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Gender and Charcoal: the Case of Agoro-Agu, Northern Uganda

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Abstract

This paper deals with the link between gender dynamics and charcoal production in and around the Agoro-Agu central forest reserve in northern Uganda. Using feminist theory, the theory of access, and post-colonial analysis, this paper will attempt to find how gender, charcoal production, and access to resources are dynamically interlinked. It goes over the history of charcoal production in the region, elements which push towards making charcoal, perceptions of locals on charcoal, drivers of gender dynamics, land tenure and forestry objectives, and how all these elements interact together. This project finds that six main conclusions can be made. First, that the history of the Agoro-Agu area and the Lord's Resistance Army insurgency have played a major role in shaping gender dynamics, and access to charcoal, in the region. Second, that men have been unable to meet their expected standard of masculinity, with many important consequences. Third, that access to resources has been significantly shifted in the post-war period. Fourth, that institutional shifts for both traditional and state groups have precipitated conflict over resources. Fifth, that Agoro-Agu is a very unique case, with very specific variables at play. Last, that the region has been subject to different forms of exploitation and stigmatisation, which are self-reinforcing. In all of these takeaways, both charcoal and gender play important roles.

This analysis relies upon interviews, participant observation, and literature.

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1. Introduction

Charcoal has been an object of much study in literature, mainly concerning its ecological impact (Chidumayo & Gumbo 2013). Charcoal is a vital element in subsaharan Africa, and in Uganda in particular (Bamwesigye 2020). Whilst governments view it as the opposite of the modernity they wish to have, the reality is that charcoal will remain an important source of heat in the years to come (Bamwesigye 2020). Charcoal's overall impact on forests is highly debated, and in spite of the amount of studies, disagreements remain (Branch & Martiniello 2018). Thought of a woodfuel crisis, where trees would be gone due to over-cutting, had begun in the 1970s and 1980, and have been shown to be "received wisdom" (Leach & Mearns 1998; Branch & Martiniello 2018). The impact on the environment from charcoal in some areas is, however, undeniable, as in the case of Uganda (Bamwesigye 2020). Charcoal's impact on the environment is a first source of debate, but social aspects concerning the resource have also gained traction. The perception of charcoal as being produced by poor, disenfranchised men is starting to be challenged, notably with the recognition that women do also make charcoal (Branch & Martiniello 2018; Agyei et al. 2020). Linking gender and charcoal is important in understanding how people are able to derive benefits from natural resources, also known as "access" (Ribot 1998; Agyei et al. 2020). It can also be used in conjunction with post-colonial analysis to uncover perceptions based on gender which may shape narratives and policies surrounding resources such as charcoal (Robbins 2012).

For this thesis, the landscape is that of Agoro-Agu, in northern Uganda, a region which has been through major turmoil (Dolan 2002; Branch & Martiniello 2018). The goal of this thesis is therefore to uncover the drivers behind charcoal production and gender dynamics within the landscape, whilst remaining aware of other factors which influence both, in particular land tenure and access to natural resources,

This project, within the realm of political ecology, will use feminist theory, the theory of access and post-colonial analysis to uncover the dynamics between gender and charcoal in the Agoro-Agu landscape. These are important tools which will be used to potentially uncover unequal power relations at play in the study area. Many contextual elements are needed to begin this process, notably the history of the region, gender dynamics, and land tenure arrangements, will all be important elements in studying the relationship between gender and charcoal.

2.1 Charcoal

2.1.1 The Importance of Charcoal in Sub-Saharan Africa

Woodfuels, meaning both charcoal and fuelwood, are important energy sources in sub-Saharan Africa, with charcoal being the result of slow-burning wood under anoxic conditions, and fuelwood being "raw" timber (Mwaura et al. 2014). These heat sources, while not energy efficient, are essential in the everyday lives of millions of people across the continent. An interesting dynamic concerning woodfuels is the difference in consumption between rural and urban settings, with fuelwood being the primary energy source in rural settings, and charcoal being highly consumed in urban areas (AEO 2014). Both charcoal and fuelwood are produced and harvested in rural areas, and in this regard the difference in consumption based on the setting (rural or urban) highlights a key aspect in the charcoal commodity

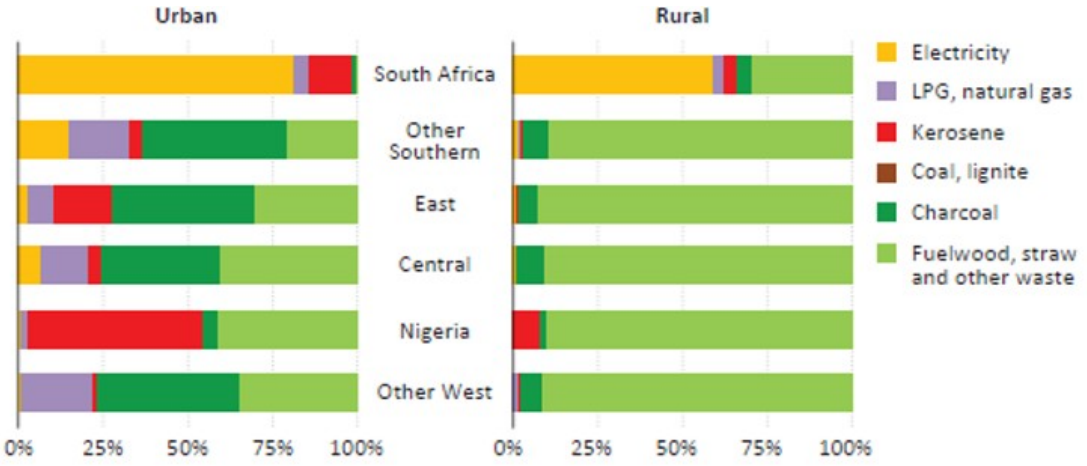

Figure 1: Household energy use in Subsaharan Africa (AEO 2014)

chain, which is that charcoal is most often produced to be sold (Khundi et al. 2011). This is in part because charcoal has a higher energy per kilo ratio than fuelwood and can be stacked in a compact manner and easily stored, allowing more efficient transport to cities, but also because in urban settings the smoke emitted from burning fuelwood is considered problematic. Charcoal is therefore a locally produced alternative with fewer consequences (Khundi et al. 2011; Ribot 1998; Rutz & Janssen 2012). Another important aspect concerning woodfuels is what they are used for, and in sub-Saharan Africa they are mostly used for cooking (Mwaury et al. 2014). Cooking is a deeply ingrained cultural activity, and changing

culinary customs is a slow process, met with resistance from people who want to “stick with what they know” (Tibesar 1991). For this reason, along with a lack of reliable alternative fuel sources, both charcoal and fuelwood are likely to remain the primary energy sources for most of the continent in the near and distant future (AEO 2014).

The commodification of charcoal is revealing in that it is representative of the dynamics of the political economy of many countries, including Uganda (Shively et al. 2010). The charcoal commodity chain comprises several actors and has been shown to be an effective window into revealing income discrepancies, power relations, and the marginalisation of the poor (Agyei et al. 2020). From producers to merchants, to transporters, to retailers, many different individuals are able to generate income from charcoal, albeit with vast differences in profit (Agyei et al. 2020). It is also imperative to understand the place charcoal holds in respect to rural livelihoods. Because charcoal is a commodity that is high in demand, it can be a non-negligible source of revenue for many households (Jones et al. 2016). Whilst the typical image put forward of the charcoal producer is that of a poor man who has to turn to charcoal to make ends meet, many studies, in Uganda in particular, have shown that the households that produce charcoal are frequently better off that those who do not (Ribot 1998; Khundi et al. 2011). However, there are strong contradictions in the literature surrounding charcoal and its impact on livelihoods, with some authors (Khundi et al. 2011; Jones et al. 2016) championing charcoal as a livelihood diversification strategy, and others saying that overpopulation combined with charcoal production has resulted in a net loss of livelihoods and migration to urban areas (Silva et al. 2019).

Considering the importance of charcoal in sub-Saharan Africa in the livelihoods of many individuals, along with the fact that it is a central element in a variety of socio-political contexts on the continent, a need for a complete and holistic understanding of this resource is essential.

2.1.2 Impact on the Environment

Because of its cultural and economic importance, charcoal and its production has attracted much interest, notably by ecologists, for its presumed role in forest degradation and deforestation in the tropical regions of the world (Chidumayo & Gumbo 2013). While NGOs and State forestry institutions frequently cite a linkage between charcoal production and deforestation, most recent scientific articles concentrate on the role of charcoal production

in forest degradation (Chidumayo & Gumbo 2013). Forest degradation indicates an overall diminution of tree cover, potentially through selective cutting, whereas deforestation refers to a complete loss of tree cover (Hosonuma et al. 2012). A common argument of most NGOs and other officials is that of population pressure and “carrying capacity”, where an increased number of people living in rural areas is a key contributor to the decline in forest resources (Leach & Mearns 1998). It must be noted however that certain aspects of charcoal production are either overlooked or not taken into account by NGOs and forestry officials when they analyse its environmental consequences. For example, charcoal production is only rarely a primary source of income for most individuals, and it is not necessarily the primary reason for cutting a tree, which could be for agricultural expansion (Jones et al. 2016). Charcoal production can be considered a secondary, or tertiary way for households to diversify their means of subsistence and is thus an enhancement to livelihood resilience (Jones et al. 2016). A second point not taken into consideration is that charcoal is typically produced alongside the clearing of fields for agricultural practices, which makes deforestation, and even forest degradation, more difficult to attribute to charcoal production alone (Jones et al. 2016). A third point is that whilst the typical discourse linking forest degradation and charcoal production highlights the selective felling of trees, it frequently does not take into account the use of bushes and the extraction of wood from the forest floor (Naughton-Treves 2007). A final element which has been seen in livelihood approaches in communal lands (Shackleton et al. 2000), is that there is frequently little to no distinction between charcoal made for personal consumption and charcoal created for sale on the market, and many studies remain in an “either/or” mould, when both could occur simultaneously. These elements, while not necessarily challenging the impact of charcoal on forest degradation, add nuance to the subject. This “nuance” is central to understanding charcoal production as being heavily influenced by specific contexts. It appears in research as if there is no global truth, no obvious “good/bad” when it comes to charcoal and charcoal production, and many factors may play a role in framing the dynamics surrounding the resource. This emphasizes the need for a holistic understanding of charcoal production in very localized settings.

2.1.3 Production Process

The following section is based upon my own experience of producing charcoal whilst in the field for this project. We produced the charcoal as a team of four people. The details on why charcoal was produced in certain ways were explained by one of our team, an agronomist.

Charcoal production requires intense and hard labour. Typically to produce charcoal an entire tree is cut down, as thicker branches and the trunk carbonize well. The logs are then stacked tightly in the form of a kiln, as shown in figure 2.

Figure 2: Stack prior to pyrolysis

The stacked wood is what will be transformed into charcoal. The stack is made by the felled tree. In this example, the wood used is from the branches of two different tree species, without cutting down an entire tree. As such, some of the wood is thinner than would be optimal, and the total amount of wood is lower than if we had cut down a large tree. After stacking the wood, it is possible to build the kiln.

As shown in figures 3 and 4, grasses and earth are used to cover the wood. The earth is dug from the ground surrounding the stack of logs. The building of the kiln is easier when using softer earth, and as such is easier to make in the rainy season.

Figure 3: Building of the kiln

Figure 4: Building of the kiln

After the kiln in constructed, the carbonization process can begin. A fire is started at one extremity of the kiln. Once it is deemed that there is enough heat in the kiln, the extremity is closed off.

The pyrolysis process needs to be regularly monitored, as it is possible for the kiln to fail and the wood to turn to ash. It is required to survey the kiln and check for problems at least twice daily during the rainy season, and at least three times during the dry season. Typically, the charcoal should be ready to harvest after three days, though this can be dependant on the amount of charcoal produced and size of the kiln.

Figure 5: Pyrolysis

The entire process of producing charcoal, from the cutting of the tree to the harvesting of the final product, is variable. If charcoal is produced by a collective, it can be ready within a week. If done alone, it can take much longer. Some people cut the wood then let it rest in the field for a few days to a week, so the internal moisture in the wood can escape. The building of the kiln can also be done over multiple days.

Once the carbonization process is complete, the packaging into sacks is straightforward. One must first uncover the charcoal by stripping away the earth, and then placing the charcoal directly into a prepared sack, making sure that the still warm charcoal does not begin to burn.

2.1.4 Gender and Charcoal

Charcoal production is typically perceived to be a male domain, due to the demanding, physical nature of the work (Ribot 1998). This male dominated aspect of charcoal production has been noted by most studies (Jones et al. 2016), yet without a further investigation into the gender roles associated with charcoal access. Mirroring the paper by Rousseau et al. (2017), which focused on access to shea nuts and how women's access changed once the shea nut was brought onto the global market, an analysis of how charcoal as a commodity for economic gain is linked to gendered dynamics has yet to be fully articulated. Recent studies have shown that women are involved in charcoal at every stage of the commodity chain in certain contexts (Jones et al. 2016; Agyei et al. 2020), which highlights the weakness of the assumption that charcoal production is a male-centered activity that is too physically demanding for women. Only a few studies have identified gender exclusion from charcoal production (Agyei et al. 2020), yet even in these cases they remain surface-level in regard to gender relations surrounding the resource. Furthermore, an accurate analysis of gender roles should not solely concentrate on women's exclusions or inclusions, but on the dynamics between genders, meaning that the positions of both men and women need to be addressed to fully understand the gender dynamics at play (Chant 2007). The acknowledgement of the role of men in defining access to charcoal allows new questions to come to the forefront of the discussion, such as if and how men are able to control access to charcoal, or why production is viewed as a male domain. Studies on gender require a full understanding of masculinities and femininities, and what defines them in specific contexts (Chant 2007). Understanding how these masculinities and femininities, as well as the dynamics between genders, shape people's relationships with charcoal, but also how charcoal production shapes the masculinities and femininities, will be central to this project. This is important because gender dynamics shape culture and norms, which are major factors in the political economy of the landscape (Rocheleau 1998). Further questions, such as how women are excluded (or included) from all production processes (timber extraction or kiln construction)

are not addressed in most academic studies on charcoal. While charcoal production has been shown to be a resource with extremely context specific dynamics surrounding it (migrant labour, seasonality (Jones et al. 2016), scale of production…), it appears as if the gender dynamics in almost all contexts is side-lined to focus on other aspects – primarily ecological — related to the resource. It is possible therefore, concerning the link between charcoal production and gender, to speak of a research gap.

2.1.5 Received Wisdom

“Received wisdom” refers to a concept or concepts that are generally accepted to be true, or self-evident, and taken therefore as a starting assumption. In the context of in the previous sections, the received wisdom is notably that charcoal production causes forest degradation and that charcoal production is a male domain, both of which require some attention. Received wisdom can be defined as a “snapshot” image of a situation and the discourse surrounding it that becomes popularized to the point of being taken for granted (mainly in the western world) (Leach & Mearns 1998; Hoben 1995). The classic example of received wisdom, which can be applied directly to charcoal, is that of “carrying capacity”, which promotes the idea that a given environment can only support a given number of people (Leach & Mearns 1998). In political ecology, which this project can be defined as an example of, it is necessary to “make claims about the claims of nature” (Robbins 2012), and it is imperative to note that many claims of nature are put forward by those in power wishing to promote a certain agenda (Brockington 2006). This concept is at the core of neo-liberalism, and the push to privatize areas which were previously commons (Branch & Martiniello 2018). In this regard also, carrying capacity narrative has been used to justify the enclosure of areas for conservation, excluding people from land. It has also had historical effects steeped in sexism and racism, linked to another narrative put forth that women from poor countries are “too fertile” (Anderson & Millington 1987; Falquet 2003). These two examples show just how powerful received wisdom can be, and how it can be applied as an extension of power to control populations. It can also be linked to further studies in development, such as the “anti-politics machine” notion of Ferguson (1994), who shows how received wisdom, even though rooted in power relations, can be rendered apolitical, or with the idea of “environmentality” by Agrawal & Bauer (2005) showcasing how certain discourses become engrained into our conduct regarding the environment.

Although this study will not focus specifically on received wisdom, understanding the power that certain discourses have in framing how studies are done and policies enacted will make it possible to understand perhaps why a study concentrating on the relationship between charcoal production and gender dynamics has not been attempted. This project will aim to take nothing for granted. Diagnosing when received wisdom is involved and steering away from it will be important to keeping this project as unbiased as possible.

2.2 Uganda and the Agoro-Agu Region

2.2.1 Overview of the Region's History

The Agoro-Agu central forest reserve (CFR) is located in Lamwo district in northern Uganda and straddles the border with South Sudan. The area is inhabited by people of the Acholi ethnicity. Since the independence of Uganda from Great Britain in 1962, the region has experienced many instances of unsettlement, most notably in the late 1980s and 1990s, and into the early 2000s with the advancement of the Lord's Resistance Army (LRA) which resulted in the displacement of up to 2 million people, and close to 95% of all people from Gulu, Pader and Kitgum districts (USAID 2006). The USAID report does not name Lamwo district, the site of this study, as at the time of its publishing Lamwo district had not been established. In 2009 Kitgum district fractured and the northern areas became Lamwo. Within Lamwo, the LRA were active in the sub-counties of Agoro and Potika, with an alleged infiltration attempt of the Potika IDP camp (Norwegian Refugee Council 2005). It is safe to assume that almost everyone in the Potika and Agoro sub-counties spent time in an IDP camp in the 90's and 2000's.

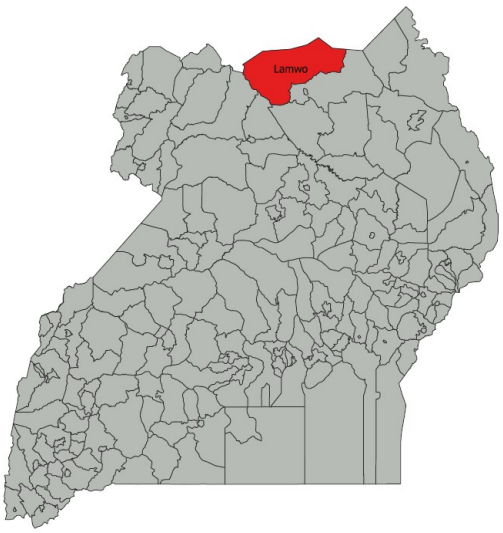

Figure 6: Lamwo district in Uganda. source:https://data.humdata.org

Infamous for its use of child soldiers, genocide practices, and violence against women, the LRA and its legacy remain a weight on the collective memory of the region. Today, due to the conflict in South Sudan, there are many refugees in Lamwo district, particularly in Palabek sub-county (UNHCR 2021). It is possible that these events result in particular dynamics

surrounding access to resources.

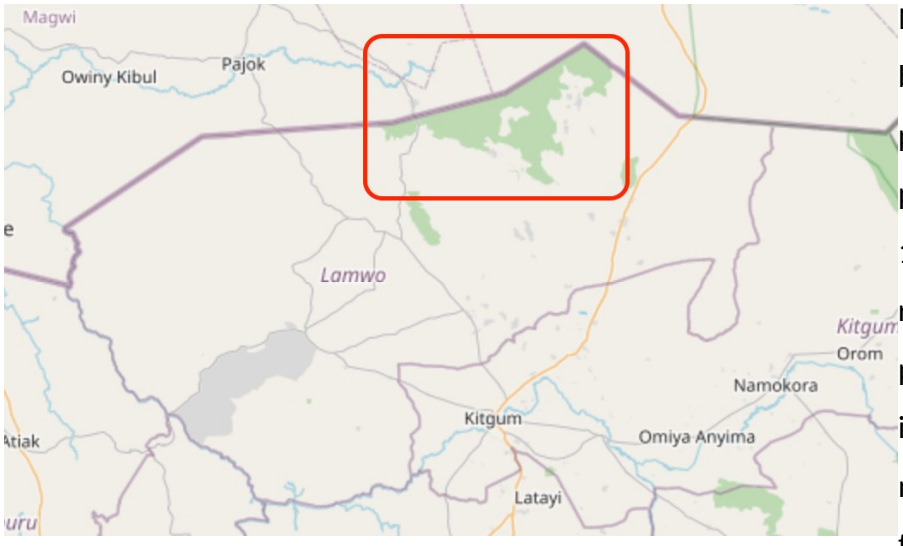

Figure 7: The Agoro-Agu CFR circled in red. Source: Openstreetmaps.org

Migrant labour has been noted as being prevalent in charcoal production (Ribot 1998), and the relocation of many people who were internally displaced means that it is likely that many individuals no longer live on the same land as their parents or grandparents, which might mean that factors such as village ancestry as noted in Rousseau et al. (2017) are less important concerning access to resources, or could become sources of conflict.

During the colonial period, Acholi men were used by the British as soldiers (Dolan 2002). The involvement of Acholi in the military continued into independence, and Acholi men formed a significant part of the Milton Obote armed forces (Dolan 2002). Dolan (2002) notes that this situation has created a negative perception of Acholis by other ethnic groups in Uganda, notably created during the Bush War from 1980 to 1986 which resulted in Yoweri Museveni seizing power in the country in 1985, which he still holds today. The aftermath of the Bush War was that many of the Acholi soldiers who were still armed returned to their homeland, and many southerners part of the victorious National Resistance Army were still angry with northerners for the violence of the Bush War (Van Acker 2004). Retaliation attacks by southerners towards northerners were frequent, and resulted in the formation of resistance movements in the north, the first of which was the Holy Spirit movement lead by Alice Lakwena (Behrend 2000). After my time in the Acholi sub-region, I can say that Alice Lakwena remains an almost mythological figure in Acholi culture, looked upon as a positive force. The succession of her initiative was however not viewed favourably at all. After the ultimate dismantling of Lakwena's movement, Joseph Kony created the Lords Resistance Army in 1987.

This study takes place within Lamwo district, in the sub-counties of Agoro and Potika. Potika was officially granted sub-county status in 2020, and was previously part of Agoro sub-county. Both sub-counties neighbour the Agoro-Agu central forest reserve, which covers an area of 26'508 Ha (Environmental Alert 2016).

2.2.2 Gender Dynamics in Northern Uganda

The impact of the conflict in northern Uganda on gender dynamics has been well researched. Studies show that is was a major turning point which heavily impacted the livelihoods and customs of locals. Understanding the lived and expected experiences of femininity and masculinity is key to analysing gender dynamics.

Dolan (2002) notes that there is a hegemonic model of masculinity in northern Uganda. Dolan notes that "The model is hegemonic in that it largely precludes alternatives and is buttressed by major forms of social and political power. It is normative in that men are taught they should aspire to and judge themselves by it, and state and society in turn judge and assess them against it - before either validating, or belittling and punishing them." A set of expectations for women to conform to is also present (Anderson 2009), with women expected to manage the household and have children. Dolan (2002) highlights that certain stereotypes are attributed to both men and women, with women being perceived as weaker both physically and mentally than men in the region. This dynamic translates to unequal power relations between genders (Dolan 2002). Inequality between men and women begins early, with men preferring not to invest in their daughter's future as they will marry and leave the household once they become of age. Dolan notes that women do not partake in traditional clan gatherings, and as such have no decision making power in clan matters. Clans are groups of people lead by elders and are a traditional way of organizing society in the Acholi sub-region of Uganda. Dolan cites Connell (1995) to explain that the concept of masculinity is relational and cannot exist without its counterpart, femininity (Dolan 2002). In northern Uganda, this relationship is unequal, and Gender Based Violence (GBV, the discrimination or violence inflicted from one gender to another), in this case from men to women (or onto another gender) is normalised (Sengupta & Calo 2016). As such, Acholi society is structurally patriarchal in that for decisions to be made they need to pass through the male clan leaders or family patriarch (Sengupta & Calo 2016). Women achieve their

femininity by providing care for the family's male heir and managing the household, which entails being responsible for the survival of said household (Sengupta & Calo 2016). Although women are considered secondary within the patriarchal culture, Dolan (2002), Sengupta & Calo (2016), and Anderson (2009) note that for men to meet their optimal masculinity, they need to be able to provide protection and care for their wife/wives.

The division of labour between men and women was clear prior to the LRA insurgency, with women occupying different spaces than men. "Women remained primarily in the kitchen, managed household finances, and brewed alcohol for sale. Beyond the homestead, they engaged in subsistence farming activities (planting of groundnuts, sesame, maize, and beans; weeding) that are not labour intensive. Men were the income providers, responsible for cultivating cash crops (e.g. rice, cotton, cassava, sorghum) and in charge of the household's productive assets. They were responsible for managing livestock, clearing agricultural land, and ploughing – activities that require hard physical labour for long hours." (Sengupta & Calo 2016).

The LRA insurgency was a societal breaking point for this system as neither men nor women could meet their standards of masculinity or femininity respectively (Anderson 2009). Men were unable to provide protection for their families, and feelings of "hopelessness" or "impotence" (Anderson 2009) became prevalent. To further undermine men's sense of being providers, relief agencies and NGOs which assisted civilians used women as "focal points" for aid (Sengupta & Calo 2016). The failure for men to meet their standards of masculinity resulted in new, more violet forms of masculinity (Ahikire et al. 2012). With their masculinity being undercut, men resorted to exerting more physical violence, and to alcohol consumption as coping mechanisms (Ahikire et al. 2012; Sengupta & Calo 2016). Alcoholism as a "negative masculinity" (Ahikire et al. 2012) had a feedback loop where high levels of consumption were linked to higher cases of violence towards women and children (Sengupta & Calo 2016; Esuruku 2011). Within IDP camps, women were subject to high degrees of GBV from both other male civilians and Ugandan People's Defense Force (UPDF) soldiers, and rape of women from a certain background (clan, ethnicity etc.) was a way for some groups of men to emasculate others (Esuruku 2011). Sexual assault against men was another way some men were emasculated (Esuruku 2011). Male victims of sexual assault suffered a severe identity crisis as this was deemed the ultimate breach of their masculinity (Esuruku 2011).

After the IDP camps, the impact of societal upheaval and the failure for both men and women to conform to their expectations of masculinities caused a shift in gendered labour (Sengupta & Calo 2016). Women took a more active role in tasks that were previously only attributed to men, such as providing economically for the family and working in more physical labour (Sengupta & Calo 2016). Sengupta & Calo note that the patriarchal structure still survives, with men exerting power upon women in various ways, however, men's responsibility as providers for the household has increasingly transferred to women. This has created a situation in which many men partake in activities which are deemed as "negative masculinities" such as excessive alcohol consumption (Ahikire et al. 2012), are "lazy" (Sengupta & Calo), and where women are more vulnerable to gender based violence.

2.2.3 Forestry in Uganda, and Gender Development Programs

Prior to colonial laws, forests were communally managed in Uganda, with a strong emphasis on their inherent value for the communities (Turyahabwe & Banana 2008). The authors note that the colonial period brought a major change in land tenure, especially considering the communal lands. Turyahabwe & Banana (2008) state that "The process of policy and legislation development in Uganda has historically been a top down approach dominated by a few Government officials, with little or no input from other stakeholders, especially forest adjacent communities." They show that this was the case during both colonial and post-colonial times. During the colonial period, most of the forests were privatised, meaning that "peasants were transformed into tenants and their hunting and gathering (firewood, trees, honey, mushrooms, etc,) rights subordinated to the power of the landowner." (Turyahabwe & Banana 2008). This links to a "tragedy of the commons" narrative, a classic example of received wisdom, although it could be argued that this is just an example of giving more power to local chiefs to justify indirect rule (Leach & Mearns 1998). Another historic example of power relations is that of the gazetting of forest reserves. In Uganda this resulted in the displacement of many people, mainly in the Mount Elgon area and in Bwindi, as well as the reduction of grazing grounds for herders (Turyahabwe & Banana 2008). This process ignored the needs and opinions of all local populations, a clear case of western views of nature at the time being applied indiscriminately in Uganda. Turyahabwe & Banana (2008) note that "In the process of gazetting forest reserves, the colonial authorities changed the public attitude towards forest management by undermining traditional rights to forest and land ownership

as well as other prior claims of indigenous communities to forest resources. Furthermore, rights to forest utilisation were granted only to a few privileged individuals. The law weakened the customary land tenure, depriving indigenous people of their rights to forests and land. Instead the colonial government gave local elites who were educated, rich and people from the royal family and chiefs land in return for support of their policies". Gazetting in this case is transferring an area to a higher level of protection from outside influences. The quote showcases a key aspect concerning colonial and post-colonial natural resource management in Africa, where decisions are made based mostly on power relations and less on the people's needs. This also meant that the Ugandans that were placed in charge of forestry and applying the law were in positions of power to continue after independence, and this is effectively what happened (Turyahabwe & Banana 2008). Apart from the breakdown of all legal frameworks during the Idi Amin period from the 1970's until the late 1980's, and until the decentralisation of the forestry service was officially implemented in 2003, this centralised forestry system that applied western views of nature management remained in place. Finally, the Uganda Forest Policy of 2001 changed the overall structure of forest management in the country, with a stronger emphasis on local organisations. District Field Services were set up around the country "to manage Local Forest Reserves and private forests" (Turyahabwe & Banana 2008). The focus of this policy was on "the management of forests outside gazetted forest reserves; collaborative forest management; private sector involvement in commercial plantations; urban forestry, the management of forests on private lands; local participation; and gender equity in the use of forest resources." (Turyahabwe & Banana 2008). However, Jagger (2008) and Banana et al. (2018) noted that this transition has been slow and uneven, with the central government still holding much power. The District Forest Services and governments need to fund themselves, and therefore there is an increased pressure to exploit forest resources (Jagger 2008).

An understanding of the history of forestry in Uganda is important to be able to pinpoint power relations and environmental discourses. It is also useful for an understanding of the Agoro-Agu central forest reserve. The notion of gender equity in regards to forest resource use in Uganda, as put forth in the official discourse surrounding forestry, is interesting. As noted by authors such as Brown (2007), development and management practices frequently use a discourse which uses gender-integrated vocabulary, with the use of specific keywords and terms, such as "gender equity". The overall idea of the Gender and Development (GAD) paradigm is that women specifically be able to be actors in their own development, notably by unbinding them from gendered power structures which maintain them in a subordinate

position (Rathgeber 1989). However, the difference between discourse and practice is sometimes blurred, with interventions and practices becoming hybridized between GAD and other paradigms, such as Women in Development (WID) which is linked to the modernization paradigm and focuses on women as passive recipients to development, without questioning or taking into account the overall structure of gender relations already in place (Brown 2007). Development and gender also focus mostly on helping women, viewed as victims (Cornwall 1997). This poses the problem of not looking at gender as a dynamic between men and women (Cornwall 1997).

2.2.4 Collaborative Forest Management

The Agoro-Agu central forest reserve (CFR, indicating that it is under jurisdiction of the National Forestry Authority (Turyahabwe et al. 2012)) has partially transitioned to a regime of collaborative forest management (CFM) as of 2017 (Thembo et al. 2017). The Potika side of the Agoro-Agu forest is managed by the Mar Yen group, whilst the Agoro side is managed by the National Forest Authority using elected delegates in adjacent villages to monitor activity and bring forward issues to village leaders. CFM can be defined as a form of participatory forest management, and more specifically as a "[…] working partnership between the key stakeholders in the management of a given forest – the key stakeholders being local forest users and state forest departments, as well as parties such as local governments, civil groups and non-governmental organisations, and the private sector." (Turyahabwe et al. 2012, citing Carter & Gronow 2005). It is a case in which communities enter into an accord with the National Forestry Authority to manage part, or all, of a forest. Turyhabwe et al. (2012) further define CFM as a "structured collaboration" between stakeholders with a goal to improve livelihoods of forest adjacent communities, where "the government does not surrender ownership of the forest […]". It is interesting to note that in the paper by Thembo et al. (2017) which discusses the transition of management of Agoro-Agu CFR to CFM, they cite three main causes of forest loss: "conversion to agriculture, charcoal burning, [and] urbanization." They further cite Ugandan demographics, notably population growth, as a key concern, as high population will undoubtedly put more pressure onto natural resources (Thembo et al. 2017). These statements, which are by no means false, happen to coincide with notions of received wisdom previously discussed, and therefore need to be scrutinized. It is also important to note that participatory forest management, such as CFM, has also been shown to enable exclusion (Agarwal 2001). A careful analysis of who at the village level participates in the elaboration of the Agoro-Agu CFM guidelines is therefore important to this project. Furthermore, understanding what

changed between the implementation of CFM in the area from the previous CFR management regime is essential. The fact that the official paper by Thembo et al. (2017), which discusses the implementation of CFM in Agoro-Agu, highlights charcoal specifically, and that the official Ugandan discourse puts forward the need for gender equity in forest management, show just how important this is. If neither charcoal management or gender equity have changed since the implementation of the CFM in the area, then to some degree the CFM would have failed, and confirm the studies by Brown (2007) that there is frequently a difference between official discourse and aims, and implementation and results. With this in mind, understanding the situation in Agoro-Agu as a before-and-after CFM is important. Alongside this, seeing the difference between the side of Agoro-Agu which is managed through the Mar Yen CFM and the side which is managed by elected local officials as representatives of the NFA will be interesting. All of this will be alongside strong traditional ways of governing land through clans, as noted by Martiniello (2019), however clans should not have jurisdiction over the central forest reserve.

3. Theoretical Framework

The contextual elements which have been presented are extremely diverse. For a holistic study concerning charcoal, the importance of the resource in African settings, the lack of a comprehensive gendered approach to the issue, and the many localized specificities must be brought together in a satisfying way. The aim of this project is to be able to contribute and be useful to the understanding of charcoal and its impact on gender dynamics, whilst taking into account the very distinct context in which the study will be carried out. My hope for this project is that is will entice further questions in more contexts, allowing for better knowledge of the links between natural resources and gender in a broader sense. With this idea in mind, a general framework which brings elements discussed previously, whilst remaining highly inquisitive, is essential.

The main theoretical framework and thesis which will be used in this study will be “Environmental conflict thesis”. As stated by Robbins (2012, p.200): “The environmental conflict thesis: increasing scarcities produced through resource enclosure or appropriation by state authorities, private firms, or social elites accelerate conflict between groups (gender, class, or ethnicity). Similarly, environmental problems become “politicized” when local groups (gender, class, or ethnicity) secure control of collective resources at the expense

of others by leveraging management interventions by development authorities, state agents, or private firms. So too, existing and long-term conflicts within and between communities are "ecologized" by changes in conservation or resource development policy." (Robbins 2012, p.200).

This thesis is an amalgamation of three other essential paradigms: feminist theory, property systems, and postcolonial analyses.

First, it is based on feminist theory, which stipulates that the gendered division of labour, whilst a common trait in most societies, is neither natural nor inevitable. As stated by Rocheleau et al. (1996): "[…] there are real, not imagined, gender differences in experiences of, responsibilities for, and interests in "nature" and environments, but that these differences are not rooted in biology *per se*. Rather, they derive from the social interpretation of biology and social constructs of gender, which vary by culture, class, race, and place and are subject to individual and social change". A gendered division of labour is thus context specific. I categorize and label the many ways "gender" is played out and experienced, as described de Rocheleau et al. (1996) under the term "gender dynamics". This includes the many interactions, roles, and responsibilities which take a gendered form. "Gender dynamics" is a curt, cover-all term. Feminist theory also implies that skewed power relations exist, resulting in unequal access to resources, which leads to the second key element of Robbins' thesis: property systems.

Whilst Robbins (2012) speaks of a "bundle of rights" when referencing property systems, "access" is defined by Ribot & Peluso (2003) as "[…] the ability to benefit from things-including material objects, persons, institutions and symbols." It is a more holistic approach to understanding how people are able to benefit from resources. In this sense, access can be considered more robust than rights, as it focuses on individual's abilities and agency, and "[…] brings attention to a wider range of social relationships that can constrain or enable people to benefit from resources without focusing on property relations alone." (Ribot & Peluso 2003). As with feminist theory, the Theory of Access is rooted in discerning power relations, with certain actors able to derive benefits from things by wielding their power, and others not (Agyei et al. 2020; Myers & Hansen 2020). In this project, access to charcoal will specifically point to access to charcoal *production*, meaning the ability to harvest timber for charcoal creation, create the final product in a kiln, and place the charcoal into bags for sale.

These three steps, along with transport between each one, are what I will define as charcoal production, and are most often done at the village level (Agyei et al. 2020). In the remainder of this research proposal, when access to charcoal is mentioned, I am referring to charcoal production specifically, unless indicated otherwise. This is done mainly for the fluidity of the text and ease of reading.

Finally, a postcolonial analysis of history shows how even well-intentioned development interventions are "[…] based on assumptions that are classed, gendered, and raced. In particular, development plans tend to imagine the subjects of development – the local farmer, herder, or fisher – with assumptions about their outlook, behaviour, and interests that reflect the socially situated imaginaries of the planner." (Robbins 2012, p. 202). A postcolonial analysis also shows how development initiatives, based in a modernist paradigm, homogenize the experiences of the people whose lives they wish to improve (Escobar 1995, p. 8). This homogenization of experiences, which can be perceived as a way for those who intervene to "[…] simplify their environments in ways that make them more amenable to their system of knowledge." (Scott 1998, p. 485), tends to result in the further marginalization of certain groups and individuals, precipitating conflict (Robbins 2012).

With the environmental conflict thesis now established, it is necessary to recontextualize it to the situation in Agoro-Agu. In this setting, both the CFM regime and elected officials governing rights to resources within the central forest reserve have likely defined how people are able to access resources (timber, bushes, trees) to produce charcoal. Even though CFM defines itself as participatory, certain groups are likely able to benefit more from the CFM than others, and these groups might be characterized by gender. The same can also be applied to the sections of the central forest reserve which are not administered by CFM, as access to resources can also be highly politicised in that setting as well. A change in access to charcoal along gender lines will have results on social norms and gender roles, highlighting inequalities and power relations. It is to be noted that even if the dimension of gender appears to play no role in regards to access to charcoal due to the CFM or local council regime, the theory should still showcase other conflicts of interest surrounding access to charcoal. The gender dimension remains the primary focus of this project due to the lack of information on the subject in most literature concerning charcoal. The following figure (figure 8) shows how this framework will be applied for this project. It can be considered as a "narrowing down" of the overall framework as proposed by Robbins (2012). This fact is both

a strength and weakness of this project, as it will allow for a complete understanding of the impact of the CFM and other forms of environmental management on charcoal production, as well as the gender dynamics surrounding charcoal, but will not concentrate on the many other elements which may impact gender dynamics and access to charcoal. That does not mean that these elements will not be acknowledged or taken into account, just that they will not be investigated with as much focus. This issue will be addressed later on in this paper.

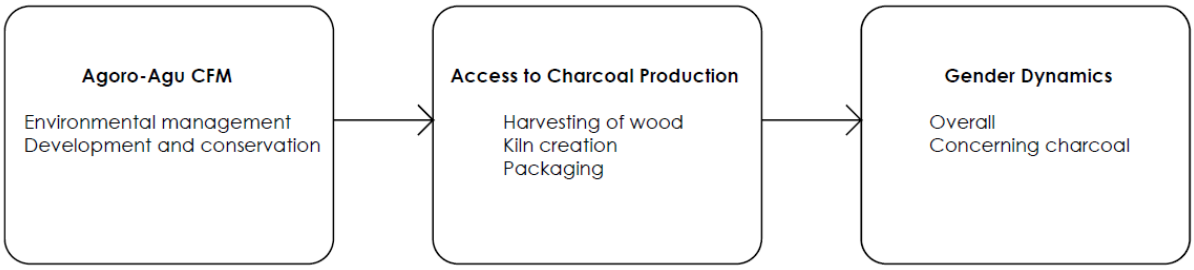

Figure 8: Theoretical framework

As apparent on figure 8, the general plan will be to identify how the CFM shapes access to charcoal production, and how this access to charcoal production shapes gender dynamics.

With these three theories combined to form the environmental conflict thesis, along with the contextualisation of the Agoro-Agu area in northern Uganda, it is possible to formulate a hypothesis and research question.

4. Hypothesis

The main hypothesis this project seeks to validate, or reject, is: "Environmental management schemes affect access to charcoal production, which in turn results in changes in gender dynamics."

This hypothesis corresponds to the framework as presented previously. It is important to point out that if this hypothesis is disproved, by either no change in access to charcoal since the introduction of the CFM, or no change in overall gender dynamics, the findings will nevertheless be interesting, and this is for a few core reasons. First, since as previously mentioned the goals of CFM are to limit charcoal production and promote gender equity, no change in either of these areas represents a failure of the CFM. Second, even if no perceptible changes in access to charcoal and gender dynamics occur following the

implementation of the CFM, the overlying gender dynamics of the area, especially those surrounding charcoal, will be established, and still lead to an understanding of the resource and its gendered dimensions. In any case, identifying the elements which shape gender dynamics and access to charcoal will be necessary, even if these are not linked to the CFM or charcoal, and allow for future research to be able to ask intriguing questions relating to access to resources and gender. In this sense, a disproven hypothesis is by no means a disappointing result, on the contrary, it would allow for a greater understanding of the situation at hand, and potentially the understanding of other situations concerning gender dynamics (charcoal or other natural resources) in different contexts. I believe this to be a core strength of this project and its framework, that it is not dependent on a certain result.

5. Research Question

The main hypothesis leads into the primary research question: “In what ways does charcoal production affect gender dynamics, and does the local environmental management scheme also play a role in shaping them?”

This question is highly linked to the hypothesis, and therefore the commentary accompanying the hypothesis is also applicable to the research question. If the answer to the research question is that the CFM or the environmental management through the local council has not changed access to charcoal or gender dynamics, whilst interesting in and of itself, further questions will become apparent, such as “What affects access to charcoal?” or “What shapes gender dynamics?” The narrowing down of Robbins’ (2012) framework is not to discount other elements which may impact the study, but to focus upon the parts which are hypothesized to be important to the study at hand. In this situation it must be remembered that a fieldwork period of two months is short, and it is important to have a certain focus, whilst keeping in mind that the situation on the field is much more complex than the framework makes it out to be.

5.1 Further Questions

With this subject, there are three other core questions which need to be addressed if a holistic perspective on this matter is to be put forward. Whilst many questions need to be asked in this study, these three, combined with the main research question, will guide the project.

The first question is “Who has access to charcoal?” With the focus being primarily on charcoal production, this question will allow for an understanding of the individuals who produce charcoal, and allow for an understanding of access to charcoal has specific dimensions, such as class, age, nationality (keeping in mind that there are many migrants from South Sudan), or ethnicity.

The second question is “What are the local gender dynamics (concerning charcoal)?”. This question relates slightly to the first, in the sense that charcoal production has a certain gendered access (with more or less access for women). Understanding the gender dynamics concerning charcoal specifically is important, notably by showing the roles and responsibilities, as well as the subjectivities individuals have and maintain surrounding the resources, is essential. Furthermore, understanding the gender dynamics in the village setting in which this study will take place will be fundamental to have complete knowledge of the situation at hand. A holistic view of the gender dynamics in the Agoro-Agu will help in understanding how women and men perceive themselves as well as each other. The roles, responsibilities, and interactions (and power relations) assigned or imposed along gendered lines, will likely be the most interesting and difficult part of this project. The difficulties surrounding this question in particular will be addressed further on in this paper.

The third question is “Has the implementation of the CFM changed access to charcoal, and if so in what ways?” This question is also linked to the first but goes further in regards to the specific management regime in place. This question implies a “before and after” situation, in which access to charcoal was maintained in a certain way and has changed since CFM was introduced. However, in the case of the Agoro-Agu central forest reserve, not only is it possible to see the CFM as a “before and after” situation, but as a “here and there”. The CFM scheme covers the Potika half of the forest, whereas environmental management through the local council is present in Agoro. Understanding what changed and how it can be attributed to the CFM is extremely interesting, and whether or not the CFM has actually changed access compared to management under the local council is extremely interesting. The important element to be considered is that the CFM is *supposed* to change access to charcoal.

5.2 Objective of the Project

Using the main research question, further questions, theoretical framework, and the hypothesis, it is possible to put forward the main objective of the project, and why this project is important.

The main objective of the paper is to understand how gender dynamics are articulated in a village setting near Agoro-Agu, and how these dynamics are influenced by access to charcoal production, and how access to charcoal production is influenced in turn by the implementation of the CFM. This is shown in figure 8. This project will attempt to define these elements in their context and identify the links between each element. A key part of this project will be acknowledging the role other contextual elements play in shaping both access to charcoal and gender relations, whilst remaining focused on the objective as stated above.

This paper should yield interesting and useful results, which could be used to expand knowledge of the impact of gender on resource use in other fields. What I hope to accomplish with this project is to enhance the understanding of the link between access to resources and gender dynamics, which could hopefully be used in both intervention schemes (the acknowledgement of differentiated gendered access concerning charcoal could help shape how NGOs or the State intervene in regards to the resource) and academic studies (which could question the link between resources and gender dynamics in various ways). I also hope that this project will be useful in underlining the importance gender plays in charcoal production in particular, as it is neglected in most studies. Even though the project is highly contextualised it should still highlight how charcoal and gender dynamics are interlinked, allowing for a greater understanding and further questions by both development project managers and researchers.

6. Methodology

The methods used for this study were 49 semi-directed interviews, participant observation, and literature reviews. The interviews and observations were carried out in the field over two months in April and May 2021. The fieldwork was done in four areas in the vicinity of

the Agoro-Agu central forest reserve, and in two sub-counties of Lamwo district: Potika and Agoro. I had a translator with me during all of the interviews, which were carried out with respondents being fully aware to the subject of the study and with their consent to having their answers being used.

In this section I will detail my approach to the study and the reasoning behind the choices of methods, and highlight their strengths and weaknesses. This section will begin by explaining the thought process behind the approach of the study. Afterwards, I will detail how an internship prior to the fieldwork was instrumental in enabling a positive outcome of the project. The area of operations will then be shown, alongside the reasoning behind the choice of each zone. After that will be a short paragraph on why semi-directive interviews and participant observation, alongside literature review, were the ideal methods for this project. I will then go over the diverse strengths and weaknesses of the methodology, beginning with the issue of language, continuing with the limitations of myself as a researcher, and finishing with my overall perceptions surrounding the methodology.

6.1 Approach

The approach of the project is essential to defining what will be concentrated on during this study, and why. There are many issues which may arise during a study of this scope, and the need to keep a focused project which aims to complete specific goals is paramount. Taking into account both the need to see the big picture, while acknowledging the need to remain focused on certain aspects, will be the central part of this section.

The approach of this study was to apply the theoretical framework around the Agoro-Agu central forest reserve, in four communities, whilst basing myself in one. Staying in one specific village had a great number of logistical advantages, such as visibility and personal connections. The scale of a village allows for a more focused study, and an understanding of dynamics which may be specific to a certain village. Whilst it would have been practical to conduct all the fieldwork in one village, this would not be enough to enable a better understanding of the dynamics of the area and be able to make comparisons. For this reason, three additional areas were chosen for differing characteristics, which will be covered further along in the methodology.

As stated previously, the study focuses on access to charcoal production specifically. Other elements in the charcoal commodity chain, which may also have gendered aspects, are not taken into account in this study, because including these elements in the study would potentially have involved going outside of Lamwo district, and it needed to remain in the area surrounding the Agoro-Agu central forest reserve to maintain focus.

As mentioned in the previous sections, this paper examines gender dynamics concerning charcoal. Gender dynamics are complicated and vast, and are influenced by many sources, which may include religious affiliation, the history of the area (with a specific focus on the time in IDP camps), ethnicity, age, or migrant status. This means that a holistic view and understanding of gender dynamics and their origins in a village setting, combined with the sensitivity of the subject matter, made defining gender dynamics in the region the most complicated undertaking in this project. As the literature surrounding this topic in the section on gender dynamics in the region suggests, this was a charged subject and a source of tension. Having anticipated this, I began interviews with exploratory questions, to form a basis of more pointed questions which I asked in the latter stages of the fieldwork. It should be noted that a full understanding of the complexities and nuances of gender dynamics in the region is impossible, especially for a foreigner with my own biases and expectations.

The study concentrates on access to the central forest reserve for resources, be it administered through Mar Yen collaborative forest management for Potika sub-county, or through the local councils in Agoro sub-county. Understanding how the central forest is used by local populations in the different management contexts was important. Understanding who benefits from forest resources under which context was useful in judging the effectiveness of environmental management, and also for seeing in what way the forest was degraded from charcoal production, both of which were essential themes of the project. Another imperative was understanding the mechanisms which granted access to charcoal produced outside of the forest. To summarize, the objective of this study was to fully comprehend how the implementation of the CFM has changed access to charcoal in and around the central forest reserve, and how access to charcoal has changed gender dynamics relating to charcoal and on a whole.

6.2 Time Prior to the Fieldwork

For a study such as this, knowledge of the area is paramount. In this vein, a two-month internship in Kitgum district and in the Agoro-Agu region in particular enabled me to meet people before the fieldwork and create relationships with important gatekeepers, as described by Bernard (2017). I believe that collaborations and relationships are built upon mutual respect, trust, and without abuses of power. When I talk about the benefits of relations and networks, I do not do so with the idea of exploitation in mind. Whilst Escobar (1995) would say that all encounters that I will have in the field are already conditioned and compromised, I believe that a sense of self-awareness helped me to assess these networks, helping me identify whether I was in a position of power (or not), and make decisions based upon this. My internship with a local NGO prior to the study was a fantastic opportunity to meet interesting people and make lifelong friends, as well as establish a certain network. Networks and "gatekeepers" are essential in anthropological studies (Bernard 2017). Gatekeepers were important for "getting people to be comfortable" with me, allowed the advancement of this project as a whole, and assisted me in identifying local politics, dynamics, and norms. In the case of this study, the internship allowed me to meet a few people who were instrumental in helping me carry out this study, and in helping me meet a host family in the region. These gatekeepers will be touched upon further on in the methodology.

6.3 Area of Operations

As mentioned in the start of the methodology, the fieldwork was carried out in four distinct areas chosen for certain reasons. For practical purposes, one of these four areas was chosen as a base of operations for the fieldwork.

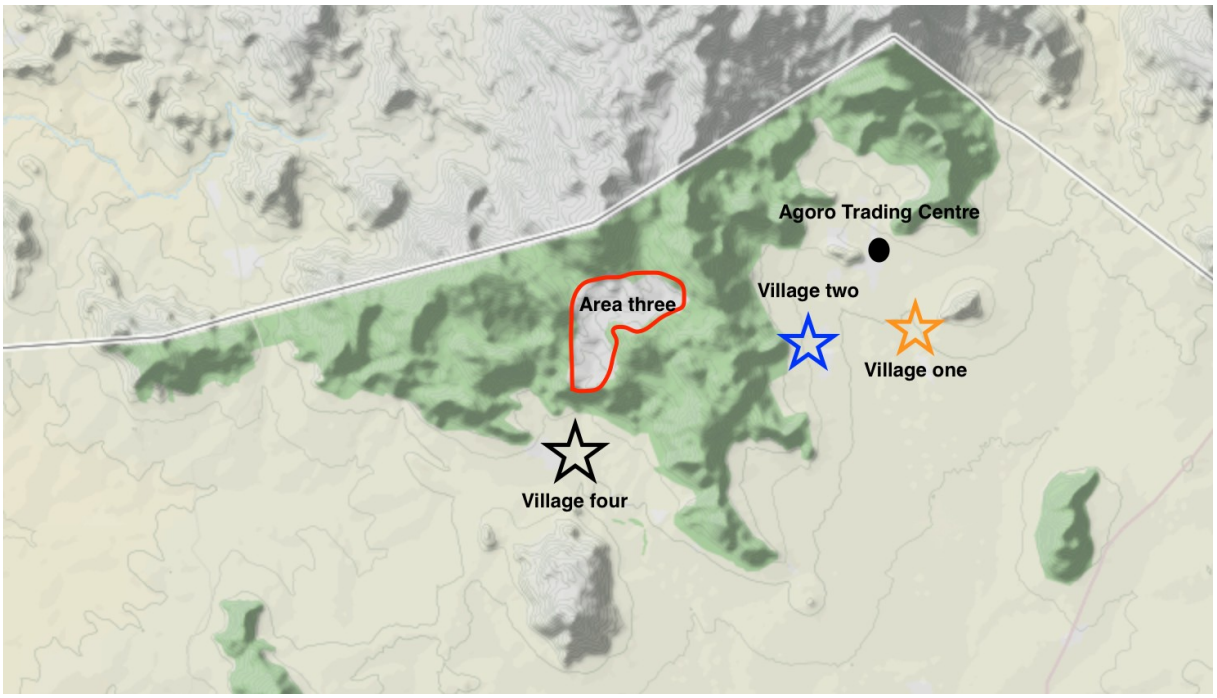

Figure 9: Study areas. Source: Openstreetmap.org

The Agoro-Agu central forest reserve, as detailed in the context, is 28’508ha in area, a significant expanse. Two different management schemes for the forest were also present. Using this situation as an opportunity, it was important to conduct research in an area in which Collaborative Forest Management was present, and compare it with a situation in which environmental management was conducted through the local councils (LCs). Another key geographical and physical factor which was interesting was that there was an enclave within the forest, on a plateau 700 meters higher in altitude than the surrounding “lowlands”, which had completely different flora, and was relatively inaccessible (at least compared with the other villages). Doing research in multiple areas with different properties surrounding the same forest reserve allows for a better global understanding of the dynamics surrounding the CFR.

Thanks to my internship prior to the fieldwork and through a colleague and friend, I met a family willing to host me in the region. This family lived in village one (detailed below), which was not directly forest adjacent, although not so far as to be unaffected by it. Further details relating to being hosted will be covered in the “Research tools and target groups” section of the methodology. Furthermore, conducting interviews in a non-forest adjacent village allowed for a “control village”, where comparison in charcoal production from that village to other forest adjacent ones could potentially highlight specific dynamics pertaining to forest resource usage. I was also hosted for a week in area three by another “gatekeeper” I had the

chance of meeting during my time in the region. I will now highlight the characteristics of each area, going over a few important indicators. These indicators will not be analysed objectively, but should be noted as general characteristics of these areas which may or may not have an impact on charcoal production and access to natural resources. Access through roads is an important factor in trade, and could have an effect on how people generate income and sell their goods such as charcoal. Forest adjacency is the proximity to the central forest reserve, and can have an impact on how a community can benefit from it. General economic activities is not an overall limiting factor, but can show how areas in the same overall region can differ. The context of natural resource governance and legality, differing between villages by environmental monitors working through local councils or through collaborative forest management is also a factor which impacts this project and changes between the areas of study. It should be noted that whilst I wanted to choose villages by the overall availability of woody biomass in their general vicinity, this was impossible to objectively quantify within the time given and tools at my disposition. I will mention the names of these places, but will attribute a number to them for ease of reading.

Village one (Loromibenge)

- Village one is located 6 kilometres from the Agoro trading centre, and 15 kilometres from the tarmac road in Madi Opei. Village one is along the good gravel road (improved in 2015) between these two localities, and as such has good access to trade, both through the proximity to the local trading centre and through transport opportunities.
- Village one is not forest adjacent.
- Village one's main economic activities were agriculture, and the main crops were maize, millet, groundnuts, and sorghum. Livestock, mainly cattle, were important though few in overall numbers.
- Village one was administratively separated into two local councils, one for the northern and one for the southern part of the village. Each local council had a volunteer National Forest Authority (NFA) representative to promote the NFAs agenda, and as such is considered as using environmental management through the local councils. This will be further detailed in the results and analysis sections.

Village two (Apwoyo)

- Village two is located 5 kilometres from the Agoro trading centre. The good gravel road which goes through village one reaches Agoro centre, then continues to village two. As such, village two is further from the tarmac than village one.
- Village two is adjacent to Agoro-Agu central forest reserve.
- Village two's environmental management scheme is similar to village one's, although since village two is more populous, it is administratively divided into six local councils, each with their own environmental volunteer.
- Village two produces the same crops as village one, and also possesses heads of cattle and goats.

Area three (Lumwaka)

- Area three is comprised of the village of Lumwaka, in Potika sub-county, and some agricultural land which is the extension of forest adjacent villages in Agoro sub-county. The fact that the border between Potika and Agoro goes through this area is why I do not use the denomination of village. This area is connected to Village four through a very poor road only accessible by tractor. It is connected to Agoro centre via steep footpaths. Access to area three was therefore very limited compared to all other villages. The site of Lututuru will also be briefly mentioned and grouped into area three.
- The main crops grown in area three were beans and barley. Fewer people possessed livestock in this part of the study area.
- Being partially in Potika and partially in Agoro, both Collaborative Forest Management and environmental management through the local councils are present, depending on which side of the sub-county border one is. Unfortunately, with Potika sub-county being so new, I have yet to find a "shapefile" with the proper sub-county delimitations, and as such it is difficult to represent this boundary on a map.
- Area three is forest adjacent because it is an enclave of arable land within the central forest reserve.

Village four (Potika)

- Village four indicates the general area of Potika adjacent to the central forest reserve along the quality gravel road which links the area to Agoro around 20 kilometers away.

- Village four is forest adjacent.
- Collaborative Forest Management is present in village four with Mar Yen CFM group. As such, a collective of people from around the area are legally mandated to manage the central forest reserve in Potika sub-county.
- The crops grown in Potika are the same as in Villages one and two.

6.4 Research Methods and Target Groups

The two methods employed in the field were, as stated before, semi-directive interviews and participant observation. Semi-directed, or open-ended interviews are a tool which allowed me to follow-up on specific knowledge that a respondent possessed. For example, if one respondent made a comment about the history of the area, it was possible to ask further questions surrounding what they said, enriching the interview. It also allowed for the interviews to become more natural, taking on a form of discussion rather than the rigid form structured interviews sometimes have. Participant observation "…produces the kind of experiential knowledge that lets you talk convincingly from the gut, about what it feels like to plant a garden in the high Andes, or dance all night in a street rave in Seattle" (Bernard 2017). Being hosted in village one was the main element which permitted participant observation, and instead of a garden in the Andes or a street rave in Seattle, I had the privilege of farming with my host family, and dancing at a clan gathering. Participant observation was key to developing friendships within my host community, for networking and meeting key respondents, and for improving my overall understanding of dynamics in the area. This tool was also important in improving the interviews, as observations and informal discussions were enlightening, and through them I was able to add new questions and alter former ones in my overall question themes. For the results of this study, participant observation through integration in village one was the most important method. Informal discussions with people who were not necessarily part of the target groups ended up being enlightening in other ways. On a personal level, I learned much more than what will be presented in the results and analysis.

The family who hosted me in village one, my colleague and translator, and a friend who hosted me in area three, alongside clan elders were my "gatekeepers", as mentioned previously in the methodology. These individuals had knowledge of the regions and its dynamics, and through them I was able to learn much. They were also central in networking and talking to interesting people within the region, as well as in participating in events and

discovering life in this part of Uganda. I was able to attend a clan meeting, multiple parties, funerals, and speak to important clan elders thanks to these gatekeepers. The week I spent with a farmer in area three was important in allowing me to conduct interviews in a region which was relatively inaccessible, would have been impossible without having met my host, who was himself the son of a clan elder. Beyond just being "gatekeepers" these people who I became close to in the region offered friendship and motivation during the fieldwork, and made participant observation and interviews the most exiting part of this project.

Whilst my question themes, which will be shown after, typically touched upon similar subjects in all situations, some questions were more detailed or pressed upon than others depending on who I was speaking to. Factors that played into this were age, gender, and occupation. For age, elders were asked questions which were not asked to youths, and vice versa. For gender, men and women were asked differing questions as well. Occupation was also a factor which altered questions under specific circumstances. For example, whilst interviewing local councillors I would ask questions pertaining to their functions. I did not ask these same questions when speaking to charcoal producers.

These methods to collect data were aimed at certain groups of stakeholders in the region. The first were charcoal producers. Since this study revolves around the dynamics of charcoal production, interviewing producers was paramount. Interviews with non-producers were also important, as understanding why someone would not produce charcoal was useful in this study. Furthermore, both producers and non-producers could relay their knowledge of the region and area even if it did not relate directly back to charcoal production, as access and gender dynamics are also central factors in this project. Elders were another "target group", as part of the study sought to uncover the changes in society over the past decades. In this study, I characterized someone as an elder if they were referred to by either the Swahili word *Mzee* for a man which was widely used across Uganda, or *Ada*, the Acholi word for an older woman. Having the perspectives of elders on changes in the region was important. On the other side of the coin, youths beyond the age of 12 and still unmarried were another "target group" with whom I needed to talk, to see the perspectives of the upcoming generation. Leaders in the region, such as local councillors, clan elders, key members of Mar Yen CFM, and village volunteers for environmental management were crucial. Finally speaking to both men and women for their perspectives was necessary for a study on the topic of gender dynamics.

The questions asked were, as is the case of semi-directive interviews, fluid and prone to change during each interview. A few main themes were always touched upon: charcoal production, charcoal merchandising/income generation, access (geography/legality), history, and gender. These themes were inherently interlinked in many ways, such as with gender and income generation, for example, where I would ask women what men spent their money on.

Charcoal production questions included whether the respondent produced charcoal, and for what reasons. This included amounts produced, when charcoal was produced (seasonality), the positives and negatives of producing, and the manner in which charcoal was produced (collectively or not, for example). The choice of trees used, in terms of species and location, or if they allowed others to produce charcoal using their trees. I also asked about the details of producing charcoal, such as if the wood carbonized could only be from one species of tree at a time, or could be used from dead wood. Perspectives on the various impacts of charcoal production were asked to both producers and non-producers. Perspectives on charcoal production outside of the village in which questions were asked, such as other areas which may produce charcoal, were also enlightening.

Charcoal merchandising/income generation questions focused on the reasons for producing charcoal, to whom producers would sell, and for what amount. For non producers this revolved around their other sources of income, and how they could make their ends meet. This theme also aimed at uncovering trade patterns within the region. What people spent their money on was also covered in this theme, as well as what people from the other gender spent their money on.

Access questions revolved around how people were able to benefit from their occupation. How were people able to access charcoal production, or how were they not? Was the availability of tools, land a limiting factor, or was power from authorities a central element pertaining to the ability to produce charcoal? This theme also explored the complicated mesh of “legality” in the region, such as what the clan, local councils, and CFM prevented or enabled in terms of resource extraction. Of course, questions involving access were also tied to questions involving gender.

Questions related to history were also another theme which was closely tied with all the others. They helped to create a time-frame of production in the area, enabled a better study of access by understanding how changes in land tenure may have happened in the region, and helped uncover when and if gender dynamics had shifted. History also helped in seeing if there were changes in ways people were able to generate income. History was also important in understanding who the major stakeholders in the region were at what time, along with the role they played. It should be noted here that after the first exploratory interviews, specific questions were asked about people's time in the IDP camps and the changes these camps had on society.

Gender-related questions were the final theme, and involved experiences of both men and women on their roles, their dynamics, and their perceptions. Understanding how men perceived the roles of women and vice versa was key to this study. Understanding the linkage between gender and access, and gender and income generation were indispensable as well. Exploring how women were able to access natural resources over a period of years within a certain gender dynamic structure was central to the questions.

6.5 The Language Barrier and Other Limits to the Methodology

Another element that needed to be addressed prior to the fieldwork was language. Whilst English is the official language of Uganda, it was not widely spoken in the research sites. I was able to carry out a few interviews in English, however in these instances, even though the respondents had great mastery of English as a second (or third) language, I felt as though some nuances in their responses were compromised and needed a more specific vocabulary which the Acholi language provided. During this study I had the privilege of working alongside a friend and former colleague who accompanied me during all of my interviews. He was a young Acholi man from Kitgum district, who had worked for three years in village one in Agoro sub-county. This had multiple unexpected benefits. Firstly, having worked in the region for three years made him a familiar face in villages one and two, and as such respondents frequently already knew who he was before the interviews started, leading to calmer and more open interviews. Secondly, being an "outsider" was an advantage, as he did not have an overly strong attachment to the region which could either create bias in his translations or in the answers of respondents. The third benefit from working with him was that my very foreign appearance was mitigated by his. The fact that interviews could be

carried out in Acholi was hugely beneficial, as people were able to fully express themselves during interviews. Almost strangely, one of my perceived greatest weaknesses in the project, my inability to properly communicate with people in the region and my foreignness being a major disadvantage, were both alleviated by working alongside a translator. As an agronomist, he was also very knowledgable about the flora and agricultural practices of the region. He also gave me feedback on my questions and was interested in the purpose of the study, and discussing the themes and questions with him allowed for more pointed questions and a better understanding of the region's dynamics very quickly. The downside of working with a translator was the fact that translating from Acholi to English came with a loss of detail and nuance in the answers of respondents, no matter how well it was translated. The quotations which will be used in the "Results" section are mostly (though not always) a distortion of what was translated to me. For example, if a respondent said something which was then translated, the quotation used will appear as if the respondents had given their answer to me without going through translation. This is of course not ideal, though in no case have I changed the meaning of what the respondents were trying to convey. During my time in the Acholi sub-region, I was able to learn some basic phrases and greetings, but would have needed at least two years to be able to conduct an interview by myself in Acholi, and as such I remain extremely grateful to my translator for his work, help, and friendship during the fieldwork.

Another concern at the start of interviews was that we were both men, and asking questions pertaining to complex and tense gender dynamics was likely going to be complicated, as women might not speak as freely to us about these issues. After conducting the interviews however, this does not appear to have been the case. Women were able to relate their stories to us naturally in most cases, and did not hesitate to say what was on their minds. The one limiting factor in this regard was when we interviewed men and women at the same time, or if during an interview with women, a man (male relative older than around 15) came to listened or participated in the interview, women did not give the same responses that they did when they were alone or with other women or children.

Observant participation has a key limit, however, which is that it reposes upon my interpretation of reality. This post-structuralist notion means that I will always have to be aware that I have an inherent bias. Semi-directed interviews were a way to solidify my research, as they attempt to relate the experiences of people directly from the source.

Conducting interviews with a wide array of people, from different professions, ethnicities, ages, genders, or religious affiliations was another way of reducing the bias. Having grown up in a white European context has shaped my view of the world, and it is certain that I hold certain preconceptions of what I might find or hear during the fieldwork. Even when attempting to be as open to other views and opinions as possible, interviewer bias relating to my own prior experiences is difficult to control for (Bernard 2017). To alleviate this as much as possible, I passed my questions through my colleague and translator, and asked my host family if what I was doing and asking made sense to them, or how I could change what I was doing to be more reflective of their realities. Even after having done this and having taken steps prior to beginning the fieldwork to remain as unbiased as possible within the hypothesis and framework, a certain bias likely remains.

7. Results

The results section will be separated into three main categories: Charcoal, gender dynamics, and access. Within these categories, results pertaining to each of the four areas covered will be given. Of course, there are linkages between each of these three main categories, so some overlap is to be expected.

7.1 Charcoal

7.1.1 General production

Charcoal production was present in villages one, two and four, but not present in area 3. In villages one and two, all individuals interviewed agreed that charcoal production greatly increased around 2007, after the last time they were confined in an IDP camp. Many people interviewed said that this was when charcoal production began in the area, and that it was whilst they were in the camps that they learned how to produce. Two respondents in village one noted that the Ugandan People's Defense Force (UPDF) soldiers showed them how to make charcoal. In contrast to these answers, one respondent in village one noted that they had been producing charcoal in the region since the 1980s, when individuals from Kitgum town came to the area to hire charcoal producers. This respondent noted that the quality of

wood used for production of charcoal differed greatly from this period from today. When they began producing they used wood from dead trees, whereas after the IDP camps only wood from freshly cut trees was used. In Village four, charcoal production had only begone "three to four years ago" according to one producer. In village four, a producer noted that the reason for charcoal production in the area began because people learned how to produce charcoal from "people from Kampala" who came to the area in a lorry and produced large amounts of charcoal to be sold in urban centres outside of Lamwo district. This was echoed through the other interviews in village four, where people perceived charcoal production as being a recent undertaking by farmers, years after the end of internment within camps.

There were certain tree species which were viewed as being the best for charcoal production. *Too* was unanimously cited by all people interviewed, whether producers or not, as being the best tree for charcoal production. Some respondents said that the wood used for charcoal did not matter. Echoing the statement from the producer who started in the 1980s, people noted that small bushes, dead trees, and fallen branches were not good for charcoal production. All producers cut a tree, built the kiln at the base of it, and packaged the final product at the same site. This was consistent in all research areas. No respondents transferred wood from one location to another to produce charcoal.

Seasonality of charcoal production, or the time in which people created charcoal, differed greatly. Some individuals preferred to produce in the dry season (November to March), with reasons being the lack of work in the fields and needing money for large festivities such as Christmas and New Years. Some others preferred producing in the rainy season (April to October), as the labour involved in constructing the kiln was reduced as the soil was softer and easier to dig, and the chance of kiln failure (burning of the wood within the kiln, resulting in ash) was greatly reduced by the moisture both in the soil used for constructing the kiln and in the lumber. Some people noted that they created charcoal when they needed the money, and that the season did not play a role in their choice. The inconsistence in responses concerning seasonality was consistent in all research areas.

7.1.2 Charcoal usage

One question which was asked to all producers was whether they consumed part of the charcoal they produced. One person interviewed in village one used a part of their charcoal, and was the only producer interviewed who did so. This individual noted “I live and study part of the year in Kitgum, so when I go there I bring 2 sacks of charcoal with me. On the road I get questioned [by the police] on what I will do with the charcoal, but since it is for my own consumption and its only 2 sacks I don’t have any problems.” All other producers across the villages made charcoal with the sole purpose of selling it, aside from the situation of the Lututuru prison farm. All individuals in villages one and two sold their charcoal in the Agoro trading centre. One person in village two sold part of their charcoal to a buyer in their own village, and one producer in village four sold a part of their produce in the Potika trading centre, although he noted that most of his produce was sold in the Agoro centre. This was explained to be due to the high demand for charcoal in Agoro. The respondent noted that “[Agoro] is where people want charcoal. It is easier for me to sell it there than Potika or Paloga (another nearby town with a trading centre).”

The case of the Lututuru prison farm is unique in the landscape in many ways. The farm was located at the most south-westerly part of area three, within Potika sub-county. It hosted around 70 inmates, and employed staff for cooking, cleaning, farming activities, and administration. Prisoners worked at the farm during the last months of their sentences. The prison farm had the objective of planting coffee extensively in the region, and as such had chopped down a significant number of trees for agricultural expansion. The felled trees were then used to produce charcoal, much different than the situation in the rest of area three. The head of the farm noted that charcoal was only being produced from trees on arable land, and that half of the charcoal produced was consumed within the prison complex for cooking. The prison farm had access to a tractor, making the transport of charcoal down the poor road a possibility. Unfortunately I did not find out where the sold charcoal ended up, nor how they managed to transport such a significant quantity of charcoal (when transported by tractor at least 20 sacks could be moved) without creating problems with local authorities.

Questions concerning the sale of charcoal were also interesting. People agreed that the prices of buyers changed from anywhere between UGX 18’000 and UGX 25’000 per sack of charcoal. People did not think that seasonality nor the quality of charcoal played a role in the price per sack. This was consistent across all villages. In bigger towns in the region like

Kitgum and Gulu, very high variations in the price of a sack of charcoal were reported during informal conversations, with prices being the highest in the early part of the rainy season and reaching above UGX 60’000 in Gulu.

Transporting produced charcoal to the buyers was straightforward from villages one and two, as it was close to the trading centre. If the producer had access to a motorcycle or bicycle they would transport it themselves, but in some cases the buyers from the centre would come to the village with their own means of transportation (although never on bicycle) and buy the charcoal at a slightly reduced price, typically UGX 2000 cheaper. Individuals in village four lived over 20 kilometres away from the Agoro centre and as such transportation with means other than a motorcycle was deemed unprofitable. Buyers from Agoro travelled to village four on motorcycle to acquire charcoal after being contacted through text by the producer that charcoal was available. This meant that producers in village 4 sold their produce for around UGX 15’000, less than the profits made in the other villages, though in exchange for the consumers to come to them.

7.1.4 Livelihoods

When asked if charcoal production was a secondary/positive side-effect to felling trees in the goal of agricultural expansion, with trees being potentially unwanted sources of shade or complications for tractors (difficulty ploughing around trees), all people interviewed in villages one, two and four said that charcoal was the main motivation in felling the tree. They did note that cutting trees for charcoal usually came with the other secondary benefits mentioned before. Simply put, if a tree was cut down and turned into charcoal, then charcoal production was the main motivating factor. In area three the situation was the opposite. Agricultural expansion was on an upswing, and agribusiness ventures promoting the cultivation of barley had dramatically increased in the area starting in 2017 according to one interview. During interviews in area three, people noted that the amount of farming had greatly increased in the past three years, and as such so had logging. The cut trees were a striking feature throughout the area, and the trunks were pushed to the sides of newly created fields. When asked why they didn’t make charcoal out of these trees, one farmer explained that “transporting charcoal to Agoro or Potika would take too much time and energy. If we could make charcoal and put it onto [the agribusiness company’s] tractor maybe we would.” The case of Lututuru mentioned previously shows even another angle of

this, where agricultural expansion was also the main driver of logging, though charcoal was produced from the trees.

As another form of income, some respondents (both charcoal producers and not) also made terracotta bricks in villages one, two and four, and cut down trees for this purpose as well. The wood used for producing bricks was more wide-ranging (more species were used) than for charcoal, and included dead wood. In the months prior to the fieldwork, I had witnessed a large tree between village 1 and the centre cut down by a group of men and the chopped wood transported to various brick burning sites over the course of a month. Brick burning was only done in the dry season (November to March).

Some women interviewed in villages one, two and four also sold firewood as a secondary source of income when necessary. This involved the difficult job of collecting and then transporting the bundles by foot to the trading centre. The return on investment for firewood was much lower than that of charcoal, with a bundle of firewood selling for UGX 5000 in Agoro centre. Women preferred to do this work as it was considered less physically intensive than producing charcoal. One woman in village one said “For firewood you can pick up what is on the ground and you can use bushes. It is easy to cut.” She continued by noting that any wood could be sold as firewood, tree species did not matter.

Another way people were able to make money in a short amount of time was working in other people’s fields. This was sometimes done through village communal work called *awac*, where people were hired to do agricultural work for a day in exchange for food, alcohol and a small amount of money. This was consistent across villages one, two, and four. *Awac* was not as prevalent in area three. In area three, communal work was commonplace, though not through *awac*, but through organisation through traditional institutions (clans) where members would work together, rotating between each others farms. In village two, many women and children were employed to work, as one respondent said, “In rich people’s gardens”. Typically “rich people” were male business owners living in one of the trading centres in Lamwo or in a larger city in Uganda (one who I was able to discuss with actually lived in Kampala), but who still possessed ancestral land (ancestral land will be detailed further on in the results section) that they wanted to be productive. Having spoken informally to one of these people, it appears that they want to maintain a connection to

their homeland, and use the fields as a reminder that they still care about their village and clan.

7.1.5 Perceptions about charcoal

All individuals interviewed in villages one and two perceived the overall tree-cover in the area to have greatly diminished since the IDP camp period. Everyone considered charcoal production as being a main cause of the reduced forest cover. There was not a consensus however on if charcoal production was increasing or decreasing. Some thought that overall production was lessening due to fewer numbers of trees, or at the very least stagnant, and others thought it was increasing with the younger generations beginning to produce charcoal themselves. In area two people noted major changes in the region in the past three years, with forest cover diminishing on arable land, and not in the adjacent forest reserve. In village four people generally thought that the tree cover had diminished since the IDP camp period, though charcoal was not deemed to be the main source of forest loss. People instead thought that it was to make room for agriculture. One farmer in village four said that charcoal production was rapidly increasing in the area, due to higher tree cover than in Agoro sub-county, and that more and more people were starting to produce. It should be reiterated that in village four it was explained that charcoal production had only begone since around 2017.

Almost the entirety of respondents said that they were worried about the loss of trees in the region. The main reason given for why trees were important was that “they bring rain”. Though “stopping wind” was a frequent secondary response. This was a rhetoric used across Uganda, and was written on some T-shirts promoting some environmental NGOs. The general feeling for most respondents was that they felt that their environment was being degraded, although they did not have a choice in the matter. In order to improve or maintain their livelihoods, cutting down trees in urgent cases was still deemed necessary. Negative aspects of the diminished tree cover other than reduction in rainfall which were mentioned were the need to look further for firewood or construction materials. Some people said that they did not know what the benefits from trees were, and expressed frustration with initiatives to stop them from cutting trees.

In terms of general perception of charcoal production as a whole, for both producers and non-producers, most people saw it as a way to alleviate poverty when necessary. Some reported that it was positive, as it was a good way to make money, some that is was negative and had a bad impact on the environment (the case of two out of three local councillors that I had the chance to speak to). However, the perception that it was just a normal thing to do sometimes was the most common answer.

Charcoal producers were not perceived as being poorer or more desperate than people who sought out other livelihoods. During the interviews, nothing indicated that producers were poorer or more desperate than anyone else in the study region. Charcoal production was more on a case to case basis, with some producing in urgent need, like a mother and daughter required to pay a hospital bill, and others producing in high quantities for partly personal use like in Lututuru. Some people just produced to compliment their other sources of revenue, like a producer in village four.

When asked if most people produced charcoal, most respondents replied no. During and interview in village one, the respondent noted “Maybe most people have made charcoal once or twice.” Many people who responded that they had produced charcoal indicated that they had only done so on only a few occasions or when in urgent need.

7.1.6 Other results

A few initiatives promoted by the National Forest Authority, notably in villages one and two, concerned planting trees as a way to replenish tree-cover in the areas. These initiatives went through the local councils of the villages, who were given tree seedlings. The trees planted were non-indigenous species, mostly red and black teak. According to an agronomist, the idea behind growing the teak tree was considered to be about creating additional livelihoods, in the form of carpentry, for which teak wood is used. As of the time of writing, this had not yet yielded success, as the trees take a while to reach maturity. There was disagreement on the usefulness of these trees. Many people were very willing and supportive of these processes, noting the need to assist the NFA and play their part in protecting the environment and in finding new job avenues for the youth. Others were frustrated with the trees, as they did not understand they were wasting their time, effort, and land on something for which they would likely never profit from.

In terms of end use of charcoal, I spoke with some buyers in the Agoro centre. This was not noted in the methodology as it was more for personal interest, and to check if, like in the study by Agyei et al. (2020), there were merchants in the centre buying and shipping charcoal away from Agoro. Charcoal merchants were not present in the trading centre. Buyers were either richer families who preferred cooking with charcoal, and to avoid smoke in the denser trading centre, restaurant/hotel owners (there were two hostels in the trading centre), or chapati/"Rolex" vendors. One business owner stated "My wife is from the city and does not know how to cook with firewood! Anyway charcoal is better." The origin of the charcoal they bought varied, but was always from either Agoro or Potika sub-counties (with Potika being the source of charcoal for three of the five respondents). The varied responses concerning seasonality continues with their responses, with one claiming that charcoal was cheaper in the dry season, two saying that it was cheaper in the wet season, and two saying that "it does not matter, the price is always the same".

7.2 Gender dynamics

7.2.1 Charcoal production

Both men and women produced charcoal in villages one, two and four, however all but one person interviewed agreed that men produced more than women. One woman in village two said that women produced more than men. Some men in villages one and two said that women did not produce at all. Four different women noted that they produced charcoal on a yearly basis, but hired men to cut down the tree and build the kiln in exchange for food, *Kwete*, and a small amount of money. The process of hiring people from the clan/village to do work or assist in the field is called *Awac* and was common in all agricultural undertakings. I do want to reemphasize that *awac* is different than organised clan work, as awac is initiated through the individual and not through the clan. This will be highlighted in the "Access" section. Whilst in this circumstance it is men who did the physical labour involved in producing charcoal, I consider this to be an instance of women producing charcoal as it is the women who made the initiative to produce, had access to a tree which she chose to cut, and who harvests the final product, packages it, and sells it. It should also be noted that during three different interviews in village one, people made note of a woman who produced charcoal by herself before, but had since left the area. Two women noted that

they had produced charcoal together before on one occasion, but had not attempted to produce charcoal since after the intense labour only resulted in a failed kiln.

The main reason given for why women produced less charcoal than men was the intense physical requirements to cut the trees and build the kiln. The difficulty of producing charcoal was reported by all respondents, men included. Nobody viewed it as easy work. Women frequently perceived themselves as being too weak to produce charcoal, and some elderly men stated the same. All respondents viewed women as being physically weaker than men, and that if women did not produced charcoal it was because of this. One woman in village two said “My husband injured his back cutting down a tree to produce charcoal. If he could not do it how could I?”

Whilst the amount of labour required was the primary reason agreed upon by everyone which limited women’s access to charcoal production, some individuals saw the time constraints needed to produce charcoal as being a barrier to produce as well. During a group interview, three young charcoal producers from village one said “Women have a lot of work to do in the household, they cannot find time for charcoal” This sentiment was echoed by women in villages one and two, with the woman in village one saying “I would like to produce charcoal if I had the time and my health.” Gendered access was also slightly touched upon in one interview when one male producer in village four noted that women did indeed produce charcoal, but that his wife did not because he was the one who produced in the household.

7.2.2 Reasons for producing

The reasons for producing charcoal were similar for both men and women. Paying school fees was an almost unanimous response, with only younger (unmarried) producers being unconcerned by this. Paying medical bills and preparing for big events (funerals, marriages, holidays, and social gatherings) were noted by both men and women. Some answers differed by gender. Responses only given by women were related to work in the household such as the addition of new kitchenware or food items such as salt. Men in all villages admitted that they used a part of the money on alcohol, though not all men admitted to this. Younger producers (both men and women) produced to be able to acquire beauty products and clothes. These younger producers also all used part of the money to assist their parents

in whatever endeavours they were doing. Two women producers in village two, mother and daughter, relayed their story of the one (and only) time they produced charcoal. “My husband fell sick, so to pay the medical bills we made charcoal from this tree [next to the home]. We hired men who had a chainsaw to help cut the tree. We made 11 sacks of charcoal.”

When asked what men used money from charcoal (and in general) on, the majority of women in villages one, two and four replied that alcohol was their main expenditure. Many women nuanced this response by saying that this was not the case of every man, but the general situation. The recounts of the expenditure of men could be quite scathing. One woman in village two noted a tragic situation: “He will come here drunk looking for money, and if he does not find any he will beat me.” When men were present during interviews, women never gave these responses. Women and men both perceived alcohol consumption as being the major problem in the region as a whole and that whilst most people (women included) drank alcohol, the amount and potency of alcohol had increased since the time in the IDP camps. They noted that it was within the IDP camps that new alcohol from other regions (Lira in particular) had become available, and that many people started heavily drinking at that time. This was the case in every area in which interviews were conducted. Alcohol consumption was also high in area three, however imported drinks were rarer. Details on alcohol consumption will be relayed below in this section.

When asked about women’s expenditures, men noted that they had same reasons as themselves for producing charcoal, i.e. paying for school fees, funding events, and medical bills. However this was only if they acknowledged that women produced charcoal. In general, men acknowledged that they consumed more alcohol than women, and that part of their money from charcoal was spent on it. They did stress that alcohol was not their reason for producing charcoal, even if some of their revenue was spent on it.

7.2.3 Gendered labour

When questioned about gendered labour, everybody interviewed in villages one, two and four noted a shift since the time in the IDP camps. Prior to confinement, there was traditionally a strong separation of labour based on gender. According to interviews with elders (Mzee and Ada/Mego) women were in charge of all aspects involving household

maintenance. This included cooking, fetching water, brewing alcohol, purchasing food and pots, and collecting firewood. Women also brought food and *Kwete* (millet alcohol) to men working in the fields. For agriculture, women were tasked with sowing seeds and harvesting. Women were also responsible for teaching young girls everyday skills and depended on them for assistance in their various jobs. Men ploughed the earth, hunted game, and constructed buildings. Men taught young boys how to do these tasks and were also frequently assisted by them. All elders and people who remembered the IDP camp period agreed that many changes occurred concerning gender roles once they were able to return to their homes. After the IDP camps, women also participated in ploughing, in some cases doing the entirety of agricultural labour required to produce crops themselves, and also taught boys. This meant that the overall workload for women had greatly increased since returning to the village after the time spent in the IDP camps. In interviews, women were deemed by a large majority of people interviewed (and by all women) to have more work than men. To compensate for this, children were frequently made to accomplish many errands that women did not have time to do. Children fetched water, travelled to the trading centre for goods, and sold items at the small village markets to assist their mothers. Whilst both boys and girls did these tasks, girls were definitely required to do more. Boys would never help with cooking, for example, aside from preparing the fire. Whilst speaking informally with my hosts, I was told “When you have many boys and no girls, the boys are very disciplined and do a lot of work. When you have both boys and girls, the boys are lazy and the girls do all the work.” This corresponds to all I had observed during my time in the village.

The reasons for the strong shift in gender roles were explained by two women in village one, and confirmed by two more in village two. During their time in the IDP camp, Oxfam, in what seems to be an attempt at increasing women’s capacities, gave them hoes so that they could plough the fields that their deceased or injured husbands could not. According to these women, within the camps men let women out to do manual labour (such as ploughing or collecting firewood) whilst they remained within, as it was safer. They also said that alcohol had become available and men did not have anything to do besides drink, as the women were working.

One man explained why he did not plough his fields because “I have three wives. If I plough the field of one, the other two will be jealous.” The man continued by saying that alcohol

consumption was important for him as a source of comfort. “If I have problems, I drink to forget about them.”

This shift in responsibilities was a source of frustration for women. Five women interviewed in village one said that men were not being responsible enough, and that they and their children would do the fieldwork that their father should have done. Alcohol was deemed a main reason for this, with one women stating “They drink too much at night so they can’t work in the morning, and since they’re too late for work they go just back to the bar.” Home-brewed *waragi* (gin) was the most consumed alcoholic beverage in all areas. *Waragi*, *Arege*, and *Guu* were the strongest and most common spirits which were drunk. *Guu* was a ready-made alcohol imported from Lira, highly consumed in villages one, two and four. *Arege* was a strong spirit which was also traditionally made from sorghum. *Kwete* was a much lighter home-brewed millet beer and was consumed during events such as marriages, funerals, and clan gatherings. *Kwete* was also taken when on break in field work, sometimes alongside *Arege*. In all four research areas, women were responsible for brewing alcohol.

Whilst the shift was deemed especially stark in villages one and two, in village four the same differences were noted, although less pronounced. Whilst some women were involved in ploughing, according to a few discussions they never did it alone (unless in the case of a small vegetable garden). A system of “work rota” was strongly implemented in village four, in which clans would organise to work in a specific member’s field on a specific day. Both men and women participated in these gatherings and did the same manual work (although men did more in terms of ploughing, and were responsible for managing cattle hired to plough, and women did everything concerning food and drink). This sort of organisation was present in villages one and two, but not to the extent that it was used in village four. In area three, the people who lived there year-round all stated that traditional labour roles were similar to before the IDP camps, with a strong separation of labour and with men ploughing fields. In area three, people who lived there year round on the Potika side went to the same IDP camp (Potika) as people in village four, and people who worked in area three but who were from a village in Agoro had been sent to the Agoro IDP camp. People from villages one and two were in the IDP camp in Agoro.

In village one, collectives of youths, comprised seemingly equally by both boys and girls, would ask elders for land which was then given to them by the *Rwot Kwere* (an important

clan elder whose role will be detailed further on in this section). These collectives of between 6 (the smallest one) to around 20 youths would work together on a set day of the week, from sowing the field up to harvesting the crops. One member told me that they were friends from the same clan and wanted to make money by selling beans and cassava, but were going to give part of the sorghum and maize to their families.

7.2.4 Other gender dynamics

A few aspects of Acholi culture were important concerning gendered access to land. In principle, according to the literature on the subject (Dolan 2002), women did not actually possess land as they were married into their husband's clan and were therefore considered "outsiders". This, combined with women's lack of agency within clan dynamics, to which they could not participate (Dolan 2002), meant that in principle women had no rights to land, and any decision in a household had to pass through the family patriarch (Dolan 2002). During my time in the region, I had the privilege of participating in a clan meeting, in which women were very active and vocal. As mentioned in the literature review, the time in the IDP camps changed many aspects of gender dynamics, and notably gendered labour. In particular, the participation and responsibility that women had in agriculture had dramatically increased, and people did not consider them to be excluded from land. The Rwot Kwere briefly mentioned that "There are fields which a man may give to his wife to do what she wants with it, and even in the clan there are women without husbands who we give land to." This response indicates that women have more control over land than previously, and also that even though customs remain patriarchal, women have more acceptance within clans.

7.2.5 Final Remarks

One aspect which caught my attention halfway through the fieldwork were "village saving loan associations (VSLA)". These were programs initiated by NGOs to help people attain financial stability through group saving, and using the savings as a bank in case of a spontaneous need of a large quantity of money such as a funeral. All people who I spoke to who participated in these saving schemes were women, and they agreed that almost all people who partook in VSLA were women. One women had stated that the saving program was the reason that they started producing charcoal "Every week my group needed to put

money away to save, I could not contribute enough, so I needed to find a way to make more money, so I started making charcoal." It should be noted that many women seemed frustrated with the saving program, saying that it felt like others would use the money and not them, and when they needed it "it was no longer there".

7.3 Access

7.3.1 A Web of Rights

In village one (but in every area in which interviews were conducted) access to resources was administered by clans and by the elected local government. I'll use the case of village one to demonstrate how these two important entities worked together. As stated in the methodology, village one was actually split administratively into two, with two village leaders representing the north and the south of the village. These leaders were democratically elected and reported to the "LC3" (elected chairman of Agoro sub-county). The entire village (both administrations and parts of neighbouring villages) were all a part of a same larger clan. This large clan was split up into "sub-clans" to allow for better governance. Each "sub-clan" had an official leader who was elected by elders. This leader played a major role in the organization of the "sub-clan's" agenda and for defending the interests of the "sub-clan" during meetings with the greater clan. From this point, when referring to clans, I will be addressing the sub-clans, as they were the most active at the village level. Clans are important for organizing communal work in which members would help others in the fields, a social base for hiring workers (*awac*), for organizing events, and for pooling resources to purchase shared items (such as a mill or tractor). Participation in clan events was extremely important. Elected village leaders also participated actively within in clans. This set-up creates a web of legality and rights that is complicated to properly navigate. In the areas in which I carried out interviews, clans were responsible for all issues concerning land, and the organization of agricultural and cultural activities. The elected village leaders carried out tasks which were handed to them from the sub-county, and it is through their administration that government projects (such as schools or certain agricultural initiatives) were spearheaded. In short, the land is set up and governed in two ways which work co-dependently. Village officials depended on clan elders to assist with issues concerning land, whilst being themselves involved in a clan, and the clans went through the elected officials to pursue objectives which did not involve land (improving

schools, finding grants to build infrastructure etc.). To make this situation even more complicated to a degree, the “parish model” was used as a tool by government to overcome the divisions between village and clan, and divide people by which parish they belonged to. This was a very interesting way of using an entity without ties to a particular village or clan, or area to enable voting and conduct censuses. Whilst the parish itself was not responsible for administration, it was an easier way for the sub-county, district, and national government entities in governing the population whilst sparking the least amount of tension due to clan affiliation as possible. The parish model, whilst important to mention, was not an integral part of the study.

Access to charcoal was therefore entangled within a web concerning both clans and village. In all villages, as well as in area three, the clan was the most important entity when it comes to using natural resources. In village four and in part of area three, access to resources becomes slightly more complicated, as the Mar Yen collaborative forest management group also had a role to play, however this concerned mainly the Agoro-Agu central forest reserve.

7.3.2 Importance of the Clan

Land use within village one, but across the Acholi region as a whole, was explained during an interview with the Rwot Kwere, a clan elder (but not the leader) of a larger clan (spanning more than the just village one) in charge of settling land disputes and diving communal lands for clan members. According to him, all land is owned by one clan or another. This was to prevent outsiders from claiming the land as theirs, or from a neighbouring clan from encroaching. Clan land is separated into ancestral land, which is used by a particular family/individual and has been passed down through generations, and communal lands, which are shared between clan members. Every clan member is granted part of the communal land based upon household size and the potential of the clan member to benefit from the field. This depends on the member’s available workforce, tools, and income. The Rwot Kwere noted that the issue of income disparities, with the rich receiving more land, and therefore more money, was addressed by revenue sharing on the profits from communal lands, and extra assistance given to poorer families within the clan. The main goals were to have the clan be as productive as possible and assist poorer households. This is a complicated job which requires much mediation between parties within the clan. The Rwot Kwere noted that there were no conflicts surrounding communal lands within the clan as

decisions were made transparently and together. This is support in how nobody interviewed mentioned having conflicts concerning communal land. Every year the communal lands shifted to allow for the land to lie fallow. In the case of village one, a third of the communal lands were cultivated every year, and the other two thirds lay fallow. Charcoal production was allowed on communal lands, although clan members were required to make their intentions of cutting down trees known. Trees were important landmarks for separating fields and knowing clan boundaries. The Rwot Kwere noted that he preferred the trees not to be cut down, but understood the necessity of doing so in some cases. If a tree was to be cut down, he wanted to be informed of it so that the boundaries and his knowledge of the land would remain intact. Landmarks such as trees were considered immensely important in the current climate in which land conflicts were frequent and extremely violent. Whilst I was fortunate enough not to witness any violence related to conflicts over land use, on two occasions during my fieldwork people had been brought to the police station in the Agoro trading centre to resolve conflict between two people from different clans who were sabotaging each others field by burning the others' crops. In an informal conversation with my hosts, they highlighted that two years prior one clan in a neighbouring village had attacked another over night, and some people were killed and over 20 people had been hospitalized. During the interviews, two individuals in village two noted that they had experienced conflicts over land: "A few years ago there was a problem where someone had cut some of my crops, saying that that was their land. [This person] was from my clan. We needed the council of elders to sort out the issue."

Ancestral land was used by the clan members who inherited it and was not subject to distribution by the Rwot Kwere. As depicted in the example above, land disputes over ancestral land within the clan (and even within households) were common, and in these cases the Rwot Kwere and clan elders needed to intervene and find compromises. Ancestral lands were typically closer to the village and were therefore more actively used. Growing the size of these fields by expanding into the neighbour's was therefore beneficial, and a common occurrence. Furthermore, in some cases the inheritance of ancestral lands was unclear, and elders needed to decide which offspring would receive which part of the land. Cutting down trees on ancestral land was allowed.

Land conflicts also arose over land given to "outsiders", people who were not of the clan but who settled in the village and were granted arable land from the elders. Once given, the land

was theirs to use, however issues arose upon their death when their descendents laid claim to the same land. This was an issue on the return to the villages after internment as well. The Rwot Kwere explained that conflicts between clan members and the descendants of the "settlers" were common throughout the region.

Many individuals (all men) who were part of the clan but who lived elsewhere in the country for work, wished to hold onto their land. This was mentioned in the "Livelihoods" section, however, instead of hiring people to cultivate their fields remotely, they sometimes sent their wife to work in their absence. Women coming from as far away as Mbarara stayed seasonally in village one to produce crops. These women (typically wealthier than the villagers) always went through the clan to determine the fields in which they worked, and hired men and women through the clan to assist them in their labour. These women never produced charcoal. This practice of cultivating their husbands land was considered, just as in the case of "rich people" paying for labour, a way to retain hold on ancestral land and contribute to the clan remotely. I witnessed a large disagreement between one women and the women she had hired to cultivate her field, where the workers were upset at the low wages they were paid, and the migrant woman was angry that they refused to work, calling them "lazy".

These women were the migrants in the area, and the issue concerning South Sudanese migrants potentially producing charcoal did not occur in the Agoro or Potika sub-counties. The refugee camps, located in Palabek sub-county were on the other side (west) of Lamwo. Whilst South Sudanese refugees sometimes went through Agoro on their way to Palabek (I witnessed a van full of children headed to the refugee camp), they did not use land within the study area.

7.3.3 Role of the local council

Whilst the clan was the most important entity concerning access to natural resources the village government also played a role. The village leader (in all administrative villages of the Agoro) was approached members of the National Forest Authority, and one member of the village was elected to carry out the agenda of the NFA. This person went to a training session in the sub-county headquarters alongside the others from all villages in the sub-county, and were tasked with promoting tree-planting and halting the cutting down of trees. The full

legal basis of what this individual was allowed to enforce is not entirely clear, though it appears as if it is only a form of promotion. Speaking with the individual who had this task in village one, she said that her main objective was to dissuade people from cutting down trees, promote the message of "if you must cut down a tree, plant two", and to get people to produce charcoal or firewood only from dead trees. She noted that after the training session, she received no monetary support from the NFA, and was not well supported by the village officials. She said that her message was ignored by people who did not understand why she was telling them to not exploit their land. After two years of scorn from fellow villagers and lack of support from the village leader, she decided that promoting the NFA message was not worth it and stepped down from her duties. When questioned about this situation, the village leader (LC1) of the north half of village one (quick reminder that village one is administratively separated into two, with one elected leader for each half) noted that he found it difficult to support the NFAs agenda as he could not justify telling people what to do or not to do on their land, and that land use (and cutting trees) was mostly regulated by the clan in any case. He did agree that promoting tree-planting and limiting cutting was important, but enforcing it was very complicated and required more incentives. In village two, most people interviewed felt that the individual in charge of promoting the NFA's agenda was doing a good job and that even if they continued cutting down trees, they were more conscious of the environmental impact that had.

7.3.4 Agoro-Agu Central Forest Reserve

In village one, nobody had access to resources from the central forest reserve. Being too far away to be profitable, all woody biomass for firewood, construction, and charcoal was collected on clan land, and hunters stayed in the area as well. General knowledge on rights to the resources from the forest were not known. In village two, most people preferred not to enter the CFR, as they had what they needed on their own land. Men went into the CFR periodically to hunt and find constructing materials, mainly poles. They stressed that the poles were cut from trees, but they never cut down whole trees within the CFR. When asked if the poles could be found on arable land, one respondent said that the right trees and best branches were now only found in the forest, though "years ago" it was possible to find them everywhere. Women went into the CFR to collect firewood, however not all women did this. One woman said that they refused to enter the forest because "… it is a bad place to go to, you may hear a baby cry and go to find that there is nothing there." When relaying this

information to my hosts, they confirmed that there are spiritual beliefs surrounding the forest and many people do not think that it is safe. Nobody else mentioned similar stories during the interviews. In village four all people interviewed said that they rarely ventured into the CFR at all as the right trees for construction material still grew on their land. In general, some people used resources from the CFR if necessary, but all stated that it was typically a rare occurrence. In area three the forest was used for the same reasons as in village two. Hunting in area three and village four was very important, especially during the dry season, and many people noted that as the most important aspect of the forest. One woman in village two noted that she used plants found within the forest for medicinal purposes, but neither me nor my Agronomist partner were able to discern exactly which plant this was, as the word used for it was likely highly linked to a local dialect of Acholi.

Figure 10: The CFR boundary marker

A final point concerning access to the CFR are the question of boundaries. In village two, many people complained that the boundaries were unclear. “At first there was a pile of stones that had been here since the British. In 2016 the NFA put up posts, but they are not everywhere.” notes one respondent. When asked where the CFR begins, most people said “where the trees are thicker and the ground starts to slope.” and some had no idea that there were any markers. In village four there were also posts indicating where the boundary to the CFR began, however there were very few of them. In area three, there were no markers at all. The perception of control over the forest was also confusing. Some people in village two and area three noted that it was owned by the adjacent clans, some people in area three and village two said “nobody”, and those who cited the NFA were the minority (and two of the three who gave this response were local councillors).

7.3.4 Mar Yen Collaborative Forest Management

In part of area three (the Potika half) and in village four, the Mar Yen collaborative forest management group was also involved in access to the Agoro-Agu central forest reserve, and as a legal extension of the NFA, took on the role which was given to elected individuals in

Agoro sub-county through the local councils. In this regard, the group as a whole promoted the idea of tree planting and reducing the cutting of trees. The group also worked together in the implementation of a tree-seedling nursery. At the time of writing, the nursery was discontinued as the land used had changed ownership and the new owner did not want the nursery to continue to be on his land. This is another instance of conflict over land use which were so prevalent in the current Acholi political climate. The group also possessed beehives, from which they hoped to expand their group through profits (though leaders reported that a large number of beehives had been damaged by fire or were stolen), had yearly meetings, and could count upon other members for farming assistance if necessary. At the time of fieldwork, Mar Yen had 587 members according to the group's leaders, with a close to equal spread of men and women. The people in positions of power in Mar Yen were all men, aside from one woman who was head of the women's group. Being the result of decentralization, Mar Yen was in charge of administering and enforcing access to the CFR. In discussions with Mar Yen leaders, they noted that access to the CFR to collect resources (building materials, hunting, firewood, etc…) is allowed during three days of the week. Cutting down trees within the CFR was not permitted. They noted that enforcing these rules were quite complicated, and that the area of the forest that they needed to administer was very large. Even if someone was caught infracting, they never pressed any charges and attempted to explain why access to the CFR needed to be limited to allow for an abundant forest with lots of game. Mar Yen was also present in area three, and had a couple of members there. However, do to the low accessibility of the area, Mar Yen was not very active there. An elected official in area three said that they had been in contact with Mar Yen leaders two years prior, however they had not seen them since. Another inhabitant of the Potika half of area three noted that there were a couple Mar Yen members there. When asked about the rumours of "people from Kampala" who came to harvest charcoal and export it in a lorry, a leading Mar Yen member said "Yes, they called me and I indicated in what part of the forest they could cut trees, usually in places far from the villages. In exchange they gave me UGX 100'000." It should be noted that the rumours of these producers were also present in village two and had spiked my curiosity prior to interviews in village four. An elected official in village two had told me that "the lorries you see passing through, they do not come from here but from [village four]."

To become a Mar Yen member, one needed to pay a yearly tax, and in exchange they were invited to meetings, could have members support them in the field in some cases, and had

access to new livelihood opportunities and specialized tools, such as beekeeping and protective gear. Whilst membership appeared straightforward, two interviews indicated that there were tensions both within the CFM and with the Potika community at large. When speaking to a local beekeeper, asking him why he was not a part of Mar Yen, he said: “I sent in my application and had the funds, but they stopped me joining.” During an interview with a Mar Yen member (but not a leader of the group), he noted that Mar Yen was not doing much any more except “asking for money.” He believed that there were “problems” between leaders within the group. When approached with questions surrounding potential exclusion of people from Mar Yen or a reduction of operations, a Mar Yen leader said “It has been difficult in the last year. We no longer have funding from the International Union for the Conservation of Nature, and the NFA does not help either. Land conflict has made it complicated too, and also corona.” He continued by saying “Maybe some people can pay, but in the end we [Mar Yen leaders] decide if the applicant will be a benefit to the group or not.”

The leaders of Mar Yen made note of a few frustrations other than their dwindling funds. First was their lack of control over the site of Lututuru, which was located in the enclave of the central forest reserve (in area three). This was potentially the most appealing touristic destination in Lamwo district, due to the views offered and its history. According to reports by multiple sources, both Idi Amin and a king of England (likely George VIII) had stayed there (though naturally at different times). Mar Yen wished to develop ecotourism and charge visitors for access to the site, which was currently controlled by the prison farm mentioned previously. The second frustration came from logging operations in the area. Whilst Mar Yen said that they tried to stop as many of these logging endeavours from leaving their territory, they had issues as the person in charge of these operations was “a rich businessman and politician in Kitgum”, and as such they had difficulties in fighting for their rights.

7.3.5 Legality of charcoal production

When asked whether or not charcoal production was legal, or if a permit was perhaps required, as it was in some parts of Uganda (Khundi et al. 2011), people said that there were not formal restrictions on the production of charcoal. Many factors mentioned previously (clan, and access to land and trees which could be turned into charcoal) could limit charcoal production, however whilst extremely important, these were not factors which related to

governmental control and law. Some people noted that they would not have any problems if they only produced small amounts of charcoal, and if they only sold it within Lamwo. One respondent reported a rumour that one person who wanted to sell sacks of charcoal in Kitgum had their entire load burned by the police, losing everything. The overall legality of charcoal production, transport, and sale, was very unclear, and I was unfortunately unable to speak to NFA Lamwo (who had their offices north of Padibe, a significant distance away from Agoro) during my fieldwork. The one aspect which was certain was that logging and charcoal production were illegal within the CFR.

8. Analysis

The analysis section will begin by summarising and analysing the takeaways from the results section. As such, the beginning of the analysis cover charcoal production, gender, and access as main topics. After doing this, a more focuses analysis concentrating on the research question, follow-up questions, and hypotheses can be made.

8.1 Charcoal production

8.1.1 Initial observations

The fact that charcoal production was present in all villages but not in area three (not including the prison farm) is an interesting result. This is a strong indication that access to a charcoal market is a key factor when producing charcoal, and area three was the only area without easy access to the Potika and Agoro centres. Furthermore, the prison farm had access to a tractor to transport charcoal, a factor which enabled access to markets. The respondent who noted that if they could use the agribusiness' tractor they may have produced charcoal gives this argument a strong basis. This result can be developed further by taking into account the fact that people routinely transported beans and other crops on foot from area three to Agoro and Potika, and considering that many felled trees, cut for agricultural expansion, were lying unused in fields. This highlights a key dynamic concerning charcoal production in the region as a whole. This is that charcoal is at best a secondary source of revenue and produced in times of need (urgencies such as medical care), to assist

in funding high-cost events, for one-time payments such as school fees or funerals, as spending money (for alcohol), or a combination of all of the above. This corresponds fully to the work by Jones et al. (2016). The case of Lututuru also emphasizes the work by Jones et al. (2016), showing a situation in which charcoal production was not the primary reason for cutting trees, and where part, but not all, of what was produced was for personal consumption. This shows extremely unique differences in use and production of charcoal within a very small region.

A second observation was that the central forest reserve was not a source of charcoal for any producer, nor was it perceived as such by non-producers. This result can be contrasted to the report by Thembo et al. (2017) which note illegal charcoal trade by neighbouring communities as a major challenge to forest conservation. The direct impact of charcoal production on the forest reserve by the neighbouring community appears to be non-existent (though with the exception of a Mar Yen leader granting access to “outsiders”, which will be analysed later). It is possible that charcoal production in the landscape has had an important indirect impact on forest conservation, as it may be a factor pushing people to use forest resources more heavily with the rarefaction of these resources in communal lands. This is supported by the respondent in village two who said that the forest was used for collecting building materials and firewood, which were becoming increasingly difficult to find (particularly building materials) outside of the forest. This is further supported by the perception of respondents that charcoal has had a major impact on forest cover in the region. The report by Thembo et al. (2017) does state that charcoal has a direct impact on forest resources from the local population, which, according to all data collected, is false. This is seemingly a case of “received wisdom”, where a situation which may be present in other parts of Uganda, or just a preconception of charcoal production and the local population had already shaped their analysis.

A final initial observation is that there were no defining characteristics of charcoal producers. Men and women, young and old, rich and poor, all produced charcoal, or did not, each for specific reasons. This corresponds to the articles by Branch & Martiniello (2018) and Jones et al. (2016). This observation will be expanded upon in the analysis.

8.1.2 Choice of wood

The result in area three contrasts to the responses given in all three villages however, where cut trees were never left unused, and were transformed into building material, firewood or charcoal. From the interviews and discussions with an agronomist, everything indicates that if a tree was a species which provided quality charcoal, producing charcoal was the main motivation in cutting it. Quality charcoal in this case refers to two distinct factors. The first was the actual quality of the end product, the calorific capacity of the charcoal, which was given by respondents in the more qualitative measure of "amount of charcoal needed to cook beans." This was a factor which created links of trust between buyers and sellers of charcoal. If a producer made better charcoal, they would have a reliable network created with buyers in the trading centre. The second factor is kiln success. Dead wood was never used to make charcoal as it would frequently burn in kilns, and some tree species were said to be only used for firewood, as they were prone to turning to ash within the kiln as well. Some species, with *Too* being unanimously cited, had high kiln success rates and provided good charcoal, and were therefore primarily cut for this purpose. Having expected dead wood or smaller bushes to be used in charcoal, as was mentioned in the article by Naughton-Treves (2007), I was surprised when only the felled tree was used and the kiln built at the site of cutting. These results are not in accordance with Jones et al. (2016), who reported that charcoal production was frequently a secondary consideration for farmers in their study area. Jones et al. (2016) showed that trees were felled for agricultural expansion, and charcoal production was an afterthought. In the case of my fieldwork, when trees were cut for agricultural expansion, they were not always turned into charcoal, and when trees were cut for charcoal, it was not for agricultural expansion (although respondents noted that cutting trees for charcoal came with some agricultural benefits). That is not to say that agricultural expansion did not play a role in the landscape, it definitely did, and will be expanded upon further on in the analysis.

8.1.2 History of production

Another result which was interesting was the time when charcoal started to be produced. Whilst it appears to have been present in the region since the 1980s, it became mainstreamed after confinement within the IDP camp in Agoro, and around 2017 in Potika when farmers learned how to produce charcoal from the workers "from Kampala". From these results a few hypotheses can be made concerning charcoal production dynamics. Firstly, this situation seems to showcase that access to a market is the main driving force

fuelling charcoal production. The road between Potika and Agoro had been greatly improved sometime in the mid 2010s, allowing for better transport between the two communities. Demand in Agoro took off when businesses reappeared once the insecurities in the region ended, and charcoal became a sought-after commodity again. Without demand, charcoal is not produced, and without a ways to transport charcoal to a market, charcoal is not produced. Secondly, the differences between the two areas could have been a result from confinement in different IDP camps, with the own specificities. In Agoro multiple respondents reported that they had learned how to produce charcoal from UPDF soldiers whilst in the camp, whereas this was not the case in Potika. In these different contexts, charcoal production developed differently, indicating that it is highly linked to very localised contextual elements. A third hypothesis is that charcoal production in Potika took off after the supply of charcoal from Agoro sub-county no longer met the demand in the Agoro trading centre, and buyers needed to look elsewhere for charcoal. This could be due either to a growing demand or dwindling charcoal supply due to forest degradation. These hypotheses could not be tested during this study, and had much to do with the history of the region.

8.1.3 Impact on the landscape

Another very interesting takeaway was that all charcoal in the region was consumed close to the source of production, and (almost) none was transported to large urban centres. This was surprising to me, as the Agoro centre is quite small, yet all of the charcoal produced in Agoro and Potika seemed to be sold there. Initially, I hypothesized that, like in the work of Agyei et al. (2020), that there were merchants stockpiling it in Agoro with the plan to ship it to Kitgum, Gulu, or another major city in Uganda, but I never observed this, and it was repeatedly denied by everyone I spoke to. This is a first result which indicated that the overall charcoal production in the region was not very high. A second result were the amounts produced and regularity with which they were produced relayed to me by producers. The respondent who produced the most had cut down three trees to make 17 sacks the previous year. As shown in the results, some producers said they had made charcoal on only one occasion in their lifetime. An overall perception of small amounts of production, though with high environmental impact, in the region were also the general consensus during interviews. These results indicate low production numbers when compared to studies on charcoal carried out in other regions of Uganda, which show

charcoal and firewood as being the most important causes of forest degradation in the country (Bamwesigye et al. 2020). Local production of charcoal does not match the industrial model of extraction present in parts of Uganda, including in the Acholi subregion (Branch & Martiniello 2018; Khundi et al. 2011). All results indicate small-scale, localized charcoal production in Agoro and Potika, outside of the case of the Lututuru prison farm and the logging grant given to "people from Kampala". This result is in accordance to the findings by Branch & Martiniello (2018), which show that both types of charcoal production, small-scale and industrial, exist in northern Uganda. Small-scale production for a local market should be differentiated from industrial charcoal production, where producers from parts of southern Uganda come to the north to clear-cut areas to produce massive amounts of charcoal for consumption in Kampala (Branch & Martiniello 2018). The fact that respondents perceived charcoal as being a factor with a large role in transforming the landscape since the end of the IDP camps could contrast this previous statement. If we again compare this to the paper by Branch & Martiniello (2018), we can note that an altered landscape due to the disappearance of trees was a major cause of concern and strife in northern Uganda, even if viewed as a necessary way to overcome poverty. Charcoal production was viewed as a necessary evil by the population in Agoro and Potika. Even though charcoal production has indeed played a role in changing the landscape, it is important to reiterate that it has not done so as it had been reported in other parts of the country, where charcoal production has been observed to quickly deplete forests and land of all trees (Bamwesigye et al. 2020). It could also be that the received wisdom of charcoal being a major driver of deforestation has conditioned the perception of respondents to viewing it as such, even if charcoal's actual contribution to the changed landscape is minor (Leach & Mearns 1998).

Another factor which needs to be analysed in conjunction with charcoal production as a major cause of landscape transformation is agricultural expansion. Two major development/agribusiness projects were ongoing in the study region. First was the Agoro irrigation scheme, which has a history dating back to the 1960s, but was more strongly implemented in 2012-2013 (Toretti 2018). The Agoro irrigation scheme was a massive undertaking, using top-down implementation with the aim of "modernising" the region, practices which characterize traditional development goals (Branch & Martiniello 2018; Toretti 2018). The second is barley production in area three from two major seed suppliers, based both in Potika and Agoro. I'll note here that the Agoro irrigation scheme perfectly encapsulates Robbins' (2012) environmental conflict thesis, where certain groups were able

to capture control over the water supply of the irrigation scheme at the expense of other users, accelerating conflict (though non-violent up until now) between groups over land rights and water resources (Toretti 2018; Ocungi 2021). Though this is an interesting observation, the main purpose of mentioning the scheme is that it brought new cash crops such as rice and sugarcane into the region. Crops which are used by the local population for consumption, mainly grains like sorghum and millet, are not produced within the scheme. Land clearings to allow for sugarcane production in particular have shown to be major causes of deforestation in local contexts in Uganda (Twongyirwe et al. 2018). Whilst I am not arguing the importance of cash crops to farmers in the region, these new state-led initiatives also push farmers to other lands for subsistence farming, hence increasing the overall worked land area. Added on to this observation the fact that the irrigation scheme has failed in multiple ways, notably concerning soil fertility, which has been deemed by farmers as rendering land within the scheme as unproductive, has pushed farmers to use communal lands more extensively (The Independent 2021). Area three shows another side of the impact of agribusiness and agricultural expansion, though this time with the growing of barley and coffee. Area three's climate, being much more lush and productive than the surrounding lowlands, was ideal for these cash crops. I have observed trees being cut for the expansion of fields and left unused in the area. Being an enclave of the central forest reserve, it is imaginable that in order to both have subsistence farming alongside the rapid expansion of cash crops, expansion within the unmarked borders of the CFR is a possibility. For these reasons, agricultural expansion through cash crops is also a major, if not the major, factor leading to landscape change in Potika and Agoro. This is solidified when knowing that land-grabbing and neo-liberal practices are a cause of land-conflict in the region and have destabilised traditional institutions (Branch & Martiniello 2018; Martiniello 2019). The issue concerning agricultural expansion will be further treated later on in the analysis.

8.1.4 Other interesting results

The lack of a variation in price of a sack of charcoal by season was intriguing. In Agoro and Potika it does not appear as if seasonality plays a role in the supply of charcoal, indicating that there is no "charcoal season", in which many farmers will partake in production. As mentioned in the results, this contrasts with charcoal sales in Gulu and Kitgum, which varied greatly, with prices being very high in the rainy season according to charcoal consumers in these urban areas. The fact that charcoal production did not follow seasonality indicates that

it was only produced when needed, or time and labour was available. The stability of prices within the study area reviewed against a changing market in urban centres within the Acholi subregion is a strong indicator that the charcoal market in Agoro and Potika is independent from that of the rest of the region, with Agoro and Potika possessing a very localized charcoal market. Comparing the average price of UGX 20'000 per sack compared to a high of nearly UGX 80'000 in Gulu shows just how much value charcoal can create as is goes along the commodity chain. This is completely in accordance to work by Agyei et al. (2020) and Branch & Martiniello (2018). This result can also be put into relation with agricultural expansion, as farmers gain on average a much smaller share of benefits that those further along the commodity chain (Martiniello 2019).

8.2 Gender

8.2.1 Women's ability to produce charcoal

Women produced charcoal in the study area, and they did this in multiple ways (communally, using hired labour, or by themselves). This contrasts typical views on charcoal production as being mainly a male domain, and is in accordance to more recent work which acknowledge that women are also implicated in charcoal production (Agyei et al. 2020; Branch & Martiniello 2018; Jones et al. 2016). The response that was given sometimes by men that women did not produce in the region was therefore curious, and as noted in the results, one women mentioned that this was because men did not respect their work. Most people, men included, did note and found it normal that women produced charcoal. This indicates a normalisation of women as charcoal producers and as having access to resources to produce. Overall however, men did produce more charcoal on a more frequent basis than women, corresponding to typical results concerning charcoal production (Ribot 1998). Neither men nor women had set patterns for charcoal production. One limiting factor for women concerning charcoal production was time, which women possessed less of than men in general. The other main limiting factor was the perception that women were too weak to produce charcoal, which corresponds to literature on gender in the Acholi subregion (Sengupta & Calo 2018). The perception of women as "weak" came from both men and women, and is intriguing. Reports that a woman produced charcoal by herself indicate that it is not impossible for women, and women were also involved in other labour intensive roles.

This could be a situation in which a perception of one's abilities are not rooted in biology, but in one's perception of their abilities which are shaped by gender norms (Rocheleau 1996). An important note is that a typical limiting factor which could have prevented women's involvement in charcoal production was women's lack of access to resources or ability to derive benefit from the land under the traditional patriarchal ownership customs (Dolan 2002; Sengupta & Calo 2018). Since this was not the case, nor perceived as such by women nor men, the context of internment within IDP camps and their disruption of gender roles as noted in the literature (Sengupta & Calo 2018) appears to have, to some extent, been a factor which has lead women to have more agency within the landscape and to access charcoal.

8.2.2 Gender dynamics

The different masculinities and femininities shown in the context section of this thesis correspond to what has been observed and reported during the fieldwork. Masculinities which were the same from prior to the IDP camps are hunting, constructing buildings, and providing for the family, although this last one has been quite disrupted. Femininities include maintaining the household by accomplishing various chores (cleaning, cooking, brewing alcohol, fetching water, and taking care of children), alongside newer femininities such as partaking in income generating activities such as agriculture, charcoal production, and small business. Both men and women viewed school fees as a primary expense. At the time of the study, women held more responsibility for the survival of the household than men, corresponding to work by Sengupta & Calo (2018), and their tasks also included work in all stages of agriculture (ploughing, sowing seeds, weeding, and harvesting). In this case, survival of the household is related to their enhanced role in decision making powers within the household, and as primary breadwinners (Sengupta & Calo 2018; Ahikire et al. 2012). The cause and effect of these changes were due to the normalisation of new negative masculinities, which Sengputa & Calo (2016) explained that men were frequently "alcoholic, violent, abusive, dominating, and neglectful". The literature and interviews show how men were not able to meet either external (the expectation of masculinity men have for others) nor internal (the masculinity one aspires to) masculinity, and as such turned to these negative masculinities. This had a negative feedback effect, as the negative masculinities made it impossible for men to be the sole breadwinners they had been before, exemplified by the woman who reported that sometimes men drank so much that they could not get up

and work in the morning. One interesting result was the presence of women during a clan meeting, which was completely different to reports from prior to the IDP camps. Dolan (2002) writes “To this day women do not participate in clan meetings or the traditional leadership, which is all male, and if they do the elders will ask ‘what are women doing here in our meeting?’.” Dolan’s paper was written before the end of IDP camps within the region, and the fact that women were actively involved in clan meeting shows the extent to which they have gained power and agency within society. This is interesting, as in the case of the study region women appear to gained power in many ways, either within the clan, household, or in terms of access to resources, yet they are still subject to patriarchal violence, and have amassed more responsibilities.

The reports that NGOs attempted to enhance the capacities of women during the IDP camps by enabling them to perform traditionally male activities is a classic example of the implementation of the Gender and Development paradigm, in which development agencies use women as focal points for interventions (Brown 2007). It is also a way in which Western viewpoints and perspectives are forced into contexts which do not accommodate them, and which ignore the broader gender dynamics, especially masculinities (Cornwall 1997). The case in the study area shows how the intervention to enable women has lead to men being outperformed by women as providers during the internment period, resulting in new, negative masculinities (Sengupta & Calo 2018). The new negative masculinities are, as shown by Sengupta & Calo (2018), the result of their inability to meet their expectations of masculinity during internment, and by being outperformed by women in areas which were theirs before. As explained earlier, these negative masculinities are then self-perpetuating. The other consequence of this situation is that by adopting these new masculinities, men are further shunned by NGOs, and perceived as “lazy” and violent. The stereotype, both from within and outside of these communities, resulting from interventions by NGOs and “protection” by the government, is one of men as being problematic, violent, or useless (Sengupta & Calo 2018; Cornwall 1997). This is even further enhanced by comparisons that men in the region make between each other, where the men who are able to perform their expected masculinity are “good” and those who are not are “bad” (Sengupta & Calo 2018). The paradox here is that two interventions, one from the state in the form of IDP camps, and one from international NGOs (in this case Oxfam according to the respondent), which officially intended to protect and improve the condition of people in the region, ended up undermining men’s ability to achieve their masculinities, resulting in the negative

masculinities observable in the field. Add on to this the fact that men in the region are now viewed by each other, women, and people from outside of the region as useless shows just how much negative impact these interventions have had on men in the region. When the respondent in village one says that he drinks to forget his problems and feel good, it is clear that it is a coping mechanism.

I want to be clear that even though the situation of men in the study area is a result explained by the historical context and outside intervention, I do no want to be apologetic for the negative masculinities. During the field work women reported some horrific experiences of violence against them, and took most duties including both the role as breadwinners and household keepers. The frustration women showed towards men during the study was of course the result of a real problem in the region which needs to be addressed in a constructive manner by the local population. This is a gender crisis which needs to be resolved.

8.2.3 Charcoal and gender dynamics

The “Gender” section of the analysis has yielded important takeaways up to now. These will be brought together with a few other key results.

The first important acknowledgement that needs to be made in regards to charcoal is that men and women produced charcoal to fulfil their expectations of masculinity and femininity respectively. Women sold charcoal to adapt to their newfound role as breadwinners, but also to fulfil their previous role as caretaker and household keeper. Men sold charcoal to meet their previous expectation of masculinity and providing for their household, but also to purchase alcohol and conform to newfound negative masculinities. Gender and charcoal are in this way inherently linked, in that the motivation behind producing is driven by a need to meet a model of femininity or masculinity. Furthermore, women may produce less charcoal than men because of their perception of their ability caused by gender norms, and not by their actual ability to produce, as noted in feminist theory (Rocheleau 1996). This hypothesis has no significant basis however, as this is difficult to test, and it may of course be rooted in biology.

The situation within the IDP camps and notably humanitarian intervention during this period enabled women to become more self-sufficient, all whilst men were unable to meet their expectations of masculinity. In this context, it was also shown that emasculation was a method used to establish dominance by one group of men over another within the camps. The failure for men to conform to their masculinity, and women's ability to perform what men previously did added to their sense of emasculation. Part of women's newfound labour includes charcoal production, which began in Agoro after the IDP camps, and which therefore is both a cause and a consequence of negative masculinities.

If this is compared to the theoretical framework, it can be stated that development initiatives, one being the State's form of protection and the other being capacity building humanitarian interventions targeting women, have altered access to resources, including the ability to produce charcoal. This has in turn affected gender dynamics, with women's ability to provide being part of an environment in which contributes to negative masculinities, including violence towards women. If the theoretical framework in section 3 was altered to change from change "Agoro-Agu CFM" to "Humanitarian interventions from the State and NGOs", the framework would make sense. However, the framework as depicted is sequential whilst the reality is not. The intervention by the State and the practices by the NGOs have their own histories which involve power relations which will not be detailed within this thesis, and they acted on both gender relations and access to resources simultaneously, which are already dynamically interlinked. Furthermore, the ability for women to become breadwinners was not the trigger of negative masculinities, but a "reinforcer".

8.3 Access

8.3.1 Gendered access

Gendered access to resources has already been covered in the previous parts, however not entirely. It is important to reiterate that after the internment in IDP camps women were able to derive benefits from natural resources more than previously, indicating an increase in access for women, whilst in principle men had the same access as before. This does not go over access to the central forest reserve specifically however. For this, traditional gender

roles of construction and hunting being central to masculinity and firewood and plant collection being key to femininity are important, and dictate why men and women use the forest differently. However, as the results show, this does not include charcoal production, for which the forest was never used. Access to the forest and resources were administered through local councils, collaborative forest management (Mar Yen), and clans.

The shift in gendered access to land in the Acholi region, with women gaining more and more power to derive benefits from land which would previously have been their husband's possession, is worth mentioning again in this section. Women's newfound influence within traditional institutions and their ability to even be mediators in land allocation within clan discussions is clearly an improvement in their situation in the region (Ocana 2018). This transition is a good example of Rocheleau's (1996) theory of feminism which is presented in the framework. In this case, we can see that gender divisions and roles are neither permanent nor natural, and a change can always occur.

8.3.2 The local councils

One way of administering the forest and access to trees on arable land was through the local councils, as was the case in Agoro sub-county. Whilst it was possible for people to use forest resources from the CFR for personal use, cutting trees was prohibited. There were no apparent tools or personnel to enforce this, but even in this case local populations did not use the forest in this manner. Firewood and poles were taken by collecting fallen branches, and cutting branches or bushes. In arable land, a system intended to stop people from cutting trees was implemented through the local councils where volunteers would attempt to dissuade people from charcoal production or brick burning, and push the message of planting trees. This volunteer had no apparent legal basis and was not compensated for their efforts, whilst not having major impacts. When speaking with the volunteer they noted how she was even scorned by the people she spoke to about these issues.

The situation of using unpaid volunteers to promote a message to not cut trees is interesting in a few ways. First, it shows a potential lack of funds on the side of the NFA. Second, it shows an overall perception of the local population as being unaware of their impact on the environment. This is a classic example of received wisdom, notably of a looming woodfuel crisis (Leach & Mearns 1996). This can be combined with a post-colonial analysis showing

that some institutions may project their assumptions onto a certain group, and categorize them in a certain manner, in this case as “environmental degraders”. Third, farmers rarely have access to seedlings to plant trees, and even so the Teak species which was most commonly sold by the NFA in the region was not particularly beneficial in the first 10 years of its growth, whilst requiring work by farmers for its maintenance. This result is confirmed by Turyhabwe (2012). In summary, the overall impact of the local council on resource management in Agoro and Potika, heavily influenced by the NFA, shows how the “parastatal institution” that is the NFA (Petursson & Vedeld 2018) views local populations as being major drivers of forest degradation in their regions.

8.3.3 Traditional Land Tenure

Traditional land tenure through institutions such as clans remains the most important form of land distribution in the study region. This customary form of governance in the region was very affected by the internment within IDP camps, and conflicts over land became common. This corresponds to literature on the subject (Esuruku 2011). One of the main sources of contention over land came from the cutting of trees, landmarks for boundaries between clans, as noted by the Rwot Kwere and confirmed in literature (Branch & Martiniello 2018). In this sense, charcoal production has a direct impact on conflict in the region, as blurred traditional knowledge can be source of disagreements over land, precipitating conflict.

As previously stated, conflict over land has also increased due to neo-liberal of enclosure and from land-grabbing to profit from agribusiness (Ocana 2018; Jeary et al. 2018). This state of competitiveness over land as a resource is a key source of frustration to local populations, and a source of distrust from local people towards state institutions in particular (Ocana 2018). In some instances, this can precipitate extraction of resources to avoid them being seized by “outsiders” (Ocana 2018; Branch & Martiniello 2018). Though this was not necessarily confirmed nor denied through the interviews, in some areas of the study the cutting of some trees to clear land could have been a way to stake a claim to certain areas. Fear from traditional institutions from land-grabbing schemes was evident, and neo-liberal land enclosure has clearly pushed clans to become more aggressive when defending their land.

Traditional land management and the clan as a local institution still retain much power in the study region, and the Acholi subregion as a whole is on of the last in Uganda where this is the case (Toretti 2018). This institution has been significantly weakened post-war, notably by the idea of "modernisation" through neo-liberal practices (Martiniello 2019). This case is an example of environmental conflict theory, where the enclosure of land accelerates conflict between groups, in this case clans, and where an environmental problem has become politicised. Charcoal likely plays a role within this situation as well, however as a minor element. The need for trees to be boundary markers is essential, as unclear boundaries are the main source of conflict over land. If a tree is cut for charcoal production, it may create issues with boundaries. In this sense, charcoal production has an impact on traditional institutions, which administer access to resources.

8.3.4 Collaborative Forest Management

Mar Yen showed many elements which are typical of collaborative forest management groups. First, the increasing disinterest and even mistrust of the group from members corresponds entirely to literature on the subject (Banana et al. 2018). As noted by Turyahabwe et al. (2012) and Banana et al. (2018), for CFM projects to be created in the first place, they require outside investment, which was done in the case of Mar Yen through the Internation Union of Conservation of Nature. For reasons to which I am unaware, funding from the IUCN has halted, as with it so has much of the support for Mar Yen from the NFA. The last time I visited, it was shown that the previous visit to Mar Yen from NFA Lamwo was some two years prior. Whilst the Covid-19 pandemic likely played a part in this, it also shows how Mar Yen were quickly left to their own devices, and without funding and with members not perceiving any benefits from schemes set up, the impact of the group as a whole as a source of forest governance is lessening.

The influence of politics within Mar Yen is also a common occurrence within CFM groups as shown by Turyahabwe et al. (2012). One of the leaders of Mar Yen happened to also be an elected official in the newly created Potika sub-county. Inclusion or exclusion of members based on political motives therefore had a high likelihood of occurring. Issues concerning land were also potentially fraught with politics. The situation with the seedling nursery, where the person who inherited the land wanted to stop the operation highlights Mar Yen's institutional weakness, as well as mistrust in the group as a whole. A perception among

members of Mar Yen being governed by irresponsible leaders was also present, and also shows the distrust within Mar Yen. All of these elements weaken Mar Yen's ability to establish good forest governance within the forest reserve.

Whilst my fieldwork did not yield any impacts from the group in terms of gender dynamics, the implementation and discourse used by Mar Yen leaders in terms of gender inclusiveness corresponds to Brown's (2007) article where it is noted that gender is sometimes a term, or discourse, used by groups and NGOs, but gender initiatives aiming at changing dynamics are rarely ever implemented. This aligns also with the work by Turyahabwe et al. (2012) where they note "Equal participation, fairness and sharing of benefits [in CFM] have left a lot to be desired."

The fact that Mar Yen not only had a low impact on access to the forest which they were mandated to administer because of a lack of means, but the fact that they did not in any way impact gender dynamics within the region is an extremely important result for this paper. I had hypothesized that the CFM would play a major role in shaping gender dynamics and therefore gendered difference in access to resources, yet the group did not play a role in shaping gender dynamics nor did they even truly manage to administer access to the CFR. Whilst the idea of transferring governance of forests into the hand of the local population is good, as noted by Turyahabwe et al. (2012) and Banana et al. (2018), and has initial positive effects such as strengthening community cohesion and improving conditions in forest reserves in the initial stages, the inability for these groups to properly fund themselves over the long-term has hindered their impact to properly govern the forest. The case of one of the Mar Yen leaders granting permission to "people from Kampala" to cut part of the forest to create charcoal highlights this.

The decision to grant permission to cut down the forest they were mandated to protect was a shocking result, yet appears to be an occurrence that is more and more common in the Acholi sub-region (Branch & Martiniello 2018). This form of charcoal extraction can be seen as industrial, where groups from outside of the region cut down a large number of trees to be sold in large urban centers in Uganda (Branch & Martiniello 2018). The Mar Yen leader who allowed this to happen only took UGX 100'000, whilst as mentioned in the results a single sack of charcoal gains significant value when sold within urban centres, reaching almost UGX 80'000 in Gulu, and at least as much within Kampala. This indicates that the

“people from Kampala” and those directing them reap very high levels of profit. This corresponds exactly to the article by Branch & Martiniello (2018), where it is shown that local populations receive only small amounts of cash in the pockets of a powerful few, all whilst their environment is being destroyed by “outsiders”. Another interesting example of such processes is shown in the documentary by Refugee Law Project, “The Golden Tree” (RLP 2020).

The Mar Yen case is a clear example of the direct impact of charcoal production on the central forest reserve, and therefore aligns with Thembo et al. (2012) stating that charcoal production is a threat to the forest. This also aligns with the framework in where the CFM has caused a change in access which has allowed for one group to derive benefit from a resource at the expense of others. This change in access might have a gender component (according to RLP (2020) it appears as if those who come to produce charcoal are all men), this has not and could not be studied during the field work. Considering the remark by a charcoal producer in Potika that they had learned how to create charcoal from these migrant labourers, it is clear that charcoal production in Potika is driven by outside events. Also, this shows that the decision to grant access to these migrant labourers to cut trees was a trigger which started charcoal production in the region. CFM was implemented to halt charcoal production within the CFR, and not only has it granted access to this, it has spawned charcoal production as a new livelihood in the region.

Analysing the impact of Mar Yen shows that the group has been unable to meet the requirements of a CFM group, and that it has even negatively impacted the landscape. I do want to emphasize that the group was not given the tools to succeed however, and it is even argued that CFM groups are almost “designed to fail” (Banana et al. 2018). Mar Yen still has the potential to be a benefit to the region if given the right resources and if stronger internal governance is initiated. Corresponding to the literature by Turyhabwe (2012) and Banana et al. (2018), where CFM begins quite well with major benefits to the population and conservation goals, the initial stages of Mar Yen were very positive by all accounts.

8.4 Research Question and Hypothesis

With the results and analysis, it is possible to answer the research question “In what ways does charcoal production affect gender dynamics, and does the local environmental

management scheme also play a role in shaping them?" First, we have shown that charcoal production does in fact affect gender dynamics. The ability for women to become breadwinners, in part through charcoal production, has indeed had repercussions on gender dynamics as a whole. However, the ability for women to become breadwinners is from previously altered gender dynamics, meaning that the sequentiality of the framework is disproved. Changed gender dynamics have changed access, which in turn reinforce the changed gender dynamics. The different environmental management schemes have also had impacts on access to resources. Traditional institutions and local councils have been affected by NGO interventions and Ugandan policies promoting gender mainstreaming (Ocana 2018; Sengupta & Calo 2016). This has a positive effect on women's ability in decision making over land resources and their access to benefits from land in all study areas. Mar Yen CFM has shown limited ability to administer access to resources within the community, though the access granted to groups coming to produce charcoal on an industrial scale is an important result. Mar Yen has not had a major impact on gender dynamics at all however.

The hypothesis was "Environmental management schemes affect access to charcoal production, which in turn results in changes in gender dynamics." This hypothesis can be partially rejected (though not entirely) for a few reasons. First, the hypothesis suggests a sequentiality, when in reality the elements are not "cause and effect" but are dynamically interlinked. A change in access definitely did have an impact on gender dynamics, but changing gender dynamics also had an impact on access. In the case at hand, it is almost a situation where gender dynamics have more influence over access than the opposite. Second, environmental management schemes were not necessarily the main drivers in changing either access nor gender dynamics, though they did play a role. The time in IDP camps (intervention by the State) and the role played by humanitarian NGOs, alongside gender mainstreaming through policies at the State level and typical development practices in regards to gender by NGOs, were the main drivers. These drivers had themselves impacts on clans, the operations of local councils, and on gender dynamics directly. Mar Yen as an environmental management scheme has had almost no visible impact on gender dynamics as a whole. In short, an alteration in gender dynamics can be seen through environmental management schemes, but these schemes are not the main drivers of change in gender dynamics. The hypothesis cannot be entirely rejected however, as traditional institutions and clans, as well as local councils and Mar Yen, all affected in some way access to charcoal production, which as shown before does have a part to play in gender dynamics. The main

thing to take away from this is that the reality of the situation is much more complex than the framework suggests, with many factors interacting in dynamics ways to create the very unique situation in Agoro-Agu.

8.5 Uniqueness

A main result after analysing the situation in Agoro-Agu is that dynamics surrounding charcoal production create a very unique situation. Whilst charcoal production in Agoro-Agu and charcoal production elsewhere in Uganda, Africa, or anywhere, may have common grounds, each situation will always be more different than similar.

The history, institutional framework, and agricultural practices all play a role in shaping the situation in the region today, and all of these factors have a uniqueness in the Agoro-Ago landscape. This is an important result, because it shows that one cannot go study charcoal somewhere in the world and assume that only men produce it because this was the case somewhere else in the world. Each situation must be treated differently. The local history in Agoro-Agu played a massive role in shaping gender dynamics and access to resources. Where I had hypothesized that environmental management would be a main driver of gender dynamics and access, it was the situation of internment within IDP camps which had the most impact on these subjects. The LRA insurgency, alongside forceful internment imposed on people by the State, have its own history which can be traced back to British colonialism and the use of Acholi as the main military force of the British colonials.

Even within the small study region, many forms of charcoal production can be seen. From locals producing once in their lives, to the Lututuru prison farm, to the industrial scale operations, all are charcoal production, but all are different. The unique case of charcoal production in Agoro-Agu has its own unique cases of charcoal production on smaller scales.

The situation of charcoal production, access, and gender dynamics in Agoro-Agu can therefore not be a basis for analysis of an entirely different situation, which would have its own history, access, and gender dynamics. What this study does show however is that these three elements all interact, and that it is important when studying charcoal to involve these elements, as they are all important.

8.6 A state of exploitation

Using the case of charcoal production in Agoro-Agu and by applying a post-colonial analysis (Robbins 2012), it is possible to show the state of exploitation which local populations are subject to. Firstly, the received wisdom of a looming woodfuel crisis is still present in the minds of government officials, forestry officers, and researchers, and has shaped the view of local populations are being detrimental to the environment in which they live. This is without recognizing that the necessity to produce charcoal is itself a symptom of the exploitation of the local population, and is considered a necessary measure for some to improve their situation. Furthermore, it is not even certain that charcoal production is even the main driver of forest degradation in the region, which brings me to the second source of exploitation: agribusiness. As shown before, the neo-liberal "modernisation" mindset has lead to rapid lad-grabbing in the region, alongside the planting of new crops. This has had a large effect on land use, and has destabilised traditional institutions (Martiniello 2019). Thembo et al. (2017) only note agricultural encroachment by local populations into the CFR as a problem, but not the push by agribusiness to expand land use, is very telling of the negative perception people have of rural farmers in Lamwo. The farmers who plant novel crops such as coffee or Barley do see small monetary gain, yet the profit that the agribusiness accumulates is likely much higher, as is always the case in value chains. A third source of exploitation is the difference in charcoal production. Charcoal production by the local population is on a much smaller scale than the industrial production reported by locals in Potika, or by Branch & Martiniello (2018). The industrial logging from the region which ends up in Kampala or outside of Uganda is a situation where local populations see almost no benefits, all whilst their environment is destroyed by "outsiders" (Branch & Martiniello 2018). This exploitation of the resources in the north of Uganda for profit by people from the south is doubly vicious. On one hand one part of the country is exploiting another, and on the other hand the local populations are stereotyped as being the cause of environmental degradation caused by others (Branch & Martiniello 2018).

All the exploitation shown here is deeply rooted in negative perceptions of people from the north of Uganda, which actually began during British colonialism (Dolan 2002; Branch & Martiniello 2018). The fact that the British used Acholi men as armed forces to control their territory has created a chain of events which resulted in the discrimination of northerners and ultimately the LRA insurgency (Dolan 2002). It has even been hypothesized that the IDP

camps or agribusiness ventures are attempts by the government to destabilize traditional institutions, further weakening the north (Branch & Martiniello 2018).

9. Conclusion

This paper has gone over elements which are interlinked but which are also subject to different forms of analysis. Six main takeaways, which all interact together and overlap partially, shape the gender and charcoal nexus in the study area.

Firstly, it has become apparent that the Lords Resistance Army insurgency, and especially the time people spent within Internally Displaced People's camps have profoundly affected the social order within Agoro and Potika sub-counties. I had hypothesised that the environmental management schemes, and Mar Yen Collaborative Forest Management in particular would entail changes in how gender dynamics and environmental resources would interact, however it is the war which has had the more consequential impact.

Secondly, men not being able to meet their expected model of masculinity whilst being confined in IDP camps, alongside women also failing to meet their model of femininity all while being the target of humanitarian aid, resulted in transformed gender roles. This showcases Rocheleau's (1996) theory that gender roles are neither natural nor permanent. Part of the major change was in how, after the war and through initiatives by NGOs, women had become more able to derive benefits from the landscape, and moved more towards a situation of breadwinner, even if they remained the secondary breadwinner within their household. This reinforced men's overall failure of meeting their expected masculinity, as well as further entrenching their new "negative masculinities" (Ahikire et al. 2012). Charcoal has played a role in this, as since the end of the period of internment, both men and women have produced charcoal in the region. Women and men produce to meet their femininities and masculinities respectively, both positive and negative. Prior to the period in camps charcoal had only been produced in small quantities and by few people, and never by women. People learned how to make charcoal within the camps, emphasizing the impact of the period on gender roles and charcoal production. It is possible to see how charcoal production and gender dynamics are interlinked, as women involved in charcoal production as a way to create income for a household can increase men's negative masculinities. This

corresponds to Robbins' (2012) environmental conflict thesis. It should be noted that other breadwinning activities carried out by women which do not involve charcoal production also increase men's negative masculinities, and the negative masculinities were themselves a product of the time within internment camps. In this sense, multiple different factors come into play in shaping gender dynamics, with charcoal being one of many.

Thirdly, access to resources has also changed since the time within camps. Traditional institutions remain the primary way to distribute land, though women can now both participate and make decisions, whereas before they were completely absent. Furthermore, women have much more access to land, allocated by the clan. Traditional institutions have as such changed to adapt to women's newfound role as breadwinner, and enable women to actively seek income through land use. Whilst it appears that these outcomes are positive for women, the downside is that men the change in access has also affected gender dynamics, resulting in men partaking in heavy alcohol consumption and are more prone to violence towards their spouses. Men also have diminished responsibilities, and in many cases women need to become breadwinners in order for the household to survive. This situation shows how development interventions and a shift in lifestyles can totally change gender dynamics. The focus on intervening with and through women, viewed as vulnerable and helpless, hide the other side of gender which is masculinity. If an objective of assisting women has an impact on men's gender roles, then men need to also be in the equation if a positive outcome is to be reached (Cornwall 1997). This masculinity crisis will be a major issue in the region for years to come, and needs to be addressed by the population. It will be interesting to see how the upcoming generation deals with the memory of war and shifted masculinities. Will heavy alcohol consumption be the norm even for those born after the period in camps?

Fourthly, different types of governance in the region are also important to reflect upon. Traditional institutions are under threat from neo-liberal policies and land-grabbing, putting ways of using communal lands in jeopardy. Conflicts have arisen involving borders between clans, and part of the issue lies with the loss of natural boundaries such as trees, cut to produce charcoal. This is a way in which access to resources, charcoal production, and gender intersect. Mar Yen is an important institution in Potika, and has been faced with many challenges. Unfortunately, the permission granted to outside groups to exploit the central forest reserve to produce charcoal undermines what they were created for, and is a

direct link between a change in governance and the ability to produce charcoal. How Mar Yen will be able to recover from their current situation will likely require, as it did for their implementation, outside assistance. Despite the current issues, it is still possible that the group can be beneficial to conservation objectives, if it is properly funded and governed.

Fifthly, this study has shown a very unique case, shaped by local history, local institutions, local cultural, and the landscape. For these reasons, making assumptions about charcoal and its social impacts is impossible regardless of the situation. Gender dynamics, charcoal production, and access to resources are different everywhere, emphasizing the need to employ feminist theory when dealing with socio-environmental issues, and not transposing the situation from one area as being the case somewhere else. This appears to have been the case by policy makers within the Agoro-Agu CFR, who assumed the local populations were using the forest as a source of charcoal, when they were not.

Finally, the Acholi subregion in general, has been destabilized through conflicts since colonial times (Branch & Martiniello 2018). Traditional institutions are now threatened by neo-liberal policies, agribusiness practices, and the forest is threatened by loggers from the south (Branch & Martiniello 2018). Agribusiness in particular has not been analysed enough in the region, and may present a danger to traditional institutions as well as the environment much greater than charcoal (Martiniello 2019). An issue which could be a continuation of this thesis would be to understand how agribusiness, charcoal production, and traditional institutions interact, whilst keeping a gender component. The destabilization and exploitation of the region is blamed upon local populations, which creates a view of rural Acholi farmers as useless (Dolan 2002) and instigates even more exploitation of the area. How clans and local populations will manage to overcome exploitation, all whilst going through a masculinity crisis, will be important in the coming years. Charcoal has played a role in this crisis, in both accelerating it and alleviating it, as it must not be forgotten that charcoal is an important way for people to make money in a relatively short time. Charcoal and gender will also play a role in the future of the area, though how is the main question.

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