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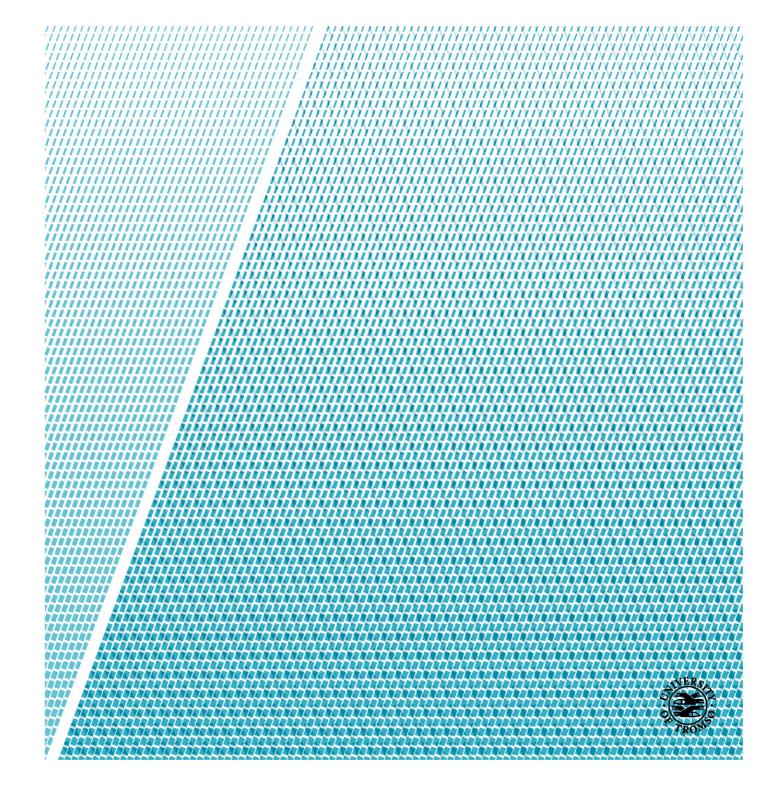
Faculty of Humanities, Social Sciences and Education

International Development and West African Pastoralism

Analysing Conceptions of Livestock Ownership

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Abstract

Pastoralists make up an important segment of the population of West Africa and inhabit large swathes of the Sahel that are unusable for crop-based agriculture for much of the year. This study aims to identify and understand how cultural, social, and economic implications of livestock ownership and care affect the implementation and outcomes of agricultural development projects targeting pastoralists by examining how these varied implications impact the relationships between pastoralists and international development projects in the West African Sahel. Data collected through semi-structured interviews, two periods of participant observation, a document review, and a short answer questionnaire are analysed using Bourdieu's theory of practice in order to show how pastoralists conceive of livestock as multiple forms of capital and how those conceptions influence their relations with development organisations. While research results uniformly show that livestock ownership is central to pastoral culture, social identity, and economic wellbeing, an analysis of how development organisations understand this situation is much less homogenous. Development projects exhibit a variety of conceptions of pastoralism, sometimes even having different conceptions of pastoralism and pastoralists at different administrative levels. Organisations that do integrate pastoral conceptions of livestock ownership into their projects are thought to be more successful in achieving their surface level objectives; however, a discussion of how these projects achieve success when looking at their larger regional development goals is complicated by the continuing effects of historical feelings of cultural superiority among pastoral groups.

Key Words: pastoralism, international development, West Africa, Sahel, Bourdieu's theory of practice, habitus

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1 Introduction

1.1 Opening remarks

Stretching across Africa from the Atlantic Ocean to the Red Sea, the Sahel forms the frontier between the Sahara Desert and the tropical savannah. The high variability of rainfall from year to year and from place to place in the Sahel means that the majority of the land is unsuitable for cropbased agriculture, yet ideal for mobile livestock systems (Swift, 1979). This has created a robust pastoral livestock sector and has contributed greatly to the cultural landscape of the region (Laouali et al., 2014; Niamir-Fuller, 1998:250–254). For many, livestock is more than a means of survival; it is a vital part of their culture (Adriansen, 2002:113). Among the many ethnic groups of the Sahel, the Fulani, Tuareg, Maure, Toubou, and Chadian Arabs are most closely associated with pastoralism, viewing livestock not only as material wealth but also as a symbol of social and cultural capital (Swift, 1979; Bonfiglioli, 1988; Ould Cheikh, 1990; Adriansen, 2002). This is illustrated by the (total or partial) economic reliance on livestock of many pastoral households, the importance of milk and cows in ceremonies and rituals, the extensive vocabulary of herding terms in their different languages, and the paramount importance of livestock ownership to cultural identity (Vermeer, 1981; Bonfiglioli, 1988; Sow, 2006).

The complex relationship between pastoralists and their livestock posed a problem for colonial administrations, who saw pastoralism as an inefficient system of land use and pastoralists as "irrationally attached" to their animals (Herskovitz, 1926; Adriansen, 1999). In the years immediately following decolonisation, newly created national governments and international development organisations were led by these same notions to continue and expand colonial policies with projects that tried to force pastoralists into sedentary lifestyles and 'modernise' the livestock sector. These programmes, which viewed livestock solely as economic capital to be traded, were not successful in their stated aims of 'sedentarisation' and 'modernisation'. Environmental and social consequences of these programmes including increased stress on groundwater resources from deep bore wells and the weakening of traditional social systems among pastoral groups can still be felt today (Glantz, 1976; Kervin, 1992; Scoones, 1995; Kitchell, Turner, and McPeak, 2014). International development organisations took these early failures to heart and decreased the number of projects targeting pastoralists during the 1980s and 1990s. This smaller second generation of development projects was more focused on strengthening the social aspect of pastoralism through local herder organisations, but even these projects viewed livestock as economic capital and gave little consideration to the social and cultural aspects of livestock ownership. These projects did not produce many (if any) tangible positive results (Oxby, 1999). Two generations of stagnant results

meant that international development funding for pastoral projects was virtually non-existent from the late 1990s until recently (de Haan, 1999).

1.2 Problem statement

Due to current concerns about the impacts of climate change and the rise of violent extremism on the lives and livelihoods of pastoralists in the Sahel, the number of international development projects targeting pastoralists is increasing (Willms and Werner, 2009; de Haan et al., 2014). In order to design projects that effectively address these concerns, international development organisations have started to focus more attention on the cultural landscape of the region (IFAD, 2009; FAO/CIRAD, 2012). Many of these organisations contend that supporting and expanding the pastoral livestock sector in environmentally sustainable ways could reduce the risk of resource based conflicts and violent extremist group participation among pastoralists throughout the region (Stewart, 2009; de Haan et al., 2014). With all these factors in mind, this study aims to identify and understand how cultural, social, and economic implications of livestock ownership and care affect the implementation and outcomes of agricultural development projects targeting pastoralists.

1.3 Research questions

In investigating these effects, the present research attempts to answer the following questions:

- 1. In what ways (if at all) do the cultural, social, and economic implications of livestock ownership and care among pastoralists impact how these pastoralists interact with internationally funded development projects?
- 2. How (if at all) do international development organisations take these implications of livestock ownership and care into consideration when designing and implementing projects that target pastoralists?
- 3. If there are development projects that take these implications into account, are these projects more effective in achieving their goals than projects that do not? By answering these questions, this study will provide useful information for international development organisations and scholars concerned with pastoral livestock systems.

1.4 Motivations

The primary motivation for this study springs from the current increased interest in the lives and livelihoods of pastoralists by development organisations and national governments. Previous colonial administrations, national governments, and early development organisations blamed pastoralists for ecological degradation and social conflicts. They viewed pastoral livestock systems as inefficient and as a hindrance to progress in the Sahel (Swift, 1979; Bonfiglioli, 1988). In the

past 20 years, ecologists and agro-economists have refuted these claims by illustrating the importance of the pastoral livestock sector to the regional ecology and economy (Laouali et al., 2014; Oxby, 1999).

As development organisations and national governments began to adapt their policies to reflect these scientific findings, concerns over the effects of climate change and violent extremism have also started to influence the pastoral policies of these institutions. Today, development organisations see pastoralism simultaneously as a prime example of effective climate change adaptation and as a way to stem the tide of violent extremism throughout the region by providing a legitimate source of income (Crawford et al., 2005; de Haan et al., 2014). This new conception of pastoralism has led to a dramatic increase in the number of development projects funded by a variety of sources including the World Bank, USAID, AFD, and smaller NGOs. By examining the connections between culture, economics, and development, this research will add to the scholarly discourse concerning development programmes and their role in conflict avoidance and transformation.

1.5 Theoretical framework

This study examines pastoral conceptions of livestock ownership and care using Pierre Bourdieu's theory of *habitus*, here defined as "a set of dispositions that incline agents to act and react in certain ways" (Thompson, 1984; Bourdieu, 1977). Applying this theory entails using Bourdieu's definitions of the different forms of capital; social capital being power gained by social contacts, cultural capital being knowledge and skills gained by education, and economic capital being value that is monetised and easily exchangeable (Painter, 2000; Bourdieu, 1986). Attempting to understand how livestock ownership and care is conceptualised at different times by different individuals as one or more forms of capital illustrates the livestock raising *habitus* of pastoral groups in the Sahel.

1.6 Methodology

Several different qualitative methods were used to collect the data presented. Combining ethnographic elements of participant observations with interviews, a document review, and a short answer email questionnaire, data was collected from a variety of sources during two periods.

The first period took place in Ouagadougou, Burkina Faso over four months in 2016, where I acted as a research intern with the World Bank's Regional Pastoralism Support Project (PRAPS), a development project specifically targeting Sahelian pastoralists. While engaged in this role, I conducted a document review, unstructured interviews with several local and regional development

professionals, and an email questionnaire that was completed by development workers across the Sahel. The entire internship process was also treated as a period of participant observation.

The second period took place in eastern Senegal, where I conducted four weeks of participant observation in a pastoral Fulani village during the month of October, 2016. Having lived in this village previously, I was able to quickly reintegrate into the community and conduct unstructured and semi-structured interviews with pastoralists and local pastoral development actors.

1.7 Thesis structure

This thesis is organised into eight chapters. After a short introductory chapter, the background chapter details the history of Sahelian pastoralism, the major ethnic groups associated in pastoralism in the Sahel, and some of the commonalities and differences that exist between these groups. A short word on the cultural connections between these groups and the practice of owning animals is also included.

Chapter three gives some historical context surrounding international development activities and Sahelian pastoralism. It also outlines the current situation in which development organisations and pastoralists find themselves.

The fourth chapter examines Pierre Bourdieu's theory of practice, the theoretical framework here used to analyse the cultural, social, and economic implications of livestock ownership and care among pastoralists. Also included in this chapter is a discussion of the limitations of the chosen theory and ways in which it has been ameliorated in order to better fit the research at hand.

The fifth chapter explains the methodological positions taken and the data collection methods used by this study. A critical examination of the data collection process and some of the difficulties and issues uncovered during this process further enrich the discussion of methodology.

The sixth chapter presents the findings from the different data collection methods, which allows for a thorough exposition of the relationship between international development organisations and pastoralists in the Sahel.

The seventh chapter analyses these findings using Bourdieu's theory of practice. It shows how this theory is helpful in describing the situation at hand, and then discusses the limitations of its application in addressing the research questions.

The eighth chapter is a short conclusion, which summarises the work and outlines directions for further research.

2 Background

2.1 Introduction to Pastoralism

Pastoralism is a 'system in which humanity mediates the relation between land and animals' (Bjørklund, 1990:75) through the 'use of extensive grazing in rangelands' (Blench, 2001:6). Alternatively, pastoralism could be defined as an 'entire way of life, involving ecological, political, economic, cultural, and social dimensions' (Nori, et al., 2005:5). The domestication of both large and small animals for the purpose of attaining meat, milk, and other byproducts was a turning point in human history. The relationship between humans, land, and animals was one of the first bonds forged between humanity and the natural world, and archeological traces of pastoral societies have been found across Eurasia and North Africa from as early as 10,000 years ago (Clutton-Brock, 1989).

Pastoral systems are best adapted to arid and semi-arid climates that are unsuitable for crop based agricultural practices (Swift, 1979). Mobility enables pastoralists to get the most out of the sporadic rainy seasons that are characteristic of these drylands. Engaging in varying degrees of mobility, herds and herders can travel as little as a few kilometres or as much as several hundred kilometres. Distance travelled and time spent in a particular range can depend on numerous factors including: rainfall, access to groundwater, availability and quality of forage, social ties, governmental restrictions, health concerns, and safety (IFAD, 2009). Blench identifies three different variations of pastoralism, but he stresses that pastoralists can and do shift between them as they adapt to changing environmental and social factors (Blench, 2001:11-13).¹

Nomadic pastoralists are totally engaged in the livestock economy, deriving their livelihood solely from the sale of animals and animal products (IFAD, 2009). These pastoralists are the most opportunistic and the most likely to have no fixed patterns of movement. While nomadic pastoralists prefer fixed travel routes, they are at the whim of nature and political events and can change their migration patterns in order to ensure the survival of their herds. Transhumant pastoralists have two or more preselected sites to and from which they travel in a given year (ibid). These sites most often take the shape of dry season and wet season pastures. Transhumant pastoralists will oftentimes have a permanent home base where the older members of the family or tribal unit will stay if they do not want to travel with the herds. In this case, the herd might be split, and some of the lactating females might be left at the homestead to provide milk and other products

¹ Classifying pastoralism by the degree of movement involved must be treated as a simplification due to the opportunism and and flexibility inherent to pastoralists. For a more in depth discussion of this discourse, see Blench (2001), Cribb (1991), and Clutton-Brock (1989).

for those left behind (Hesse and Cavanna, 2010). Agropastoralists are mostly or fully settled pastoralists who engage in crop-based agriculture as well as livestock raising. Their herds are often smaller than other pastoralists, as they are confined to grazing in the areas surrounding their fields. If their herd become too large, they often enlist more transhumant pastoralists to take it further afield. Agropastoralists are also an important link between nomadic pastoralists and local sedentary populations, acting as middlemen in the exchange of crop residue forage for the manure of mobile herds (Nori, et al., 2005).

In the year 2000, pastoral production systems used 25% of the world's land area, provide 10% of the global meat supply, and support upwards of 200 million households (Blench, 2001). Despite these large numbers, pastoralists continue to face a multitude of threats to their livelihood. Population growth in both pastoral and sedentary societies has forced the introduction of crop agriculture into areas previously thought unsuitable. This has increased the occurrences of conflict between sedentary farmers and mobile pastoralists (Nori, et al., 2005). Pastoralists are also on the front lines when it comes to the effects of climate change (López-i-Gelats et al., 2016). Scientific opinion is varied on this issue, with some researchers claiming that pastoralists are one of the most vulnerable populations and others predicting that pastoralism is well-suited to manage the risks associated with a changing climate (Dong, et al., 2011).

The majority of ongoing violent conflicts are situated in areas of traditionally high pastoral activity (de Haan, et al., 2014). The Middle East, the Horn of Africa, and Sahelian West Africa are all currently experiencing high levels of violent conflict, which severely limits pastoral mobility, economic opportunity, and social wellbeing.

2.2 Pastoralism in the Sahel

Originating from the Arabic word *sāhil* meaning coast or border, the Sahel forms a band of arid and semi-arid land that separates the Sahara to the north and the Guinean and Sudanese savannahs to the south. This band encompasses the present-day countries of Senegal, Mauritania, Gambia, Mali, Burkina Faso, Niger, Nigeria, Chad, and Sudan. With average yearly rainfalls ranging between 150 and 750 mm, the Sahel boasts a variety of biomes, from the dry desert lands approaching the Sahara to the more humid, fertile soils further south and by the ocean (FAO/CIRAD, 2012).

Throughout the Sahel, there exists a rich tradition of pastoralism that traces its roots to prehistoric times (Kervin, 1992). This long history has shaped the land and people of the region, causing many inhabitants to see pastoralism both as a means of survival and as a cultural practice. The Tuareg, Maure (Mauritanian), Toubou, Shuwa Arab and Fulani ethnic groups all consider

pastoralism to be central to their ethnic and cultural identities (Adriansen, 2002; Ould 1990; Swift, 1986; Swift, 1977). While some Tuareg, Maures, Arabs, and Toubou travel across the Sahara to North Africa, the majority of pastoralists follow the rains from north to south within the Sahelian zone (Swift, 1986).

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Graphic 2.1

Source: Atlas de l'élevage au Sénégal (2011)

Pastoralists have travelled along the general routes shown in graphic 2.1 for centuries. While previous colonial administrations and present-day national governments have drawn borders that cut these routes at odd angles, pastoralists continue to use them. This has caused tensions between pastoralists, neighbouring states, border guards, and sedentary communities. More recently, extremist groups have been using some of these routes to smuggle narcotics and arms across the Sahara and to elude national and international military authorities (de Haan, et al., 2014).

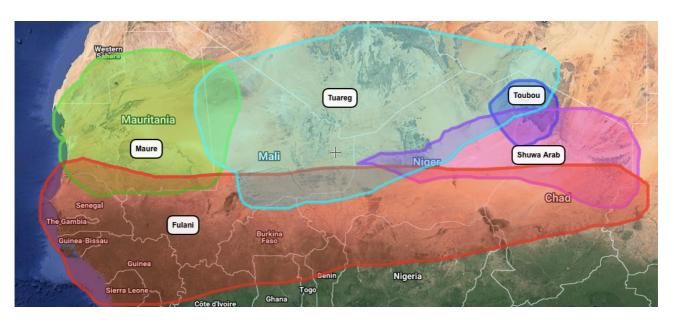
Encroachment of sedentary agriculture practices and rapid regional population growth have placed stress on traditional pastoral activities and transhumant routes. As the population expands, more and more land is put under cultivation to meet the growing need for grain. This limits the rangeland available to pastoralists and makes conflicts between pastoralists and sedentary farmers more likely. The number of these conflicts has increased significantly in all parts of the Sahel with

Northern Nigeria, Niger, Chad, and Mali all being particularly effected (de Haan, et al., 2014; Swift and Krätli, 2013).²

2.3 Pastoral Groups of the Sahel

Below is a short introduction to the main pastoral ethnic groups discussed throughout this work. While more specific details about each of these groups will be provided in the following chapters, this section provides a preliminary introduction to the history and territories associated with each ethnic group.

Graphic 2.2



Sources: Google maps; Bâ (1984); Bernus (1990); Chapelle (1982); Holl (2003); Ould (1990) 2.3.1 Fulani

Of the many Sahelian pastoral ethnic groups, the Fulani are the most geographically widespread and the most numerous. The Fulani, also called Peul, Ful6e, Haalpulaar'en, Bororo, Pulaar, or Fulfulde in various countries and languages, have spread across the Sahel, stretching all the way from Senegambia in the west to Sudan in the east. While this wide geographic dispersion has created marked differences between different groups of Fulani, livestock and pastoralism remains a central part of Fulani culture and ethnic identity (Sow, 2006).

Archeological evidence suggests that the Fulani originated in what would become the Sahara desert. Moving south after the prehistoric desertification of the Sahara, the Fulani came to Senegambia before spreading out across the Sahel belt (Touré and Mariko, 2005). Even at this early stage, Fulani culture and livelihood were centred around cattle pastoralism (Sow, 2006). The mobility that characterised this lifestyle facilitated contact with trans-Saharan Arab caravans, which

² See Benjaminsen (2008) for an alternate view of the causes of these conflicts.

subsequently led to the Islamisation of a majority of the Fulani. Having been some of the first Sub-Saharan Africans to convert to Islam as well as pastoralists, the relationship between the sedentary peoples of the Sahel and the Fulani could be characterised as contentiously symbiotic (Bonfiglioli, 1988). Animist sedentary peoples saw Muslim Fulani pastoralists as constant outsiders, but were dependent on them for animal products like meat, milk, and leather. On the other hand, the Fulani saw sedentary agriculturalists as infidel manual labourers of lower social standing.

2.3.2 Tuareg

The Tuareg, or Kel Tamasheq, consist of several clan-based tribal groups that once controlled vast swathes of territory in the driest fringes of the Sahel in Northern Mali, Northern Burkina Faso, Northern Niger, Northern Chad, Southern Algeria, and Southern Libya (Bernus, 1990). These pastoralists mainly concern themselves with camels, but also occasionally keep cows and small ruminants and engage in small scale oasis agriculture (Bernus, 1972). Due to the extreme aridity of their environment and the vastness of their territory, the Tuareg also engage in long distance transhumance, sometimes covering several hundred kilometres in a year. Several of the various tribal groups also engage in cross-Sahara caravans, trading salt, dates, camels, and other goods between North Africa and the more septentrional populated regions of the Sahel (Claudot-Hawad and Hawad, 1996).

Historical record of Tuareg trading caravans bringing gold and other goods across the Sahara exists in Greek, Roman, and Arabic texts (Swift, 1979). Through trade and animal husbandry the Tuaregs were able to control a vast territory under a type of caste system in which they were able to enslave large numbers of Sub-Saharan Africans, forcing them to engage in oasis agriculture and small livestock tending while the Tuareg occupied themselves with camels and trade (ibid). Echoes of this historic reliance on slave labour can be seen today in the northern parts of Mali and Niger where conservative estimates state that 10% of the current population is kept in some form of slavery (Norris, 2012). Although slavery is technically illegal in both of these countries, the compromised ability of the national governments to patrol their vast northern regions ensures that this practice will continue for the foreseeable future.

Occasional livestock raids and small feuds between the different tribal groups and between Tuareg groups and nearby sedentary agriculturalists occurred frequently before the arrival of the French (Swift, 1979). During the colonial era, the Tuareg fought the French on several fronts throughout their territory. These rebellions brought limited success and were eventually quelled by the 1940s. During the 1960s independence period, Tuareg lands were carved up among several Sahelian countries in which Sub-Saharan Africans, often considered to be slaves by the Tuareg,

were in charge of the new state governments (Benjaminsen, 2008). In both Mali and Niger, there have been several Tuareg rebellions calling for an independent Tuareg state in the northern reaches of the Sahel. The latest of these uprisings resulted in the Malian Civil War of 2012 (Swift and Krätli, 2013). Religious extremist groups were (and still are) heavily involved in fighting UN and AU forces in northern Mali as a result of the war in 2012. This has caused a surge of Tuareg and Fulani refugees to seek shelter in neighbouring Mauritania and Burkina Faso.

2.3.3 Moors/Maures

While Fulani pastoralists populate the southern and eastern regions of the Islamic Republic of Mauritania, the Maures, another ethnic group with strong ties to pastoralism, occupy the more northern areas of the country. Beginning with the arrival of the Arabic tribe of Beni Hassan from Egypt in the 1500s, the Berber ancestors of the present-day Maures have been increasingly Arabised to the point that the official stance of the Mauritanian government is that Maures are ethnically Arab (Ciavolella, 2010). Although the Berber population had been converted to Islam long before the invasion of Beni Hassan, this influx of Arabs brought with it Hassaniya Arabic, the language of modern-day Mauritania, which has now become a vibrant mix of classical Arabic, Berber languages, and borrowings from other nearby African languages like Pulaar and Wolof (ibid).

Primarily concerned with camel herding, these pastoralists occupy the northern reaches of the Sahel and have been known to take part in caravan trading from the Senegal River all the way to the southern cities of Morocco (Ould Cheikh, 1990). Much like their Tuareg and Fulani neighbours, Maures developed a caste system that included the slave labour of Africans from the southern part of their territory. This practice is so entrenched in Mauritanian society that slavery continues to be a national political issue; it was outlawed in 1981, but continues to this day in the peripheral areas of the country (Norris, 2012). Also like their other pastoral neighbours, nomadic Maures tend to think of themselves as superior to the sedentary peoples that settle in the south along the Senegal River and along the Atlantic coast (Ciavolella, 2010).

The number of Maures engaged in nomadic pastoralism has been steadily decreasing since the Pan-Sahelian drought of the 1970s. In 1965, nomadic pastoralists accounted for more than 75% of the population; however, as of 2013 that number has fallen to around 2-5% (Randall, 2015). That being said, livestock raising remains an important part of the national economy.

2.3.4 *Toubou*

The Toubou are a small pastoral ethnic group that occupies the desert steppes around the Tibesti mountains. Raising camels and small ruminants in the harsh environment of the Sahara in northern Chad, northern Niger, eastern Sudan, and southern Libya, the Toubou comprise two main

groups of clans: the Teda who inhabit the borderlands between Chad, Niger, and Libya, and the Daza who inhabit north and central Chad (Chapelle, 1982). Both of these groups consider themselves primarily pastoralists, but do engage in oasis agriculture, growing dates and some cereals. The bulk of the agricultural work was traditionally done by Haddad people, who engaged in a feudal type of agreement with various Toubou clans (Laouali, 2014). Due to their intimate knowledge of this vast portion of the Sahara, the Toubou also engaged in desert mining of salt and natron (ibid).

2.3.5 Shuwa (Chadian) Arabs

From the Lake Chad basin in the southwest to the borderlands between Chad and Sudan in the northeast, Chadian Arab tribes herd camels, cows, and small ruminants. These Arab tribes, originating from the Arabian Peninsula and Egypt, have been traversing the land of present-day Chad for around 500 years (Holl, 2003). Sharing the ample grazing land of southern Chad with Fulani pastoralists while also herding camels alongside Toubou pastoralists in Chad's arid north, Arab tribes have become an integral part of the pastoral economy of Chad. Like Mauritania, pastoralists make up a large percentage of the rural population, and contribute greatly to Chad's GDP (Serge and Hesse, 2008). Many of these pastoralists engage in cross-border trade, sending cattle from Sudan to the market towns of Nigeria and Cameroon around the Lake Chad basin (ibid).

The cross-border trade of livestock and other goods is not a new phenomenon. Shuwa Arab tribes have been exploiting their familial connections with Sudanese and Egyptian Arabs in order to send goods from Egypt and Sudan into the Lake Chad area for centuries (Holl, 2003). The more nomadic nature of these Arab pastoral groups has aided in the continuation of a culture that is still heavily reliant on livestock, and thus places high importance on the ownership and care of livestock (Serge and Hesse, 2008).

2.4 Livestock and Culture

The complex relationship that exists in all of these groups between humans and livestock has fascinated outsiders and sedentary peoples and elicited numerous responses from the favourable to the discriminatory. While most fail to understand or simply disregard the central role that livestock plays in the cultures of these groups, several generations of foreign anthropologists, and more recently local anthropologists who themselves are members of these ethnic groups, have investigated this aspect of pastoral culture and the ways in which it affects not only all other parts of these cultures, but also how these ethnic groups interact with sedentary groups and other pastoralists (Bonfiglioli, 1985; Sow, 2006; Laouali et al., 2014).

For pastoralists in the Sahel, raising livestock is an all-inclusive way of life (Hesse & Cavanna, 2010). Herding is not simply an occupation, but a central part of one's personal identity. Animals are not thought of purely as goods to be traded, but as members of the family that nourish the humans that care for them (ibid). The health and well-being of one's herd is just as important as the health and wellbeing of the human members of the group. In general, pastoralists take great pride in preserving the specific animal breeds that they raise and in preserving the traditions associated with the animal care (Blench, 1999; Blench, 2005, Thevenin, 2011).

2.4.1 Cows are a Gift from God

Among the Fulani, the group most closely associated with the raising of cows, cattle are considered to be a gift from God (Sow, 2006). One Fulani origin story entails God creating the cow and then creating the Fulani in order to care for the cow, thus the cow became the raison d'être for the Fulani (Bâ, 1984). This sentiment is echoed even today among both rural populations that remain primarily cattle herders, and more urbanised Fulani who still hold cattle ownership to be of utmost importance in defining one's cultural identity (Adriansen, 2005). Placing such a high importance on the ownership and care of cattle also has the ability to alienate the Fulani from the sedentary people among which they trade and live. Among sedentary peoples of the Sahel, the Fulani cultural preoccupation with livestock in general and cows in particular is seen as backwards or uncivilised (Azarya, 1999). It often serves as the framework of a joke or small theatrical pieces that appear on local television and radio.

2.4.2 Camels and the People of the Desert

The Tuareg, Toubou, Maure, and Chadian Shuwa Arab populations are all mainly concerned with camelid pastoralism and occupy the high northern regions where the Sahel meets the Sahara desert. Tuareg, Maures, and Arabs engaging in cross-desert trade provided the sole link between Mediterranean Europe and Sub-Saharan Africa for hundreds of years prior to the arrival of Europeans in the Sahel (Bernus, 1990). While the idea of Saharan camel caravans evokes images of turban-clad nomads trekking camelback through vast expanses of desert, the reality of life in such a harsh environment means that these groups have learned to rely on their camels in order to survive (Swift, 1979).

Members of all of these ethnic groups still see the ownership of camels as a definitive part of one's cultural identity. Much like the Fulani think of themselves as naturally charged with the care of their cattle, many Tuareg, Toubou, and Arab pastoralists think of pastoralism as not just an occupation, but as a separate way of life (Ould Cheikh, 1990; Serge and Hesse, 2008). Again like the Fulani, the lifestyle of these groups has served to alienate them from the larger society. The

racial divide between these Arab-Berber groups and the larger population of Black Sub-Saharan Africans, along with cultural differences and the history of slavery, has furthered the separation between these pastoralists and the sedentary communities with which they interact (Swift and Krätli, 2013). This situation has also led to a mistrust of Arab-Berber pastoralists among Black African sedentary groups that continues to this day (Norris, 2012).

2.5 Summary

The above chapter has provided an overview of the pastoral livestock systems present in the Sahel and a short introduction to the ethnic groups most closely associated with pastoralism in this area. As the present study deals with specific ethnic groups, this chapter has introduced these groups, showing their differences and highlighting their similarities. These cultural similarities will continue to be analysed, discussed, and elaborated upon as they provide the basis for the research at hand.

3 International Development and Pastoralism

In order to provide an adequate amount of background information for the concepts dealt with in this research, it is necessary to highlight some overarching trends in international development and how they have affected both pastoral groups and the greater population of the Sahel.

3.1 Development during the Colonial Era

Beginning with France's rapid colonisation of West Africa in the late 1800s, the French government began introducing programmes designed to modernise their new citizens and maximise the profitability of their Sahelian colonies (Glantz, 1976). Roads, irrigation systems, and new forms of taxation and social structure were engineered by the French in order to further 'develop' the societies they encountered. While these do not necessarily fit into today's definition of development, these projects paved the way for what would become the international development agenda of the Sahel (Mainguet, 2013; Oxby, 1999³).

Pastoralists presented the French with a unique situation due to their mobile lifestyle and strong aversion to subservience (Swift, 1977). Judging these groups as 'wild nomads', the French set about attempting to coerce them into a more sedentary form of livestock raising by digging several deep-bore wells throughout the region (Glantz, 1976). The French considered wells to be necessary pieces of infrastructure to ensure the stability of the colonial economy; however, the newly available water sources disrupted the existing practice of pastoralists digging shallower wells that only filled with water seasonally and put less of a strain on the water table (Quimby, 1977). Adapting to this new system of water drastically changed pastoralism in the Sahel. Pastoralists were no longer forced to travel long distances in search of water. Both pastoral and sedentary people in the region could keep more livestock in the towns and villages that began to grow because of their proximity to the new mechanical wells (Glantz, 1976). Keeping more livestock limited to a smaller range meant that the pastures around these new wells were quickly degraded, leaving both pastoralists and sedentary livestock owners with ample water but insufficient grass. This problem continues to this day across the Sahel with many agropastoralists being forced to either buy industrial feed for their animals or entrust them to more transhumant family members (Adriansen, 2008).

The French also instituted irrigation projects along the Niger River and the Senegal River that opened up more land for cultivation, thus limiting the amount of land that was used by

³ Oxby gives a more detailed account of the history of the relationship between international aid and pastoralism in the article cited here. This chapter owes much to her research on this topic.

pastoralists (Benjaminsen, 2008). Irrigation and dam building projects gave many more people access to water, but they also dramatically changed existing wetlands that were used by pastoralists as a prime source of fodder plants (ibid). These infrastructure projects, along with the tax that the French forced all of their colonial subjects to pay⁴, completely changed both livestock and crop based agricultural systems in the Sahel (Quimby, 1977). Irrigation schemes like the Office du Niger and the Sélingué Dam have continued to cause conflicts between agriculturalists and pastoralists as more and more land is put under the hoe and thus taken out of pastoral use (Benjaminsen et al., 2012).

3.2 Post-colonial Development

Shortly after the initial few West African states became independent in the early 1960s, numerous national governments in Europe and North America created diplomatic ties with these newly created states. In order to open up new markets for American products and prevent these new states from developing closer ties to the Soviet Union, the United States led the way in funding both small and large scale infrastructure projects in several Sub-Saharan African countries during the 1960s and 1970s (Bovard, 1986; USAID, 2013). Growing out of colonial practices and procedures, these projects also tried to introduce a more sedentary lifestyle to pastoral groups. In this period, the United States and the World Bank invested heavily in creating large fenced-in ranches where selected herders were able to benefit from constant water access, nationalised veterinary services, and the opportunity to crossbreed their livestock with exotic (read European) breeds in order to increase milk and meat production (Oxby, 1999). The colonial idea of deep-bore wells in the Sahel was taken up by international development agencies and expanded on in several countries including Senegal, Mali, Mauritania, and Chad. The advent of new water points coupled with fenced-in ranching schemes disrupted existing transhumance routes and was successful in coercing some pastoralists into leading more settled lives around these new pieces of infrastructure (Quimby, 1977).

Whereas, for better or worse, the deep-bore wells of the French have continued to impact how pastoralists interact with their environment, ranching programmes proved far less successful in achieving their stated goals (ibid). Most of the European livestock breeds that were imported to increase production levels were not suited to the harsh climate of the Sahel and ended up dying of tropical diseases or lack of sufficient food and water. Even the animals crossbred with native livestock suffered a similar fate, as they too were unsuited to the heat and were unable to travel the

⁴ This tax was originally paid in the form of livestock or cash crops (peanuts, cotton, and/or gum arabic), but during the last decades of colonial rule it was paid in cash.

long distances necessary to procure sufficient forage (Oxby, 1999). The fences that served as boundaries for these ranches also served to limit the available grassland both for herders working inside the ranch perimeters and pastoralists who now had to lead their herds around fence lines when ranch fences cut through pre-existing transhumance routes (ibid; Boyard, 1986).

The drought that hit the Sahel in the 1970s effectively put an end to most ranch operations when herders were forced to leave the fenced-in areas in a desperate attempt to seek out whatever forage they could find. The massive scale of the drought also pushed international donors to reallocate development funds into humanitarian food aid for the region (Kennedy, 1978). Social effects of the 1970s drought are still being felt across the Sahel, as many people who were displaced during that time have since established themselves and their families in new locations. The loss of animal wealth caused by the drought forced many rural people to seek out new livelihoods in urban settings (Vermeer, 1981; Adriansen, 2006).

The failure of ranch projects throughout the Sahel, coupled with the extensive drought, led international aid agencies including the World Bank, AFD, and USAID to focus their attention on the social aspects of livestock raising by assisting in the creation of various herder associations and pastoralist networks during the 1980s and 1990s (Oxby, 1999). Some of these projects still advocated for fenced in ranching techniques; however, ranches were redesigned to be run by groups of pastoralists using primarily local breeds. Generally, these herder association projects were marketed as a form of 'local empowerment' meant to provide pastoralists with the organisational structure to effectively present their concerns to the national government and international donors (ibid). This most often took the shape of a board of directors (usually created by a group of closely connected families) tasked with managing a deep-bore well or a tract of specified rangeland (Grainger, 1990). Other, grander associations were also created, in which pastoralists from across a country or region could join together to lobby for pastoral issues at the regional, national, and international levels.⁵ In reality, herder associations proved to be difficult to sustain once the external donor funding was taken away. National governments were also weary of the social/ political empowerment that these institution building projects espoused, and were quick to withdraw their support for these projects once funding had run out (de Haan, 1999). Toward the end of the 1990s national and international aid organisations decided to abandon these types of projects, yet many current aid initiatives still push for the creation of herder associations related to sustainable environmental management practices (Brockhaus et al, 2012:101).

⁵ While many of these associations failed, there were some notable successes. For more on a few these, see: http://www.maroobe.org

Beginning in the late 1990 and early 2000s, international aid in the Sahel increasingly focused on environmental degradation and climate change. This change in direction was aided by a movement among rangeland management researchers showing that pastoral systems are the most productive way to raise livestock in harsh environments like the Sahel (Behnke and Scoones, 1993; Niamir-Fuller, 1999). These researchers saw traditional pastoralists as the people best suited to act as keepers of the range (Niamir-Fuller, 1998). Benefiting from the global rise in environmentalism and interest in the effects of climate change that also occurred during this time, many new organisations started to fund projects in the Sahel. Projects from this era urged pastoralists and farmers alike to plant and care for numerous tree species both local and exotic in an attempt to stop the spread of desertification (Reenberg, 2011). Although these types of projects appear to value the input of pastoralists in the design and implementation of projects geared toward ameliorating their own environment, some of the governmental policies resulting from these projects have been shown to severely limit pastoralist access to the natural resources needed to adequately care for their herds. Benjaminsen et al (2012) show how international environmental organisations have funded irrigation and land tenure projects that continue to restrict pastoralists while favouring sedentary farmers and fisherfolk along the Niger River in Mali. The Great Green Wall Initiative is another example of this trend, with the international community exerting pressure on national governments to introduce stricter regulations on pastoral activities around tree planting areas (GEF, 2011).⁶

3.3 Current Trends

While projects defining themselves as promoting sustainable natural resource management continue to be implemented across the Sahel, the last decade has also seen more pastoral development projects that include conflict prevention components (Oxfam-Novib, 2011). Conflict prevention is rarely a primary objective, but rather a tool used by projects advocating for sustainable environmental practices and/or increased economic activity among pastoralists. With the number and intensity of violent conflicts related to pastoralists and pastoral zones on the rise throughout the region, international donors have started to shift more funding toward these areas. Naming climate change, rapid population growth, and religious extremism as the root causes of this increase in both violent and nonviolent conflicts, international donors and national governments have started to more seriously investigate how these phenomena interact with each other (Homer-Dixon, 1999; de Haan et al., 2014).

⁶ The Great Green Wall is an ongoing project started in 2007 that aims to plant a live fence made up of arid tree species that stretches across the Sahel from Senegal to Djibouti in an attempt to control desertification.

Scarcity and population growth as threats to the people and environment of the Sahel is not a new idea; however, in recent years these concepts have grown in popularity and have aided in securing funding for several large-budget international aid projects (Reenberg, 2011). Following the narrative of resource scarcity caused by climate change and rapid population growth as the main driver of conflict in the Sahel, numerous studies and projects have started to focus on land use rights and how to more accurately and legally portray the complex systems of land use that exist in rural areas between farmers, fisherfolk, and pastoralists in an attempt to prevent conflicts between these groups (Benjaminsen et al., 2012; Oxfam-Novib, 2011). Resource scarcity has also informed several projects exclusively targeting pastoralists in the hopes of averting the 'overgrazing' of fragile rangelands in several Sahelian countries. These environmental projects have taken many forms including livestock and fodder amelioration projects meant to increase productivity in a sustainable manner, educational programmes meant to train pastoralists on different ways to incorporate sustainable agricultural practices into their daily lives, and conflict management programmes meant to help communities deal with farmer-herder conflicts at the local level.

Alongside growing environmental concerns, there has also been a marked increase in the amount of violent acts carried out by extremist groups claiming to be inspired by Islam (de Haan et al., 2014). Of the Sahelian states Mali, Niger, and Chad have been the most affected by these groups, but a smaller number of attacks have also occurred in Mauritania and Burkina Faso. Al-Qaeda in the Islamic Maghreb (AQIM), Boko Haram, the Movement for Unity and Jihad in West Africa (MUJWA), and Ansar Dine are the biggest active extremist groups, but there are also several smaller groups or breakaway factions from these larger structures. AQIM originated in Algeria in the early 2000s, but has since spread south into the vast desert hinterlands of Mauritania, Mali, Niger, and Chad attracting new recruits from all of the pastoral ethnic groups found in the area (de Haan et al., 2014). Boko Haram began in northern Nigeria, but has since moved north into Niger and the Lake Chad Basin of Chad and Cameroon, drawing recruits from the Fulani that live in the borderlands (Tanchum, 2012). Ansar Dine and MUJWA were created in response to the unrest in northern Mali that resulted in the Civil War of 2012. These two groups are mainly comprised of young Tuareg and Fulani, but also include North African Arabs. (Zoubir, 2012).

Although the reasons why these groups were created and have been successful in recruiting new members is continuously being debated among academics, government officials, and village elders, research points to a lack of economic opportunity among young people, complaints directed toward unresponsive national governments and/or the larger international order, and increasingly uneven distribution of livestock ownership in pastoral communities (de Haan et al., 2014). This

situation has provoked international aid organisations into funding projects that are geared towards promoting legitimate economic activities as a way of persuading young people to not join violent extremist groups, as well as projects geared toward establishing more responsive and effective governmental structures throughout the region (El-Busra, Ladbury, and Ukiwo, 2014; World Bank, 2015; World Bank, 2016).

The World Bank, USAID, AFD, and the FAO have all begun to design projects that attempt to solve both the environmental and extremist group problems. These organisations assert that if the pastoral economic sector is supported and expanded in an environmentally sustainable way throughout the region the incidences of both resource based conflicts and violent extremist group participation will decrease substantially (Stewart, 2009; de Haan et al., 2014). Practically speaking, this translates into increased funding for the types of environmental projects mentioned above, as well as infrastructure projects in pastoral zones meant to increase market access, animal health projects meant to increase veterinary services in pastoral areas, and an increased focus on multidisciplinary research related to Sahelian pastoralism.

3.4 Ongoing World Bank Project in Pastoralism

"PRAPS is a US\$248 million regional operation to scale up selected activities within six Sahelian countries that have already proven their capacity to support pastoralists groups and enhance regional integration; the activities are recognised throughout the region to have the potential to provide significant beneficial spillover effects (World Bank, 2015)."

The World Bank funded Regional Sahel Pastoralism Support Project (PRAPS) is perhaps the largest example of a project that aims to incorporate all of these elements into one package. Beginning in 2015, this six year long project covers pastoral zones in Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal. In an attempt to provide support to pastoralists in the most holistic way possible, PRAPS components include:

- animal health improvement,
- natural resource management enhancement,
- market access facilitation,
- pastoral crisis management, and
- project management/institutional support.

The everyday activities of PRAPS are overseen on the regional level by the Permanent Interstate Committee for Drought Control in the Sahel (CILSS), a research body that comprises representatives from governments of 13 Sahelian states and specialises in the management of internationally funded research and development projects. On the local level, PRAPS activities are conducted by country teams made up of government workers, researchers, and civil society actors in each of the six countries. While the project is currently still in the research and planning phases, the activities suggested by the results of research currently being undertaken will be implemented by a number of actors including national governments, USAID, AFD, the Swiss Development Cooperation, the Belgian Development Cooperation, as well as numerous local agricultural NGOs and pastoralist associations (World Bank, 2015).

Of the six countries covered by PRAPS, Mali, Niger, Chad, and Burkina Faso have experienced significant political unrest in the last three years. Regional and local violence (farmer-herder conflicts, extremist group activity, violent political movements) is also commonplace in the pastoral zones of these countries. These conflicts often begin over access to resources and/or unfair treatment (real or perceived) of a group at the hands of the government or outside funders (El-Busra, Ladbury, and Ukiwo, 2014; Benjaminsen et al., 2012; Oxfam-Novib, 2011). Realising that the activities and infrastructures that will be put in place by PRAPS have the ability to create conflict in the fragile contexts of pastoral zones, the World Bank has also funded a separate conflict prevention project to provide conflict sensitivity and prevention tools for all of the partners working within the larger PRAPS framework.

The Pastoralism and Stability in the Sahel and the Horn of Africa (PASSHA) Project is an attempt to introduce conflict sensitivity thinking into all phases of the various interventions that PRAPS will fund. PASSHA also serves as a way to use the implementing partners of PRAPS interventions in gathering data on pastoral livelihoods in general and pastoral conflict in particular. Due to the sensitive and specialised nature of these objectives, the majority of partner organisations are pastoral associations, social networks, and civil society groups working at the local and regional levels to both publicise and lobby for the interests of pastoralists throughout these six countries. All PASSHA activities are of a regional nature and are directed by CILSS (World Bank, 2016).

During a four month summer internship at CILSS, I worked closely with the Conflict Management Specialist of PASSHA and was given access to a large amount of information collected by regional and local partners. I was also invited to participate in several workshops hosted by CILSS in which the different PRAPS country teams came together to discuss the particulars of each project component and how these components will be adjusted to the different

contexts of their countries. Workshop topics included gender mainstreaming in data collection, pastoral livelihood data collection methods, and how to use GIS mapping tools in pastoral data collection. As this internship formed the foundation of the data collection for this project, it will be discussed in detail later in the methodology chapter.

3.5 Summary

The present chapter has followed the timeline of international development efforts in the Sahel from the colonial era to present day. By discussing the different ways in which governments and international donor agencies have conceived of pastoralism and its relationship to the social and economic development of the Sahel, this chapter has provided the background information necessary to follow the arguments presented here. The short overview of PRAPS provides an introduction to the internationally funded aid project that provided the bulk of the data used in this study.

4 Theoretical Framework

4.1 Introduction

While there exists a wealth of development literature dealing with the ways in which development organisations can meaningfully and successfully engage with the cultures of their target populations, I have chosen to set this study on a conceptual foundation heavily influenced by the sociological theories of Pierre Bourdieu. This choice is due to the fact that the present study focuses not only on the actions and sentiments of the international development establishment, but also on the actions and sentiments of Sahelian pastoralists themselves. To truly capture both sides of the relationships that exist between these groups, a broad sociological framework is needed. Bourdieu's theory of practice provides a holistic method for examining social relations.

4.2 Bourdieu's theory of practice

Building on Marx's ideas about the production and reproduction of social classes, Bourdieu looks at the ways in which these processes occur and the role that culture plays in them. He also concerns himself with discovering how cultural reproduction influences social relations. In so doing, Bourdieu presents us with the idea of *habitus*, which can be briefly defined as 'a set of dispositions that incline agents to act and react in certain ways' (Thompson, 1984: 53; Bourdieu, 1977b). These agents act and react in different ways within different social arenas that Bourdieu calls *fields*. Through his later work on the subject, Bourdieu builds on these ideas by introducing different forms of capital as units of power that individuals use in order to exert control over aspects of their social arena. Bourdieu lists these forms of capital as: *economic capital*, which is anything that can be directly converted into money; *cultural capital*, or knowledge and skills gained by education and experience; and *social capital*, or power gained by social contacts (Painter, 2000; Bourdieu, 1986).⁷ These concepts are key components in Bourdieu's theory of practice in social relations and are discussed below in greater detail.

4.2.1 Habitus

Bourdieu further defines habitus as 'structured structures predisposed to function as structuring structures' (Bourdieu, 1977b: 72) and 'the durably installed generative principle of regulated improvisations' (ibid: 79). While these definitions embody the philosopher's love of obtuse language, they also provide for a rather open interpretation of the concept. The vague nature in which Bourdieu describes habitus is perhaps the very reason why so many later sociological thinkers have taken up this concept and transformed it in several ways (Reay, 2004). Put more

⁷ For further reading on this concept applied to pastoralism, see Moritz (2010)

simply, habitus can be thought of as an individual's internalised dispositions taken from the larger social world that induce that individual to act and/or react in certain ways. These actions, or *practices*, are the ways in which an individual is able to create the social world in which he or she lives.

4.2.2 Field

Dividing the larger social world into smaller units called *fields*, Bourdieu sees individuals acting as social agents in different social arenas that each have their own rules. These fields are settings where social agents interact with one another, take on different social positions, and engage in a multitude of practices (Bourdieu, 1984). As agents move in and out of different fields, their positions are likely to change. A simple example of this would be if a professional tennis player suddenly found herself on a basketball court. On the tennis court, she is well versed in the rules of the game and has no trouble understanding the practices that she must perform in that specific field; however, when she picks up a basketball she is out of her element. She is unsure of the rules of this new field and what her function is within it. An agent's social position in a specific field is thus determined by the rules of the field, the habitus of the agent, and by the amount and form of capital that the agent possesses (ibid).

4.2.3 Capital

Bourdieu defines capital as 'accumulated labor ... which, when appropriated on a private, i.e. exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor' (1986: 241). He sees capital as anything, be it material or intangible, that is considered valuable in a specific field. This could mean financial wealth, knowledge, education, experience, friendships, or linguistic ability. In order to better explain how capital influences social interaction, Bourdieu finds it necessary to differentiate between three different forms of capital. Economic capital, the form most familiar to most people, is simply anything that can be 'immediately and directly convertible into money' (ibid: 242). Social capital can be thought of as the combination of social connections that an individual possesses, and can be gained from membership in a family, tribe, professional guild, or socio-economic class (ibid). Cultural capital can take on many shapes, but is fundamentally related to one's education and experiences. In its embodied state, cultural capital is something personally achieved by an individual over a period of time. Examples of this type of capital include knowledge gained through education (both formal and informal) or the acquisition of a language. Cultural capital can also appear in an objectified state, where material objects are defined by their relationship to an embodied form of cultural capital. A musical instrument as an object can be converted into money fairly easily, but the

embodied cultural capital of learning how to play it and appreciate it adds another layer to its value. In its institutionalised state, cultural capital is best exemplified by academic qualifications and degrees. Institutionalising cultural capital makes it easier to convert into economic capital by giving it a specific market value. All three forms of capital are heavily interconnected, and capital can often be converted from one form to another in specific situations.

4.2.4 Context and application

Combining field, habitus, and capital into a theory of practice came from empirical studies carried out over several decades in two different locations. Bourdieu first began writing about social practices and the structures that comprise them during his time in Algeria in the 1950s and 1960s. In compiling an ethnography of the country's Kabyle Berber population Bourdieu drew several conclusions about how social structures influence individual agency that would continue to influence his work for several decades (Painter, 2000). Later becoming preoccupied with how culture is reproduced from one generation to the next through education systems, Bourdieu studied interactions between teachers and students in French schools during the 1960s. Through this research he was able to show how students from different socio-economic backgrounds attained different levels of success throughout their educational careers (Bourdieu, 1977a). This discovery led him to further expand on the concepts of social and cultural capital in his later works.⁸

The concepts of *field*, *habitus*, and Bourdieu's different forms of capital prove themselves relevant to an analysis of the ways in which pastoralists conceptualise their social world and the ways in which those predispositions affect how pastoralist groups react to development aid programmes. Additionally, incorporating different interpretations of culture, individualism, and reflexivity into Bourdieu's theory of practice provides for a more nuanced examination of these relationships. It also allows for the analysis of both pastoralist conceptions of livestock ownership and the conceptions of pastoralism held by local and international development actors.

4.3 Pastoral practice

Much has been written about pastoralism as a multifaceted social and economic system, and many researchers have found the concepts of habitus and practice useful in analysing decisions made by pastoralists in different contexts (Camara, 2013; Guilhem, 2008; Moritz, 2010; Rasmussen, 2010). In pouring over this prior research, certain broad cultural characteristics are found to be shared by most (if not all) of the Sahelian ethnic groups who identify heavily with pastoralism, namely the Fulani, Tuareg, Maure, Toubou, and Chadian Arab. However, it should be

⁸ These concepts are primarily dealt with in *Distinction: A Social Critique of the Judgement of Taste* (1984) and "The Forms of Capital" (1986).

noted at this point that marked differences also exist between these groups, and what is described here as pastoral habitus is in no way an attempt to belittle or homogenise these different groups who all have their own distinct culture, language, and history. Forming a broad generalisation about these groups is only meant to draw out the similarities that exist between them, especially in regards to how they treat and are treated by local and international development programmes.

4.3.1 Pastoral fields

In defining a pastoral habitus that fits all of these groups, it is first necessary to identify some of the social fields in which they commonly find themselves. The fields of livestock herding, rural living, peri-urban or urban living, governmental and non-governmental development programming, and the ever-present field of power are traversed by Sahelian pastoralists with varying degrees of virtuosity on a regular basis. As livestock herding forms the central component of both their social and economic lives, it is by far the most important field (Moritz, 2010). Skills and knowledge associated with herding are major forms of cultural capital that can be easily transformed into economic capital through the profitable selling of animals and their byproducts, as well as social capital through clan and family ties cemented by the giving and receiving of animals. Power relations are somewhat simpler in this field as compared to others discussed below, because interactions are normally between pastoralists.

Since the vast majority of Sahelian pastoralists live in rural areas, this forms another social field. In the rural field pastoralists interact with agriculturalists, and thus are subject to power struggles when confronted with social agents with different practices and strategies (ibid). Due to this fact, the valuation of capital becomes more difficult as agriculturalists and pastoralists disagree on what constitutes capital and how much it is 'worth'. This struggle often manifests itself in conflicts over resource use and the market prices of animals or grain.

Due to the global trend of urban migration (typified in the Sahel by the rural exodus that occurred after the severe drought years of the 1970s), pastoralists and their herds are increasingly found in urban and peri-urban locations (Bonfiglioli, 1988). This creates numerous problems not only for pastoralists who are unfamiliar with the rules and practices of the urban field, but also for other agents in this field who must reshape and change their practices to contend with these new additions; however, this can really be said about any situation where new agents in a field are socialised into that field. As newcomers, pastoralists present a weak force in the power relations of the urban field. Questions about what constitutes capital and who decides abound in this field as

⁹ This is not meant to be an exhaustive list of the fields present in pastoral society. The examples given here only serve to illustrate how one can apply this concept.

pastoralists compete with a multitude of other urban dwellers to try to navigate the urban social arena. Pastoralists in this situation often find themselves trapped in a cycle of poverty (Camara, 2013; Adriensen, 2002: Paper D). With the loss of their herds signifying a severe loss of all forms of capital, these pastoralists are at a disadvantage in this field.

Lastly, more and more governmental and non-governmental development programming is currently focused on pastoral issues. This brings pastoralists into a social field where agents interact through policy and law. Power relations in this field are complicated by the number of actors (pastoralists, governments, INGOs, and local NGOs) and the diversity of practices that these actors employ. Capital valuation is incredibly complex in this diverse field due to the large number of different cultures and socio-economic levels that interact with each other. Again, due to their unfamiliarity with the practices associated with this field and their shortage of purely economic capital, pastoralists have been at a disadvantage when interacting with other more powerful agents in this field. However, due to the increased interest in pastoralism among INGOs, pastoralist advocacy groups are gaining power in this field by using their social and cultural capital (their understanding of the context and their pastoral social networks) to gain financial support from both INGOs and national government programmes (Wane, Ancey, & Grosdidier, 2006; Thébaud & Batterbury, 2001).

4.3.2 Pastoral capital

As the concept of capital forms the basis for the research questions addressed by this study, careful attention should be paid to the manner in which this concept is applied in the context of Sahelian pastoralism. Economic capital in this context is usually derived from the direct sale of animals and animal products (meat, milk, hides, etc.) or from wages earned through caring for someone else's herd; however, it can also come in forms that are not directly part of the cash economy. These include: the creation of outputs that are used as inputs in other activities (i.e. manure or traction power in crop farming), outputs that are directly consumed by households (i.e. leather, milk, and other dairy products), and/or the accumulation of live animals as a store of capital (WISP/IUCN, 2006; Swift, 1979).

Defining cultural and social capital in a pastoral context is a bit more challenging. Since pastoralism in the Sahel is often thought of in ethnic or cultural terms, cultural capital is often embodied in the education and experience that one can be inferred to possess by belonging to a specific ethnic or cultural group. This can be easily confounded with notions of social capital, because in the context of Sahelian pastoralism one's education and experiences are tightly bound together with one's lineage and position within an ethnic group, clan, or family. Who one knows

and what one knows are often inextricably linked. Cultural capital in an institutionalised state is of less importance here, due in part to the weakness of the educational systems extant in Sahelian countries. Pastoral institutions are usually based on ethnic, clan, or family relationships, and thus are closer in nature to the concept of social capital.

Objects representing cultural capital are prominent in this context. Tools associated with the raising of livestock are valuable far beyond their monetary cost. The shepherd's staff is a status symbol as well as a useful way to guide one's herd (Sow, 2006). While the design of the staff differs greatly among Sahelian pastoral ethnic groups, the cultural value remains relatively unchanged. Scarves, swords, and other accoutrements associated with the practice of herding are also given cultural value among these ethnic groups (Guilhem, 2008; Bernus, 1990).

4.3.3 Pastoral habitus

According to Bourdieu's theory, all uses of capital in a field is shaped by the habitus of each agent. While the habitus of each individual pastoralist varies greatly, some broad social predispositions are common to a large number of pastoralists from all of the previously mentioned ethnic groups. The most important of these predispositions concerns the central importance of livestock. Animals form the occupation of pastoralists and are essential to their social and economic livelihood (Secretariat of the Convention on Biological Diversity, 2010; Blench, 2001). The conceptualisation of livestock simultaneously as cultural, social, and economic capital is central to any accurate understanding of a pastoral habitus (Camara, 2013; Adriansen, 2002; Vermeer, 1981).

Although the importance of livestock is by far the most widely held predisposition among pastoralists, it is not the only one. Chief among these other predispositions is a deeply felt sense of cultural superiority (Scheele, 2014; Villasante-de Beauvais, 1997; Kervin, 1992; Bernus, 1990). Each in their own way, Sahelian ethnic groups who closely identify with pastoralism often see themselves as superior to their neighbours solely due to their status as a member of their ethnic group. Closely linked with the more power-laden disposition of the importance of livestock, ideas of cultural superiority manifest themselves through numerous practices including: slavery (which is still practiced in some areas of several Sahelian countries), armed conflict (i.e. Touareg rebellions in Mali, Niger, and Algeria and ongoing conflicts between Fulani herders and sedentary farmers in Nigeria), and other more quotidian forms of racism and ethnic tensions throughout the Sahel.

¹⁰ For a deeper analysis of this phenomenon, see Tajfel and Turner (1979).

Pastoralists across these ethnic groups also share certain bodily aspects of their habitus. Bourdieu calls these physical tendencies of posture, movement, and personal space the *hexis*. While each ethnic group has specific aspects of hexis that set them apart from the rest, there are also some striking similarities. All of the groups in question have codes of conduct that regulate how one should carry oneself that are based around the precepts of quietness, patience, and modesty. Ideal members of these groups are supposed to keep quiet, endure pain without complaining, and pay special attention to not be seen without properly covering most of the body (Scheele, 2014; Rasmussen, 2010; Guilhem, 2008; Sow, 2006). Although all of these groups have also adopted Islam to varying degrees, these codes of conduct pre-date the arrival of Islam (Claudot-Hawad, 1996; Bonfiglioli, 1988).

4.3.4 Policy and practice

Combining abstract predispositions concerning the importance of livestock and ideas of cultural superiority with the bodily codes of conduct that exist among pastoral ethnic groups, a broad template of pastoral habitus emerges. With this image in mind, it becomes easier to analyse how pastoralists interact not only with other social groups in the Sahel, but also with international development organisations. This conception of a pastoral habitus allows for a more thorough reading of project plans and policy documents published by aid organisations and national governments. Comparing pastoral habitus as it has been described by anthropologists, linguists, and, most importantly, by pastoralists themselves to the ways in which pastoralism is portrayed in project plans and policy documents provides a window into the relationships that exist between these development actors and pastoralists. However, it can also lead to an over-emphasis on structural thinking and a tendency to generalise or, worse yet, orientalise pastoral practices.

4.4 Challenges to Bourdieu

Bourdieu's broad, yet empirically grounded, approach makes his theories well suited to many diverse contexts. In an attempt to overcome the theoretical divide between objectivism and subjectivism, Bourdieu puts forth the concept of habitus as a structure that inscribes 'subjective, bodily actions with objective social forces so that the most apparently subjective individual acts take on social meaning' (King, 2000). While King argues that Bourdieu's habitus falls too squarely into the objectivist category of social theories, Wacquant provides a more understanding reading of the concept. His understanding of habitus appears to be a bit broader, as he explains: 'Habitus is never the replica of a single social structure since it is a layered and dynamic set of dispositions that record, store, and prolong the influence of the diverse environments successively encountered in one's life' (Wacquant, 2005:319). While this description does place more emphasis on individual

agency, it is still far too concerned with the objective social structures that exist in 'diverse environments' (ibid).

Looking at interactions as dynamic and reflexive mental processes that, while influenced by social structures, are also shaped by actual events as they unfold during the course of an interaction provides for a more realistic view of social life. While Bourdieu sees social structures influencing dispositions which in turn influence practices, he fails to account for how social agents react to events when there are 'intra-habitus contradictions', incongruence between dispositions or positions, and/or 'persons are [simply] reflexive' (Mouzelis, 2007: 2). Bourdieu and Wacquant discuss reflexivity and its role in the forming an individual's habitus; however, they only see agents truly changing their strategies and orientations in times of 'crisis' (1992:131). On the whole, Bourdieu's own conceptions of habitus and practice do little to account for any form of reflexivity and/or increased individual agency in social interactions.

This is not to say that social interactions are completely unscripted, or improvised without any inclusion of preexisting dispositions. The practices of all agents involved in these interactions still follow, at least to some extent, Bourdieu's line of thought, but this line of thought does not necessarily prescribe the events that will occur. His theory of practice can be used to accurately describe some aspects of social interaction, but it should not be thought of as a way to predict the path that a given social interaction will follow. Used descriptively, Bourdieu's theory serves as a legitimate framework in which one can analyse social relationships and interactions of many kinds; however, when used prescriptively, this theory can be used to generalise (and subsequently marginalise) certain populations. While Bourdieu's original research in the French education system provided much information on cultural reproduction and power relations between teachers and students, it did not prescribe the future of any individual. In other words, one's habitus does not necessarily predict how one will act in a certain situation, or how one's life will progress.

A certain amount of reflexive individualism can prevent the structuralism inherent in Bourdieu's theory from overtaking common sense. As Mouzelis says, 'his theory of practice generally—given that it is based on the idea of transcending the objectivist-subjectivist divide — underemphasises the rational, calculative, and reflexive aspects of human action' (2007: 4).

4.5 Summary

By first explaining Bourdieu's theory of practice and then showing how this theory applies to the context of Sahelian pastoralism and development, the present chapter has detailed the theoretical framework that this study will employ in its analysis of how cultural, social, and economic implications of livestock ownership and care affect the implementation and outcomes of

agricultural development projects targeting pastoralists. The concepts of *habitus*, *field*, and Bourdieu's forms of capital were outlined, and their application to the subject matter of this study were made clear in the second and third sections.

The fourth section outlined some issues that arise when using Bourdieu's theory of practice. It also presented ways in which the basics of this theory can be supplemented with a critical view of individual reflexivity. As a final word on the theoretical underpinnings discussed here, I would like to clarify that the popular nature of this theory and its widespread usage mean that there are myriad examples of its use (and misuse) in the literature. The approach described above is but one way to interpret Bourdieu's theory, and should not be considered the only way.

5 Methodology and Reflections on Data Collection

5.1 Introduction

Data collection for the present research project took place during a five month period from the beginning of June through to the end of October, 2016. Funding was provided through a research grant from the Centre for Peace Studies at the University of Tromsø - The Arctic University and an internship stipend from the World Bank. Data was collected through several methods, namely: a document review, two separate periods of participant observation, a short answer questionnaire, and several unstructured interviews. From the early stages of project design, it became clear that using a variety of methods was the only way to truly capture all of the disparate viewpoints needed to provide adequate answers to the research questions.

The present chapter introduces the data collection methods used, gives explanations as to why these methods were chosen, and discusses some of the issues that arose during the data collection process. Reflections on my role as a researcher are also included here in order to approach methodological issues as critically and transparently as possible. By examining the reasons behind my chosen approach and the consequences that it engendered during and after the data collection process, this chapter gives further insight into the project at hand and also allows for a more thorough understanding of the diverse contexts in which data was collected.

5.2 Qualitative methodology and pastoralism

As the research questions at hand are fairly qualitative in nature, it is only natural that qualitative methods would be better suited to the task of finding answers. The cultural, social, and economic implications of livestock ownership and care among pastoralists are difficult concepts to grasp, and do not lend themselves easily to quantitative, objectivist approaches to research. At its heart, this research project is based on the idea of a constructed reality in which individuals actively create their social worlds. Looking at how pastoralists conceptualise livestock ownership and then how international development organisations conceptualise pastoralism and pastoralists automatically leads the researcher into taking up certain epistemological and ontological positions.

The present research project examines how a social construct (pastoralism and livestock ownership) is seen by the members of various social groups (pastoralists, local NGO workers, and international development workers). Epistemologically, this is a prime example of interpretivism. Linked strongly with phenomenology as conceptualised by Schutz, Husserl, and Weber, interpretivism is interested in discerning the meanings that social actors give to social constructs. It also 'requires the social scientist to grasp the subjective meaning of social action' (Bryman, 2012: 30). The analysis of a situation with the purpose of seeing things from the points of view of one's

research subjects is exactly what this research project is attempting to do. Accomplishing this goal also leads quite naturally to a certain ontological position.

If a researcher aims to discern the meanings behind certain social properties, it then makes sense for that researcher to also see those social properties as being actively constructed by the society that he or she is studying. The idea of social properties being created by social actors, and not just existing as objective phenomena, is called constructivism (Bryman, 2012: 33). The examination of how different groups continue to adjust and revise not only the concept of livestock ownership and care itself, but also how these different groups conceptualise their interactions with one another in the larger field of social interaction and power relations obviously leans more toward a constructivist ontological approach.

While the nature of the research questions helped me to firmly establish epistemological and ontological positions, there was another factor present in my decision to use qualitative methods as tools of inquiry. Social research on the subject of pastoralism has been going on for quite some time, and as such there have been numerous studies using both qualitative and quantitative approaches to answer a wide variety of questions. In a preliminary review of the available literature, I noticed a dearth of information regarding what pastoralists think about projects and programmes implemented by international development organisations geared specifically toward the pastoral sector. I want to use the present research as a way to fill that gap, but also as a way to let the voices of pastoralists be heard more clearly.

There is already a wealth of quantitative information being produced concerning the economics of pastoralism (WISP/IUCN, 2006; Wane, 2010), the current changes in pastoral cultures (Adriansen, 2002; FAO/CIRAD, 2012), and the ever-changing weather patterns that deeply affect Sahelian pastoralism (Grainger, 2013; Mainguet, 2013; Behnke and Scoones, 1993). These studies often minimise pastoralists' participation in the research process, offering broad generalisations while not engaging with the social constructs at the heart of the issues being researched. In taking a natural science approach to problems facing pastoralists, these researchers reduce the comprehensive and subjective experiences of these people to narrowly defined statistics. With this research project, I am trying to present a more in-depth view of how Sahelian pastoralists and development professionals working in the pastoral sector conceive of these social constructs, a task best accomplished through the use qualitative methodology.

5.3 Document review and analysis

The first step in the data collection process was an extensive document review, examining peer-reviewed articles, development organisation publications (both in-house and public), project

papers, and governmental documents. This document review took place during a research internship with the World Bank's Regional Sahel Pastoralism Support Project (PRAPS), which was completed at the headquarters of the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) in Ouagadougou, Burkina Faso. Documents were obtained from Google Scholar, the University of Tromsø library database, and development professionals at CILSS. A qualitative content analysis was undertaken in order to identify instances where the cultural, social, and economic implications of livestock ownership were mentioned, instances where the opinions of both development professionals and pastoralists were collected, and instances where pastoral development projects were evaluated by an outside monitoring and evaluation team. This method, which Bryman describes as 'a searching-out of underlying themes in the materials being analysed' (2012:557), was chosen as a way to gather a large amount of specific information about people, projects, and organisations that are spread over a vast geographic space.

Scott (1990) asserts that documents create the same methodological issues as any other form of sociologically relevant evidence. As such, he outlines four criteria that can be used to assess a document's quality: 'authenticity (Is this evidence genuine and of unquestionable origin?), credibility (Is the evidence free from error and distortion?), representativeness (Is the evidence typical of its kind, and, if not, is the extent of its untypicality known?), and meaning (Is the evidence clear and comprehensible?)'(ibid: 6). Using these criteria allowed me to take a more critical look at the documents reviewed; however, analysing documents for the purpose of understanding how they describe, analyse, and/or perpetuate social constructs also requires a certain amount of 'interpretation'.

Focusing my attention on articles and development trade publications that dealt with the interplay between pastoralists 'on the ground' and local/regional development workers, I was keenly aware of my role as a reader and 'interpreter' of the information that I was collecting. My previous experiences living and working with pastoralists as a development worker coloured my understanding of the documents, and my concurrent experience working with a pastoral development project impacted the ways in which I was able to engage with some of the ideas unearthed by the document review process. Being careful not to cling too blindly to the information presented to me as fact while also making sure that my own experiences did not influence my interpretation too greatly, Mottier's idea of the 'mutual construction of meaning' became more relevant (2005: 4). As Mottier points out, data collection is not a passive act, but rather an interaction between researcher and data source in which meaning is interpreted and constructed (ibid). This idea can be used to frame all of the methods employed in the present research.

5.4 Participant observation at CILSS

According to Bryman, participant observation involves a researcher 'participating in a group's core activities but not as a full member. In closed settings like organisations, the researcher works for the concern often as part of a research bargain to gain entry or to gain acceptance' (2012:442). My arrangement with the World Bank and CILSS accurately fits this description. Throughout a four month internship, I kept a thorough journal consisting of the tasks I was asked to perform, any interesting information that was made available to me, and all the daily office happenings of which I was aware. The observations and information put down in the journal have proven valuable to my understanding of the context in which I was working and also as a microcosm of the larger development industry.

A large part of the participant observation process was spent interviewing international development workers in various positions both within PRAPS and within other unrelated Sahelian development projects managed by CILSS. As the schedules of these professionals are often overloaded, participants were selected using an opportunistic sampling method. Interviews with willing participants were normally of a spontaneous nature, occurring in what little free time could be found. This sampling strategy was far from ideal; however, it did mean that interviewees were generally more candid, due to the fact that interviews were short meetings usually sandwiched between other work-related commitments. The often unplanned nature of these interviews meant that I was occasionally unable to take notes while the interview was taking place. Again, this was not ideal and led to several instances of having to repeatedly ask the same questions to the same interviewees on multiple occasions.

While I was able to seek out several people willing to offer me their opinions on various topics related to development, the timing of my internship did coincide with the summer holidays. As such, there were several weeks during which many members of the office staff were on vacation. Although I was able to use these slower weeks to devote more time to my own personal research, I feel as though I could have been exposed to more opinions had I had the opportunity to complete the internship during a different time of the year.

5.5 Short answer questionnaire

During the second half of my internship at CILSS, it became clear to me that getting a broader idea of pastoralism and international development in the Sahel could only be accomplished by attempting to communicate with development workers in all six countries¹¹ involved in PRAPS.

¹¹ These countries are Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal.

While I would have preferred travelling to all six countries and holding face-to-face interviews with both development workers and pastoralists, this was not possible due to high travel costs and the safety and security situations in some of these locations. Email was chosen as the preferred means of communication, as all other project information was disseminated in this way. Studies have shown that data collected from self-completion questionnaires is less likely to be affected by social desirability bias than data collected through in-person interviews (Sudman & Bradburn, 1982; Tourangeau & Smith, 1996; Bryman, 2012). This means that questionnaire respondents are theoretically less likely to change their responses to better suit what they think the researcher wants to hear.

Using contacts with local development actors provided by PRAPS staff members, I was able to compile a list of potential survey respondents in the six PRAPS countries. Respondents were targeted due to their unique position as 'go-betweens', working directly with pastoralists while also communicating directly with executives and donors from international organisations. As I had already interviewed several development executives at CILSS, the opinions of workers 'on the ground' provided a way to see the impacts of development projects from the perspectives of both the pastoralist and the development organisation.

A short answer questionnaire was adapted from the interview guide that I had originally compiled at the outset of the research process. This questionnaire was sent out to 24 potential respondents working for various local and international development and civil society organisations. Included in the email was a short disclaimer informing potential participants of their right to not respond and assuring them that any information they gave would not be associated with any personally identifying details. The questionnaire was also sent out by the Regional Coordinator of PRAPS to all 6 of the national project directors. They were instructed to disseminate the questionnaire to their staff as they saw fit. In total, at least 30 people were asked to fill it out.

The questionnaire consisted of 8 short answer questions focusing on the objectives of the respondent's organisation, the challenges that his/her organisation faces when dealing with pastoralists, and their organisations' (as well as their own personal) perceptions of pastoralists and pastoralism in the Sahel. Although 8 is a small number of questions, the PRAPS staff members who helped me modify the original interview guide thought that adding more questions would result in fewer complete responses, a sentiment echoed by Bryman (2012: 233). All questions were crafted to provide certain specific information, while also being open enough to elicit anecdotes and

 $^{^{12}}$ An English translation of this questionnaire can be found in the appendices. The original French document is also included.

examples showing similarities and differences in the conceptions of livestock ownership held by various international organisations, local development workers, and pastoralists. Respondents were also asked to include their name, gender, job title, and the number of years that they had been working for their current organisation. While I was initially hesitant to ask for biographical data, my academic supervisor and my superiors at CILSS thought that it would be interesting to note any demographic trends that emerge from the respondent pool.

5.5.1 Difficulties with responses

In total, I received 6 responses. This rate of return (20%) appears low, however it is somewhat typical for self-completion questionnaires (Denscombe, 2014: 30). The low number of responses could be due in part to timing. As previously mentioned, my internship was during the summer holidays, and many development workers were out of the office. The small number of responses could have also been due to technical difficulties. Internet service throughout the Sahel is limited, especially in the rural areas where some of the potential respondents were working. The busy schedules of the targeted respondents could also be to blame. Due to this low rate of return, discerning demographic trends and/or generalisations based on these responses was problematic; however, the great degree of agreement existing in received responses facilitates drawing conclusions related to the research questions at hand.

All respondents were males of similar ages.¹³ Four of the respondents were from Southern Niger, with the cities of Niamey, Maradi, Zinder, and Diffa being represented. The 2 other respondents were from Burkina Faso, and work in Dori and Fada N'Gourma. All 6 filled out the questionnaire thoroughly and in many instances gave additional information that was not directly part of the questions.

Although the responses received were full of enlightening information, their statements should be considered with a critical eye. Being that the questionnaire was sent out to the respondents from myself (a foreign researcher), the Regional Coordinator of PRAPS, and the Conflict Management Specialist of PASSHA, one could assume that the respondents could have been telling us what we wanted to hear. My positionality as a foreign (white) researcher who was presented as having a direct connection with the World Bank could have also influenced respondents, but again, I find this scenario unlikely. As previously mentioned, there have been

¹³ As there were no females included in the initial list of targeted respondents and relatively few females occupying positions as local pastoral development workers, the lack of a female perspective is of note not only in this research project, but also in the industry in general. There were female development executives interviewed at CILSS, but there were no observable trends between gender and responses to interview questions.

studies that suggest that self-completion questionnaires are less likely to be plagued by these problems than face-to-face interviews (Sudman & Bradburn, 1982; Tourangeau & Smith, 1996; Bryman, 2012); nevertheless, this issue is worth mentioning as a possible problem with the validity of the questionnaire data.

5.6 Data collection in eastern Senegal

The second period of data collection for this research project took place in the Linguère district of Senegal for four weeks in October, 2016. The majority of interviews and participant observation took place in and around the village of Diagualy, a predominantly Fulani community of around 1,200 inhabitants (2,000+ during the rainy season). If I had previously spent two and a half years living and working in Diagualy as a member of the U.S. Peace Corps. My experiences during this time stoked my interest in pastoralism and the relationships between pastoralists and international development organisations. My position with the Peace Corps also entailed learning the language of the village.

While proponents of participant observation see it as a way to collect large amounts of very specific data with the intent of presenting a holistic picture of the topic being researched, its opponents see the close contact extant between researcher and his/her subjects as a sign of decreased objectivity or a lack of scientific rigour (Iacono, Brown, & Holtham, 2009). Even though this method of data collection seems inherently subjective, it is the best way to seek out 'information that is tacit and embodied rather that explicit and intellectualised' (DeWalt &DeWalt, 2002: 10). As this research project deals specifically with deeply held cultural and social constructs, participant observation is an obvious data collection tool.

Returning to Diagualy after a two year absence was surprisingly easy, as friends and coworkers that I had made there were still very welcoming. Employing a snowball sampling technique and using the social networks of these prior contacts as a way of finding initial interview subjects, I was able to interview 15 pastoralists (most of whom engage in or have engaged in transhumance) and 6 local development workers who could tell me about their experiences working with international development projects. Bryman defines snowball sampling as 'a sampling technique in which the researcher samples initially a small group of people relevant to the research questions, and these sampled participants propose other participants who have had the experience or characteristics relevant to the research' (2012: 424). While I had had limited previous contact with 4 of the initial interviewees, the other 17 were total strangers to me. The interviewees included 14

¹⁴ This is a rough estimate based on the 2014 official state census of Senegal and many conversations with village notables.

males and 7 females and ranged in time from 30 minutes to 1 hour and 20 minutes. In a stroke of luck, I was even able to talk with some pastoralists from a neighbouring village who were in the process of working with the Senegalese PRAPS staff in order to build a new deep-bore well that should be completed in late 2017. The development workers interviewed included 2 of this PRAPS contingent and 4 others who had experience working in the region with both government-funded and internationally-funded pastoral development projects over the last 15 years. This sampling strategy has obvious drawbacks related to the accurate representation of a large and diverse population; however, due to the time and budgetary constraints of this research project, it was selected as the best possible way in which to widen pool of possible participants.

During my time in Diagualy, I was constantly jotting down my impressions of the context and any information that was given to me. In order to not arouse too much suspicion during interviews with pastoralists, I refrained from using recording devices and only wrote down recollections of what was said after the fact. Most interviews were conversational in nature and took place while engaged in pastoral activities (watering animals, feeding animals, gathering forage, or talking with other pastoralists). As such, it would have been difficult for me to take notes while actively listening to all that was being said and also actively participating in these daily chores.

Taking part in daily activities gave me ample time to probe deeper into their statements and elicit additional responses to a basic questionnaire that I administered during these extended interviews.

Delamont (2004) and DeWalt &DeWalt (2002) agree that recording data collected during periods of participant observation is best done slightly after the fact to allow the researcher to be fully present and more aware of all that is happening 'in the moment'.

A white foreigner coming to a village in the hinterlands of Senegal with a recording device and a big pad of notepaper is probably not going to elicit any sort of honest responses, even if he or she *does* speak the language of the village. I had seen that very thing happen numerous times during my time with the Peace Corps, and that is one reason why I chose to forego toting around the obvious signs of the researcher. In his field guide to effective participant observation, James Spradley acknowledges this phenomenon and advises that a good researcher should try to be unobtrusive and keep a low profile (1980: 48). Occasionally, being a little more covert helped me to blend into the background. That being said, I was always sure to present my project and explain to all interview subjects that they did not have to talk with me. Oral consent was obtained from all participants, and informants were also assured of their total anonymity in any and all publications stemming from this research.

The opportunity to spend a month in a pastoral community conducting participant observation lends an ethnographic dimension that is somewhat rare in such a small-scale research project. In an article investigating the pros and cons of ethnography as a data collection method, Herbert notes that 'ethnography can elucidate the linkages between macrological and micrological, between the enduring and structured aspects of social life and the particulars of the everyday' (2000: 554). As one month is not nearly long enough to develop a vivid ethnographic account of a community, I also relied on the journals that I kept during the two and a half years that I had previously lived in the community. Looking back on some of the events that I had detailed within gave me the opportunity to contextualise certain cultural aspects in a broader fashion.

One of the biggest drawbacks to the ethnographic approach discussed above is the fact that the entire period was spent with only one ethnic group, the Fulani. For information about the other pastoral ethnic groups¹⁵ discussed in the present research I had to rely on data collected from other sources, namely the document review and interviews conducted while at CILSS and the questionnaire responses that I had received. Throughout the research process, I have been careful not to allow the lack of firsthand experience with other ethnic groups to colour my perceptions of these groups, but a certain degree of that is unavoidable. If given the opportunity to expand on the research topic presented here, I would very much like to conduct longer periods of participant observation in the contexts of these other groups.

5.7 Language and culture

Being that data collected for the present research is in three different languages, it is necessary to discuss the important role that language plays in data collection. French is the official language of all six of the countries discussed here, and it was the only language used in the offices of CILSS and at all workshops, trainings, and conferences. Although I consider myself to be quite fluent in French, it is not my native language. During the course of my internship and the data collection that took place concurrently, I had no problems understanding what was said or written to me; however, there may have been certain nuances of communication that were missed on both sides. The ability to read and speak both French and Pulaar opened innumerable doors for me before, during, and after the data collection process. I was able to read text sources in their original languages, and interact with interview subjects without the need for a translator.

Language is the most important tool of social science research in the quest for a 'proper understanding of societies, social institutions, identities, and even cultures' (Alvesson & Kärreman,

¹⁵ These other pastoral groups include: Maures, Tuareg, Toubou, and Shuwa Arabs.

2000: 137). Reaching a common understanding is difficult enough when both parties speak the same language and share similar backgrounds, but it becomes increasingly difficult when both parties use a language that is not their mother tongue and come from very different backgrounds. I found myself in this situation during my internship. Interacting primarily with researchers and development workers from across West Africa, I was faced with both my expectations of them as local and regional development professionals and with their expectations of me as a foreign researcher. While, in my view, this was an easy task for which my previous work experience had prepared me, I will not assume to speak for the West African researchers and development professionals. Try as one might to thoroughly understand and interact within another culture, there are bound to be cues and miscues of which one is totally unaware.

The same can be said of my time in Diagualy; however, I was much more at ease in that situation. Having previously lived and worked there, I did not feel as out of place as one would expect in a small village in eastern Senegal. My linguistic ability in Pulaar is quite good, and at no time did I struggle to understand what was said to me or around me. That being said, I am an outsider in that community, and will never fully comprehend all of the cultural differences that exist between a Western researcher and Senegalese Fulani pastoralists.

5.8 Summary

By first giving a brief explanation of the epistemological and ontological positions taken and then discussing the data collection methods employed, this chapter explains the methodology used in the present research. A critical discussion of the two separate data collection periods is joined with insights into the positionality of the researcher as outsider, coworker, and friend along with personal observations about the data collection process.

6 Results

This chapter presents findings from a review of relevant documents, questionnaire responses provided by a small group of local pastoral development actors, and unstructured interviews with development actors and several Fulani pastoralists.

6.1 Document review findings

Scholarly literature and policy papers concerning the Sahel provide concrete examples of how national governments conceptualise pastoralism and how their policies and projects impact pastoralists. In order to better understand the role of international development organisations in this context, one must first look at governmental policies concerning pastoralism. In their comparison of the new pastoral codes of Niger and Chad, Avella & Reounodji (2009) explain how the lack of clear land rights legislation and the political marginalisation of pastoral groups on the national level continues to affect relations between pastoralists and the national governments of these two countries. In a later paper questioning the efficacy of Niger's pastoral code, Bodé points to difficulties in the implementation of this law, saying 'the vast majority of texts [of the pastoral code] did not take into account the land tenure system and way of life of pastoral societies, transhumance routes, and the integration of agriculture and livestock raising' (2013: 4). This weakness of Niger's pastoral code is echoed by Wabnitz (2006), who compares it with that of Mauritania. Wabnitz explains how Maure pastoralists see Mauritania's code as more legitimate, because it is based on customs and methods of conflict management that originate in their own culture and pastoral practices.

While the pastoral codes of Chad and Niger explicitly mention clear demarcation of transhumance corridors as key to preventing the occurrence of conflicts between farmers and herders, both Bodé (2013) and Avella & Reounodji (2009) describe how the governments of Niger and Chad lack the funding and the political will to actually accomplish this task. Bodé also illustrates the role of corruption in pastoral areas, giving the example of vast tracts of Niger's northern drylands being expropriated by government elites in order to appease French-owned mining interests (2013: 5). Giving smaller examples of corruption, Sougnabe explains how, even with many Sahelian countries further developing their pastoral legal codes, pastoralists taking their herds across the borders between Chad, Niger and Cameroon are still asked for bribes by border patrols and heavily targeted by bandits and cattle thieves (2010: 347).

¹⁶ Originally in French: '...la grande majorité des textes n'ont pas pris en compte le foncier et le mode de vie des sociétés pastorales, les parcours et l'intégration de l'agriculture et de l'élevage.'

Sougnabe's example of how national pastoral codes are still struggling to cope with the realities on the ground illustrates the main issue with these laws: mobility. Pastoralists rely on the ability to move their herds, yet there are oftentimes large legal and physical hurdles in their way. Gonin & Gautier (2015) explore some of these obstacles in the context of Burkina Faso. They chronicle the erosion of pastoralists' access to pasture and water from the 1970s onward, showing how sedentary agriculturalists were encouraged by local and national officials to encroach on transhumance corridors. They also tell how in 2012 the aid agency of the Netherlands (SNV) and the Action Group on Land Tenure (GRAF) implemented a project to delimit some of these routes, in an attempt to facilitate mobile herding. Lack of funds and pastoral participation resulted in only a small section of regional transhumance routes being delimited (Gonin & Gautier 2015: 7).

The International Fund for Agricultural Development (IFAD) has addressed these same issues concerning pastoral mobility, documenting how sedentarisation policies, decreased water access, and poor delivery of social services have weakened pastoral societies throughout the region (IFAD, 2009). The FAO, teaming up with the French research organisation CIRAD, produced a document detailing the evolution of pastoral systems in the Sahel over the past 40 years that identified key issues affecting relations between pastoralists and national governments.

- 1. National governments lack the resources to effectively enforce pastoral codes, especially at the local level and along borders.
- 2. There exists many years of mistrust and corruption existing between government officials and pastoralists.
- 3. Governments still seem to harbour feelings of anxiety about pastoralists who travel between countries, often seeing them as threats to national security (FAO/CIRAD, 2012).

This document offered several examples of ways in which international organisations have worked with both pastoralists and governments to address these issues. Notable among these is a partnership between UNICEF, the French (AFD) and Swiss (SDC) development agencies, and the Chadian government working to create more scholastic opportunities for pastoral children. This included building and renovating schools in villages along transhumance routes. While this is worthwhile, the authors from CIRAD are quick to point out that this approach has its limits. They assert that, while this project was helpful, 'the development of mobile schools linked to large groups of pastoralists with specific curricula and a specific scholastic period is necessary' (FAO/CIRAD, 2012: 31).¹⁷

¹⁷ Originally in French: Le développement d'écoles mobiles liées aux grands groupes de pasteurs, avec des programmes et une période scolaire spécifiques est nécessaire.

6.1.1 Case study in Niger

The Swiss Development Cooperation and the Belgian Veterinarians Without Borders worked jointly on a project to improve the living conditions of Fulani, Tuareg, and Arab pastoralists in the Maradi region of Niger. The Programme d'Appui au Secteur de l'Élevage [Livestock Sector Support Programme] (PASEL) was a multi-phase project that ran from 2003 to 2013. Its goals included: livestock intensification, improved veterinary care in pastoral zones, increased security of pastoral people and livestock routes, and capacity building in the form of pastoral advocacy groups that were trained in Niger's new pastoral legal code (PASEL, 2002).

Focusing on stakeholder ownership, PASEL programmes created and supported numerous pastoral associations tasked with demarcating pastoral corridors, providing mobile veterinary services, addressing governmental injustices, and managing conflicts between pastoralists and sedentary agriculturalists (Ibrahim, Mormont, & Yamba, 2014). These objectives were decided on through pre-project research studies in which the pastoralists themselves were able to identify the problems that they wanted to address with this project. Pastoral conceptions of the social and cultural value of livestock were incorporated into the fibre of the project, and pastoral associations were constructed with social and cultural ties in mind (Sambo & Guibert, 2013). Although livestock intensification was originally stated as a goal of the project, that goal was modified after members of pastoral associations voiced concerns over intensification strategies that stressed sedentary methods of livestock production. The project then shifted its attention to the improvement of the existing pastoral system by incorporating trainings in improved fodder techniques and advocating for more equitable access to existing natural resources. This shift was based on input from pastoralists 'on the ground'.

This degree of responsiveness to the advice and opinions of the target population of a development project is rare. What is not rare are the challenges this project experienced. Even though they faced a limited life cycle and major geopolitical challenges, PASEL was able to work with pastoralists to severely reduce farmer-herder conflicts on the Niger side of the Niger-Nigeria border. By recognising the social and cultural importance of livestock in Fulani and Tuareg societies, this project was able to use the resources existing in these groups to work towards successful conflict management and increased security of both people and animals along transhumant livestock corridors. Although the pastoral associations showed promise during the project life cycle, the results of the auto-evaluation revealed that there was little hope of them continuing to function after funding was stopped (Sambo & Guibert, 2013).

6.2 Questionnaire findings¹⁸

In responding to questions about their organisational and programmatic objectives, 5 out of the 6 respondents wrote about the issue of ensuring equitable access to natural resources.¹⁹ Other problem areas that were addressed by all (or nearly all) of the respondents included access to education (for both children and adults) and animal healthcare. Questions about the design and implementation of projects elicited slightly different responses from each of the respondents. While many of them stressed the participative nature of project planning and implementation, few went into specifics of what that looks like on the ground. Diffa explained their process of diagnosing the challenges faced by a pastoral community as consisting of community meetings and focus groups including men, women, and youths. In these meetings locals are often pushed to come up with local solutions for the problems being discussed. This enables development organisations to see what their role can be and to design worthwhile programmes for that community. Dori told how his organisation makes a five-year regional plan that is agreed upon through a round table process attended by pastoralist representatives, technical partners, and representatives from funding bodies.

When asked further questions about how their organisations go about responding to these problems, all respondents pointed to partnerships with local technical actors on the village, region, and state levels. Maradi also mentioned the role of researchers and research institutions in coming up with creative solutions to problems facing pastoralists. All 6 of the respondents agreed that the bulk of the funding for all projects comes from the North, with the EU and the development cooperations of various European states providing a large part. That being said, Dori and Fada N'Gourma stressed that some projects are also funded by state governments and the Economic Community of West African States.

Although 'mobility' was the most popular response to a question about the specific challenges these development workers face when working with pastoralists, all of the responses are presented in the table below. This allows the reader to get a better sense of the variation that can occur, even when there is great agreement among responses.

¹⁸ In this section, I refer to individual respondents by their city name as a way of ensuring their continued anonymity. The 4 respondents from Niger were in Niamey, Maradi, Zinder, and Diffa. The 2 respondents from Burkina Faso were in Dori and Fada N'Gourma

¹⁹ The sixth respondent left these questions blank. From reading through the literature of this respondent's organisation, the importance of this objective to that organisation is clear.

Table 1: Responses to the question: What are the specific challenges you face when working with pastoralists?

Respondent	Answer
Maradi	Mobility makes it hard to find people and keep in contact with them.
Zinder	1) Mobility. 2) Other socio-cultural groups knowing about pastoral rights and designated grazing areas.
Niamey	1) Communication. 2) Logistics and Equipment. 3) Free circulation of livestock and pastoralists. 4) Access to services and markets. 5) Secure transhumance corridors.
Diffa	1) Low literacy rate among pastoralists (less than 10%). 2) Project sustainability. 3) Limits to project interventions (Less than 10% of pastoralists are reached). 4) Low level of resilience to shocks
Dori	1) Low rate of school attendance among pastoralists caused by marginalisation from state educational systems due to pastoral mobility. 2) Farmer-herder conflicts (often deadly), which are due to this ignorance. 3) Political marginalisation, even though the livestock industry is a large contributor to the GDP of all of our different countries. 4) Low levels of integration of pastoral communities in their living space. 5) Rising poverty levels in pastoral communities.
Fada N'Gourma	1) Improving pastoral access to natural resources when they are considered as second tier users. 2) People don't respect pastoral spaces (grazing zones, water points, transhumance corridors, and camp areas.

When asked about how the pastoralists with whom they work conceive of livestock ownership, all respondents pointed to the supreme importance of livestock to pastoralists. Maradi stated, 'the herd is everything for pastoralists.'²⁰ Niamey answered with, 'livestock remains a fundamental resource for their survival and also represents their identity'.²¹ Dori explained that 'the possession of livestock among pastoralists is considered as a sign of wealth and social prestige'.²² The rest of the responses to that question followed the same general tone. Zinder included a story from the drought of 2010, where his organisation helped pastoralists kill animals that were too tired to walk. These pastoralists did not butcher the animals, but instead laid them to rest under shade trees. All respondents agreed that livestock ownership was a sign of social prestige and a form of cultural identity.

When asked about differences between ethnic or socio-cultural pastoral groups, respondents provided a number of examples. Niamey pointed out differences in between the cattle herding Fulani and the camel herding Tuareg, Toubou, and Arabs. Fada N'Gourma explained the different

²⁰ Original in French: 'Le troupeau représente tout pour les pasteurs.'

²¹ Original in French: 'Le bétail reste un capital fondamental pour leur survie et représente à la fois leur identité.'

²² Original in French: 'La possession du bétail en milieu pastoral est considérée comme un signe de richesse et de prestige social.'

milking practices of the Jelgoobe and Nommaabe groups of Fulani in Burkina Faso; among the Jelgoobe, women are responsible for both milking the herd and selling the excess milk, whereas, Nommaabe men milk the herd and charge the women with taking the excess milk to market. Dori drew attention to the different conceptions of livestock among nomadic pastoralists and agropastoralists (no matter the ethnic group): the former seeing livestock as wealth, social standing, and familial well-being; the latter more as a way to ensure household food security in times of drought. All respondents agreed that these differences were small and that the conception of livestock among pastoralists was similar regardless of their ethnic background.

Respondents identified much larger differences between sedentary agriculturalists and pastoralists. Maradi answered that 'there is a difference in conception between pastoralists and sedentary people in the sense that for pastoralists, livestock is their whole life; they only live for that, while the sedentary [people] can have other sources of income that can compensate for the other burdens in relation to their existence.' Dori explained how pastoralists see livestock herding as central to their culture and as something that they want to pass down to future generations, whereas sedentary people view livestock solely as a savings system to stave off future difficulties. Niamey and Zinder both pointed to mobility as a central part of this difference. Pastoralists use mobility as a way to adapt to an ever-changing climate, and are sometimes even tasked with the care of animals owned by sedentary farmers when natural resources are scarce. Diffa expanded on this, explaining how sedentary people do not understand pastoralism as a way of life. They see pastoralists as malnourished, uneducated, 'crudely dressed', and only concerned with their animals.

Many of the respondents' organisations focus on conflict resolution and dialogue building between sedentary farmers and pastoralists. Dori wrote about low school attendance and literacy rates among pastoralists as a large contributing factor to these conflicts. Maradi and Zinder both listed mobility as the biggest challenge, telling how follow-up activities are difficult when project staff can no longer locate participants. All participants also wrote about political marginalisation and lack of respect for the pastoral legal codes of their respective states as sources of these conflicts. Interestingly, none of the respondents mentioned any historical factors that could cause conflicts between farmers and herders. Numerous documents discuss historical grievances between

²³ Original in French: 'il y a une différence de conception entre les pasteurs et les sédentaires en ce sens que pour les pasteurs, le bétail constitue toute leur vie, ils ne vivent que de ça alors que les sédentaires peuvent avoir d'autres sources de revenus pouvant compenser les autres charges en lien avec leur existence.'

herder ethnic groups and sedentary peoples in both Niger and Burkina Faso, yet the respondents were silent on this matter.²⁴

The geographical provenance of the responses received allowed a more in-depth analysis of pastoral development programmes along the border between Burkina Faso, Mali, and Niger and the border area between Niger, Chad, and Nigeria. These areas are particularly rich pastorally, as they are home to Fulani, Tuareg, Arab, and Toubou pastoralists. Most of the respondents mentioned this ethnic diversity, while also stressing that the pastoralists with whom they work are very similar in their conceptualisations of livestock ownership. Although each of the respondents explained a different method for how their organisation goes about doing this, they all agreed that development projects should incorporate these cultural ideas if they want to be effective in a pastoral context. Most respondents cited mobility as a major challenge in reaching pastoral populations, yet also agreed that mobility is key to pastoralists' success. The opinions of the respondents were similar to those heard during my time working at the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) and during my time in eastern Senegal.

6.3 Findings from participant observation

Sitting in on conferences and workshops and also becoming part of the office culture of CILSS exposed me to some of the general difficulties involved in organising development projects. While the amount of bureaucracy involved in coordinating international organisations and local development actors was not the least bit surprising, ideological differences concerning how different levels of development workers thought of pastoralism and pastoralists were at times mildly shocking.

A workshop on gender issues and data collection where CILSS/PRAPS regional staff and outside consultants presented to country level staff demonstrated this disconnect. While the PRAPS regional staff had a wealth of knowledge about the pastoral contexts of each of the project countries, some of the outside consultants were noticeably out of their element when it came to practical issues related to pastoralism. Mobility was cited by many of the country level attendees as a major obstacle to accurate data collection about pastoral households; however, many of the consultant presenters had little experience with data collection in the pastoral milieu. This was especially evident in presentations concerning statistical methods of discerning population density in pastoral zones. Presenters were caught off guard by participants from Mali, Niger, and

²⁴ See: Kervin (1992), Turner et al (2014), and Wilms & Werner (2009)

Mauritania, who voiced concerns over the large amount of petrol required to survey a statistically significant number of pastoral households in the hinterlands of their vast countries.

The attendees were respectful of all of the presenters, but their negative reactions to some of the directions and advice given by the consultant presenters were obvious. For example, when one presenter suggested including detailed questions about herd mortality rates in a questionnaire designed to be administered to pastoral households, attendees were quick to point out how that is a culturally sensitive subject that might be offensive to some pastoralists. To the credit of the PRAPS regional team, these reactions were addressed in a professional manner, and they did offer more plausible solutions to some of the data collection issues brought up by country level staff. PRAPS staff also made it clear that the real test of any survey is when it is given in the field and how it is translated into the languages of pastoral groups.

In that same workshop, gender issues were presented from a World Bank friendly, Western perspective. Again, this was met with respect from the country level staff. While this topic is part of the PRAPS agenda, there exists are large chasm between the gender discourse offered by World Bank consultants and the reality of gender relations in the Sahel. Participants from Mali and Niger proved this by explaining how national laws exist in both countries that prohibit women from being named as heads of household. The participants from Mauritania also thought this to be the case, but were unsure whether or not this was actually a law or just a customary practice. The participants from all three of these countries identified this as a potential problem when choosing the correct wording for surveys dealing with pastoral households.

A later workshop focusing on biomass data collection put on solely by the CILSS/PRAPS regional staff was more in line with the expressed needs of the country level teams. CILSS staff, having many years of combined experience with different research projects and development projects focusing on pastoralism and the Sahel in general, proved the most knowledgeable about context appropriate data collection methods. As the PRAPS regional staff was primarily comprised of researchers and development workers who have lived and worked in the Sahel for most, if not all, of their professional careers, their expert opinions were treated with respect from country teams in need of guidance. The fact that most of the country level staff had previously worked with members of the CILSS/PRAPS staff enriched this exchange. Both groups inhabit a similar professional niche as development workers occupied with Sahelian pastoralism.

In a conference led by PASSHA, project partners from international, regional, national, and local levels of the project met together to exchange information concerning their roles in the project. This was of particular note, as it involved project staff from all administrative levels.

Conceptions of pastoralism held by development workers from across the region and across administrative levels had much in common; however, there was a noticeable divide between the local level partners, who work directly with pastoralists, and regional and international actors, who deal with pastoralism on paper with limited 'in the field' contact. This was evidenced when one local level participant voiced his concerns over some of the monitoring and evaluation procedures that were part of the project. Coming from a pastoral background, this participant was anxious about administering a regional survey that would ask about public perceptions of local conflicts, because of how the results of this survey could be used by the media and local/regional governments to fuel discrimination against pastoralists. His concerns were revelatory for the international actors, who did not see any of the potential problems the survey might cause at the local level.

Another example of this divide came when the discussion turned to the marking of transhumance routes in different regions. Pastoral representatives gave several examples of routes being choked by expanding cotton cultivation in Burkina Faso, with conflicts occurring between cotton farmers and pastoralists using these livestock routes. Representatives' explanations of how unclear land tenure and discrimination creates legal and social problems with the demarcation of these routes were met with surprise by international project staff.

6.4 Findings from eastern Senegal

Spending a month among Fulani pastoralists in eastern Senegal unearthed several key pieces of information that are of interest with regard to the research questions at hand. Among these, the statement, 'a Fulani without cows ceases to be Fulani' sticks out as telling.²⁵ While this statement was often said in various tones of seriousness, it was spoken by old and young alike. Cattle ownership is so closely tied to cultural identity that without it, one ceases to feel connected to his/her culture. This sentiment was also mirrored by Maure pastoralists in the area, but pertaining to the ownership and care of camels.

In talking to Fulani pastoralists in the area, a sense of cultural superiority was often connected to livestock ownership. If one owns cattle, even if it is a small herd, they think of themselves as fundamentally better than their sedentary neighbours. In the case of eastern Senegal, these sedentary neighbours are often of the Wolof ethnic group. This concept of cultural superiority plays out in a number of subtle ways, from only interacting with sedentary people when one needs manual labour to forbidding one's children to marry a person of another ethnic group. A sense of

²⁵ Original in Pulaar, 'Pulo so alaa na'i wona pulo.'

cultural superiority can also be found among Maure camel herders in the area. Theirs might be even more pronounced, as they often forbid mixing of any kind with other ethnic groups. This could also be due in part to the long history of Arab Maures taking slaves from black ethnic groups along the Senegal river, a practice that continues to cause animosity between these groups to this day.²⁶

The close relationship between livestock ownership and cultural identity are well-understood by many of the local development workers, because the majority of them are from this area and are either Fulani or have worked with Fulani people for their entire lives. In theory, this allows projects spearheaded by local organisations to be more reactive and attentive to the cultural context in which they are implemented. In the past, local development workers were often bound to take direction from their superiors at the national and/or international level; however, recently there has been a push toward more inclusive project planning and implementation strategies that give local development workers and pastoralists alike the opportunity to have a say in the process.

Even with these changes in development project design, many pastoralists that I spoke with were unclear about the objectives of the projects currently operating in the area. Several expressed the opinion that these projects were only good for the free lunch provided when project staff arrives for site visits. While these pastoralists had all worked with a variety of development projects touching many aspects of their lives, they still harboured a distrust of outsider intervention with their livestock. Programmes offering veterinary care were welcomed by nearly everyone, but other projects attempting to teach new techniques in animal nutrition or handling practices were met with much scepticism.

Local development workers mirrored many of these same opinions, explaining how it was difficult at times to meet funding prerequisites set by international donors while also meeting the needs that they saw in pastoral communities. They also stressed the challenges that pastoral mobility poses to most projects. Although cellular phone technology is being used as an effective way to stay in contact with mobile pastoralists, many development workers still complained about the difficulties of conducting follow-up activities with herders that move away for months at a time. One development worker who also acts as a local political leader told me that out of all the livestock development projects that he has seen in his time in the development industry, none of them have adequately integrated local ideas about the social and cultural importance of livestock.

²⁶ During my time in Senegal I was told of a kidnapping, in which a Mauritanian camel herder had taken a Fulani child as he was tending his father's herd in the bush. That child was then made a slave to the Mauritanian's family clan. Many people said that this happened in 2005-2006. While I find this hard to believe, it was corroborated by several village officials.

Going further, he asserted that 'an outsider is unable to understand [Fulani] pastoralist culture and the importance of [owning] cows'.²⁷ While his statement was not echoed by any of the other development workers interviewed, it is in line with statements made in interviews with two of the pastoralists.

²⁷ Original in Pulaar: 'Neddo, so o jeeyaaka do, waawata aandude aada aynaa6e e fayida na'i.'

7 Analysis

Using Bourdieu's theory of practice to analyse the results presented in the previous chapter shows how cultural, social, and economic implications of livestock ownership and care impact the relationships between pastoralists and international development projects and, in turn, affect the implementation and outcomes of agricultural development projects targeting pastoralists. Questionnaire respondents, development workers, and pastoralists all provided descriptions of how pastoralists conceive of their social world and how livestock ownership fits within these conceptions. The respondent from Dori explained how the pastoralists with whom his organisation works see livestock as a sign of richness and social prestige. Multiple development workers commented on the high level of care exhibited by pastoralists for their animals, some even going so far as to say that animals were treated better than children. When asked about their relationship with livestock, several pastoralists made clear statements equating cultural identity to animal ownership. Whether it be a questionnaire respondent writing about Tuareg and Arab camel herders or a Fulani pastoralist talking about the way he sees the world, these descriptions lend themselves to Bourdieu's habitus. They speak to dispositions extant in pastoral societies that incline members to behave in certain ways. Many of these dispositions relate directly to the ownership and/or care of livestock.

When looking at pastoralism and the relationship between development organisations and pastoralists through the lens of Bourdieu's theory of practice, the differences between development organisations' conceptions of pastoralism and those of pastoralists become easier to understand. Most development organisations do not come from a pastoral social context, and are thus not habituated to the social structures found in pastoral societies. It is then no surprise when these organisations struggle to adapt to this new *field*. This is evidenced in a statement made by the questionnaire respondent from Niamey, who wrote how he sees a distinct difference in efficacy between development projects that involve pastoralists in their design and implementation and those that do not. Interestingly, he cited state-funded projects as among the worst at incorporating pastoralists in decision making.

Niamey is not alone in recognising this situation. Several of the locally based development workers that I interviewed in eastern Senegal gave examples of projects that failed to achieve their objectives due to a poor understanding of pastoral societies. One such example, a project aimed at training women to make clay brick cookstoves, was remembered by many. It returned several times after its initial failure, yet the implementation strategy remained the same. The international organisation that funded this project never asked the local workers, or the women for that matter,

what could be changed to make this project more successful. The problem lies, of course, in the fact that these heavy cookstoves are not mobile, and thus cannot be taken on transhumance with the family. By failing to understand how the mobility necessary for the sustenance of a family's herd affects the cooking practices of its women, this development organisation wasted both time and money. When asked about this past project, two women told me it was not a waste. They had each been paid for every day they attended the trainings, and a few other women had been paid to cook the lunch that was provided free for all participants. This caveat about free lunches was given often by both male and female pastoralists who had dealt with international development programmes in the past.

By being so closely tied to the cultural identity and social standing of each individual pastoralist as well as each pastoral ethnic group as a whole, livestock ownership means much to more these people than simply a profession. The story that the respondent from Zinder told about pastoralists caring for their dying animals as if they were family members during a recent drought clearly illustrates this relationship. The importance of animals and the close relationships that pastoral families have with their animals makes them far more valuable than the market prices for meat and byproducts would have economists believe. Both the respondent from Dori and a development worker in eastern Senegal stressed that market prices and market access are important to pastoralists, as they do, after all, derive their income from the sale of animals; however, economic value is but one facet of the importance of livestock.

While all of the questionnaire respondents spoke to the care that their organisations take in trying to design projects that integrate pastoral ideas of livestock ownership, they are still bound by funding requirements and guidelines set by their international partners. Only the respondent from Niamey discussed the possible conflicts that can occur between local implementation strategies and international project objectives. This was corroborated in interviews with CILSS/PRAPS staff, where interviewees gave the example of project monitoring and evaluation indicators that are out of touch with pastoral realities and cultural mores.

The issue of providing accurate monitoring and evaluation data while also being culturally aware was spoken about several times during different discussions with CILSS/PRAPS staff, many of whom had worked previously with various pastoral development projects and had seen the difficulties involved in accurate data collection. Survey questions concerning herd size and family size are troublesome to many pastoral ethnic groups, due to cultural taboos against vocalising specific numbers of livestock or family members in a compound, yet the answers to these questions provide statistics that are often important to international funders. Putting this in Bourdieu's terms,

development actors introduce themselves in the *field* of pastoral communities in order to collect monitoring and evaluation data, and in so doing, they are confronted with a different system of capital valuation. This creates a situation where development actors are unfamiliar with the practices of this *field*, and pastoralists are confronted with forms of power relations and capital valuation that might not fit into the *field* as they envision it.

Development professionals have recognised this disconnect between pastoral cultural constructs and development industry practices, and there have been a few researchers working on inventive and culturally appropriate ways to gather this data.²⁸ Changes in design and implementation processes surrounding more recent pastoral development projects are a sign that the industry is becoming more reactive to the special issues faced when working with pastoralists; be that as it may, the multifaceted nature of the development industry means that there are still projects designed around out-dated notions of pastoralists as environmental degraders who should change their practices and become sedentary. The questionnaire respondent from Niamey wrote about this, explaining that 'some programmes limit the movements of pastoral communities in certain areas of the sub-region, others focus on security and the movement toward sedentary livestock practices.'²⁹

An example from a PASSHA project implementation workshop which paired international development workers with local and regional counterparts further illustrates the differences between actual pastoral practice and development industry conceptions. Although information exchange was both 'top down' and 'bottom up', statements made by the international partners (who were closer to the World Bank) still tended to focus solely on the economic value of livestock in pastoral systems. More holistic descriptions of pastoral practices were found in statements by representatives of local and regional level partners. This difference did not seem to cause any surface problems, as international project staff left most of the implementation procedural decisions to local staff more knowledgeable about their own specific contexts.

The involvement of a multitude of local and regional organisations and pastoral associations in the design and implementation phases of both PRAPS and PASSHA means that there is more room for pastoralists' voices to be heard. It also allows for a more detailed look into how international development organisations conceive of pastoralism and pastoralists by forcing these conceptions to confront the conceptions held by local and regional organisations that work closely

²⁸ See: Wane, 2010; Wane et al., 2010; and Wane et al., 2006.

²⁹ Original French: 'Certains programmes se limitent à la gestion des movements des communautés pastorales dans certains espaces de la sous région, d'autres sur la sécurisation et penser à transiter vers un élevage sédentaire.'

with pastoralists and whose membership, in large part, comes from pastoral communities. This example is of note, in that it challenges some of Bourdieu's ideas about how actors with different social practices and different ideas of capital valuation interact when put in the same *field*. While each of the participants of this workshop had their own individual *habitus*, with some being more closely aligned with the pastoral *habitus* described earlier and others not, actions could not be predetermined based on this fact alone.

7.1 Theoretical limitations

Bourdieu's theory of practice allows for the categorisation of social and cultural constructs and the analysis of how these constructs influence the actions of the individual; however, it describes the process of cultural reproduction as a rather static affair. It does not account for the reflexivity needed to adequately analyse the relationship between pastoralists and the development industry. As King states, the theory of practice tends to see individuals as 'automatically fulfilling the appropriate role for their objective situation' (2000). It is too easy to see pastoralists as holding a unified *habitus* and development organisations as failing to understand that *habitus* and integrate it into their programmes. Reality is much more complicated. Culture is not static, and not every member of a socio-cultural group can be expected to act and react the same way to the same stimuli.

Ethnic and socio-cultural groups are very real, and belonging to a certain group does affect how one behaves; however, individual choice should not be underestimated. This is especially true in the context of pastoralism. Pastoralists spend much of their time in the wilderness covering long distances and often live in smaller communities. These characteristics have a tendency to make pastoralists self-sufficient and fiercely independent. Development workers in eastern Senegal and certain members of the PRAPS/PASSHA staff in Ouagadougou spoke about this independent spirit when explaining the challenges inherent to development projects in a pastoral context. Trying to bring together a group of independent-minded people behind a common goal was seen as a challenge both by the members of pastoral associations as well as the conference and workshop facilitators with which I spoke. Even though many pastoralists say that they think about things in very similar ways, their individualism often comes to the surface in meetings surrounded by fellow pastoralists. This presents a challenge to researchers and development organisations alike.

Bourdieu and Wacquant mention reflexivity and its role in forming one's habitus, yet
Bourdieu's theory only allows for a true change of an agent's strategies and orientations in times of
'crisis' (1992: 131). Although it could be argued that interactions between development
programmes and pastoralists occur in 'crisis' situations where each individual is forced to adapt his
or her orientation in order to interact with foreign social agents on foreign fields, this is most often

not the case. Questionnaire respondents from Niamey, Diffa, Dori, and Fada N'Gourma all wrote that local development actors met regularly with pastoralist participants throughout the planning and implementation phases of their respective projects. These development organisations develop relationships with their participants. This seemed to be especially true in the case of local level development actors, who often come from the pastoral communities with whom they work.

These interactions simply do not meet Bourdieu's criteria for a changing of one's orientation or position. Interactions between individuals of these two groups do, however, call for a greater level of reflexivity. Sometimes coming from different cultures, different countries, and/or different socioeconomic situations, social agents in these interactions are confronted with cultural challenges. Development workers interviewed in eastern Senegal spoke to this, in relaying a few experiences with visiting foreign project managers. One worker spoke about project managers making a field visits and having to be walked through the customs involved in greeting a delegation of pastoralists. While the image of culturally unaware foreign development workers did make the interviewee smile, he was quick to add that both parties later said that the meeting went well (no doubt because of his own adeptness at translation and intercultural communication).

7.2 Verhelst

In order to more fully discuss the development industry and how development actors conceptualise cultural constructs, Bourdieu's theory of practice can be supplemented with Thierry Verhelst's definition of culture. Verhelst sees culture as a multitude of dynamic and holistic mental processes that, while influenced by social structures, 'evolve through needs, desires, and external contacts' and 'encompass all aspects of life' (Verhelst, 1990:160). He encourages development actors to broaden their concept of culture and to become more reflexive in how they think about their own positionalities in the communities in which they work. Too often development actors (and also academics) orientalise the people that their programmes target, reducing the cultures with which they interact to mere caricatures (ibid). Seeing this, Verhelst calls for a rethinking of how development actors design their programmes. He also cautions development organisations not to romanticise culture as a static structure (Verhelst & Tyndale, 2002).

As Verhelst cautions development organisations not to romanticise culture as a static structure, so too must researchers refrain from attempting to concretise the idea of pastoralism as it has existed in the past (Verhelst & Tyndale, 2002). Culture is constantly in flux. This is especially true in the Sahel. For while there is still a large rural population that fits notions of a pastoral *habitus*, that population is getting smaller as technology and infrastructure proliferate into the hinterlands and change the way things are done. After the severe droughts of the 1970s, many

pastoralists assumed a more sedentary lifestyle and their culture has changed to accompany this shift (Camara, 2013; Adriansen, 2002). Related to this shift are the trends of urbanisation and westernisation of West African cities. This has led to many people losing ethnic and cultural identities and becoming simply urban dwellers (Wilson, 1995).

Although some researchers (especially African academics) give this large socio-cultural shift some attention, a large number of occidental researchers tend to focus on older traditions and practices, seemingly in an attempt to grasp hold of antiquated notions of anthropological discovery in the wilderness.³⁰ Development actors also tend to fall into these categories. This sentiment was echoed by questionnaire respondents from Niamey and Dori, as well as development workers in eastern Senegal. They agreed that local actors tend to have a more intimate knowledge of the current situation on the ground; whereas, international actors tend to rely more on secondary sources. These secondary sources often include reports from local development partners, but at the international level these reports must compete for precedence with other academic articles and governmental and organisational policy documents.

My time observing PRAPS regional staff as they sifted through myriad lengthy reports from local development workers and locally hired consultants, while also having to send their own reports to higher levels of World Bank administration in Washington D.C., illustrates the amount of paperwork produced by these large projects and also shows the difficulty that international project designers face when trying to incorporate accurate and current local knowledge. The disconnect between the local and the international levels of project management was not lost on the development professionals working at CILSS. Working at the regional level, they are able to see firsthand the bureaucratic pace of international programming as well as the dynamic nature of the Sahelian context 'on the ground'.

7.3 Programme efficacy

As the respondents from Niamey, Zinder, Diffa, and Dori wrote, there are a multitude of development programmes currently targeting pastoralists, and these programmes come in all shapes and sizes. The wide variance in methodologies used and differing conceptions of pastoralism held by development programmes makes it difficult to determine whether or not the incorporation of social and cultural conceptions of livestock ownership into project planning and implementation strategies has any effect on a project's success. If one judges a project successful simply when that

³⁰ For examples of African researchers dealing with pastoralism, see Laouali, 2014; Laouali et al, 2014; Camara, 2013; FAO / CIRAD, 2012; and Sow, 2006. For examples of western viewpoints that could be construed as orientalist, see Scheele, 2014; Rasmussen, 2010; Guilhem, 2008; and Bonfiglioli, 1988.

project achieves its surface level goals, then yes, statements from interview subjects in eastern Senegal and at CILSS/PRAPS speak to an increase in efficacy when projects are designed to take the social and cultural implications of livestock ownership into account. The case of PASEL, which was outlined in the previous chapter, provides another example of such a project. Although PASEL is far from ordinary if one looks at development programmes over the last 50 years, it is representative of the current state of pastoral development programmes.

Many current development programmes are including pastoralists in their design and implementation phases. Along with this (or perhaps because of it), there has been an increased interest in adapting development programmes to the unique social and cultural context of pastoral communities. Current development efforts seem to be following Verhelst's advice given almost 30 years ago. Nevertheless, the challenges facing newly instituted national level pastoral legal codes and PASEL's own conclusion that many of their interventions would cease to be effective without continued outside funding are evidence that even when social and cultural aspects of pastoralism are addressed by national governments and development organisations, there are larger forces at work. Programmatic sustainability is stressed by international donors in contexts where other, local sources of funding are scarce or non-existent. While a number of the interventions and trainings funded by PASEL achieved their stated aim in a culturally appropriate manner, the overall efficacy of the project was compromised by a lack of continued financial support (Sambo & Guibert, 2013).

However, if projects are judged by how well they address the major regional issues of climate change and violent religious extremism, the answer becomes more complicated. Project documents from a number of major international aid organisations all include these two issues as among the most important reasons for implementing projects in pastoral zones throughout the Sahel.³¹ One of the early project documents from PRAPS discussed how, by improving the pastoral livestock industry in the Sahel, PRAPS could reduce the number of pastoralists being inducted into violent extremist groups and strengthen the industry's ability to adapt to a changing climate (de Haan et al., 2014).

While PRAPS is only in the second year of its seven year lifecycle and it is far too early to judge its efficacy accurately, these larger objectives seem optimistic at best. Increased adaptability to a changing climate is indeed achievable, due to pastoralism's natural adaptability to constantly variable climatic conditions; nevertheless, increasing social and governmental constraints on pastoral practices provide challenges that may prove insurmountable. Whereas increasing climate

³¹ Some of these project documents include: World Bank, 2015; World Bank, 2014; FAO & CIRAD, 2012; GEF, 2011; and PASEL, 2002.

adaptability seems very much possible, notions of economically lucrative pastoralism changing young men's minds about working for and/or joining violent extremist groups are unrealistic. This is especially true when one considers how some of these extremist groups draw on memories of times past, when pastoralist ethnic groups (notably Arab, Tuareg, and Fulani) were in control of large swathes of the Sahel.³²

7.4 History and cultural superiority

All of these ethnic groups have very distinct and separate identities, yet they share many cultural traits related to their shared preoccupation with pastoralism and livestock. Notable among these traits is an idea of superiority over their sedentary neighbours (Bonfiglioli, 1988; Nori, et al., 2005; Swift, 1979). Perhaps due to the fact that they lived apart from the greater society or possibly due to the fact that herding is a fundamentally less physically challenging activity than agricultural work, feelings of superiority exist in each of these Sahelian pastoral groups (Blench, 2001; Bonfiglioli, 1988; Claudot-Hawad & Hawad, 1996; Vermeer, 1981). At one time or another, all of these groups have enslaved members of sedentary ethnic groups and/or demanded tribute from sedentary villages within their sphere of mobility (Norris, 2012).

Although, in most cases, these practices have ceased to exist³³, the idea of pastoral superiority continues to influence interactions between pastoralists and sedentary peoples in rural areas (Adriansen, 2008; Azarya, 1999; Diop and Fall, 2002). This was witnessed in both Maure and Fulani pastoralists in eastern Senegal. Several Fulani pastoralists told of a local Fulani child who had been kidnapped by Maures and kept as a slave as recently as 2006. While giving this story as an example of how Maures tend to think that they are better than others, these same Fulani pastoralists also told how they only deign to deal with sedentary Wolof farmers when they are in need of manual labour or when they want to sell animals to these farmers. Two of the pastoralists interviewed went a step further, saying that they would not let their children marry a member of the Wolof ethnic group.

Historical relations between sedentary and pastoral people have also influenced national and regional political processes during the French colonial period and in the years following independence (Kervin, 1992; Swift, 1977). As pastoral mobility is seemingly anathema to the idea

³² Boko Haram has called for the reestablishment of the Sokoto Caliphate, a government system in which a Fulani caliph ruled over much of northern Nigeria and southern Niger (Owolade, 2015). AQIM has invoked Fulani and Arabic history in wanting to reestablish the Macina Caliphate in Mali (Zenn, 2015). Ansar Dine and other Tuareg nationalist groups have consistently called for the creation of the independent state of Azawad, which would comprise parts of Mali, Niger, Algeria, Chad, and Libya (Livermore, 2013).

³³ For more information on the contemporary history of slavery and how it relates to pastoral groups, see Villasante-de Beauvais, 1997; Norris, 2012; and Livermore, 2013.

of a modern nation state, the French saw pastoralists as 'wild' nomads not yet ready to commit to a settled existence (Swift, 1977). These mobile groups also posed a threat to French supremacy, as they had been the ones in control of large swathes of the Sahel prior to colonisation. Realising the existing relationships between ethnic groups, the French vacillated between using the influence held by pastoral people and belittling these pre-existing social structures (Kervin, 1992).

The post-colonial newly independent state saw their pastoral minorities as threats to national unity (Ciavolella, 2010; de Haan et al., 2014; Swift, 1977). Aside from Chad and Mauritania, sedentary people comprised the majority in all of the states emerging from French West Africa. The new-found majority power of these sedentary groups allowed them to continue the marginalisation of pastoral people that had begun with the French, while simultaneously overturning centuries of rule by pastoral peoples (Kervin, 1992). This situation was compounded by the massive drought that hit the Sahel during the 1970s (Mainguet, 2013). Today, pastoralists rank among the poorest citizens in every country in the Sahel, yet feelings of cultural superiority still exist (Adriansen, 2008).

The contrast between the history of cultural superiority that exists among pastoral groups and the present situation of pastoralists ranking among the poorest citizens of the Sahel has not been lost on researchers and development organisations, yet many project documents view pastoralists as simply another category of poor people. Notions of cultural superiority are vital to pastoral *habitus*. Therefore, international development organisations should keep these notions in mind when designing and implementing projects in pastoral contexts. Development organisations could also be more effective in turning pastoralist youths away from extremist groups if they acknowledged this history and worked to reconcile some of the frustrations arising from issues of cultural superiority that number among the many causes of discontent among pastoralists both young and old.

Addressing the economic, social, and cultural implications of livestock ownership is a step in the right direction, but more care and attention must be given to the unique context of Sahelian pastoralism if development projects are to be effective in accomplishing this objective.

7.5 Summary

Analysing data collected from a review of policy and programme documents, journal articles, and organisational internal publications; the responses to a questionnaire that was filled out by regional and local development workers; and two separate periods of participant observation that included interviews with international, regional, national, and local development workers as well as pastoralists, this chapter has attempted to provide as complete a picture as possible of development programmes targeting pastoralists in the Sahel. Bourdieu's theory of practice was used as a way to

present the idea of a pastoral *habitus*, that was then expanded on by Verhelst's thoughts on culture and its relationship to the development industry. This theoretical framework was used to analyse trends found in the data that have provided answers to the research questions at hand.

In specifying what ways cultural, social, and economic implications of livestock ownership and care among pastoralists impact how pastoralists interact with internationally funded development projects, the concept of *habitus* allows for a somewhat broad, yet believable, answer: every way possible. Interviewees and questionnaire respondents all agreed that livestock ownership is central to pastoral cultural and social identity, as well as the foundation of their economic wellbeing. Describing this in Bourdieu's terms of *habitus*, *capital*, and *field* further clarifies the holistic manner in which the ownership and care of livestock influences the social actions of pastoralists when interacting with development programmes.

Development organisations and project designers take implications of livestock ownership into consideration in a variety of ways. Some organisations and projects do not recognise these implications at all and still see pastoralists threats to their own environment who have an unhealthy and 'unscientific' attachment to their animals. Others understand the holistic (economic, cultural, and social) importance of livestock in pastoral communities and design and implement their projects accordingly. However, most development projects fall somewhere in between, sometimes even having different conceptions of pastoralism and pastoralists at different administrative levels.

Organisations that *do* integrate pastoral conceptions of livestock ownership into their projects are thought to be more successful in achieving their surface level objectives; however, a discussion of how these projects achieve success when looking at their larger regional development goals is complicated by the continuing effects of historical feelings of cultural superiority among pastoral groups.

8 Concluding Remarks

The preceding chapters have presented different aspects of the research process involved in answering questions related to conceptions of livestock ownership among pastoralists and international development organisations in Sahelian West Africa. The chapter of background material on pastoralism, both globally and specifically in West Africa, introduced the reader to the context and provided the background information to more fully engage with the project at hand. The same can be said for the third chapter, an introduction to international development and how it relates to pastoral societies. Chapters four and five outlined the theoretical and methodological frameworks used, and provided discussions about their strengths and shortcomings. The sixth chapter presented the results of the inquiry, and the seventh presented an analysis of those results. With this short final chapter, I will present a summary of the research findings and offer a few new directions for further research.

8.1 Summary of conclusions

Scholarly and grey literature, questionnaire respondents, and interview subjects all pointed to numerous ways in which pastoralists' conception of livestock ownership and care influence how they interact with development organisations and projects. The bond between livestock and pastoralist was compared to a familial relationship by several sources. Livestock ownership and care was described as central to pastoralists' cultural and social identity. It is then no surprise that there was such widespread agreement that it influences pastoralists' dealings with both local and international development organisations and projects. Questionnaire respondents and interview subjects provided many examples of the ways in which this socio-cultural construct affects pastoralists' relationships with development organisations, with the consensus being that the fundamental nature of livestock ownership to the cultures of pastoral peoples means that it affects nearly all aspects of their lives. Understandably, it has profound effects on the ways in which pastoralists think about wealth and their own social and economic development.

As for how international development organisations respond to pastoralists' ideas about livestock ownership and care, the results were far less conclusive. Although every questionnaire respondent told of how his organisation worked to integrate pastoral socio-cultural ideas into the fabric of their programmes, it is not clear if this is successful. A review of project literature and interview subjects in Senegal were somewhat split on this matter. Several interviewees extolled the virtues of some of their projects, but were also quick to recount tales of failed projects that were oblivious to the pastoral context.

The short case study of the PASEL project in Niger may be a notable exception in how it chose to handle pastoral cultural constructs. However, as I was unable to confirm claims made by project reports and programme documents as to how successful PASEL's staff was in integrating local conceptions of livestock ownership, this might simply be a case of evaluators and project staff hiding a project's weakness while focusing on its strengths. The varied and dynamic nature of the development industry makes any question of how the industry integrates cultural constructs difficult to answer conclusively, yet many examples cited in the data point to the need for development organisations to more fully understand pastoral cultural constructs and the many ways in which they can affect each specific development project.

Discerning whether or not certain development projects and programmes are more or less effective in achieving their stated aims when they incorporate pastoral conceptions of livestock ownership and care appears straightforward; however, this question also elicits varied responses. If projects are judged simply by their ability to meet stated objectives 'in the field' (i.e. measurable increases in per capita income or increases in the availability and quality of water or livestock fodder), then yes, projects that integrate pastoralists' cultural ideas about livestock do seem to be more effective. While the available literature offers no empirical data proving this to be true, several development workers from both the regional and local levels as well as pastoralists that were interviewed assumed this to be the case.

Complicating matters even further are the larger goals that many international organisations set for their projects, those of increasing adaptability to climate change and stemming the tide of regional violent extremism. Often mentioned as possible after-effects of development projects, both of these objectives seem difficult (or impossible) to achieve. Perhaps the latter is more difficult, due to pastoralism's natural adaptability to climatic uncertainty; however, pastoralists can only achieve so much while being constrained by other, larger social, economic, and governmental forces. Urbanisation, rapid modernisation, and the post-colonial eroding of traditional regional leadership roles held by pastoralist groups are possible causes for the recent rise in regional violent extremism, yet development projects targeting pastoralists often fail to address these issues adequately and/or in a culturally and contextually effective manner.

International development organisations and the projects they fund targeting pastoralists across the Sahel serve a purpose. Many pastoral populations in these countries are among the poorest citizens, and they are often in dire need. That is why it is vital that development organisations continue to rethink and redesign their projects to inhabit the unique context of Sahelian pastoralism. Integrating pastoralists' conceptions of livestock ownership is but a first step

in further understanding the ways in which pastoralists conceive of their own society, economy, and culture.

8.2 Directions for further research

While completing the present research project, several new avenues for further research have presented themselves. As is common during the research process, I often had to refocus my attention after several hours of 'going down a different rabbit hole' that was only vaguely related to the problems at hand. As I near the end of this current project, these other related topics have come back to me, and I feel it necessary to outline some of them in the hopes that readers of this work who share my interest in Sahelian pastoralism might take it upon themselves to further investigate these issues.

The first of these topics is gender relations among Sahelian pastoral groups and their effect(s) on relations with development organisations and national governments. It would be interesting to see how (if at all) gender dynamics and traditional gender roles change and are changed by development projects and governmental policies, specifically in a pastoral context. Rasmussen (2010), Querre (2003), and Ouldseidune et al (2013) all discuss different facets of gender relations within pastoral groups, yet I was unable to find research into the ways in which gender relations affect how these groups interact with outsiders and outside influences.

Although religious extremism is somewhat related to the research questions covered in the present thesis, it is a vast subject which merits much more attention than it currently receives. There is much research into major questions concerning this phenomenon, yet its breadth, depth, and urgency requires still more scholarly time. Pastoral regions with little to no governmental presence often serve as safe havens for terrorist groups wanting to avoid surveillance and national militaries. Compound this with a pastoral population that harbours notions of bygone regional superiority and secessional tendencies and conflict becomes almost inevitable. The intersection of all of these factors is pregnant with excellent research questions, ranging from the sociological to the militaristic. For example, are members of extremist groups actually pastoralists from these areas, or are they outsiders who have co-opted the grievances of pastoralists for their own ends? Are national governments using the fear of violent extremism coming from pastoral areas as an excuse to further marginalise pastoralists and widen the social divide between sedentary farmers and pastoralists? Why do the pastoralists that *do* join extremist groups feel like they have to do so? The connection between pastoral regions and extremist activity exists not only in the Sahel, but also in Central Asia, and East Africa.

The findings presented in this thesis can propel new inquiries related to the two topics outlined above. I also encourage others to continue to investigate the issues that this thesis covers, as there are still many questions left unanswered. Other researchers should also design alternative methods to look at these issues; my purely qualitative approach to these questions is far from the only way to handle them. The idea behind pastoralism is adaptability to the unknown. Academics should mirror this adaptability, especially when dealing with pastoralism and pastoralists.

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Appendices

1. Interview Guide for Pastoralists Involved with Development Projects

English and Pulaar

Age:

Gender:

- 1) Can you tell me about the NGO projects with which you have worked?
 - 1) Aada waawi haaln-am ko faate projetuuji di ko liggondir-ɗaa di? (jooni wala eɗan)
- 2) Do you think these NGO projects knew about how pastoralism works here?
 - 1) Aada sikki 6e liggotoo6e 6e e projetuuji di kam6e ngaandi ngaynaaka do?
- 3) Why are you a pastoralist?
 - 1) Ko taaki aan a woni ngaynaako?
- 4) Can you explain the significance of livestock to your life?
 - 1) Aada waawi haaln-am ko ooroori/na'i nafat e ngurndam ma?
- 5) What does ownership of livestock mean to you?
 - 1) Holko njeeygol ooroori/na'i firtat e maa?
- 6) Do you think this is different than what livestock means to sedentary people? If so, how?
 - 1) Mbele dum ina seerti e ko ɗum firtat e seedbe wala yimbe hoodiibe wuuro? Si ee, holno?
- 7) Were your parents pastoralists? If so, how do you think they would have answered those questions? What about your grandparents?
 - 1) Mbele jinaa6e ma woninno aynaa6e? Si ee, holno 6e jaabirotono ngal naamndal ngal? E taanara6e ma, holno 6e jaabirotono ngal?
- 8) What can you tell me about governmental policies that affect pastoralists?
 - 1) Ko ngaandu-ɗaa ko faate luwaa ngaynaaka (le code pastorale) e lamido Senegal?
- 9) Do you think that NGO projects affect governmental policies? If so, how?
 - 1) Ko cikku-ɗaa ko faate projetuuji di ngaynaaka e lamido Senegal?

2. Questionnaire pour le personnel technique des institutions (projets / ONG) travaillant sur le pastoralisme

French

Age:
Sexe:
Titre du poste:
Nombre d'années de travail dans votre organisation actuelle :

- 1. Quels sont des objectifs principaux de votre organisation?
- 2. Pouvez-vous expliquer le processus de conception de vos projets ciblant des pastoralistes? (Quels sont des objectifs principaux de ces projets? Qui finance ces projets? Qui est impliqué dans les différents démarches du projet? etc.)
- 3. Pensez-vous que les objectifs de ces projets sont clairs aux populations pastorales avec lesquelles vous travaillez? Pouvez-vous expliquer pourquoi ou pourquoi pas?
- 4. Quels sont les défis spécifiques auxquels vous faites face lorsque vous travaillez avec les pastoralistes?
- 5. Pouvez-vous expliquer comment les pastoralistes conçoivent de la possession du bétail?
- 6. Quelles sont les similitudes et les différences entre les idées (ou conceptions) de la possession du bétail des différents groupes socio-culturels de pastoralistes avec lesquelles vous travaillez?
- 7. Pensez-vous que les pastoralistes ont une idée (ou conception) différente de la possession du bétail que les peuples sédentaires? Si oui, pouvez-vous expliquer comment est-elle différente?
- 8. Pensez-vous que le nombre de projets á financement international ciblant les pastoralistes est en augmentation? Si oui, quelles sont selon vous les raisons qui expliquent cette augmentation?

3. Questionnaire for technical personnel from development organisations (projects/NGOs) working with pastoralists

English	Translatio
Age:	
Sex:	

Job Title:

Number of years with current organisation:

- 1. What are the main goals of your organisation?
- 2. Can you explain the design process of your projects that target pastoralists? (What are the main goals of these projects? Who finances them? Who is involved in the different implementation phases? etc.)
- 3. Do you think that the goals of these projects are clear to the pastoral populations with whom you work? Can you explain why or why not?
- 4. What are the specific challenges that you face when working with pastoralists?
- 5. Can you explain how pastoralists conceive of the possession of livestock?
- 6. What are the similarities and differences between ideas (or conceptions) of the possession of livestock held by the different socio-cultural (ethnic) groups of pastoralists with whom you work?
- 7. Do you think that pastoralists have a different idea (or conception) of the possession of livestock than sedentary people? If yes, can you explain how it is different?
- 8. Do you think that the number of internationally funded (development) projects targeting pastoralists is rising? If yes, what are the reasons for that rise (according to you)?