

[45] PO diary, walking with through Wiyeta.

House, and later taught at the institute. Florence and Patrick had told me that due to their education and awareness of climate change's impact and fear of future insecurities, the family has continued in organic farming at home and teaching children at local primary schools nearby about the importance of conservation and organic farming. The shamba of Florence looked like an oasis of many trees, diversity of fruits, flowers, plants, and shadows. It felt like entering a vibrant sanctuary for nature. Besides the family and guest residence, the compound had a greenhouse, a self-dug water well, and a small strip for vegetables like tomatoes, Sukuma wiki, and other kales.[46]

Same as the farmers in Wiyeta, the family told me they struggled with money issues and stable future prospects. There was no organic market yet in a nearby area to sell their product for a valid price, and to make a living the family participated in various insecure job opportunities, like making sustainable paper, and cheese or renting out their guesthouse. Nevertheless, Florence and Patrick acknowledged the interconnectedness of their human livelihood with the natural system, and responded to this by being active in sustainable management and organic farming:



*"Nature is everything, the trees, the animals, the water, the air, the plants, everything that surrounds me. And humans are part of that … We have to appreciate our soils, take care of it, because it feeds us." [47] -Florence*

*Photo 6 Florece showing her sustainable paper artisanry, sitting in the garden in front of her guesthouse, 16.03.2024.*

Relating Mama Gayo with Florence, both women emphasize how nature is an intrinsic part of their livelihood and identity and recognize nature as a service provider as farming is crucial to their livelihood. However, comparing their actual interactions with nature shows a different relationship. As elaborated earlier, Mama Gayo's agricultural activity and effect on the natural ecosystem shows in the approach of Pálsson (2016), a slight orientalist and paternalistic

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[46] Shamba Florence and Patrick, Field notes observations, 16.03.2024.

[47] Florence, semi-structured interview, 18.03.2024.

perspective due to their reciprocity with the Wetland. In terms of Florence and Patrick, their study and further teaching at Manor House had given them education about sustainable livelihoods through organic farming, and constructed a like-minded network through the institution. Interpretating from this, their history had shaped their meaning and interaction with nature, and influenced a livelihood that reflects a communalism perspective (Pálsson 2016). Their advocation in organic farming has shaped a relation to nature with a balanced reciprocity and their idealization of a harmonious relation to nature resembles a positive reciprocity.

Also to be interpreted that their way of giving meaning is intertwined with a future orientation (Tsing 2015). During my staying at the family, I was shown how their sustainable organic farm was nurtured to enhance a more stabilized and secure future, as they perceived climate change to come in the future. This latter is explained by Patrick; "When you think of the future, in the long term, you need to create a healthy environment in which you grow your food. That is of paramount importance!"[48] Creating a healthy environment, in this case at their shamba, refers also to the meaning of owning land as a form of future security. Likewise, to Patrick, I had observed that future orientation was a key theme in the development and promotion of ecosystem restoration strategies. The precarious environment and ecological livelihood were an intergenerational challenge, and this was advocated strongly among conservationists and in the school curriculum. I was told that the environmental clubs at school that had been part of the education curriculum for decades. This an example of how the younger generation was already engaging with future orientations that are shaped around climate change issues, and the interaction with their natural environment. The relevance of analyzing education through environmental clubs was shown to me by Edwin, who is a teacher of History and Religion at the Wiyeta School for Girls. Similar to Patrick, Edwin saw the necessity in creating a healthy environment and therefore led the environmental club at the Wiyeta Secondary School for girls. I had interviewed Edwin at Bob's 'Wiyetamok Saiwa' tree nursery where the girls learn about conservation in practice. During the interview, he had demonstrated with great enthusiasm how the girls participate in the art of bamboo propagation. He had explained the environmental value of bamboo and the necessity of cultivating and planting bamboo along the Kapenguria River and at the school dam. Edwin had expressed his personal motivations to be active in conservation and teach the girls, is because he believed in the importance of passing down the knowledge to the coming generation. Besides, the girls would bring their knowledge

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[48] Patrick, semi-structured interview, 17.03.2024.

to their villages and continue to spread the knowledge there, he explained. He continued by emphasizing that we need to educate ourselves while it "is our duty because our livelihoods depend on it. Nature needs us, and we need nature. So, we are independent."[49] From the interconnected approach (Latour 2017; Tsing 2015), Edwin recognizes here the intertwined systems of human activity and the ecological system. Nevertheless, with this Edwin also shows a paternalistic relation (Pálsson 2016) through his perception that it is a sense of 'duty' to protect nature. This way of perceiving that nature 'needs us' reflects a paternalistic interaction, positioning society as master over nature (Pálsson 2016). Although recognizing similar to Mama Gayo that their ecological livelihood (Gibson-Graham and Miller 2015) is intertwined with the natural resources of the Wetland, in contrast, Edwin orientates differently towards the future by participating in conservation practice and educating the younger generation.

As explained above, in terms of reproducing balanced and positive human-nature interactions, education, interlinked with future orientation, and passing down knowledge are fundamental. To further understand this future lens and the role of education in conservation, we have to look at generational diversity as a crucial part of the approach to ecosystem restoration strategies. While I had observed how in terms of effective long-term conservation efforts, reproducing a positive reciprocity relation with nature is highly crucial. This became clearer during the Wiyeta Wetland Restoration Day on the 9th of March. The local community of Wiyeta, together with the Wiyeta School for Girls, and the CBO organization of Mr. Walala (CAC) had prepared this day in the last five weeks through weekly meetings. The aim of this day was to create a sense of ownership in the Wiyeta community of the initiative, and increase capacity building, and sensitize farmers to restore the Wiyeta Wetland. The 9th marked the beginning of the annual event as a long-term initiative, with a strategy of "edutainment",[50] as Mr. Walala called it. There were various performances of local musicians, poems and dances, and speeches of different generations. During the event, I was helping Guti with documenting the performances and overall scene on film. Mr. Walala wanted to make an after-movie from the event as a strategy to annually show progression of the community participation, and to gain possible funding of donors (also my phone was used for this documentation). Elders talked about the history of when they encroached the Wetland, and the rapid change they had seen in

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[49] Edwin, semi-structured interview, 13.02.2024.

[50] Mr. Walala, PO diary Wiyeta community meeting, 14.02.2024.

the environment. Weta and their fellow students of him sang a song about the need for the community to stand together. Most strikingly I had found the speech of the head girl from Wiyeta Girls Secondary School. I had talked to her once when I went with the environmental club to Bob's tree nursery. With confidence, fierceness and almost with a slight glimpse of frustration, she spoke about the insecure future her generation has ahead of them because of the current environmental issues and the human impact on their Wetland.[51] I had observed during my various visits to the school, how the students were taught that conserving the environment is key to their present, and future orientations.[52] While the school was nationally famous for its football team, one of Principle Kate's awareness strategies was to rebrand the school team to not only play for their football championship status, however moreover to play 'for their environment'. All students present at that day emphasized how they feared an unstable future, and that the environmental burden that is caused by previous generations, is laid on them. [53]



*Photo 8: Wiyeta Wetland Restoration Day Banner, hanged aboven the Arrowroot Farm of Wesonga. The finance of this banner was frequently discussed during the meetings, giving an example of the lack in money in the initiative. 09.03.2024.*

*Film 4: A local muscian had written a song for the special occasian, titled 'we must plant trees'. In the song he had used all names of the participants, signing e.g. 'Isabel is going to plant trees'.09.03.2024.*

*Link:*
*https://drive.google.com/file/d/1jUmnRhs1X9vnXCXNO9FgG_ydLMzg7ke2/view?usp=drive_link*



*Photo 7: Edutainment set up in Wiyeta Valley, requiring the tents and chairs was done by the community itself, emphasized by Mr.Walala that this is part of creating the sense of ownership of the project among community members, 09.03.2024.*



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[51] Field notes, Wiyeta Wetland Restoration Day, 09.03.2024.

[52] Field notes, Wiyeta community meeting, 07.02.2024; Field notes, Wiyeta community meeting, 14.02.2024; Edwin; 13.02.2024; Field notes, Docubox showcase at Wiyeta Secondary School for Girls, 08.02.2024.

[53] Principle Kate, informal conversation, 07.02.2024.

*Photo 9 Principal Kate with pupil planting a seedling during the ceremonial tree planting. 09.03.2024.*

*Film 5 Speech Head Girl of the Envrionmental Club Wiyeta Secondary School For Girls. She talkes about her fears for the future if the community continues this way of life. 09.03.2024. Filmed by Guti. Link: https://drive.google.com/file/d/1f-5DKeE6A-tetkl3y9rCW6JUe-mcJ9qC/view?usp=drive_link*

The Wiyeta Wetland Restoration Day shows how multiple generations came together to discuss the community environmental issue and participated in a conservation effort. All the actors in play, reflect how the degradation of natural resources is an intergenerational issue, and therefore the participation in ecosystem restoration strategies also includes every generation. Furthermore, this shows that learning about conservation management was not only done through the education of institutional systems. The Wiyeta Wetland Day illustrates how education through edutainment, simultaneously sensitizes a community, contributes to the construction of conservation efforts. Florence and Patrick also told me that besides going to schools and teaching in environmental clubs, they invite community members over to their shamba to show their sustainable agricultural practices and participate in conservation activities like planting trees with organizations. These engagements teach us two things; one, these activities are inherently a conservation strategy and by participating in them, it reproduces a specific human-nature relation in the sense of communalism and at the same time shapes an approach to conservation. Secondly, these activities demonstrate how community engagement and participation is an important factor in the reproduction of the community interacting with nature, and accordingly engage in conservation efforts. If we dive further into this latter, we can understand why anthropologists like Orlove and Brush (1996) and Brosius and Russell (2003) advocate the importance of community engagement in conservation initiatives. However, to do so, we need to explore the interlinked socio-cultural patterns.

# The challenges of socio-cultural patterns

As mentioned before, anthropologists have advocated in earlier local ethnographic research that in order to 'save the environment', one needs community participation (Brosius and Russell 2003). The shamba of Florence and Patrick had shown me the effects of none, or limited, community engagement. In contrast to that, the Wiyeta Wetland Restoration Day had shown me an event where community engagement and participation, intertwined with education, was at the core of an ecosystem restoration strategy. To further critically unfold this approach of Brosius and Russell (2003), we have to look at how a community gives meaning to nature and how this might challenge conservation efforts. This was shown to me by Chris, the second-born son of Florence and Patrick.

On my third day staying at the organic shamba, Chris taught me how to make paper from toilet rolls. It was one of the family's ways of making an extra income while they sometimes were able to sell their paper to a friend of theirs in England who owned a sustainable paper company. During the paper-making process, Chris opened up and told me about how he used to not really care about nature, anything for that matter and felt lost. But that changed after he spent more time with a family friend, Britta, from France, who had inspired Chris by *pole pole* to learn more about organic farming, and the importance of taking care of your environment. He now works on the farm of the family and makes an extra living as a *pikipiki* driver. While Chris his interest in nature started when he got into contact with Britta, I wondered if he was also inspired to pass down his knowledge and passion to other community members. However, Chris responded to this by explaining an underlying socio-cultural pattern that involves the interplay between individualism, social status, and perception about private and public natural resources, that challenges community engagement in conservation. He explained it according to an analogy comparing sharding knowledge and sensitizing the community with driving: "Imagine you are driving and a disabled person is crossing the road. But closely behind you, there is another car. You try to save the disabled person, but then you will get knocked from behind. It is the same thing with passing down knowledge and creating more community engagement in this … They don't appreciate it because they think you are trying to interfere and don't want you to benefit from their land. You had a good intention, but you are the one ending up in a mess".[54] He further continued how he had experienced that the

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[54] Chris, semi-structured interview, 18.03.2024.

sense of community used to be stronger. However, due to the influences of capitalism, Westernization, and the increased pursuit of material wealth, people became more individualized and started to compete more with one another. Chris explained how he had experienced the effect of social status, as he had often felt like he was not taken seriously due to his lower education and often jobless status. According to him, this complicates the process of spreading awareness and knowledge about sensitizing people's impact on the environment and addressing their way of living.

These socio-cultural patterns reproduce a relation between individuals, and a community as a whole, with nature that contributes to creating a sphere of negative reciprocity (Pálsson 2016), rather than sensitizing the community and emphasizing the interconnectedness. Recalling that the shamba of the neighbour directly across had planted a row of eucalyptus trees, and other surrounding shamba looked distinctly less sustainable, had cattle, and did not participate in organic farming. Florence and Patrick had expressed how besides teaching in environmental clubs at school, the interaction with surrounding community members about their way of living was low. They had also spoken about how their fruits sometimes would get stolen when they were at church, illustrating another effect of the precarious reality. From Chris his explanation we can further understand how in these precarious realities, fragmentation of the land interlinked with individualization, unpacks additional socio-cultural patterns like social status and distrust. We can further understand the meaning of social status and distrust, and how this influences communication among the people, by looking at the fieldtrip I made with Bob and Wesonga.

Wesonga had told me with deep frustration, and fear, that in five years' time, the Wiyeta Valley will be dried out and people cannot survive from nature in this area. Therefore, likewise to Bob, he was active in sensitizing the community to change their destructive livelihood strategies. During the development of the Wiyeta Restoration initiative, he was one of the key players and thereby joined Mr.Walala, Bob and me often on our walks around the Valley. After the documentation of the earlier mentioned story of Gayo, we walked back to the shamba of Wesonga. As we were walking down the descending road, we crossed Wesonga's arrowroot farm on our right, and his neighbors sukuma Wiki farm on the left. [55] Next to the neighbor's

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[55] Arrow root: is a sustainable vegetable crop that functions as a water-preserving plant, and therefore does well in Wetland areas.

farm you could see the rest of a water resource, that now had dried almost dried out due to the nearby agricultural activities. Bob had pointed this out to Wesonga and had asked him if he had talked to his neighbor about this issue, to which Wesonga responded: "Some people just don't want to listen to others who have different ideas and try to change your mind. They don't want to hear that they are destroying their lands. They don't see how planting trees and keeping bees can make their money."[56] Bob added: "Also a good number of people don't want to work. They want to be given things. That is what they are used to. They are lazy, just lazy."[57] Bob and Wesonga illustrate here how at the local level socio-cultural challenges can lead to conflicts over resource management. For instance, the social status between community members affects an open dialogue over unsustainable farming management, which relates to Chris his struggle to pass down his knowledge to his community. How this is intertwined with the pattern of distrust, will be further elaborated in chapter four.



*Film 6 Clip of documenting Wesonga's story, sitting in his shamba, in the background are is the Wiyeta Valley, viewing maize crops, 05.04.2024.*

Link: https://drive.google.com/file/d/11uvcLNXbNvZJLAczfwawJxJb-gL2dkg_/view?usp=drive_link

In this Chapter I have argued how different human relations are shaped in the context of a precarious environment and socio-cultural patterns that challenge community engagement and participation in conservation efforts. I have argued how different forms of education regarding human-nature interactions and sustainable land management, raising awareness to human impact on the environment, is key in reproducing a positive reciprocity relation to nature. This is inherently part of ecosystem restoration strategy, however also contributes to enhancing the perception towards conservation. In the next Chapter, we will explore how this relates to the organisational level of conservation, and how various stakeholders in this field deal with the diversity in how human-nature relations take shape.

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[56] Wesonga, informal conversation, 05.04.2024.

[57] Bob, informal conversation, 05.04.2024.

*Chapter four*

# Restoring Together; Organizing Conservation

In the previous chapters, I have examined with a comprehensive lens the context in which human-nature relations take shape in Trans Nzoia. In brief summary, I have shown how the interactions between society and nature are influenced by the lived reality of precarity, and the effects of socio-historical and cultural patterns. I have explored this by showing the relevance of access to education and socio-economic positions and argued that this contributes to the reproduction of perceiving nature as a service provider. In this chapter, I will build further on this by exploring how this context influences conservation strategies at an organizational level. To understand this, I will first unpack the strategy of tree planting, showing the multifaceted meaning. After that, I will illustrate how the complex aspect of 'money' in conservation management, as well as the precarious realities, is interlinked with perceiving nature as a service provider. Here, I will build a bridge to the last subchapter by connecting the previously mentioned effects of socio-historical patterns. I argue that this interrelation leads to the socio-political pattern of distrust on various organizational levels in conservation, and is critical to understand how ecosystem restoration strategies are shaped.

## The multifaceted meaning of tree planting

The activity of planting trees was a common conservation strategy in the County. Many organizations and school institutes advocated the socio-environmental values of planting trees. I had asked Mr. Walala how many environmental organizations are actually present in the County, apart from the couple of which we were sharing the office. He started to list almost 20 organizations, varying from NGOs to CBOs and official County organizations. All of these organizations used the activity of planting trees as an ecosystem restoration strategy. Including companies that have to plant trees due to compensation for environmental damage. What made the strategy more interesting is that President Ruto's government announced this year in May the ambitious national target to plant 15 billion trees by 2032. Since then, the Trans Nzoia County officials have expressed their commitment to plant 11 million trees per year in order to reach 55 million by the end of 2027 (Maiyo 2024). To reach that goal, every institution has to plant a specific number of trees, I was told based on a rate depending on the size of that institution. During my field research, this idea was already known among conservationists and school institutions. In the following section, I will show a tree planting activity that can help

us to understand how a positive repository of human-nature interactions (Pálsson 2016); is stimulated at an organizational level; however is part of complex political power dynamics (Carpenter 2020; Roberts 2020); advocates community engagement and participation fundamental to conservation management (Brosius Orlove and Brush 1996); and illustrates an interconnected approach to human-nature interactions (Latour 2017; Tsing 2015).

On the 21st of March, it was International Forest Day, which was celebrated in every County of Kenya, including Trans Nzoia. The event was held at Endebess technical institute, as the theme of the day was 'Forest and Innovation'. Hundreds of people attended the event, including from surrounding schools, environmental organizations, and County officials. I was dropped off by Mr.Walala together with Geraldine, a fellow CAC member. Before the presentations and speeches started in one of the main halls, a tree ceremony took place on the compound of the school. Around 100 holes were dug across the field, and in small groups, people were spreading over the compound carrying shuffles, water cans, and tree seedlings. In some corners of the field, I saw hundreds of tree seedlings that had been donated by the organizations. A team of Kenya News channel was present, filming with two large cameras a group of 20 that surrounded a county representative. I heard him talking to the group and camera, about the importance of planting trees and the celebration of this day. The two news cameras were not the only ones who were recording the ceremony. Everywhere you looked, people were recording with their phones, people posing while covering the seedling with earth or water. One of the organizers guided Geraldine and I to a hole to plant our seedlings. He asked for my phone so he could take pictures from, and for, us. As I crouched beside Geraldine, two military men joined us, creating a somewhat crowded and 'staged' scene to what for me personally, felt like a one-person job. After we cleaned the dirt from our hands, the mass of people slowly walked to the school hall where the event would continue with performances and speeches of environmental organizations and county officials. Geraldine and I walked in with the last groups of people, and the heat of the hall hit us in the face. A couple of hundred seats were faced towards a stage, on which, almost only men, the heads of the County's conservationist organization were seated, among Mr.Walala, Stanley, and Elly. In the next hours, we watched dance performances of the surrounding schools, self-written songs and

poems from students about climate change and 'a call to conserve and plant trees',[58] and formal speeches of organizations.[59]

The vignette illustrates, similar to Wiyeta Wetland Restoration Day, how people give meaning to nature, as a valuable ecosystems that is intertwined with their future livelihoods (Tsing 2015), by participating in planting trees. Through organized edutainment, and national events, the value of nature is recognized at an individual-, and community level. The strategy here lies in the plant ceremony, media attention, and the performances, that aimed to create environmental awareness and showed a sense of intergenerational responsibility to take care of the environment. In this light, the event carries out a message, from the perspective of Brosius and Russell (2003) and Orlove and Brush (1996), that the natural ecosystem cannot be 'conserved' without the participation of a community. This message was also general to be heard in all the speeches, and emphasized the necessity, especially in a precarious environment like Trans Nzoia where ecosystems are almost at their tipping point.[60] Furthermore, the International Forest Day provides a valuable illustration in which we can explore the political power structures in conservation (Carpenter 2020), by analyzing the meaning of the various stakeholders that were present. The involvement of the diverse stakeholders; school institutions, County officials, CBOs, and NGOs, can tell us something about how conservation is, in accordance with Carpenter (2020), laden with power dynamics and organised at a governmental, and grassroots level. The stage where the representatives of the organizations were placed, and the wide diversity in informal performances of the students and formal speeches of County officials, shows a strategy on how the advocacy of conservation, and human-nature interactions, is carried out at an organizational level. The presence of the media channels adds to the strategy by increasing online public attention that trees are being planted by organizations and the County government. This events perpetuate a way of caring for nature through at an organized level. The excessive phone documentation of the participants adds to this. For instance, I had asked Geraldine what she would do with the photos and videos, to which they similarly replied they would post them on social media platforms. Weta later

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[58] PO diary, International Forest Day, 21.03.2024.

[59] PO diary, 21.03.2024.

[60] PO diary, 21.03.2024.

explained to me when I saw myself on the Facebook page of CAC: "That is nice! You see, people can now see that you plant trees and you are taking care of the environment!"[61]



Photo 10: Endebess Technical University, Planted seedlings after the tree ceremony, 21.03.2024.



Photo 11: Media attention to a county official who gives a speech about the importance of the International Forest Day,

Looking more in-depth at the power dynamics at play, and with the knowledge of the government's tree target, we have to question what the event means as a strategy for Endebess Technical Institute. I had attended a prior meeting of the event where the involved organizations and institutions had discussed the number of trees they were going to donate, which was in the end way more than the 100 that were planted in the end. After that, I asked Mr.Walala how the location of this day was determined, and what had happened to the other hundreds of trees. To which Mr.Walala responded: "You see, the Principal had offered to hold the event at her school … which also means that she can keep all the trees and the students will plant them in the coming days around the compound."[62] Hosting the event at the school was a strategic decision for the principle, as donated trees were being allocated to the school. Her powered position had enabled the school to participate in conservation, also adhering to the government's target, and had gained public media attention.

In addition, the act of donating trees, tells us more about the underlying socio-political meaning in the organization of tree planting. I had asked Mr.Walala why it was common for organizations or individuals to donate trees, as I had seen it at the Wiyeta initiative as well. He

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[61] Weta, informal conversation, 22.03.2024.

[62] Mr.Walala, informal conversation, 21.03.2024.

responded with: "As a partner, it is part of commitment, somehow cultural maybe. A partner that supports initiatives is of course recognized more as a member and you look more committed to the goal. You may find that the County might produce that money for the event because they have that money, but they will eat that money!"[63] The act of donating trees, as Mr.Walala explained, is a socio-political strategy while it contributes to the status of an organization, and aligns with the future orientation aimed at potential public or financial support. Furthermore, donating trees from a cultural perspective, shows that the natural resource of 'trees' is not only a socio-political strategy, however can also be considered to reflect a societal value and belief in taking care of the environment. By donating trees, the organization expressed their commitment to these values and recognized the importance of conservation. The relationship of the organizations to nature is illustrated to be shaped by the sense of human responsibility, like Edwin, balanced reciprocity in the perspective of paternalism (Pálsson 2016) and future orientation (Tsing 2015).

Lastly, I want to make a bridge from the socio-political meaning of tree planting to the role of money in conservation and the previously mentioned insecure perception of the role of the government (Roberts 2020). Mr.Walala expresses a distrust in the county government, due to the lack of money funding from the grassroots perspective. We can understand this clearer by looking at the challenges that the role of money in tree planting conveys. In particular by looking at the process after the 'planting', which is the maturing phase of the seedling. As mentioned before in chapter three, the effectiveness of ecosystem restoration is challenged by multiple factors; livestock damage; theft due to poverty; or lack of trust and inclusion of the local community. Aligning with the effects of precarity, the lack of money at an organizational level is part of this. Mr.Walala explained this later to me when we were visiting Kapolet forest to check up on the welfare of almost 10.000 trees that were planted there a few months before in cooperation with the County Government, KFS (Kenya Forest Services). When we arrived, he was very satisfied with the almost 70% trees that had 'endured'. Across from the acre where they had planted trees, was a farmer. Mr.Walala knew that the livestock of the farmer would be the biggest threat to the seedlings.[64] However as Mr.Walala had told me, the succession rate was due to the newly installed rangers by KFS. Meaning that specific law enforcement was in

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[63] Mr. Walala, 21.03.2024.

[64] PO diary, visit Kapolet forest, 10.03.2024.

place that guarded these hills for the conservation initiative. He explained how much of a difference that had made and how a conservation project that is not community-based but with the county government involved, sometimes can make a difference; "we don't have that money, but the KFS does."[65] Nevertheless, as mentioned before by Elly, money disappears. Also in this case Mr.Walala expressed distrust against the placed rangers even though it had helped a majority of the trees to grow: "Let's be honest, people here love money. The rangers that are sometimes in place, are not qualified as actual rangers. Somebody has a gun and money, but no passion, so there is a lack of seriousness … Money disappears in people's pockets, and the work is not done. Also, have you ever seen a government official struggling with money?"[66] Mr.Walala and I had many times conversations about the possibility that conservation could be done without the incentive of money. However, similar to another conservationist I had talked to, he firmly answered that it is impossible, as people live here in poverty and precarious conditions.[67]

Checking the tree's maturity has thus shown me that the key challenge and driving force behind conservation is money. In accordance with Gibson-Graham and Miller (2015), conservation organizations understand that the human economy is inherently part of their agency in restoring the environment. Not only from an organisational point of view, however also the lack of money is a fundamental aspect behind the precarious realities that challenge these conservation efforts, such as in tree planting. It also has briefly highlighted that human-nature interactions are shaped around the incentive of gaining money. In the next subchapter we delve further into the value of money in conservation, how this influences human-nature interactions in a precarious environment, and how this invites the commodification of nature. While the tree planting activity shows us how human-nature relations are constructed at an organizational level, critically looking at the monitoring activity afterward helps us to further understand the meaning of conservation in a precarious environment.

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[65] Mr.Walala, informal conversation, 25.03.2024.

[66] Mr.Walala, 25.03.2024.

[67] Mr.Walala, 25.03.2024; Stanley, 01.04.2024; Elly; 18.02.2024; Jane, semi-structured interview, 29.02.2024; Maurice: 16.02.2024.

# The monetary value of conservation

At one of Mr.Walala's favourite local restaurants, we shared a dinner with a friend of his, Jane. Before becoming the Head of Communications at Kenya Seed Company, Jane used to be the former chairwoman of the Green Belt Movement. The Green Belt Movement is an environmental organization that empowers communities in conservation management and improves livelihoods (Cstraight Media - http://www.cstraight.com, n.d.). I had a talk with Jane about her perspective on tree planting, and the challenges of money in conservation initiatives. Jane had expressed that planting trees is a job, and the process works when people get paid. Her expression aligned with Barbier (2011), stressing that conservation is a form of business, and when nature is given a form of monetary value, it stimulates conservation. However, in a precarious environment like Trans Nzoia, the role of money also challenges conservation efforts, as Jane showed me:"You know in the end, conservation is not from the heart, it is about money. People need money to survive. It is all about money, money, money. People plant, get paid, and then leave. But what happens with the dialogue?"[68] Jane illustrates here how the precarious condition in terms of economic instability, on the one hand, influences the way people perceive the value of nature, and on the other hand also impacts ecological strategies. Relating this to Sullivan (2009), Jane similarly critiques money being the binding relation between humans interacting with nature, whilst from an organizational point of view understanding that the human economy is inherently part of restoration efforts. In light of the interconnected approach by Tsing (2015), Jane here illustrates how the conservation strategy of planting trees, which is an economy in itself, is intertwined with the ecological system. This interconnected approach to conservation was shown clearer to me by conservationist Maurice.

Maurice was called the 'big fish', at our office in Kitale town. The man was now coming closer to retirement, and was now looking for a next successor to take over his legacy of almost 50 years in conservation, he had said.[69] In 1990 he founded his CBO the 'Kipsaina Crane and Wetland Conservation (KCWCG)', which had grown in the last decade with international attention and was active in various County's outside Trans Nzoia. One day he showed me around his organization office, which included a gigantic tree nursery, and invited me into his home where he had proudly shown his Disney Conservation Award 2000. We had talked a lot

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[68] Maurice, 16.02.2024.

[69] Jane, semi-structured interview, 29.02.2024.

about the environmental issues of the County, and during our drive from place to place we had stopped along various areas where he had showed me his forestry conservation efforts. With his organization and help from international donors, he had planted approximately 250.000 trees last year. During our follow-up meeting, Maurice explained to me how giving monetary value to natural resources, helps as a conservation strategy to not only protect nature, however also sensitize the community: "If we can calculate how much the natural resources are worth, for example, the wetlands, we can prove how much worth it is when it is conserved. That can assist us in lobbying for funds, and encourage the community to restore!''[70] Maurice illustrates how commodifying nature can build a positive case for conservation, similar to the perspective of Barbier (2011). He elaborates on this further by advocating 'ecotourism': "If we can package what we have conserved, the land we restore, the two institutions (meaning Kenyan Government and local school next to his tree nursery) my organizations and the women groups (who work with bees), if we can partner together and package this, we can show people our beautiful species, make camping-sites, we can create an eco-tourism. We can start to generate an income while leaving nature as intact as possible."[71] Maurice advocates here how from an organizing perspective, whilst recognizing the interconnectedness between the human economy and ecology (Gibson-Graham and Miller 2015), commodifying nature can be molded into an ecosystem restoration strategy (Barbier 2011). What is more relevant, is that this strategy to commodify nature in favor of protecting the environment resembles the paternalistic paradigm of Pálsson (2016). Comparing this with Barbier (2011), commodifying nature in the form of ecotourism, could counter environmental degradation whilst *pole pole* providing more security to the precarious lives that are present. As later stressed by Maurice, taking into account the precarious reality and economic insecurities in Trans Nzoia, introducing ecotourism can provide more job opportunities for local communities.[72] Thereby, in the process of protecting and restoring the environment, this strategy provides more economic stability for humans and at the same time fosters a balanced reciprocal, yet harmonious, relation with nature. In light of the interconnected approach, nature has not only become a service provider to humans, however humans provide a service to nature as well.

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[70] Maurice, follow-up semi-structured interview, 04.03.2024.

[71] Maurice, 04.03.2024.

[72] Maurice, 04.03.2024.

# The challenges of Trust

I have pointed out in chapter two that the post-colonial context had established a context of unequal power dynamics on various levels in the political and socio-economic sphere. My interlocutors often used the term corruption, when they would speak about the political situation in Kenya, and how this also is a challenge in the field of ecosystem restoration strategies. Like Elly had told me, the interlinked issue of a lack of money and the political discourse was often referred to as bureaucratic sabotage: "Government has a lot of bureaucracies. Even at our level to write proposals and gain some funding, it is not easy that the actual funding trickles down to the community, because money disappears."[73] Likewise, to Elly, other interlocutors also had emphasized how the lack in funding, and the disappearance of money when there is funding (especially when the County is involved), often was the main challenge in conservation management. In essence, what Elly and other conservationists had described to me, was how bureaucratic sabotage, socio-cultural patterns such as individualization and the influence of land fragmentation, and the experience of precarity interlinked with poverty, had created socio-political distrust in the field of conservation. I will further unpack this by first looking at the meaning of socio-political distrust at the organizational level among the network of conservationists.

For instance, I had observed similar to the approach of Orlove and Brush (1996), how some conservationists were alienated due to their engagement with external organizations or lacked of dialogue with the community. Giving the example of Maurice, who has many connections with foreign donors and was well-known by other conservationists, he had told me that he had built up a strong relationship with donors and therefore "they only trust me with money."[74] He added, that he took the save guarding over donor money very seriously, while had been betrayed in a funding situation, leaving out specific details. Nevertheless, Maurice strongly showed a pattern of distrust that was present in his field of work. During our interview, he had even asked us to move to a different table because he had seen a small electronic device attached to the parasol that we were seated under, which later turned out to be part of a small malfunctioning light system. This distrust was perpetuated in the network of Maurice, as I was told by Mr.Walala that he and others mistrusted Maurice while he neglected cooperation and

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[73] Elly, 18.02.2024.

[74] Maurice, 16.02.2024.

shared the contact and resources of donors. This analysis had shown me how patterns of the disappearance of money, and unequal power dynamics, had resulted in a pattern of socio-political distrust among the conservation network.

As previously mentioned, the importance of building trust with the community where the conservation efforts are implemented had frequently been emphasized to me by my interlocutors. Adhering to Orlove and Brush (1996), this importance was illustrated when I was shown how patterns of distrust among conservationists perhaps also mirrored the distrust between conservationists and local communities, which accordingly led to challenges in executing the restoration strategy. Mr.Walala expressed his perspective on this when I was joining him on a field trip in the Wiyeta Valley and he spoke again about Maurice his status: "You know what the woman said?", referring to one of the farmers he had been talking too, "Maurice had planted trees there, but the trees all died. The reason is because sometimes the community does not trust you, they think you come there with bad intentions. You know conservation is not just about planting trees, and then going. You need to stay engaged with them, build trust."[75] To understand how the challenges of trust are intertwined with human-nature interactions, we have to look more critically to the goals of conservation initiatives. In the following vignette, I will unfold how human economic systems, within specific rural livelihoods, show an interconnectedness with the ecological systems.

On the 5th of April, I joined Bob and Wesonga in documenting the story of two female farmers about their relation to the wetland for the Wiyeta Restoration Initiative. Wesonga is an important advocate for sustainable land management and is part of a carbon credit group with other community members. They wanted to document the impressive story of Mama Gayo, however, when we arrived, we were offered to talk with her eldest son, hence Gayo. I had never seen Gayo himself at one of the Wiyeta meetings, which probably had contributed to his incorrect assumption about the initiative. Specifically, when documenting their family's story as farmers in the Wetland, Gayo had started similar to his mother expressing his concern and distrust about the restoration initiative: "Year in and year out we have food security problems. Now, if somebody (meaning the advocates of the initiative) wants me to move away from this

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[75] Mr.Walala, infomal conversation, 17.04.2024.

land, tell me, where do I get the source of food and income."[76] I noticed that Bob and Wesonga started to get frustrated. Bob explained the real purpose of the initiative was not to evict people, but rather *pole pole* introduce sustainable farming practices such as fishing, fruit trees, and beekeeping. To which Gayo replied: "Well the project also depends much on your sides (pointing at me). You come with an initiative. But the main problem is always the surrounding. I am in your circle. But people with whom you are working will sabotage you. People have self-interest, as well as the people in the management. Even if you have good intentions."[77] He explained further that in the past NGOs had come to the area to engage with the community in conservation efforts, however, instead had only left the resources and disregarded the dialogue and education with the community. Gayo had shown me, that the pattern of distrust towards conservation efforts, and among the community, contributes to the reproduction of a human-nature interaction that holds a negative reciprocity. This also refers back to chapter two, for instance Gayo illustrates how his precarious reality is interlinked with the socio-cultural pattern of distrust, as the latter challenges to welcome restoration initiatives and therefore the loop of precarity and destructive impact on the natural ecosystem continues.

To elaborate further on the meaning of distrust in a context that is influenced by post-colonial patterns, I had noticed how my presence unfolded these patterns. My presence at the Wiyeta Restoration meetings, and the frequent walks in the Valley, had induced economic expectations from the farmers and had affected building trust in the community in a positive yet also negative way. For instance, during my interview with Gayo, he had frequently emphasized during his documentation he needed financial support from the organization if was to participate in the initiative. The reality was that we had explained that the initiative is community-based and does not include any financial funding so far. Nevertheless, Gayo continued his plea for financial funding to me. At that moment I had not realized the meaning. However, later Bob and Wesonga explained to me what my position in this initiative reflected towards the community: "They see us walking around with you, Isabella. And they think money. They think, how does Bob get this *Muzungu*? They think you come here, give money, and then leave."[78] Wesonga his explanation describes my experience of being a Western woman in a field that holds a post-colonial pattern. This pattern had been kept in place by for

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[76] Gayo, Collaborative filmmaking, 04.04.2024.

[77] Gayo, 04.04.2024.

[78] Wesonga, 04.04.2024.

example the earlier mentioned NGO whom had specifically given resources, rather than interacting and building dialogue. On the other hand, my Western and highly educated position was, in various cases, beneficial for Mr.Walala by associating with me. As my positionality and research goals opened doors to other interlocutors, Mr.Walala was able to increase his network, enhance social capital, and build trust in local communities and among conservationists.

In this Chapter I have explored how the socio-, economic-, and political- context in Trans Nzoia, influences conservation at an organizational level. I have shown this by unfolding the multifaceted meaning of tree planting, which underscores the complexity and intertwinement of human-nature relations and the ecosystem restoration strategy. I have demonstrated the importance of education; public awareness building; and community engagement and participation is a key strategy in the field of conservation. Nevertheless, I have argued that due to the incumbent power dynamics and the precarious reality, leads to challenges at the organizational level in terms of socio-political issues around the driving force behind nature; lack in funding and bureaucratic sabotage around money. According to the latter, I have further argued how socio-political dynamics, deriving from post-colonial and socio-cultural patterns, leads to the effect of distrust among the stakeholders in the conservation field. This inherently challenges the development and implementation of conservation efforts. Accordingly, this continues the reproduction of a degrading interaction of individuals whom live in precarious ecological livelihoods, with nature.

## Conclusion and Discussion

This thesis has shown an anthropological approach to the field of conservation by exploring the relationships between human society and the natural world (Descola and Pálsson 1996; Tsing 2015), in Trans Nzoia County, Kenya. This local ethnography is conducted by a triangulation of ethnographic research methods including participant observation, semi-structured interviews, informal conversations, and collaborative filmmaking.

The conceptual lens of human-nature relations has focused on the complex connection between human society, including cultural-, economic-, and political- systems, and their natural environment (Descola and Pálsson 1996: Descola 2013; Pálsson 2016). Adhering the interconnected approach (Latour 2017; Tsing 2015) to this thesis, it has been found that the two concepts are interrelated and therefore shape each other. The context of this research in which this lens is used and studied in the field of conservation, was amidst precarious realities, intertwined with poverty, and post-colonial patterns. Therefore, this study has foregrounded the experience of lived realities (Tsing 2015; Hinkson 2017) and used the discipline of political ecology and environmental anthropology (Carpenter 2020; Brosius and Russell 2003; Orlove and Brush 1996; Roberts 2020) to first navigate the foundations of the discursive human-nature relations and the field where ecosystem restoration strategies are shaped. Within this field, the findings demonstrate various challenges, paradoxes and factors that, both separately as interrelatedly, shape human-nature interactions and conservation management.

For instance, this thesis has started by laying out the broader socio-historical perspective, focusing on the political discourse, socio-cultural patterns, and land management. From this context derives how the influence of a lack of law enforcement and bureaucratic dynamics in the political discourse of Kenya, is inherently part of the construction, and moreover, challenges, the field of conservation management. This background builds the first bridge to the findings that ecosystem restoration strategy is guided by unequal power dynamics (Carpenter 2020), and influenced by distrust among the stakeholders that are in play. For instance, the approach to conservation involves various stakeholders, which in some cases means the involvement of the government, and other cases community-based organizations or non-governmental organizations.

Continuing from this broad perspective, the findings show that socio-cultural patterns influence the perception of natural resource management, within particular land ownership. The cultural value of owning land is interrelated with land fragmentation, and a cultural shift towards individualization. Together, these factors reproduce a human-nature interaction that sets personal interest above communal and environmental interest. This reproduction, and the increasing rate of land fragmentation, challenges the development and implementation of ecosystem restoration strategies as landowners have the right to utilize their land in the way they want.

Building on this context and using the approach of Pálsson (2016) on human-nature relations, this thesis has unfolded various ways in which people give meaning to nature in precarious realities, moreover relating to paternalism and communalism relations (Pálsson 2016). In general, at the foundation of these meanings is the intertwinement of the human economy and natural ecosystems. As this adheres to Tsing's (2016) interconnected approach, it also proves how the relationship is shaped due to the meaning of nature as a service provider (Barbier 2011: Gibson-Graham and Miller 2015; Sullivan 2009). It is found that a fundamental driving force behind recognizing this interconnection is the role of money. On the one hand, money often tends to be the mediator between the interaction of the interlocutors and nature. In conservation the role of money, more to say lack of funding, is often connected to the issue of socio-political power conflicts and limits restoration efforts to take shape or be effective.

However, in perceiving so, it has also revealed underlying paradoxes that showed how in some cases this livelihood dependency of nature is not reflected back in how they take care of nature. This has been found within precarious realities, intertwined with poverty, like the encroached Wetland area of Wiyeta. The natural environment was inherently part of the ecological livelihood, leading to environmental degrading activities such as brick-making and unsustainable farming practices. On the other hand, the sense of precarity and an awareness of the interdependency with the natural ecosystems also had created among others an incentive to participate in conservation efforts and strive for sustainable livelihoods.

To understand these different ways of giving meaning and interacting, the findings have found that access to education and social networks helps to reproduce a balanced and more positive reciprocity with nature. This is again countered through socio-cultural patterns like social status, individualism, and distrust among stakeholders. In terms of conservation, these latter patterns challenge sensitizing focus groups to participate in conservation initiatives and

shift towards sustainable land management. However, this perspective also shows how ecosystem restoration strategies are shaped with the goal to not only 'save nature', but rather to create a more stable and secure environment for all the precarious lives that are present, including that of society. From an organizational point of view, the interaction between society and nature demonstrates in line with Brosius and Russell (2003) how community engagement and participation is perceived as key components to ecosystem restoration strategies.

A final note, by foregrounding the precarious realities, intertwined with poverty, through Tsing (2015) within the field of ecosystem restoration strategies, and taking this into account when exploring the human-nature relations approached by Pálsson (2016), this research broadens the academic knowledge of these concepts from an interconnected perspective (Tsing 2015; Latour 2017). Nonetheless, as stated in this thesis, this research has been conducted by me, a white, highly educated, Dutch, atheist, and young adult woman. My position in the field has perhaps biased, influenced, or limited, my aim to grasp an understanding of the meaning of the precarious context and how my interlocutors navigate their relationship to nature. Also as mentioned before, the experience of precarity, and poverty, is an individual matter and is not just centred around economic positions. Thereby, my analysis of unpacking human-nature relations in a precarious environment, has to be regarded as a general observation.

The approach of this thesis is broad and complex. I have attempted to include all the interconnected findings that I had deemed relevant to answer the central research question. Yet, in this process and due to the scope of this thesis, unfortunately, there had been no further room to explore deeper specific aspects, particular the aspect of gender. Therefore, in future studies on these two intertwined topics, I suggest taking the aspect of the role of women in conservation into account.

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