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**HOUSEHOLD RESOURCE MANAGEMENT,
LAND TENURE EVOLUTION AND RURAL
LIVELIHOODS**

EVIDENCE FROM BURKINA FASO

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Thesis submitted for the degree of PhD

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Abstract

This thesis researches the mechanisms of land tenure and its relationship with natural resource management, particularly trees, and the changing rural livelihood strategies of the Mossi people in northern Burkina Faso.

In most rural areas, the newest complex land tenure reform (Loi 0034) has yet to be implemented. Customary laws and previous national land laws coexist and are superimposed but are not integrated and do not complete or complement each other. This thesis argues that land tenure evolution is a social matter in Burkina Faso's Sahelian rural areas. To support this hypothesis, this research aimed to analyse the local ethnic group model of the household and its livelihoods and assets.

The analysis of decision-making processes leading to household resource management highlighted a well-established customary land tenure system standing alongside parallel, more fluid arrangements regulating access to trees and their products. Moreover, the analysis allowed us to argue that women's lack of long term secure access or ownership of the land has little impact on their capacity to negotiate temporary rights over agricultural fields. In fact, women's central role in the collection, transformation and use of non-timber forest products places them even more in a position to constantly renegotiate their rights within the household.

This research was carried out through a year of mixed methods fieldwork in Northern and Western Burkina Faso. While the literature review leans towards the description of a seemingly rigid society, the results highlight the natural tendency the actors have to negotiate constantly their rights, obligations and overall role in the household and the society.

This thesis refines our understanding of the evolving characteristics of the Mossi household as an ever-changing socioeconomic entity regulated by customary laws and inserted in a traditional context, but able to constantly adapt to new events and challenges. It is, in fact, a household formed by different actors with sometimes clashing rights, obligations and personal goals but able to

renegotiate and reshape its internal organisation to achieve better sustainable livelihoods.

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*The hardest thing in this world — is to live in it.*¹

*Clear eyes, full hearts, can't lose.*²

As a child, I was absolutely certain that I would become a teacher and a writer. I just didn't know I would end up teaching undergraduates and writing a thesis. Despite the fact that it won't become the bestseller fantasy medieval novel I had high hopes for, I am very proud of this accomplishment.

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And Lucy, for always getting my silly quotes. *This right here – my over the moon face.*⁶

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Que la terre vous soit légère.

¹ ***Buffy The Vampire Slayer***, Season 5, Episode 22 "The Gift", 22.05.2001, Fox.

² ***Friday Night Lights***, Season 1, Episode 1 "Pilot", 03.10.2006, NBC.

³ ***Cicero***, Marcus Tullius., E. Sutton W., and H. Rackham. *De Oratore: With English Translation. Section 120.* Cambridge, MA: Harvard UP, 1942.

⁴ ***Firefly***, Season 1, Episode 1 "Serenity", 20.12.2002, Fox.

⁵ ***Battlestar Galactica***, Season 2, Episode 2 "Valley of Darkness", 22.07.2005, SyFy.

⁶ ***Veronica Mars***, Season 2, Episode 17 "Plan B", 05.04.2006, WB.

⁷ ***Tolkien***, J.R.R. *The Fellowship of the Ring.* New York: Houghton Mifflin Company, 1994.

⁸ ***Friends***, Season 2, Episode 14 "The one with the Prom Video", 01.02.1996, NBC.

⁹ ***Buffy The Vampire Slayer***, Season 5, Episode 22 "The Gift", 22.05.2001, Fox.

Table of contents

HOUSEHOLD RESOURCE MANAGEMENT, LAND TENURE EVOLUTION AND RURAL LIVELIHOODS

ERROR! BOOKMARK NOT DEFINED.

Abstract	3
Acknowledgements	5
Table of contents	8
Index of Figures	12
Index of Tables	14
Chapter 1. INTRODUCTION	15
1.1. Land tenure and livelihoods in French-speaking West Africa	15
1.2. Resource management in a risky context	20
1.3. Thesis approach and outline	25
Chapter 2. LITERATURE REVIEW	30
2.1. Sub-Saharan Africa food security and smallholder farming	30
2.2. Livelihoods	34
2.3. Climate change and livelihoods	39
2.4. The household: unit, units	40
2.5. Intra-household resource management and allocation theories	43
2.6. Resilience and risk management	47
a. Agroforestry: trees and non-timber forest products	49
2.7. Land: tenure, governance, reforms	54
2.8. Land and broader policies: agriculture, economy, institutions	66
2.9. Household resource management, land, livelihoods and resilience: a framework	68
Chapter 3. CONTEXT: SOCIO-ECONOMIC BACKGROUND, POLITICS AND ENVIRONMENT IN BURKINA FASO	73
3.1. Historical overview	73
3.2. Environment	81
a. Agriculture: climate, crops, soils	81
3.3. Economy	86
a. GDP, sectors, poverty and literacy	86
b. From MDGs to Sustainable Development Goals (SDGs)	88
3.4. Social organisation	90
a. Hierarchies, respect and gender in a Mossi society	91
b. Land and its uses: main actors	94
c. Social organisation and access to land in the Lyélé, Gurunsi area of Boulkiemdé and Sanguié provinces	96
3.5. Trees and NTFPs: an overview	98
Chapter 4. METHODOLOGY	105

4.1.	Approach	105
4.2.	Research Design	108
4.3.	Conceptual framework	111
4.4.	Methods	113
a.	Research questions summarized	113
b.	Temporal context	115
4.5.	Sample size and study sites	117
a.	Description of the commune and villages	119
b.	Choice and selection of the households	122
4.6.	Survey design and data collection	126
a.	Baseline quantitative data	127
b.	Qualitative data	130
c.	Secondary data	133
4.7.	Data analysis	134
a.	Determining land access	135
b.	Role of trees	137
c.	Examining resource management and livelihood strategies	138
4.8.	Data quality assessment	142
4.9.	Ethics	143
Chapter 5.	LAND TENURE CHANGES IN MOSSI VILLAGES OF PASSORÉ	146
5.1.	Legal framework	146
a.	National law evolution	146
b.	Customary laws	150
c.	Non-Mossi customary laws: the Gurunsi of Western Burkina Faso	160
(1)	Land in Gurunsi society	162
(2)	Gurunsi livelihoods	164
d.	Islamic jurisprudence influences	166
5.2.	Women's access to land: evolution of a rural society	168
a.	Women's access to land in the Western part of Burkina: insights from the Boulkiemdé and Sanguié provinces	175
5.3.	Key findings	177
Chapter 6.	ACCESS TO RESOURCES: EVIDENCE FROM TREES AND NON-TIMBER FOREST PRODUCTS MANAGEMENT	178
6.1.	Land and trees nexus: a case of power and intra-household relationships	178
6.2.	Baobab	181
6.3.	Néré	186
6.4.	Shea	190
Chapter 7.	STRUCTURE, DYNAMICS AND POWER RELATIONSHIPS FOR LAND AND LIVELIHOODS IN MOSSI HOUSEHOLDS	193
7.1.	Households resource management in Passoré	193
a.	Households in a Gurunsi region, patterns of household decision-making and gender aspects	206
b.	Social organisation, lineage and land tenure	209
c.	Outsiders and migrants	213
7.2.	Participatory map exercise: spatial perceptions in a Mossi society	217

a.	Key findings	219
7.3.	Negotiations in a seemingly rigid society	221
Chapter 8.	CONCLUSIONS AND FURTHER IMPLICATIONS	223
8.1.	Main findings	223
a.	Access to land and resources: land tenure of a Mossi household	223
b.	Access to other natural resources: non-timber forest products and households' livelihoods	228
c.	Land tenure evolution and social relationships.	230
8.2.	Policy implications	233
BIBLIOGRAPHY		237
Appendix 1 – Households of the Passoré province (primary field site)		256
Appendix 2 - Households of the Boulkiemdé and Sanguié provinces (secondary site)		263
Appendix 3 – Surveys and Semi-structured interviews guides		267
a.	Survey to key informant interviews on land tenure	267
b.	Interview guides by topic.	267
c.	Guide d'entretien pour les chefs de village	267
d.	Guide d'entretien chef de terre	268
e.	Guide d'entretien d'historique foncier et informations démographiques	269
f.	Guide d'entretien sur les routines alimentaires	269
g.	Guide d'entretien sur les routines	270
Appendix 4 – Community maps of households, villages and main resources		271
a.	Tinkoaglega	271
b.	Zambélé	272
c.	Gomponsom	273
d.	Gomponsom 2	274
e.	Kounkané	275
f.	Lablango 1	276
g.	Lablango 2	277
h.	Kouni	278
Appendix 5 – Maps		279
a.	Passoré province	279
b.	Gomponsom Commune	280
c.	Boulkiemdé province	281
d.	Koudougou Commune	282
e.	Sanguié province	283
f.	Réo Commune	284
g.	Tenado Commune	285
Appendix 6		286
a.	Loi 0034 / original text of the 2009 National Land Law	286

Index of Figures

FIGURE 1 RESEARCH FRAMEWORK FOR ANALYSIS. BASED ON SCOONES AND OWN ELABORATION.	72
FIGURE 2 MAP OF THE PASSORÉ PROVINCE. INSTITUT GÉOGRAPHIQUE BURKINABÉ.....	122
FIGURE 3 HOUSEHOLD L2; DIVISION OF TASKS DURING RAIN AND DRY SEASONS. FOR FULL REFERENCING SEE APPENDIX 1.....	196
FIGURE 4 HOUSEHOLD K1; DIVISION OF TASKS DURING DRY AND RAIN SEASONS. FOR FULL REFERENCING SEE APPENDIX 1.....	196
FIGURE 5 DISTRIBUTION OF TASKS IN HOUSEHOLD L1 DURING DRY SEASON.....	200
FIGURE 6 DISTRIBUTION OF TASKS IN HOUSEHOLD L1 DURING RAINY SEASON	200
FIGURE 7 DISTRIBUTION OF TASKS DURING DRY AND RAIN SEASONS IN HOUSEHOLD Ko1	201
FIGURE 8 MENTIONED RESPONSIBILITIES ACROSS MEN AND WOMEN OF THE SELECTED HOUSEHOLDS.	203
FIGURE 9 TASKS DISTRIBUTION ACROSS HOUSEHOLDS FROM THE WESTERN BURKINA FASO FIELD SITE. FOR FULL REFERENCING SEE APPENDIX 2.	206
FIGURE 10 COMMUNITY MAP EXERCISE TO IDENTIFY THE POSITION OF THE HOUSEHOLD AND THE DISTANCES TO THE FARMED FIELDS.	271
FIGURE 11 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS	272
FIGURE 12 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS.	273
FIGURE 13 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS.	274
FIGURE 14 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS.	275
FIGURE 15 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS.	276
FIGURE 16 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS.	277
FIGURE 17 COMMUNITY MAP EXERCISE TO IDENTIFY THE HOUSEHOLD AND ITS SURROUNDINGS (MAIN ROAD, MARKET, MILL, SCHOOL) AS WELL AS THE DISTANCES TO THE FARMED FIELDS.	278
FIGURE 18 MAP OF THE PASSORÉ PROVINCE (BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013)	279

FIGURE 19 MAP OF THE GOMPONSOM COMMUNE. BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013.....	280
FIGURE 20 MAP OF THE BOULKIEMDÉ PROVINCE. BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013.....	281
FIGURE 21 MAP OF KOUDOUGOU COMMUNE. BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013.	282
FIGURE 22 MAP OF THE SANGUIÉ PROVINCE. BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013.	283
FIGURE 23 MAP OF THE RÉO COMMUNE. BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013...284	
FIGURE 24 MAP OF THE TENADO COMMUNE. BURKINA FASO GEOGRAPHICAL INSTITUTE, 2013.	285

Index of Tables

TABLE 1 RESEARCH QUESTIONS AND METHODOLOGICAL COMPONENTS USED TO ANSWER THEM.	114
TABLE 2 SAMPLING: SELECTED VILLAGES.	121
TABLE 3 PAIRWISE RANKING OF CITED NON-TIMBER FOREST PRODUCTS. HOUSEHOLD #1 TINKOAGLEGA. JUNE 2014.....	141

Chapter 1. INTRODUCTION

1.1. *Land tenure and livelihoods in French-speaking West Africa*

Most Sahelian countries, including Burkina Faso, have rural economies mainly based on agriculture and livestock. The land is inherently central to these rural systems and the main resource for initiating economic activities. Inequitable access to land is without a doubt one of the main factors hindering sustainable development of rural people and the overall countries. Insights from understanding land tenure in Burkina will have resonance with the situation in other Sahelian countries, and the household and community management issues will illuminate household studies and the search for solutions to challenges of natural resources management elsewhere. This is because, historically, Sub Saharan Africa has been considered a whole, especially when talking about land tenure. The literature (Sjaastad and Bromley 1997) has highlighted some characteristics that make discussing land tenure context specific to Sub-Saharan Africa: a context where land used to be abundant, with shifting cultivation practice. The ready availability of land makes for “extensive” land uses including mobility to another plot, virtual absence of trade and overall importance of labour. The livelihoods that developed over the course of the years in that specific context were obviously impacted by different factors including different types of colonisation, decolonisation processes, internal politics, global dynamics etc. However, the specificity of the original context naturally led to land tenure systems that are similar, or at least comparable. Without generalising, the limited available resources (including natural, social, economic, etc.) underpinning livelihoods and influencing land tenure systems being very similar, it is possible to say that findings from this research will resonate in the Sub Saharan region.

Access to land is central to Burkina Faso livelihoods, enabling people to achieve food security and diversify their strategies, and can best be understood in terms of the widely accepted livelihoods framework elaborated by Scoones (1998).

This study explores livelihood strategies of complex households in rural Burkina Faso, particularly revolving around access to land and trees, which are the

principal natural livelihood assets available to rural people. It aims at unpacking evident or hidden mechanisms that are, in fact, integral parts of social organisation, hinder social inclusion, and shape and are shaped by the overarching land tenure organisation.

It focuses specifically on the province of Passoré, in the Région du Nord, situated 110km North of the capital, Ouagadougou. The chosen province, at the centre of which is the Urban Commune of Yako, has specific socioeconomic characteristics that allow for an interesting analysis.

In fact, as Chapter 4 will explain in more detail, the dominant Mossi ethnic group have specific customary land regulations that are particularly relevant to this study. In order to emphasise the importance of social customs in relation to land tenure, a secondary field site was chosen in the Western part of the country. Three households were selected over two provinces, in Boulkiemdé and Sanguié around the towns of Koudougou and Réo. These provinces are inhabited by a majority of Gurunsi. The differences and similarities between the two ethnic groups constitute further proof that formal and informal land tenure systems are intrinsically linked to social organisation.

The specificity of the livelihood systems, customary tenures and overall cultural backgrounds of both ethnic groups will be explored and explained in Chapter 3.

The way individuals manage resources within a household is affected by some factors including availability and opportunity, risks, variability, *inter alia*. (Tincani 2012).

I argue here that the nature of livelihood strategies in northern Burkina Faso rural areas is strictly linked to access to land in its quality, quantity, security and implications. As stated by Lavigne-Delville, one of the main references in land tenure in French-speaking West Africa, land tenure security can be a blurred concept, intrinsically linked to the social context (Lavigne Delville and Chauveau 1998).

In French-speaking West Africa, the duality of a formal context parallel, superimposed or mixed with pre-existing forms of tenure increases the vagueness of the land tenure security concept. It is acknowledged that there is a syntactic and a factual difference between the terms “customary” and “traditional”.

However, for the purpose of this research, customary tenure and traditional tenure systems will be used as synonyms. In Burkina Faso, land tenure concepts have evolved according to historical, socioeconomic and political changes. Chapters 2 and 3 will detail the evolution of the customary and formal land tenure laws but it needs to be stated here that specific events such as colonisation, African socialism years, decolonisation processes and political changes have influenced and shaped how people access, use and manage land. This perspective is sustained throughout the thesis as an underpinning idea to the hypothesis that, in fact, land tenure systems are shaped, evolve and are strictly linked to social organisation and therefore need to be carefully put into context. Failure to do so could result in inappropriate policies or laws, counterproductive development programming and overall misunderstanding or misinterpretation of land related issues.

This research has roots in the difficulties that Burkina Faso decentralised government is having in implementing the latest land law (Loi 0034). The evolution of the national land law system (explored in Chapter 3) highlights that policy makers don't always see the ethnic and socio-cultural context as a priority when updating the texts. It can be interesting to note here that, originally, the researcher wanted to explore plans and mechanisms of implementation of the law and their impact on traditional tenure systems. This has proved impossible because the current law has only been implemented in some rural villages and none of them in the Northern area mainly inhabited by the Mossi ethnic group. This led to a change in the thesis focus and a shift towards traditional tenure and the importance of the socioeconomic, cultural and ethnic context.

As a result, and as the following chapters illustrate, the complexity of land tenure can be found in the many strategic, economic, political, social and environmental issues that constitute systems and underpin their dynamics. Externally, the constant evolution of socioeconomic contexts, political frameworks, international and global goals highlight, cause or influence new land-related challenges, the extent of which is difficult to grasp.

Theoretical debates and empirical studies have been published and constitute a rich, flourishing and constantly increasing literature. Maxwell and Wiebe (1998)

put forward the idea that there is no universal definition of land tenure security, and promote the debate around contextualised *ad hoc* characteristics. Arnot et al summarised quite effectively the debate around land tenure relations, focusing on the concept of (lack of) land tenure security, basing their paper on empirical case studies. The research highlights the variety of definitions that land tenure security has in different contexts and across scales. The authors argue that a lack of clarity in defining tenure security as well as its relationship to people's economic behaviour result in a gap between the theoretical literary debate described by Arnot and the analysis of empirical case studies. However, this approach, also discussed by Hagos and Holden (2006) and others, does not facilitate a more complete analysis as it does not allow for a complete investigation of land policies and more generally the improvements or interventions over time (Simbizi, Bennett, and Zevenbergen 2014). Simbizi *et al.* (2014) also highlight that, in Sub Saharan Africa, land tenure systems are constantly emerging and suggest that a holistic approach that focuses on linkages and dynamics across the different factors previously identified by the literature as tenure security are only to be considered in relation to each other. The author refers to the perception of land tenure security, legal tenure security and *de facto* tenure security.

This research has its roots in these conclusions. For our purpose, land tenure relations and land tenure security are intrinsically linked to rural livelihood strategies and influence and are influenced by those. This research aims at analysing the relationships between formal or legal land tenure security and the *de facto* traditional tenure as it is observed in rural areas of Northern Burkina Faso. By adopting participatory approaches and in-depth qualitative data collection over the course of a year, it also aims at a better understanding of the perception of land tenure security. This is particularly important in Burkina Faso's current context, for it could impact on new policies and comprehensive rural land tenure laws. The study aims to add empirical evidence to give new insights into how land organisation shapes and is shaped by evolving contexts, social fabric and access to resources in a Mossi household in rural northern Burkina Faso.

It seemed important for the purpose of this research to anchor land tenure organisation to livelihood strategies even more. A relevant nexus was found in access to trees and more specifically to non-timber forest products.

From the previously mentioned literary debate it becomes clear that land tenure is difficult to define and complex to explore. It becomes even more complicated when individuals or legal entities hold some rights over land, although not necessarily the “full bundle” (Dekker 2003). Access to trees and NTFPs exemplifies this theory; in this context, analysing rights over trees and their products has spiritual, economic, social and obviously land tenure-related implications, as explained below.

In French-speaking West Africa, trees are a big part of land tenure rules; they have their rules of access, linked to land and different from those of accessing it. In Burkina Faso, different access, rights and social norms even apply to different tree species (N. Poole et al. 2016); and trees and their management are embedded in traditions and customs that are essential to the society; finally, their products are extremely important in diversifying livelihood strategies and achieving food security in the most critical periods.

This study explores the importance of analysing land tenure mechanisms in Burkina Faso and their links with livelihood strategies and social organisation; this is particularly important as land tenure is a complex system and a comprehensive analysis of what it means in rural Mossi areas of Burkina involves looking at the different kinds of rights over land in different context and how, for example, customary tenure (or *de facto* tenure) has been influenced and may have influenced national laws. This research also focused on the role of trees and non-timber forest products. I have considered the role of trees from two different angles. First, as an important element of customary land laws impacting the social organisation of Mossi households and villages; secondly, as a resource and with a focus on edible non-timber tree products for human consumption, vital components of livelihood strategies in addition to or in substitution of harvest products, particularly in the difficult dry season.

The literature review that follows this chapter will also focus on legal pluralism, or the interesting and complex system encasing how rights over resources (or

anything else, in fact) are stated, evolve and are perceived. In looking at different resources, as stated, I will be focusing on land and trees; when looking at the actors, or legal entities (von Benda-Beckmann 2002) accessing these rights, it was important to analyse household management of these resources and then, more specifically, gendered access to land and trees.

1.2. Resource management in a risky context

In analysing land tenure mechanisms and livelihoods, substantial importance is given to the surrounding context. Politically, economically and environmentally, this is the background for the evolution of land tenure, both formal and customary. More importantly, for this analysis, the context of livelihood strategies impacts deeply on the role of land tenure in relation to social organisation and access to resources at the household level.

Rural livelihoods, especially in Sahelian countries, are worked out in a risky context. In these countries, policy makers have tried to address the issue by focusing on mitigating health, environmental and economic risks. For example, numerous development initiatives aim at introducing drought-resistant crop varieties to improve agricultural production as per the Green Revolution in Asia ¹.

However, the increasingly complex web of risks faced by Sahelian countries is making targeted policy interventions an inappropriate tool to deal with these issues.

The 2014 riots in Burkina Faso are an expression of exactly how interlinked political stability is with food prices and the cost of living; exacerbated by climate extremes and extreme weather often causing disastrous events such as drought and flooding, the unrest turned into a countrywide revolution leading to the deposition of former President Compaoré. The terrorist attacks of January 16th 2016 also highlighted linkages between the domestic political economy and regional and global instability.

Ethiopia offers another case demonstrating how global dynamics are interlinked with local land tenure laws and intertwined with the effects of climate

¹ For more insights see reports and publications from the Improved Sorghum Technology Adoption in Burkina Faso project led by Innovations for Poverty Actions – IPA in Ouagadougou.

change. The 2016 riots were a mixture of political unrest fuelled by an extreme drought, ethnic clashes and a land tenure reform (*BBC News* 2016). That plan to expand Addis Ababa's limits and transform part of a rural area in Oromia into urban areas had been presented to the government in November 2016. In a historic turn of events, it was rejected by one of the key members of the ruling coalition; not only this is unprecedented in Ethiopia, it also means acknowledging some kind of legitimacy of the protests ongoing in the Oromia region (Muindi 2016). Oromo, around 35 million and the largest ethnic group of the country, felt outraged by the law threatening arable land around the capital. A key player in the four-party coalition that has had control over power since the 1991 coup d'état – the Ethiopian People's Revolutionary Democratic Front, or EPRDF – the Oromo People's Democratic Organization (OPDO) voted against the proposal and got it rejected by the government. This event led to a series of ongoing protestations across the country, and especially in Oromia (Davison 2016). Moreover, it opened the door for other mainly ethnic-based protestations over centuries old boundaries such as the ones between Amhara and Tigray, engendering more protestations in other regions (Somaliland Press 2016). This links even more land to the politics, world events and to the possible risks that may arise from land tenure related issues.

IPCC (2014) reiterated that an approach of risk management is more effective than risk mitigation, indicating that some risks cannot be mitigated or avoided. The climate change debate, as well as the rich literature on resilience, adaptation and transformation suggest that policy focusing on risk management is indeed the most appropriate to start addressing these issues (Pelling 2010). This is relevant to this study as it tries to explore linkages and dynamics between and across traditional customary land tenure in the field and the evolution of a national land law. When talking about land tenure security, risk is a factor to take into account as potential cause and consequence of livelihood changes as well as changes in the perceptions people may have of land tenure security.

It is interesting that, as highlighted by the literature analysed in the following chapters, people living in rural contexts have been managing their risks for decades if not centuries (Southall 1998). They highlight how some of the shocks,

such as the inherent seasonality of the agricultural cycle, social events, education and some health shocks are in fact rarely unexpected. In line with literature on risk management and farming strategies for adaptation, in Burkina Faso Mossi households, it quickly became evident that diversification in strategies was often resulting from planning for potential risks and shocks. The components that this research focused on, such as access to land and resources, agriculture, livestock etc. were found to be extremely interconnected, representing livelihoods in a holistic manner. An approach that focuses on the communities first could benefit policy makers in the way they approach risk management, rooting their policies in what has worked at the local level for decades.

However, such risks cannot be underestimated or diminished and both the literature and empirical evidence confirm that they can be overwhelming and significant for a household but are not entirely unexpected (Tincani 2012).

The debate on resilience offers proof of the relevance of approaches and tools that aim to learn from how communities conceptualise their risks and manage them, more or less efficiently. For example, the approaches such as AAA (Anticipation, Absorption, Adaptation) (Bahadur et al. 2015) or AAT (Absorption, Adaptation, Transformation) (Béné et al. 2012) focusing on adaptation to shocks or transformation and the ensuing stresses can be deemed useful tools for policy makers. In fact, these frameworks do their best to take into account the ever-changing social context and high level of uncertainty that this entails.

Approaches aiming to understand risk management and resilience strategies are relevant to this thesis as they underpin how people access and manage resources, including land and trees, within a household.

The literature review and methods sections will analyse the Sustainable Livelihoods Framework (SLF) in depth; as a risk management tool, its limitations are clear, as it stresses on traditional strategies for managing crises such as accumulation or diversification (Ellis 2000).

In the aftermath of a shock (extended drought, flooding, or economic crisis, rise in food prices, political unrest, etc.), people have resorted to unusual strategies that are difficult to grasp when using a traditional framework, sometimes highly praised by the media and publicised as an unusual event. I argue here, in line with

previous studies, that these livelihood strategies are not simply isolated events but rather rooted in social organisation, customary resource access systems and people's mechanisms of accessing land and resources.

As a land-based people, the Mossi are renowned for their ability to implement successful and efficient soil and water conservation (SWC) techniques. Those technologies have recognised effects on rural livelihoods. It has not been consistently studied, however, how they impact on household sustainability and relate to people's ability to access resources, especially land, in an ever-changing socioeconomic and political context such as the Burkina Faso one. It is important to recognise at this stage that while the main focus of the research is how land is accessed, I am here only taking into account land used for agriculture and small livestock.

The livelihood of the Mossi society being agro-pastoralism, land is used for different kinds of crops, trees and complementary livestock activities. There is extensive literature on the importance of accessing land and land-related disputes when talking about water management; however, because it is a different kind of access, these specific practices over land have not been analysed in this study. Moreover, literature and recent empirical studies have focused on land for communal forests and the consequences of an unclear pattern of access to it. Once again, this follows a specific form of land tenure that transcends the household livelihoods and won't be the main interest of the thesis. Finally, because of the rural focus, this research does not analyse the complicated and interesting land tenure literature and empirical evidence related to land for permanent buildings.

The following chapters will explain how these uses are acknowledged in the national law and customary tenure and further explain the interest of the study, focusing on two main resources: land and trees. To further pinpoint the borders of the research, it is important to highlight that land is therefore arable land, including fields close to the compounds and the plots further away. It also includes access to plots specifically designed for garden vegetables. These are managed differently from the arable land and the distinction will be explored in the thesis. The spatial position of the fields and plots has a particularly important impact on

access and management of land, trees and consequences on households' livelihoods.

As the methodology will explore in depth, this research uses quantitative baseline data, focuses on qualitative data for the core themes and uses participatory community maps to highlight the role of spatial perceptions in the household's management of resources and choices of livelihoods. Findings from the participatory maps elaboration process and spatial perceptions have been analysed with a resilience lens.

It has been stated previously that because trees follow a different tenure from agricultural land, they will be analysed separately and will be used as a lens to focus on livelihoods and resilience. This study will focus on three trees: baobab, shea and néré. It will later be explained that they were chosen because they were mentioned consistently and because of their particular role and importance in the Mossi society and tree and land tenure. It is worth mentioning here that there are several other species, mentioned in the literature review and methodology, that are as important to both the household livelihoods and for a peculiar tenure. However, baobab shea and néré also have a particular importance in traditions and social organisation. They were chosen to highlight some aspects of intra-household resource management and to put forward from a different angle the argument that land tenure processes are a social matter for Mossi society of Northern Burkina Faso.

What does access to these resources mean? This research will add to the debate on the different kinds of access that this involves. The specificity of the West African context involves an in-depth analysis of multiple resource systems (formal laws, decentralisation mechanisms), an investigation of customs, an understanding of social organisation and intra-household dynamics. On the other side of this question is the use and purpose of these resources.

Are there different kinds of access? How are they represented in formal and customary tenure? What is the relationship between different access and different uses? Even an initial look at rural livelihoods highlights different uses for land: agriculture and livestock. This thesis goes deeper into analysing how

different uses are taken into account in formal and customary tenure and how that relates to Mossi social organisation.

How does access to land evolve in a Mossi household? How does that relate to access to trees? Can women achieve land tenure security and how? How does the social organisation of a complex household in rural Northern Burkina Faso shape and is shaped by land tenure? How does customary land tenure relate to formal laws? How does this duality of laws and traditional rules impact livelihoods? It is clear that people need land to both farm and raise livestock, as well as to access trees and their products. How is that integrated into the evolution of social fabric? How can formal land laws and customary tenure impact people's access to trees? How does that shape people's resilience?

These can be summarised in the three main overarching research questions, reflected in the empirical chapters 5, 6 and 7.

- 1. What is the main framework of reference for land tenure in a northern Burkina Faso rural household?**
- 2. How does that impact on a Mossi household's access to natural resources, and livelihoods?**
- 3. How has that framework evolved within the complex web of intra and inter households relations?**

This thesis aims to shed light on these questions, using detailed case studies of seven households of Northern Burkina Faso and three households of the Western part of the country.

1.3. *Thesis approach and outline*

This research has been developed through a thorough literature review followed by the elaboration of a rigorous methodology applied during an intensive in-country fieldwork period.

The analysis uses a modified version of Scoones (1998) SLF to scan the data collected through in-depth participant observation, interviews and focus groups discussions tools. This methodology seemed the most appropriate to unpack linkages between land tenure, social organisation and livelihoods of a Mossi rural household.

This original study uses access to trees and non-timber forest products as a lens to explore the formal and customary land tenure systems and mechanisms of accessing resources within and in between households.

Burkina Faso was chosen due to his fragile environmental context, variability in climate and unique resourcefulness of people in terms of livelihood strategies. This study's data collection took place in 2012-2013; the country was still an example of long-lasting democracy and political stability in the West African contexts. The 2014 revolution and 2015 coup d'état, as well as the 2016 terror attacks appear to have changed this apparently peaceful context. While it is too soon to analyse the impact of the past two years, the events clearly highlighted inherent contradiction of the democratic regime and diffused discontent underneath the surface. This does not directly influence the results of the research but contextualises them in a different and wider geopolitical scenario. It also stresses the importance of analysing resilience and livelihood strategies, proving once more how different risks and shocks are interconnected and the need to address them holistically rather than with precise and sectoral policy interventions. This research aims to address local, national and international stakeholders and policy makers to add to their understanding of local dynamics regarding access to, rights over and ownership of land, in view of more comprehensive and applicable reforms.

Seasonality is a huge part of the natural environment of Burkina Faso; this thesis focused on livelihood strategies harvest to harvest, with a focus on the dry season months to uncover any "unusual" mechanisms. This research methodology is inter-disciplinary; the literature review presented below allows drawing on rich and different studies composing the presented framework. Because of the variety of interlinked sectors, a compromise had to be done between breadth and depth of analysis. The historical perspective and contextualisation of the thesis supports the main arguments from beginning to end and can be found in the literature review and context chapters.

Bodies of literature and topics were selected according to their relevance in answering the proposed questions and main hypotheses presented below.

An initial hypothesis was that the newest Rural Land Act (Loi 0034) had an impact on customary tenure and the way people accessed and managed land and

land-related resources at the household level. I also guessed, based on previous studies, that customary laws, specifically the ones related to land tenure, were constantly evolving, parallel to national laws and shaping and being shaped by social changes. This evolution has yet to be documented and this study aimed at addressing this gap. Moreover, I conjectured that women had restricted access to rural land and a role formally recognised as secondary in a patrilineal society. Adding that to our holistic view of risk and resource management, I argue that socioeconomic changes, a global and connected world and new technologies have an impact on the way members of a household relate to each other, specifically about accessing and managing land and trees. Based on previous reports and another thesis (Tincani 2012), I picked up on the importance and role of tree foods in rural livelihoods and used them as an insightful crosscutting lens to link livelihoods, customary tenure and social organisation for accessing resources. The study built on the ethnographic and anthropological literature arguing that, in West Africa, they are the key to land ownership in customary tenure. The literature review has also highlighted a lack of recent studies on Mossi households; I tried to start filling the gap by assuming that the household, as an entity, had evolved over the last years and needed to be explored and redefined. The study takes household resource management to be a social construct, meaning in this context that it allows us to place the resource management entity within a wider context while focusing on the users' motivations for their strategies. The research then explores the hypothesis that all household members work together towards the same goal of better livelihoods.

I argue here that intra-household resource management is in constant evolution and is deeply influenced (and influences) social customs, formal laws and current events; insights from the literature and analysis of the collected data will prove this argument throughout the thesis.

These were some of the hypotheses of this research arising from the initial questions and the literature review. It is important to understand that they evolved and were explored over the course of the data collection period, pondered during the revision of the initial literature review and transformed into proper arguments, supported by literature and data, as will be presented in the

final chapters of this work. This research highlighted mechanisms through which Mossi households' access land and trees and the impact on their livelihoods.

The relevance of the matter and added value of the study, introduced in this Chapter 1 are contextualised in Chapter 2 through the cross-disciplinary literature review. This covers livelihoods, the household unit of analysis, resilience and land tenure. These concepts stem directly from the research questions and initial hypotheses; they are explored to strengthen the link between each component of the study and ground the chosen analytical framework. The socioeconomic context and political background are presented in Chapter 3 from a historical perspective and empirical analysis. This chapter not only contextualises the hypotheses and the study itself, it also highlights social and cultural characteristics, linking them to environmental factors, economic data at national and regional level and, finally, rooting it in the country's political history. Having thoroughly analysed the existing literature and surrounding context, Chapter 4 puts forward the research methodology, an explanation of the framework for analysis, the process of data collection and ethical considerations. The data collection was conducted over a year in two different sites and over a total of 10 households. The sample was directed by initial quantitative data on social position within the village, different cultural and religious backgrounds, proximity to several resources (roads, mills, schools, etc.) and taking into account feasibility and availability.

Findings from these case studies have been divided into the following chapters. Chapter 5 presents the evolution of land tenure in a Mossi context and focuses on underpinning mechanisms of accessing resources. It puts forward evidence from the two field sites to highlight differences and similarities between social systems and their relationship to national land laws. Part of this chapter is dedicated to a preliminary analysis of women's access to resources. The increased emphasis in the literature on gender and this study's inherent interest in intra-household livelihood strategies prompted special attention to women's access to resources. Findings from both sites are presented in this chapter.

In fact, this is a central chapter because it assesses the lack of implementation of the national land law in the Passoré province. Moreover, it insists on the

concept of land tenure being embedded in the social organisation, shaping and being shaped by the constant evolution of traditional mechanisms.

The second resource analysed in this research, trees, is presented in Chapter 6. I argue in this chapter that trees are key to explain customary land tenure. The research, in fact, explores the nexus that trees create with land in a Mossi society and analyse their contribution to livelihood strategies. Having presented access and management of the selected resources, the study's structure leads towards the broader conclusions on the linkages between access to land and trees and the livelihoods of a Mossi household in Chapter 7.

The core of the analysis suggests that the concept of land tenure security that impelled the latest land laws has challenges in being implemented country-wide and that reasons for this may be found in customary tenure and local context. I suggest that they could be partially addressed by considering land as an integral element of the social organisation. In a dynamic, complex system such as land tenure, this means looking at how customary tenure may influence and can be influenced by the evolution of the national legal system.

These statements lead to conclusions, necessary nuances, policy recommendations and some implications for future research, including the ethical question of modifying or transforming social norms in favour of achieving seemingly better livelihoods.

Chapter 2. LITERATURE REVIEW

2.1. *Sub-Saharan Africa food security and smallholder farming*

In order to present the context of rural agricultural households and their livelihoods, it seemed appropriate to start this literature review by an analysis of the status of food security in Sub-Saharan Africa and its links to the livelihoods of smallholder farmers that are the main object of this thesis.

According to FAO, in 2014, 220 out of 795 million of undernourished people worldwide were in Sub-Saharan Africa (FAO 2015). Moreover, Shapouri et al. (2010) (2010)(2010) provide pessimistic projections concerning the area's food security conditions. First, it states that half the total population is estimated to be food insecure; then they project that, by 2020, the food insecure population will exceed 500 million out of a total estimated to have reached by that date one billion. The possibility of famine is therefore extremely high: Devereux (2009) highlights that human beings do have the capacity to eradicate the threat of famine and yet Africa's population is still deeply affected by it. Those persisting vulnerabilities, when coupled with climate change, make it evident that food insecurity and famine are indeed endemic in Sub-Saharan Africa and especially in the Sahel (Baro and Deubel 2006).

The causes for these issues are complex and due to a comprehensive range of interrelated factors such as climatic hazards, environmental degradation, population growth, ecological disasters as well as more human-related factors such as inappropriate policies and infrastructures, poor productivity, lack of livelihood diversification and conflicts (Nath and Behera 2011; Devereux and Maxwell 2001; Baro and Deubel 2006; Webb and von Braun 1994; Cutter et al. 2009).

The latest report on food security (Research Institute (IFPRI) 2016) highlights that nearly a quarter of all global land has been affected by environmental degradation as a response to food insecurity. This opens to the debate concerning sustainable intensification, or a more efficient and low impact management of natural resources.

Most of the rural poor in Sub-Saharan Africa depend on rain-fed, subsistence, and small-scale agriculture for their livelihoods. I want to highlight here the role of agriculture and in addressing food insecurity and point out a dynamic link between them. However, recent literature (Ellis 2000; Bryceson 2002; de Haan and Zoomers 2005; de Haan 2012) also indicates that rural households in Sub-Saharan Africa have been diversifying their livelihoods. It is still a reality that agriculture remains the dominant source but other activities will be taken into account here, such as the use of non-timber forest products that are particularly important for the selected country and the thesis arguments

The World Bank estimates that 78% of rural poor depend on agriculture as a major source of their livelihoods, for both income and employment². As one of the most natural mechanisms of resilience, however, rural people are engaging in non-farm activities to increase their income, diversify risks and achieve better livelihoods. This is especially true in Sub-Saharan Africa, where agricultural development has been seen as the main way out from poverty for many years by policy-makers. This sentence has been the centre of the debate on agriculture being used as the engine for economic growth and development. This is a longstanding debate rooted in the Fifties and still a focus of international attention, especially after the 2008 World Bank Report called "Agriculture for Development" (Hazell et al. 2010; Wiggins, Kirsten, and Llambi 2010; Christiaensen, Demery, and Kuhl 2010). These authors argue that poverty, according to the World Bank report (2007), is concentrated in agriculture and rural areas; that the agriculture sector is dominant in developing countries' economies; that spread crisis such as the food price surge of 2007-2008 greatly affected the rural poor adding millions of people to the food insecure worldwide. They therefore highlight that a global focus needed to be reinforced towards the agricultural sector. The more recent 2015 estimates from the World Bank prove that growth in the agricultural sector is more effective in raising incomes amongst

² World Bank estimates for 2015 based on 2012 UN data.

Agricultural data available on the World Bank database website at: <http://databank.worldbank.org/data/home.aspx>

the poorest when compared to other sectors³. In fact, more recent UN estimates also confirm that one third of the GDP and three quarters of employment in Sub Saharan Africa depend and could generally benefit from a focus on an agricultural economic growth⁴. Moreover, markets for food products are being seen as increasingly important in addition to, even more than, own-production.

A recent study based on data from Kenya, Ethiopia and Malawi highlights the positive relationship between market proximity and access and dietary diversification (Sibhatu, Krishna, and Qaim 2015). This study proves that reducing the distance from the market by 10km has the same effect on dietary diversity as increasing the livelihoods by one different crop or livestock species (Ivi, 2015, 10658).

While the World Bank Report argued that agricultural growth may serve as engine, in the early stages of a country's development, for the growth of the industrial sector (2007), a growing scepticism has been building on the continued role of agriculture in a world affected by the effects of globalisation and trade liberalisation (Hazell et al. 2010). Following this tendency, a body of literature grew around internal contradictions and vagueness concerning the use of agriculture for poverty reduction⁵. For example, Akram-Lodhi (2008) argues that this focus on agriculture led to major policy implications because in trying to transform smallholders systems into an arguably "new agriculture" (Ivi 2008, 1160) it did not take into account previously existing roots of power, privileges, corruption and other causes of poverty, simply leading towards the creation of a capitalistic agriculture rather than improving livelihoods of smallholder farmers.

This on-going debate is rich in sources, contributors and initiatives. For our purposes, I will now proceed to analyse the features characterising the smallholder farmers and their livelihoods, leading us to the main object of this thesis.

³ Ibidem

⁴ Ibidem.

⁵ Main authors include Akram-Lodhi (2008), McMichael (2009), Kay (2009), Rizzo (2009), Woodhouse (2009), Hall (2009), Oya (2009).

There is no universal definition for the term “smallholder agriculture” and the literature agrees that it can be defined in various ways depending on the varied contexts (Narayanan and Gulati 2002). Most definitions characterise it by referring to farm size; for example, Narayanan and Gulati define smallholders those that farm less than 2 hectares of cropland. However, Dixon et al. argue that, in Sub-Saharan Africa, these measurements make no sense if they do not include population density in the equation (Dixon et al. 2004). Others, including the World Bank, conceptualise it by the origin of the labour and effort needed for farming and define smallholder agriculture as farming that is mainly operated by a household. Others also focus on limited land availability; a body of literature including Asuming-Brempong (2011) and Von Braun (2005) furthermore highlights the importance of defining smallholder farmers within a framework considering assets and risk conditions. The lively debate in the literature suggests that while a common definition may be difficult, some key themes are more commonly emerging and can also be applied in this context (Chamberlin 2008). The key themes relevant to this research include landholding size (for this thesis, limited access to land) and access and presence in local and wider markets (here, limited, little or no access to big markets and difficult access to local markets). To complete the picture, it is important to take into account wealth; however, rankings have been proved unreliable (Ibidem, 2008). More importantly, different levels of vulnerability to different risks can be applied in the context, linked with exposure and the ability to cope (Chambers 1992).

I define here smallholder farming as a system with limited resources endowments such as land, capital and skills, highly vulnerable to various risks (environmental, climatic, and economic), with no or little access to technologies and no or poor links to markets (Dixon et al. 2004). It was important for this study to focus on the various aspects of the “smallness” and its multi-dimensionality positioned within the rural Northern Burkina Faso context. Such smallholder households are the objects of this research and I will then highlight the main contribution to the literature regarding their livelihoods and natural resource management.

2.2. *Livelihoods*

It is important to have a good understanding of the livelihood approach to be able to link livelihoods, natural resources management and food security.

In this paragraph I will explore the livelihood approaches evolution and their importance when applied to policies for management and capacities for action.

The livelihoods approach draws from several disciplines and different bodies of literature. It has origins, in the late 80s, in studies regarding the capabilities of specific units to cope with different crises, focusing especially on rural people. This literature analyses people's patterns of asset holdings as well as different degrees of exposure to risks (vulnerability) both internal and external to the community.

This approach also arises from the failure of the classic food security analysis that only focused on food. As de Waal pointed out while analysing the 1984-85 Darfur famine, the "food first" analysis did not take into account that people may choose to go hungry to avoid other asset liquidation (De Waal 2005), and that market exchange plays a part as important as or more so than household agriculture.

With the main focus shifting from exclusively food deprivation to income holdings and assets, new indicators were created for analysing poverty (Devereux and Maxwell 2001). The livelihood approach rapidly and naturally evolved to focus on sustainable livelihoods. The Brundtland Commission claimed in 1987 that 'sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987, 43).

While most authors and policy makers usually accept those concepts, and while the Brundtland Commission idea itself had widespread acclaim, the approach has proved to be difficult to implement. Livelihood studies became even more central in development studies in the late Nineties, when the Department for International Development (DFID) started actively promoting the Sustainable Livelihoods Framework as a tool for poverty alleviation policies (de Haan 2012). Ample discussion has been carried on regarding the notion of sustainability and the measure in which implementation should be more focused on it rather than

on development (Tao and Wall 2009; Wall 1997; Chambers 1992; Butler 1999). The definition of development itself has been broadened by its combination with sustainability (Telfer and Sharpley 2002; Todaro 1994).

In this context, the passage from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) cannot be overlooked. As stated by Sachs, the MDGs marked a milestone in highlighting “widespread public concern about poverty, hunger, disease, unmet schooling, gender inequality, and environmental degradation”(2012). In fact, they undoubtedly promoted global awareness and political accountability on easily understandable and shortly packaged eight issues (Mitchell 2012). With highly variable results across countries, a lot of them were on the right path towards achieving some of the goals. Arguably, the general feeling was that progress had been made in the fight against poverty and that the MDGs had a substantial role in this evolution (Easterly 2009); they were therefore reformatted, repackaged, and put as main objectives for another 15 years.

The on-going debate on sustainability touched the MDGs sector and transformed the goals according to a triple bottom line approach (Sachs 2012) that adds the aims of economic development, environmental sustainability and social inclusion to the overall goal of fighting poverty. Moreover, the MDGs have been heavily criticised by some of the literature for their main shortcoming of overall failure in reducing socioeconomic inequalities (Vandemoortele 2011). The MDGs’ focus and attention to specific aspects and aggregate data resulted in an evident lack of conceptualisation of the multi-dimensional causes and experiences of poverty. This was identified as the main shortcoming and challenge that needed to be addressed in thinking about further development goals (Herrick 2014).

This is a substantial shift as the MDGs were roughly targeting developing countries while the SDGs try to change to approach into working together of all nations towards a more sustainable future (Mitchell 2012), taking a more holistic approach to fighting poverty. As mentioned, the specificities of MDGs and SDGs will be treated in Chapter 2. It is important to highlight the passage from 8 to 17 goals, showing the will to further link issues relating to personal wellbeing with the appropriate infrastructures to address them as well as the concerns for the overarching natural environment (Waage et al. 2015).

The debate in the literature proves that there are difficulties with the notion of sustainable development. When applied to specific sectors, the positions within the debate become even more radical. For this research, the context has been valued as a vital factor because of its role in achieving sustainable outcomes (Lew, Hall, and Williams 2004). The ultimate aim of the research being people's livelihoods, a sustainable livelihoods approach is proposed.

As briefly mentioned before, three important realizations underpin the sustainable livelihoods (from hereafter: SL) approach. It was evident that economic growth and poverty were linked but there is no direct relationship between one and the other, since it depends on the capabilities the poor have to take advantage of such growth. Moreover, it is important to understand that poverty is not just a question of low income, but also overall health, literacy and less quantifiable things such as vulnerability. Third, there is the idea of powerlessness and that the actors (in this case, the poor themselves) need to be involved in designing policies and projects intended to better their condition (Krantz 2001).

In the way the SL frameworks were created and modified, they focused on how people organised their lives and on their opportunities rather than on their impoverishment and lack of resources. This attention to bottom-up and participatory methods and the emphasis on people's lives and daily needs is much indebted to Sen's work (Sen 1981a) on entitlements. Sen highlighted the need to focus on overall welfare rather than on food only. This is paramount since it is the foundation of his theory based on the assumption that individuals aim not to acquire commodities rather than what he calls *functionings* (welfare, longevity, happiness) (Drèze and Sen 1991; Barraclough and Utting 1987). This methodology was combined with Chambers and Conway's paper on SL (Chambers 1992). Building on this, Carney elaborated her own definition of livelihood, since then prevailing in the literature (de Haan 2012).

"A livelihood system comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and

maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.”(Carney 1998)

Rural development and SL have been thoroughly studied throughout the years (Adato and Meinzen-Dick 2002; Carney 2003; Chambers 1992; Helmore 2001; Lee 2008; Krantz 2001; Wanmali 1999). Leach, Mearns and Scoones added dynamism to Sen’s theories by arguing that the distinction between entitlements and endowments be neither an a priori nor fixed in time. In fact, they affirm that they are dependent on context and time, creating a process where “what are entitlements at one time may, in turn, represent endowments at another time, from which a new set of entitlement may be derived” (Leach, Mearns, and Scoones 1999, 233).

Another shortcoming of this approach that was identified was the neglect of markets. For example, and while recognising the importance of a comprehensive approach such as the livelihoods one, Dorward et al. (2003) highlight the importance of a thorough analysis of markets and institutions as integral part of the livelihoods development agenda. More specifically, this innovative conceptualisation of the roles of markets, institutions and technology in livelihoods and economic and social development could offer benefits in increasing the scope of livelihood analysis in designing SL action oriented programmes (Ivi, p. 330 2003).

There is an important body of literature that includes theoretical debates as well as case-studies and empirical research. While this review cannot go in-depth into analysing the debate, an interesting example is found in two studies concerning taro and coffee producers in Nicaragua.

Subsequently there has been consideration for power relations. According to de Haan, this was due to the non-ideological context in which the framework was first developed and emerged (de Haan 2012). This naturally led to a flourishing literature on livelihood analysis that included the analysis of power relations. Sen’s work on entitlements, as mentioned, was part of the body of literature that stimulated the attention to power relations and even more so to the actors, the poor themselves. This happened because both Sen’s scholars and his critics

focused on power; his scholars on how it drew attention to it, his critics on the fact that it did not get enough attention from Sen.

The debate around Sen's work expanded from the livelihood approach debate into other disciplines. Geiser argues that it was one of the reasons for human and political ecology to evolve and look at local complexities, leading to the creation of new models around the idea that power structures might be a root cause of vulnerability strictly linked to livelihoods (Geiser et al. 2011; Blaikie et al. 2014).

Later on, the debate on livelihoods started drawing on another growing field, gender studies, which have a vast literature, which will only be cited here for the contribution to new livelihoods frameworks, with no ambition of this section to be complete or comprehensive. Foucault's power theories had quickly become an often cited model for the core of power analysis in gender studies (Foucault 1982; de Haan 2012). Rowland efficiently made this theory operational by coupling it with its conceptualisation of power (Rowlands 1997). He saw four levels of power, i.e., "power over" in win or lose relationships, "power with", based on solidarity, collaboration and common benefits, "power to", focusing on creativity impulses and their inputs in realising actors aspirations and "power within", based on self-esteem and respect for others conceived as equals. This was used in several analyses, the most renowned being Lakwo's study on the effects of micro-finance in Uganda rural women (de Haan and Lakwo 2010). This case study added a layer to the livelihoods framework because it proved that empowering was not limited to improving assets or entitlements but could be linked to immaterial concepts of challenging one's social position or negotiating power and decision-making dynamics in a household (de Haan 2012).

The evolution of the livelihoods approaches in itself explains the nexus between natural resource management at the household level and livelihoods that will be summarised in the last paragraph of this section. As mentioned in the first paragraph, sub-Saharan Africa is deeply affected by climate change and smallholder farmers are especially vulnerable to disasters and environmental risks. I will then point out how climate change has affected the livelihoods this thesis aims at analysing.

2.3. *Climate change and livelihoods*

Sub-Saharan Africa is, as many other parts of the world, threatened by negative effects of climate change. With rainfall patterns becoming unpredictable, temperatures rising and overall precipitation decreasing in average, it is a now accepted phenomenon with potentially destructive impact on development (Holmgren and Öberg 2006; Thulani and Phiri 2013; Biggs et al. 2008). This has been confirmed by the latest Intergovernmental Panel on Climate Change report (IPCC 2014), stating that climate change is causing impacts on both natural and human systems across the world.

Livelihoods are universal in the sense that everyone, everywhere, has to pursue livelihoods, and tries to pursue better livelihoods, to make a living (C. B. Field 2014a). However, I argue here that the adverse impact of weather events, climate variations can threaten not only nature and the environment, but also and most importantly poor people's capabilities, rights and entitlements to make a living. Hence, it is clear how climate change is actively reshaping people's livelihoods and their ways of achieving them (UNDP 2007; Adger 2010b; Adger et al. 2003; Leary 2008). The 2014 IPCC report also highlights that the impact of climate change is strong and comprehensive for natural systems and recognises a role for climate change on human systems (IPCC 2014).

Mano and Nhemachena argue that the most immediate effects will be seen in agriculture, the mainstay of most rural economies in Africa that would inevitably affect the livelihoods that depend on crop production (Mano and Nhemachena 2007). More recent studies confirmed the trend, confirming that the anticipated effects of climate change on dryland agriculture are seen in Sub Saharan Africa. Since the literature flourished on climate change and since it was clear that it would affect the realisation of development goals, studies (Davidson 2003) started being carried out to explore and measure the impact on local livelihoods. However, most of those studies became localised and cannot be generalised. This is easily explained by the fact that each study is strictly connected to a specific socioeconomic, anthropologic and ecologic area. As argued by Nath and Behera, the assessment of a local vulnerability is necessary to understand the responses

to a specific environmental stress; since the impact is linked to vulnerability, it naturally varies across the globe (Nath and Behera 2011).

There is an extensive literature on the impacts of climate change on agriculture, focusing specifically on the vulnerability of the sector. Those studies convey that local environmental and management factors, such as local biological conditions, soil content, type of crop, management regime in use, support from government or NGOs, awareness of expected changes, *inter alia*, influence the degree of vulnerability⁶. The main lessons emerging from the literature on the impacts of climate change on agriculture focus on human influences, warming of the climate systems and rain shortfalls (IPCC 2014). Due to the nature of the area itself, these effects are expected to have a major impact in Sub Saharan Africa (Amjath-Babu et al. 2016). The Sahel is an especially vulnerable and fragile environment where the effects of climate change are extremely likely to impact on poor populations basing their livelihoods on subsistence rainfed agriculture and increasingly dependent on the contribution of biodiversity for their food systems and overall livelihoods sustainability (N. Poole et al. 2016).

Modelling studies have assessed potential impacts of climate change on agricultural production, with various methodologies grounded in both crop and climate science (Challinor et al. 2007). As previously mentioned, the impact will depend on location and adaptive capacity. However, it is likely that, in some places, the climate change will alter agro-ecological condition so much that the coping range will not be enough. It is therefore likely that, in those situations, livelihood options themselves will be modified (P. G. Jones and Thornton 2009).

Having described how agriculture, small farms and livelihoods create the broad framework for this research, I will now literature around rural households.

2.4. *The household: unit, units*

A scientific interest towards household studies has developed relatively late and became a focus for scientific sociological research in late 19th Century. In the

⁶ For a complete critical review of the literature please see Kurukulasuriya and Rosenthal (2003).

early Twenties, Chicago School of Sociology started a productive vein of treatises and papers on family (Marc Pilon et Kokou Vignikin 2006).

However, a lot less has been said on African families, for several reasons. As it has already been stated here, ethnological and anthropological attention to Africa has been consistent and extensive especially after decolonization. African societies were thoroughly analysed with the underlying assumption that, in an environment where individual freedom was relatively unknown, the society worked as a structure strongly based on its own, often undecipherable, rules. This led to the emphasis being put on regulations, customary laws and structure of the households leading towards a better knowledge of village organizations through alliances and marriage.

While this literature gave important details to the African societies and families, it was mainly ethnographic work and, for the most part, carried on in a linear view of change, from a more extended form of households towards the conjugal unit. This has been questioned by researchers in medieval history, clearly discrediting the idea of a linear evolution of the household. In fact, Bloch states that due to multiple factors (political, social, economic) families have been known to reduce in size or broaden several times during history (Marc Pilon et Kokou Vignikin 2006).

While this applies more to European studies and types of families, it is even more obvious in African societies, where several sociological studies clearly state that modernity does not necessarily mean the most restricted household models (Van de Walle 2006; Marc Pilon et Kokou Vignikin 2006). Moreover, those studies highlight how new households are forming, making the linear evolution theory obsolete, even more so with the emergence of woman-headed households.

It has been made clear by those studies that the enormous changes several regions had gone and still were going through, especially Africa (colonization, decolonization, imposition of western values, cultural melting pot, economic transformations, progressive literacy, urbanization phenomena, as well as new epidemics such as HIV/AIDS, and so on) called for a new theoretical framework well family was to be thought in a lot wider perspective than just natural or acquired kinship.

The convergence theory, consistent in sociological discourse since the Sixties, is twice discredited. First because what was theorised did not happen in Southern societies of the world; and second because it could not be applied in western history (Berquó and Xenos 1992). The progressive disproof of all frameworks led to a diffused scepticism regarding all theorizations of family and household evolution. This unfolding prompted for a redefinition of the family itself, a long and rich debate not to be undertaken here. For this study's purposes, Bourdieu's idea of a family as a changing tool able to change, influence and ultimately build society is the most exhaustive, as opposed to the family only being an immediate static factor inside society itself (Bourdieu 1993).

This rich debate over what a family is and entails and can condition a complete redefinition of the notion of the household. The household as a concept originated from the idea that a family has a physical habitat in western societies. Its evolution led to the household itself being the main unit in the organization of a society in most of its aspects, from administration and bureaucracy to economic needs and statistics.

Mostly renowned as a standard unit of analysis, a definition of household comes from the United Nations in its principles and advice as the way by which members of one or more families, individually or collectively act towards providing for common needs (UN 1980). Since then, in statistics and surveys administered in Africa, a household is a group of people, whether related or not, that eat together under the same roof and acknowledge the same member as chief of the household.

It is paramount to understand that the household is one of the primary units directly affected by social changes, modernization, cultural swings, development, economic crisis and so on. It has been acknowledged that an African household is not a static unit rather than one or several combinations of factors intertwined together. Because of its complex nature, it always seems to be caught in between local customs, tradition and external inputs, might they be socioeconomic factors or political changes (Adepoju and Mbugua 1997).

It is constantly changing, yet it is the steadiest unit a society can have, since households bear the weight and the capabilities of readapting to new and constantly changing political, cultural, religious and socioeconomic contexts.

It is important to understand that, while ethnographic research has been necessary to understand Mossi's rural household systems, this thesis focuses specifically on intra-household resource management and their impact on livelihood strategies.

2.5. Intra-household resource management and allocation theories

Intra-household livelihood strategies can be challenging to pinpoint, identify and explain. However, rural households have some common points that need to be laid out.

As Scoones highlights, every decision that was ever taken within a rural household not only has to take into account available opportunities, it also needs to minimise exposure to shocks that could negatively impact on the household livelihoods. More specifically, managing the involved risks in decision-making is essential to prevent poverty or move out of it (Scoones 1998).

The nature of livelihood strategies often applied in rural contexts is, in itself, extremely variable. This is easily explained by looking at how family farming, fishing, livestock and agroforestry are linked to climate and therefore exposed to constant risks. In semi-arid conditions such as those of the Sahel, where agriculture is rain-fed and rainfall is erratic, the demographic pressure is increasing and overuse of fragile land accelerates deforestation, the risks are easily exacerbated. Moreover, insecure land tenure and complex access to water resources often discourage long-term sustainable strategies as the benefits are too uncertain for the individuals.

Market-related risks such as price volatility, unpredictable political shocks and unreliable climate changes impact heavily on the environment within which household members construct their livelihood strategies. Several problems need to be mentioned to understand the approach to this research. Over the past decade, simplistic links from poverty to forest degradation have been de-

emphasized by the literature (Sunderlin et al. 2005). Most authors now assume that the converse of poverty – here assessed as a high standard of living – can also lead to forest destruction (Brosius 1997; FAO 1995b). It is however increasingly and widely appreciated that forests disappearance or degradation has a negative direct and indirect impact on livelihoods (Maruyama and Morioka 1998).

The World Bank has highlighted how people suffering from extreme poverty often live on fragile land (arid zones, slopes, poor soils, etc.) and 18.5% of those live in forested areas (World Bank 2002, xvi). This aspect of the livelihoods and land relationship needs to be emphasized here, as while the two problems are clearly acknowledged, they tend to be studied as two separate entities; as Sunderlin argues, it is however pivotal to study them together to conceptualize effective solutions (Sunderlin et al. 2005).

The complexity of intra-household decision-making has been analysed through a variety of modelling and theoretical approaches (Beckett 2013). Systematic differences in allocation of resources inside a household have been studied with particular attention to developing countries⁷. This meant a flourishing body of literature taking into account both economic models and a plethora of anthropologic, ethnographic and in general more qualitative studies.

Becker definitely made a fundamental contribution to the intrahousehold resource allocation theories studies by introducing the unitary model (G.S. Becker 1976). In the unitary model, the household is considered a single decision-making unit led by a dominant male making decisions based on efficiency, meaning maximising benefits for the household overall. The unitary model was progressively discredited in the decade after it was formulated. Pollak specifically analyses Becker's theory and highlights contributions and shortcomings (2003). The fact that Becker was able to put the family on the agenda of economics opened for a new field of research and, consequently, to many critiques. This original study put forward the necessity for modelling whilst, at the same time, highlighting the shortcomings of this approach. In fact, extensive evidence has been analysed since in the literature regarding the initial distribution of resources

⁷ For a more in-depth literature review see Duflo, 2005.

between men women and its effect on household outcomes (Duflo and Udry 2003).

Another model followed these critiques and was named “collective”, in opposition to “unitary”. In the collective model, in multi-person households decisions are made based on bargain between individuals, either based on consensual processes or on non-cooperative behaviour (Kazianga and Wahhaj 2013). The collective model was also criticised by evidence on imperfect risk-sharing and inefficient productive resources allocation within the household (Browning and Chiappori 1998; Udry 1996; Goldstein and Udry 2008).

The theoretical literature then turned to models showing dynamic bargaining and exhibiting a different level of commitment, falling from pure individualism to pure cooperation (Grossbard 2010; Basu 2006). Research on the matter requires both quantitative and qualitative analytical approaches, and also for economics to merge with other relevant disciplines, specifically anthropology and nutrition (Bouis and Pena 1997; Gittelsohn and Mookherji 1997; Guyer and Peters 1987).

These models treat the household as a collection of agents, with possibly conflicting wills and actions. It will be necessary to add the context of agricultural production by a household to make them closer to West African rural realities. Ethnographic literature makes a distinction between common farm plots and personal plots, the first ones managed by the head of the household, to which all members contribute labour and the latter worked individually. The measure in which this specific institution impacts on the household members’ organization will be empirically determined.

Even if adding this institution resolves issues of informational asymmetry between household members, these approaches do not explicitly take into consideration gender differences. Moreover, for our purpose, the entitlements approach (Sen 1981a) is applied to intra-household resource management. Because of the multiplicity of actors involved, defining personal and group entitlements will help address issues of decision-making, purposes, causality and outputs within the studied household. Moreover, the underlying assumption being that the actors involved work towards better livelihoods, entitlements will

help untangle endowments, rights and obligations that are the main motivation and cause for a household organization, its members' roles and overall actions.

Having acknowledged this literature, it is important to mention here the idea, put forward by Ribot and Peluso (2009), that the property and access literatures failed to theorise the notion of access "as the ability to benefit from things" (Ibidem 2009, 153). It is relevant here especially as it highlights the duality between power and claim or right, which at the same time mirrors and underlies the distinction between formal and informal and it adds complexity to it.

The authors highlight different ways and mechanisms of access that are relevant and useful to this work and divide them into categories that help make the analysis richer and more complete. It is particularly relevant to this study to see how the different ways of accessing land and trees could relate to Ribot and Pelus's theorisation of legal and illegal access as well as "structural relational access mechanisms" (2009, 164).

The authors' main argument and their expansion of the "bundle of rights" theories (Demsetz 1967) into a more holistic and contextualised idea of different powers shaping people's abilities to benefit from resources (Ribot and Peluso 2009) is useful in this context, especially since it helps draw together the different existing tenure systems and social links around land and trees.

A key strategy within rural households in Burkina identified by Tincani (2012) was the dynamic of negotiation and renegotiation by women of entitlements to food and other resources. Both prudence and opportunism are appropriate at different seasonal and lifecycle stages as means of adapting to changing household and environmental conditions. In effect, balancing rigid social norms against a constant renegotiation of power dynamics enables household decision makers to avoid a 'rigidity trap' - a consequence of constraints such as undue risk aversion, and a 'poverty trap' - a consequence of the lack of opportunities, or unwillingness to take advantage of opportunities.

This research aims to address some of the questions posed by Tincani about decision-making, access and use of natural resource and adds ethnographic as well as socio-economic detail through a contribution that is primarily qualitative. As mentioned in the first paragraph, this thesis acknowledges the role of agriculture

and will analyse the role of land tenure systems in small farms. However, a peculiarity of sub-Saharan Africa has been the capacity of the rural population to diversify livelihoods and explore different strategies in order to cope and then possibly adapt or transform their livelihoods altogether to become less vulnerable (Béné et al. 2012). For this reason, having presented the characteristics of Sub Saharan African smallholder farming when faced with climate change and some of the difficulties Sub Saharan households are face with when trying to achieve better livelihoods, it is now important to analyse their capabilities to resist shocks and survive uncertain odds.

2.6. Resilience and risk management

The analysis of the literature presented in the previous paragraphs showed how livelihood strategies for smallholder farmers are dependent on the use of land and the diversification of activities within the household. Because I chose the household as the main unit of analysis, this implies looking at power relations and social links within and between households. As noted, management of risk is an important element of household strategies.

Adato and Meinzen-Dick argue that the accent has been on good governance when trying to address issues such as risk mitigation and promote better resource management, political stability or improved legal environment (especially in land tenure) (Adato and Meinzen-Dick 2002). However, because of the interconnections between actors and contexts as well as the need to address so many outcomes, the accent has more recently shifted from risk mitigation (not covering what is impossible to avoid or predict and in fact focusing on issues that people are already facing), to risk management (H. Jones 2011).

Burkina Faso, as any country, is affected by global dynamics; in 2011, food price hikes and the increased cost of living caused riots in major Burkinabé cities, linked to political exacerbation that later led to the coup against the incumbent President Compaoré and related to food price increases and particularly bad harvests. However, as Raynaud highlights, for rural communities living in those environments, specifically the Sahel, this approach is rather natural. What is

considered a shock in health or socioeconomic context is indeed expected and while significant in expenses, it can often be planned for (Raynaud 1997).

Most of the previously mentioned frameworks designed to look at livelihood systems and intra-household allocation proved to be inefficient, and so did the policies tentatively implemented after them. Very few studies documented the successful household risk management strategies and the literature shows a knowledge gap in evidence-based best practices and resilience building activities, especially in Africa (Pelling and High 2005; Pelling 2010; O'Brien et al. 2012; CARRI 2013; Bedi et al. 2014; Deshingkar 2012).

Because land tenure evolution is a social matter in Burkina Faso's Sahelian rural areas, long-term land tenure security is less a burning issue to the communities than that stated in the literature and mentioned in the previous paragraphs. To support this hypothesis, the research focused on analysing the local ethnic group (Mossi) model of the household. Within the household, the members' rights and obligations over different resources are shaped by and shape the intricate web of rules referred to as customary land tenure.

Burkina Faso's risk-prone ecological and economic environment makes for an interesting case study, as shown by Tincani (2012). Evidence from villages in Northern and Western Burkina Faso proved that the social norms governing access to assets are constantly evolving and can be negotiated to a degree sometimes sufficient to minimise ecological and economic risks. Moreover, a rural household's behaviour in constructing livelihood strategies is made of periods of asset accumulation, investment and risk-taking. The study puts forward the new opportunities that often arise through risk and uncertainty, proving that a dynamic evolution of livelihood strategies is indeed possible because, and not despite, risk itself.

Resilience as the capacity of a specific system to experience shocks while remaining functional is a process more than it is an outcome (O'Brien et al. 2012). This process is constructed on personal experience, best practices, peer sharing and so on (Tincani 2012). For this reason, this research focuses on intra-household power relationships and analyses access to resources to highlight how livelihood strategies might evolve in response to events.

This thesis is interested in what properties make a household resilient and in what principles and processes strengthen or undermine resilience. More specifically, it aims at understanding how social relations and decision-making processes within a Mossi rural household impact on land use and natural resources management that are key to this household resilience and better livelihoods. As pointed out by Tincani, because resilience is often seen as a result and measured quantitatively, historicity is often missing from SL frameworks; because of those reasons and its important influence on livelihood strategies, it will be part of this approach.

a. Agroforestry: trees and non-timber forest products

It is important to focus on agroforestry in order to understand the nexus between household management of natural resources and rural livelihoods. As noted above, while the people this research is based on are farmers, they are not only dedicated to agriculture.

Evidence suggests occasional consumption for most non-timber forest products (NTFPs), and that management of tree resources are part of a system that integrates them with agriculture. It is therefore implied that trees and land (for crops) are intertwined and linked in a relationship and form a cycle with inputs and outputs (Alexandre 2002). It is a system where a tree's life is of course based on soil quality and climate but also defined by its interactions with other biological components of nature and influenced by the farmer's approach to it. In a systemic view, it is more a matter of adding an important element to an already complex system.

As previously stated, resilience comes down to the ability to withstand a shock as well as the capability to face new risks (Bhamra, Dani, and Burnard 2011). Crichton, *inter alia*, conceptualised communities as complex systems (2009). Simply put, this research understands communities as a system of interconnected agents continuously forming linkages and interacting non-linearly. The variety of actors that can be influenced allows for a variety of possible outcomes. Admitting a multiplicity of outcomes automatically makes complementarity an option. It is assumed here that diversifying a livelihood strategy is a necessary step for

reducing risks, surviving and ultimately achieving better livelihoods: in this scenario, complementarity becomes a necessity.

An integrated agroforestry system is not only a reality, but it is also a framework for analysis, as it allows us to interpret results from natural resource management perceived as a whole working towards better livelihoods (Alexandre 2002). This thesis is particularly interested in the role of trees and non-timber forest products in Burkina Faso's rural households. This is due to different reasons; the quantitative baseline for the study, based on FAO research on access to local markets for non-timber forest products (Audia et al. 2014; N. Poole et al. 2016), highlighted the importance of those products in local livelihood strategies. Moreover, as this paragraph will show, trees have a particularly important role in Mossi's culture, influencing both people's access to land and intra and inter households' power relationships. Finally, it has emerged as the main livelihood diversification strategy and the basis for people's resilience and capacity to cope, adapt and transform and therefore cannot be overlooked.

The tree has been known to be a cultural and economic symbol throughout time and among ethnic groups, especially in Africa. It has been identified as a cosmic link between heaven and earth, a protector, both motherly and fatherly looking, a symbol for essential goods as it gives food, shade, fertility, knowledge, power, an association between life and death (Pelissier 1980).

For this research, it is important as well to analyse its primary role as part of an agroforestry system. It is therefore necessary to examine its interactions with other elements of this system and the consequences of adding a tree in an otherwise treeless system such a classic agricultural one.

It is widely proven that young woods constitute a perfect base start for fertile humus; moreover, they carry an anti-erosion agent. In fact, young woods can protect the soil and facilitate water infiltration and absorption. The branches act as perches for birds and their role is not to be understated: while birds can be destructive in an agricultural context, their faeces act as a strong base for natural fertilizer. In relation to land, the addition of a tree in a semi-arid zone is straightforward: it strengthens soils (Myers 1988). In fact, trees can help reduce wind speeds, thus protecting crops and making for better yields. In arid zones such

as Sub Saharan Africa, they are used traditionally to slow down the expansion of the deserts and provide a source of fuelwood and food, contributing to livelihoods diversification (FAO 1992).

As mentioned, it is important to analyse a tree's role when combined with other actors in the agroforestry system, first of all people. As wood, trees have been useful to men (including farmers); wood serves as fuel, the basis for construction, furniture and accessories, work utensils, weapons. Bark has been used in Africa for textiles as well as for fishing nets (Alexandre 2002).

Trees and their products have historically been used for medicine. It is a general belief in West Africa that tree-based medicinal products are more effective than plants; while it is mainly a cultural belief, the role of bark and seeds is not to be understated. In Burkina Faso, for example, baobab trees (*Adansonia digitata*) are known for their soothing emollient effect; guiera fruits and leaves (*Guiera senegalensis*) are used to treat fever and diarrhoea; acacia (*Faidherbia albida*) is a strong cough medicine. Traditional local pharmacopoeias have a long and detailed list of all the medicinal uses every part of plants and trees can have in West Africa, a consistent part of local customs and culture, other proof of the central role of trees and tree products. Since the overall aim of this research leads to a look into people's access and management of livelihoods, however, trees will be analysed here for their ability to provide food and nutrition.

Although there is no universally agreed definition of Non-Timber Forest Products (NFTPs), Food and Agriculture Organization (FAO) defines Non-Timber Forest Products as "non-wood forest products which include all goods of biological origin, as well as services derived from forest or any land under similar use, and exclude wood in all its forms" (FAO 1995a, 348). Interest in these products has grown since the Eighties, originating in the passion for sustainability and the sustainable management of natural resources (Byron and Ruiz-Pérez 1996), and they are widely recognised as contributing to the household economy of rural/forest margin dwellers (Shaanker and et.al. 2004).

It is now widely acknowledged that NFTPs are indeed an important part of the subsistence economies of smallholder farmers in the Sahelian region. They are more and more recognized as an active part of local markets, but their

contribution to local food security is still often underestimated. Hitherto, consumption of tree foods has generally been viewed as a coping strategy in the context of food insecurity and poverty, an extreme response measure alongside among a suite of responses to food insecurity along with other strategies such as changes in dietary intake, food rationing, reducing expenditures or temporary shifts in household structure (Tincani 2012; Vira et al. 2015; Chagomoka et al. 2016).

During the past two decades, this important shift has made NTFPs more and more relevant to rural development as well as conservation of natural resources. Numerous literature expressed this in three main paradigms (Myers 1988; Arnold and Pérez 2001). The first one highlighted the contribution of NTFPs to livelihoods and welfare of population living in and adjacent to forests; the second one focused on the sustainability aspects of harvesting NTFPs rather than timber, much more destructive alternative; the third was that an increased value of NTFPs would be incentive to retain forests as resources. A fourth paradigm is less frequent yet important and pushes forward potential income from sustainably harvesting NTFPs, hypothesizing it could be more income/generating than timber income or even using forest sites for agriculture (C. M. Peters, Gentry, and Mendelsohn 1989; Balick and Mendelsohn 1992)

Those paradigms generated an on-going debate and lessons started to emerge in practice, suggesting revisions to the propositions as well as new outputs and new paradigms (Arnold and Pérez 2001). While it is not pertinent here to go in depth on ecological or sustainable characteristics of trees and tree products, it is one of the aims of this research to look at the contribution of NTFPs to people's livelihood and well-being.

Much is yet to be learnt about the relationship between trees and wellbeing. Recent work by Ickowitz et al. concerned the relationship between tree cover and nutritional sufficiency in Africa (Ickowitz et al. 2014). The nature of the association is not clear but findings from 21 countries findings suggest that children in Africa who live in areas with more tree cover have more diverse and nutritious diets. Causation pathways could be access to trees and other wild foods, the incorporation of agroforestry in production systems resulting in better diets,

and/or a tendency towards more diversified agricultural practices. In short, forested regions contribute to food security, maybe in ways that are as yet imperfectly understood, and that nutritional imperatives for retaining and enhancing tree cover can be added to the multiple other reasons such as benefits derived from economic output and ecosystem services. Tincani's work in Burkina has shown that tree foods are likely to be a key part of cultural food practices with a much greater role to play in food security and nutrition than has been recognised hitherto. It is estimated that tree foods could constitute as much as 40% to meals of rural people in some seasons (Tincani 2012). These 'minor' food items can make a significant nutritional contribution to diets particularly in rural areas: seeds, nuts, leaves and bark are used in sauces which are the basis of Burkinabé cuisine and may provide important micronutrients as part of a seasonal contribution to food supplies and income generation. Moreover, dry seasons tend to correspond to NTFPs collection, therefore highlighting the importance of those products for household well-being and nutritional contribution during times of stress. As such they may contribute to assuaging the negative social and psychological consequences of food security and malnutrition – shame, guilt and powerlessness – identified among the rural poor in northern Burkina (Ickowitz et al. 2014; Nanama and Frongillo 2012).

In general, NTFPs are widely important as subsistence in hard times; they are supplement inputs of fuel, medicinal and enhance the palatability of staple diets, providing vitamins and proteins. They can provide inputs for farming, as previously argued; they are a resource and could constitute the base for added or sole income. Finally, they can also contribute to reducing vulnerability in a household economy as a counter-seasonal source of food, fodder and income (FAO 1995b; Townson 1995; Behnke and Scoones 1992; Chambers and Leach 1987; Arnold and Pérez 2001).

The study is here considering a society formed by small farmers who are not solely small-scale agriculturalists and therefore include forest products in their system mostly because maintaining a diversified livelihood strategy is a necessity to survive and reduce risks. Recent evidence from Burkina Faso shows that ethnic groups closer to the desert in more arid areas of the country know, have access to

and protect a higher number of trees. These trees and their products are highly important and contribute substantially to their livelihoods strategies compared to ethnic groups closer to bigger markets with better climatic conditions, who only focus on NTFPs that can provide substantial income (Audia et al. 2014).

The NTFPs in those areas are for the most part consumed directly by collectors and their families, small or extended. The ones that need manufacturing to be turned into selling products often remain within the households; the collectors usually consume the ones that are easily accessible to most right away. This immediate consumption makes it hard to quantify the overall importance of some products, nutrition-wise (Belcher, Ruiz-Perez, and Achdiawan 2003).

However, their link to improved livelihoods, especially for the poorest, is strongly supported by evidence and therefore fits for the purposes of this research (Belcher, Ruíz-Pérez, and Achdiawan 2005; Neumann and Hirsch 2000). The land is without a doubt the main asset for smallholder farmers; it is true for those this study is focusing on, as their livelihood strategies are based on both agricultural and non-agricultural land. The importance of land tenure systems, their evolution and their impact on livelihood strategies will be analysed in the next paragraph, once more highlighting the nexus between the elements of this research.

2.7. *Land: tenure, governance, reforms*

The land and livelihoods nexus has often been stated as an assumption, mostly implicit, sometimes explicitly. The UK Department for International Development (DFID) has stated in more than a document “...*land is a fundamental livelihood asset. Shelter, food production and other livelihood activities all depend on it. Secure, safe and affordable land is a necessary, but not always sufficient condition for reducing poverty. For most poor people, land reform must be complemented by improved access to services (health, education, skills, finance, transport and knowledge), technologies and markets if they are to realise better livelihood opportunities and escape from poverty.*” (DFID 2002b, 2002a).

Moreover, in the Livre Blanc des Acteurs Français de la Coopération (Lavigne Delville, GRET, and CNRS 2008), land tenure has been defined as a set of relationships established between different actors in order to have access to or

ownership of the land. Even more effectively, Bruce et al. direct the reader's attention to a juridical side often forgotten by arguing that *"land tenure means the right to hold and use land, rather than the simple fact of holding land. One may have tenure but may not have taken possession. Land tenure implies a property right, and indeed the terms land tenure and real property rights (rights in land and things permanently attached to land, such as trees and buildings) can be used virtually interchangeably. Economists and social scientists tend to write of land tenure, while lawyers and those unspecialized in land matters tend to work with the term property rights"* (Bruce, Wendland, and Naughton-Treves 2010, 3).

When writing laws about land it is important to think about the process of sanctioning customs and habits into written acts (C. Barrière and Barrière 2002); this obviously involves a thorough knowledge of the local context. Some contexts may also be difficult to sanction into written laws because of social and cultural impacts. At the same time, nevertheless, land laws have to be flexible enough to be 'fit' for a global scenario (Le Bris, Le Roy, and Mathieu 1991). Indeed, the link between the relationships revolving around human beings and land and the need for new development strategies is by itself enough to create an on-going debate on land tenure at a global scale (Lavigne Delville, GRET, and CNRS 2008).

The demographic pressure makes the land issue a living matter in both urban and rural areas in almost every region of the world (Griffon 2006). To feed the growing population, accessing land becomes fundamental to have access to food (Griffon and Weber 1996); at the same time, urbanization calls for land to live on, and therefore for regulations to secure the kind of field.

A body of literature rooted in the Seventies and embodied by Wiseman (1986) argues that land related conflicts are an urban matter, and analyses land conflict as an urban matter, strictly linked with mobilisation and politicisation of the urban people. However, this research focuses on the rural, agricultural context of a sub-Saharan African country. Land scarcity, ethnicity claims, confusing land entitlements, globalisation and climate change have impacted deeply on the capacity of rural people to access and manage land for different purposes. In the years following independence, newly born states found themselves attracted by the ability to control land, and most reforms analysed in this chapter stem from

this desire. Land has a strong spiritual meaning that cannot be underestimated, At the village level, for example, land is the barrier and the link between the living and dead and therefore plays a central role in customary tenures and societies. Simply put, the dead are buried in land, become protectors of the land that the living use for food and livelihoods (Fisiy 1992). Because communities usually elaborated their own land tenure, any attempt to change this order was bound to generate conflict.

Land tenure has a central role in the economic development sector, since farmers, pastoralists, agriculture-based businesses and industries all need land to begin with; land tenure security impacts deeply on the production of goods and therefore on people's livelihoods. This kind of impact on production processes and economic growth has been studied from different angles, such as.... (e.g. M. Adams, Cousins, and Manona 1999; Deininger 2003; Dong 1996; Place 2009).

It is indeed straightforward that since land is a strategic asset historically there have been multiple conflicts over who can access and own it; it is also a central element in the network and social relations of production and reproduction from which conflicts may start (USAid 2005).

The multiple ways of accessing land and defining the rights and obligations over the land itself, its uses and its resources can be extremely different. It has been written that they could define a state itself and its population (Lavigne Delville, GRET, and CNRS 2008; C. Barrière and Barrière 2002; Le Bris, Le Roy, and Mathieu 1991; O. Barrière and Rochegude 2007; Le Roy, Karsenty, and Bertrand 2000).

While some factors can be identified as common in developing countries' land reforms in the years after their independence, it is crucial to acknowledge the differences not only between geographic areas or continents but also between countries and within the same countries. These differences occur because every population, from the state down to local communities, creates its own set of rules that are specific to the society, milieu, climate, techniques and operating choices (P. Peters 2007). These rules are not frozen in time and usually follow their own evolution in relations to the environment and the social changes (C. Barrière and Barrière 2002).

Nonetheless, having acknowledged that land tenure issues vary according to the context they are set into, some common characteristics can be determined throughout the continents. In South East Asia, for example, countries like Vietnam, Cambodia and Laos are transitioning towards a more open market economy; this has caused different kinds of land-related inequalities and some land tenure insecurity (Eaton 2012; Fujimoto 1996).

It has been clearly argued that, in Sub-Saharan Africa, geopolitical conditions and contextual historical factors have indeed affected the current land situation. Most of the Southern and East Africa is characterized by a strong colonization of the agricultural land, with extreme to less evident inequities in distribution (Bassett and Crummey 1993). This is evident in the territory, with the diffusion of mainly white-led, large and mechanized cultivations as opposed to traditional family farming in a less fertile land where the black population was relegated (Bassett and Crummey 1993; Sikor and Müller 2009; M. Adams, Sibanda, and Turner 1999). This dichotomy embedded on the territory has endured even after these countries achieved independence, the main difference being that the former colonial élite has been replaced by a new one, while discrimination in land distribution has been carried on (Lavigne Delville, GRET, and CNRS 2008). It is therefore evident that agrarian reforms are still high on the agendas of most African countries governments. This is also true in West African countries, where colonization left a different kind of impact that translated in a juridical dichotomy rather than a territorial one. Small family farming is the main form of agriculture in these countries, based on local land rights that are for the most part customary and not recognized by State laws (O. Barrière and Rochegude 2007; Le Roy, Karsenty, and Bertrand 2000). These are the countries where the most recent agrarian reforms are trying to address this dichotomy between customary and State laws and to include all the actors in the process, especially pastoralists, historically marginalized and often relegated in arid zones due to the need for agricultural land (Lavigne Delville, GRET, and CNRS 2008). Migration is another contemporary challenge, and violence causes significant cross-border movements of affected peoples.

In Northern Africa and the Maghreb countries, Islamic law plays an important role in land tenure and land laws, even where the territorial and political situation is similar to other Western African countries (Wilson 2011). Wilson argues that both alienable and inalienable parts of the land have contributed to redefining these countries' land tenure systems, with Islamic law addressing these issues and constantly evolving along with them (Ibidem, 2011).

The link between land tenure, land and agrarian reforms and politics is a direct one, especially when looking at these examples; moreover, the attempts to undertake reforms and the actual land laws of the Twentieth Century in developing countries and former colonies highlight the link with the social context.

Moreover, as argued by Boone (2014), the concept of property itself easily becomes contradictory in rural Africa, especially because recognise its "political character and evolutionary dynamics" (Ivi 2014, 15). Land tenure security may therefore influence local policies, development and poverty reduction policies and environmental issues. A key factor, nonetheless, is the understanding that land tenure also means how to handle resources coming from that land (Lavigne Delville, GRET, and CNRS 2008). This calls for an analysis of how different social and political actors structure their power and control to efficiently and equitably manage land.

- Local governance and new policies

There is an assumption that invigorating farming and agriculture is the answer to poverty for countries that are mainly rural country. This has been challenged by the literature, and is still one of the main factors in recent policies and NGOs and government actions (Rigg 2006). Further, I stated that, due to various factors, such as increasing populations and the declining natural resources base, land is becoming increasingly scarce and therefore the competition for it has been enhanced between different actors, users, elites and foreign investors (see Chapter 3).

Moreover, socioeconomic change has influenced customary rules and institutions that traditionally administered land rights; further, these changes also

modified the dynamics between traditionally administered land rights and national laws.

This scenario has had major political implications at both national and local level. In order to respond to these challenges, I also pictured how a large number of former colonial states, and most African states, developed new policies and laws to restructure land relations. For this section, Cotula will be the main referenced author. While others will be quoted and have been taken into consideration in this literature review, he is the main reference on land reform and has written extensively on West Africa. It seemed appropriate to focus on his theories, as they are the most applicable to the context in which this study has been carried out. As this section will show, however, the literature review is not limited to his contribution.

Cotula argues that, in fact, there has been a so-called *new wave* of land legislation since the 1990s (Cotula, Toulmin, and Hesse 2004). It would be deceptive to try identifying trends over the African continent: the land related issues in Africa depend too much on local history, geography, economy, society, politics, culture, religion and climate (Bruce, Wendland, and Naughton-Treves 2010). However, from local experiences, it can be useful to identify emerging issues concerning land tenure to strengthen the link between land tenure and national policies.

In an attempt to eradicate customary systems, the main policy response to the land tenure insecurity and the blur existing between customary and statutory land laws has been land titling and registration (Cotula, Toulmin, and Hesse 2004).

Land registration is said to stimulate a more efficient use of the land, create a land market, encourage investment in land based technologies and assets, and therefore encourage dynamic farmers to have access to land. This would naturally lead the farmers to produce a written and recognized title that can act as collateral to financial institutions and provide governments with information regarding landholders, field sizes, etc. that can be the basis for a system of property taxes (Galiani and Schargrodsky 2005; Shipton and Goheen 1992).

However, in practice, very little land has been registered as private property throughout Sub-Saharan Africa. Cotula argues that the causes can be found in

particularly flexible and dynamic customary systems and in the populations perception of the total absence of benefits in the bureaucratic process of titling (Cotula, Toulmin, and Hesse 2004). In fact, it has contributed to blur and confuse the already fuzzy land tenure and land rights scenarios. The registration process may have resulted in a long and costly process, particularly difficult for people without access to education; conflicts have sometimes been exacerbated with people without customary rights to plots buying land and setting off a complex and articulated dispute. Moreover, the so-called secondary land users such as herders and women do not see their rights registered and are thus expropriated (Atwood 1990; Benjaminsen and Lund 2002; Bruce and Migot-Adholla 1994; Firmin-Sellers and Sellers 1999; Lund 1998; Platteau 2000; Shipton 1989b).

For example, a number of studies have been conducted regarding Kenya land registration program, making this country a landmark case study for the policy debate on land titling. At first, the former colonial powers dispossessed Africans of their land and confined most of the population to reserves where profitable crops were prohibited; nevertheless, in 1954 the approach was reversed by the Swynnerton Plan, later implemented by the Native Lands Registration Ordinance in 1959. These laws promoted agricultural commercialization in the reserves and granted individual land titles to African farmers.

After independence, the Registered Land Act (1963) and the Land Adjudication Act (1968) replaced the previous laws. These new acts established a systematic process of land registration in several phases (adjudication, consolidation, registration) that would allow increased land tenure security over the region. However, a study by McAuslan found that new land disputes were set off by the registration process in an attempt to grab permanent land titles (McAuslan 1998). Costs have discouraged part of the population; moreover, in former reserves, no evidence was found to correlate post-independence increase in agricultural productivity, nor to link the use of formal credit and collateralization effect of the titling system.

Furthermore, evidence showed negative repercussions of land registration on the land rights vulnerable groups such as women and herders, therefore generally reinforcing class and wealth differentiation (Barrows and Roth 1990; Bruce and

Migot-Adholla 1994; Coldham 1978; Firmin-Sellers and Sellers 1999; Galiani and Schargrodsky 2005; Little and Brokensha 1987; Shipton 1989a).

Due to this shift and to the lack of success of registration and titling, the new wave of land reforms presents some innovations. First, in order to avoid the increase in land disputes, efforts have been made to capture all land rights, protecting customary arrangements (e.g. Niger's Code Rural in 1993, Mozambique's Land Act and Village Land Act in 1999 or Uganda's Land Act in 1998) (Cotula, Toulmin, and Hesse 2004). More attention has been paid to communities, with some laws allowing titles to be issued to families and groups (for instance, Mozambique's Land Law allows it) (Alden Wily 2000). Decentralization has been adopted to try and spread legislation across the territory (for example the responsibility for land titling has been transferred to Land Commissions in Niger) (Gastaldi 1995).

Further, at field level, some new mechanisms and practices to increase land security have been put in place, usually with little recognition by policies and laws. For example, in Burkina Faso, a process called 'informal formalization' has been set off, whereby land transactions are recorded in written and signed documents that while they have little or no legal value, they still are perceived as important by farmers, thus providing greater stability to land rights (Alden Wily 2003; Atwood 1990; Cotula, Toulmin, and Hesse 2004).

Moreover, it is important to keep in mind that there often is a difference between the land actors who actively cultivate the land and the local élites that lead the processes of land tenure reforms. Therefore, there can be manipulation at some stages of the law-making process and appropriate guarantees should be established to ensure equitable access to the institutions provided for by the legislation (Cotula, Toulmin, and Hesse 2004).

The new reforms have introduced the concept of land redistribution and restitution, specific to the countries where a history of colonial settler economy has resulted in an extremely inequitable land distribution mainly along racial lines. For example, in South Africa, Namibia and Zimbabwe, redistribution programs have been set off. This allowed land to be purchased by individuals and groups rather than by the State (South Africa) or in a more state-centred model (Namibia,

the so-called “willing seller, willing buyer” model) (Alden Wily 2000; Barrows and Roth 1990; Cousins 2000)⁸.

In West African countries, however, the colonization left a different kind of mark on the territory and the land tenure systems. Most of these countries have been characterized by a centralized control over resources and therefore land administration. Alden Wily argues that the inadequacy of Western legislative models inherited with the colonial systems caused the informal local tenure mechanisms to be seen as legitimate by the local population. Therefore, in recent years, the new land laws adopted are aimed at providing a more decentralized system of land management (Alden Wily 2003).

In Francophone West Africa, the link between decentralization and land tenure is particularly strong as local authorities play an important role in natural resources management (Niger, Mali, Senegal). Burkina Faso falls within this context of new reforms; however, Alden Wily highlights that policies on decentralization and laws on land tenure may create inconsistencies and ambiguities. For instance, the Burkinabé *Réorganisation Agraire et Foncière* introduced village-level institutions for land and water management in the 1980s; however, a national law on decentralization adopted in 1998 established new local governments with natural resources management responsibilities, creating confusion as to the roles of the different institutions (Alden Wily 2003).

Toulmin and Quan argue that the creation of specific land bodies, elected local institutions (e.g. Village Councils in Tanzania or the *collectivités rurales* in Senegal) or recognized customary authorities (for instance, in Ghana, the custodial role of the chiefs is written in the constitution) present their strengths and weaknesses. Furthermore, in most countries, even where local bodies manage land, the central government has a variety of tools to maintain control of the land tenure administration, for example the nomination of the major member in the bodies or the empowerment to direct local institutions (e.g. Tanzania) (Camilla Toulmin and Quan 2002).

⁸ For a complete analysis of the lessons learned from land redistribution programs in South Africa, Namibia and Zimbabwe, see Cotula’s comprehensive work (Cotula, Toulmin, and Hesse 2004 chap.12).

Cotula highlights, in this context, that outside the domain of policy and legislation, the decentralization processes set off important developments in the direction of new mechanisms of natural resource management at field level. For instance, in Burkina Faso (as well as in Mali and Senegal), negotiated agreements by all resource users have been concluded, introducing the concept of *convention locale* (local convention) as a response to the inadequacy of the formal legislative framework (Cotula, Toulmin, and Hesse 2004).

It is interesting at this point to highlight how the Burkina Faso history of land reforms (that will be treated extensively in chapter 5) provides examples in line with most West African countries. However, the latest attempt at establishing a unique and single nationwide land tenure law (the so called Loi 0034) in 2011 encountered, as previously mentioned, an increasing number of challenges in its implementation. This is a crucial part of the thesis since it provided motivation to look into more detail at household resource access and management; moreover, it offers an opportunity for policymakers to look at past challenges in view of a new and more easily implementable national land reform.

In Sub Saharan African contexts, some authors have talked about a “triple heritage” to mention the mix of African, Islamic and colonial influences on land tenure (Bass and Sow, in Oheneba-Sakyi and Takyi 2006). In Burkina Faso (and other countries such as Mali and Senegal), the State claimed the land as its domain (Toulmin 2009); French colonial law pushed for individual ownership and to write and codify traditional land rights (Kazianga and Wahhaj 2013). Islamic law hasn’t influenced Burkina Faso’s land tenure system as much as in Senegal; however, the vast majority of the population being Muslim, it can safely be said that customary practices are strongly based on Islamic law (Cotula, Toulmin, and Hesse 2004).

The evolution of a country’s land tenure framework needs to take into account these accumulated layers before analysing further policies. As previously established, in the past, land policies and legislation aimed at promoting investment in land, creating land markets, raising agricultural productivity or enabling sustainable land use (see the previous section). However, it was also important to outline how these policies may have had negative consequences for

the land rights of some social groups, especially the land titling and registration-based reforms (Galiani and Schargrodsky 2005).

Moreover, it is important to pay attention not only to vulnerable groups (especially women, pastoralists, youth, etc.), but also to address the nature of the processes of exclusion, as a great differentiation exists within vulnerable groups such as women belonging to different classes, cattle owners and hired herders, etc. (Cotula, Toulmin, and Hesse 2004).

A flourishing literature exists regarding women's access to land in developing countries. For a more complete review of this literature, see for instance Lastarria-Cornhiel (1997). Agarwal's work (1994) on gendered management of natural resources captained a body of literature arguing that an understanding of women's access to land is a paramount part of the puzzle needed to understand intra-household resource management in rural context (Joireman 2008).

In this regard, efforts have been carried on to address women's rights in statutory laws; this is obviously a crucial step but their translation into actual practice, particularly in rural areas, though the implementation of women's rights legislation is extremely limited across Africa. This is due to a variety of factors, like lack of information about laws, reluctance to claim their rights, inaccessibility of the enforcing institutions, socio-cultural factors influencing women's status, etc. (Cotula 2002). In the 70s, a wave of critiques (Nair and Boserup 1971) highlighted how reforms that were in fact "gender blind" could not only be a tool to perpetuate the status quo but also negatively impact on intra household gender relations. Ribot and Peluso (2009) stress that while women seem sometimes to have access to some resources such as firewood or other tree products, land access in Sub Saharan Africa remains embedded in patriarchal customs.

By contrast, some scholars also interestingly argue for the flexibility and sustainability of traditional management of natural resources, suggesting that building on customary tenure could lead to changes from within the society itself (Yngstrom 2002; Lund, Odgard, and Sjaastad 2006; Jackson 2003). In parallel, a growing body of literature pushes for more centralised state-driven reforms as opposed to following or letting flourish traditional tenure (Ann and Dzodzi 2003; P. Peters 2007; P. E. Peters 2004, 2009). The main argument is that patriarchal

societies would have a tendency to perpetuate certain patterns without challenging their own power relations and with no possibility to move towards gender equity in land tenure (Varley 2007). More recently, the land reforms analysed by Cotula have also been criticised for being disadvantageous for women since they most often aimed at titles that would concentrate ownership into men's hands (Pedersen 2015).

This flourishing, active and widespread debate over formal and informal land institutions proves that despite scholars having different views, there is a common push towards action and newer balanced, gender transformative sustainable policies.

Similar conclusions can apply to policies addressing the land rights of migrant groups, as these measures may become a crucial factor for economic development and peaceful coexistence, particularly in contemporary West Africa. Measures to protect migrants land rights such as legal recognition and protection of arrangements for accessing land (e.g. sharecropping, tenancy, etc.) can be of paramount importance to avoid broader and generalized conflicts that have roots in a discriminatory access to land. For example, the Côte d'Ivoire conflict is said to have its roots in issues of citizenship and access to land for the portion of the population constituted by migrants from the landlocked Sahel (Alden Wily 2003; Cotula, Toulmin, and Hesse 2004; Le Bris, Le Roy, and Mathieu 1991; Mathieu 1995).

Another aspect that needs to be taken into account is pastoralism, a major source of livelihood in rural areas, especially in dry landlocked African countries.

Cotula argues that this is another innovation of the 1990s new wave of reforms, following decentralization, redistribution-based programs, innovative local informal mechanisms and attention to gender access to land and migrants' rights. For example, in Burkina Faso, laws aiming at securing pastoral rights have been passed in 2002, positively reversing the previous legislation which was traditionally hostile to herd and herder mobility. Moreover, these new laws recognize mobility as a key to a successful strategy for pastoral resource management. The Burkinabé law highlights the concept of productive land use (*mise en valeur*), an important key issue of most West African legal systems.

However, the productive land use applied to herding remains broadly undefined and mostly separated from the agricultural counterpart; this is a key issue because in drylands Africa, scarcity of land and natural resources is generalized. Therefore, a combined, flexible and communitarian property regime is the only one that could be described as productive in this region (Alden Wily 2003; Banzhaf, Drabo, and Grell 2000; Cotula, Toulmin, and Hesse 2004; d'Aquino 1998; de Bruijn and van Dijk 1999; Guillaud 1993).

Banzhaf et. al., in this regard, describe a successful example of including all actors and building a platform for negotiation in an agro-pastoral zone in Northern Burkina Faso (Kishi Beiga). Due to the inadequacy and inefficiency of statutory regimes, innovative mechanisms such as the local conventions have been used and proved to be efficient and to have stabilizing effects on local land tenure administration in addition to reducing land-related conflicts in the area (Banzhaf, Drabo, and Grell 2000).

Since the early 2000, these reforms have been conceptualised, written, approved and, sometimes, implemented, with very different degrees of success in terms of long-term tenure security (Bruce 2014). In fact, UN-HABITAT estimates that about 5% of total usable land is formally registered (2010). However, the 1990s wave of land reforms had the peculiarity of introducing a more democratic and less centralised approach to securing land rights, including an attempt to take local dynamics into account (Alinon and Kalinganire 2016).

The following paragraph discusses how land tenure security, especially in West Africa, has gone hand in hand with a decentralisation process that has sometimes been proven to be effective in determining local dynamics and working towards a resolution of the duplication of formal and informal land rights.

2.8. *Land and broader policies: agriculture, economy, institutions*

Land tenure is undoubtedly part of a broader framework linked to agricultural economic and institutional policy issues.

In fact, within the legal system, land relations are affected by land law but also by property law, inheritance, family and succession law as well as contract and environmental law (Lavigne Delville 1998).

Furthermore, land ownership, land management and land rights issues may have significant implications for the agricultural development and distribution of income and wealth, therefore affecting people's livelihoods. That is one of the reasons why changing the patterns of land holding may be a crucial element of broader poverty reduction strategies. Thirty-four Sub-Saharan African states adopted Poverty Reduction Strategy Papers (PRSP), as stated by the World Bank website⁹. Looking at papers from West and Central African states, some of them discuss improving access to land for the rural poor (for examples the Benin, Cameroon and Gambia PRSP¹⁰), but not directly linked to poverty alleviation.

Burkina Faso PRSP highlights the importance of land for poverty alleviations and lists possible solutions such as titling and the creation of a land market. Moreover, it acknowledges that the current land legislation (the *Réorganisation Agraire et Foncière*, RAF) is limited in its implementation but does not identify a priority activity regarding land in itself (Cotula, Toulmin, and Hesse 2004).

Cotula states that the presentation of land related issues in the PRSP documents lacks precision and is based on assumptions nowadays discounted by social and economic researchers over the past 15 years, since the papers still refer to titling and registration based reforms. Furthermore, the researcher criticizes the tendency of all PRSP documents to commit to market liberalization and to highlight the role of the private sector in generating economic growth by investments, without specific reference to land primary actors such as poor farmers (Cotula, Toulmin, and Hesse 2004).

The land reforms that opened to a new concept of tenure security and focused mainly, although not exclusively, on land registration, as previously stated, have been implemented in various degrees. These reforms have been followed and supported by decentralisation processes highly variable between West African

⁹ A full list of the countries, the original papers in English, progress and assessment reports and other data are available at the World Bank website.

¹⁰ Full texts available at the World Bank website.

countries. The next chapter will analyse the specifics of the Burkina Faso process of both tenure security attempt, land reform and decentralisation. It can be generalised here that a pluralism in laws and formal and informal institutions naturally complicates the tenure framework. Moreover, ambiguity over ownership rights can push towards strategies resulting in conflict over land (Alinon and Kalinganire 2016).

In conclusion, most recent studies mentioned above agree that new land policies are needed across Africa. Specifically, Alinon and Kalinganire's work (2016) suggests that top-down approaches to clarification of land tenure systems are ineffective and focus on inclusive policy reforms taking into account local systems, formal items as well as flexible means.

These laws should aim to protect the rights of all land users, promote effective, equitable and participatory institutions of land management, ensure equitable distribution and effective land dispute resolution and, in general, be generated from a continuous research of the compromises and consensus between what is needed to become legal and how to anchor it in legitimacy, following a bottom-up logic (Cotula, Toulmin, and Hesse 2004; O. Barrière and Rochegude 2007; Arnot, Luckert, and Boxall 2011; Bruce 2014; Widman 2014; Alinon and Kalinganire 2016).

2.9. Household resource management, land, livelihoods and resilience: a framework

It has been stated in previous sections that livelihoods are influenced by a combination of factors. The aforementioned literature emphasizes the close relationship between climate change and socioeconomic and political stressors that, together, impinge on livelihoods and impact deeply on the process of achieving them (C. B. Field 2014a chap. 13).

This constitutes the core of a re-elaborated livelihoods framework for this analysis, as shown in the Figure below. The approach suggested by this research can be defined as a combination of Scoones' (1998) and Chambers' (1992) approaches, creating a theoretical framework focusing on people, community-level actions and giving substantial importance to the context, specifically to capacities and knowledge systems of rural and publics.

Scoones approach to livelihoods has been previously explored and can be resumed as the result of the neoliberal turn of the late Eighties that associated livelihoods with a more individualistic development agenda. This meant, in Scoones theories, that the stress was shifting on various forms of capital (Small 2007; Scoones 2009). Moreover, this study will link household and intra household relationship to community level interactions as well as other levels of economic organisation, in an effort to provide a more holistic approach to analysing livelihoods.

The proposed re-adaptation tries to overcome the main critique made to Scoones, mainly concerning some analytical limitations as explained by Van Dijk (2011). The author argues that capitals, assets, social capital are difficult to measure and eclipse the power dynamics and the focus on the households. Moreover, Small reiterates that wider structural processes, such as policies, and ecological impacts directly linked to livelihood decisions are overlooked or insufficiently explained (Small 2007; Dijk 2011; C. B. Field 2014a, 2014b).

The household is, as mentioned, at the centre of our study. It has been acknowledged, by reviewing the relevant literature, the importance of wider context shifts. At a macro level, they include climate change, globalisation, technological change, macroeconomic impacts and so on; at a regional, national and local level, this study takes into account institutional context and the role of policies in shaping the macro level stressors. As the ultimate link between the national context and the household, the research also recognises the importance of the decentralised institutions that mediate those changes at a micro-local level. However, ultimately, the aim is to assess mechanisms of accessing and managing natural resources within households, for the actors to be able to achieve better livelihoods.

Livelihood security is the ultimate aim, with livelihoods defined by the *“capabilities, assets (stores, resources, claims and access) and activities required for a means of living. A livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which*

contributes net benefits to other livelihoods at the local and global levels and in the short and long term." (Krantz 2001, 7).

As previously mentioned, it is interesting to note Béné's approach to resilience in vulnerable contexts as it highlights the households' capacity to adapt to achieve better livelihoods (2012). When talking about household decision-making for livelihoods and taking into account risk (Pelling and High 2005) and the vulnerable context, it is also worth mentioning some of the adaptation literature. Adaptive planning has been defined to be about deciding how to deal with the future when some variables are uncertain (Brown et al. 2011). Uncertainty entails that a certain amount of flexibility is necessary to make decisions. Moreover, this means that decision-making will evolve over time as conditions change or different, new knowledge is acquired (Dessai and Hulme 2007). In the context of this study, this translates into acknowledging that power over, or access to land and other resources, is constantly discussed by the members of the household when conditions change, should they be climatic, economic or cultural.

This element of the literature is particularly useful for the data analysis because it allows to place the Mossi household within a broader context. The main biases of this study, such as the small sample of in-depth interviews that makes conclusions difficult to generalise and the limited time frame that makes change difficult to observe over the data collection period, are partially addressed by using theories of adaptation to climate change to analyse evolution of customary ways of accessing land and resources.

Some characteristics of adaptation can help frame the analysis in the wider context and extrapolate clear findings about change within household decision-making. For example, the fact that resources are interconnected and depend on many factors such as climate, use, social systems and can be seen across multiple scales (temporal, governance), make the decision-making motives intrinsically complex to understand and analyse. This is even more true for the Northern Burkina Faso rural household context, since "bad" or "wrong" decision-making could in fact result, for example, in lack of food for the household, loss of social status, intra-household lack of cohesion and so on.

The figure below (Figure 1) resumes the approach used in this research.

By analysing the surrounding context, it is possible to isolate and focus on trends and conditions that are paramount to the actions we aim at understanding; by targeting specific natural and human resources the study is able to concentrate on the actual livelihoods that are managed within the household, in which we identify an organisational structure. The household is, indeed, the overall framework that influences access to human and natural resources. The research will then be able to identify the strategies that exist within a household for the actors living in a specific context to access natural resources; pinpointing overall livelihood strategies is key to understand and improve outcomes, that is the final step of this study. To highlight how decision-making strategies for accessing land and resources are relevant and aim at filling a gap in the literature, adaptation theory is useful as it tries to frame the problem of actors coming to different conclusions despite being inserted within the same context, and facing the same challenges. It is also important to highlight here that some pitfalls of this approach have been pointed out in the adaptation literature that argues that 'framing the issue' is actually the biggest analytical challenge of climate change adaptation (Adger 2010a; Brown et al. 2011; C. B. Field 2014a). To strengthen the analysis carried out according to this framework, the research also relies Ribot and Peluso's theory of access as a valid tool to streamline linkages between natural resources (namely land and trees), formal and informal rights, actors and their ability to access both resources and rights (Ribot and Peluso 2009). The literature analysed focused on land tenure concepts and evolution, land laws, the importance of trees and household resource management throughout West African and in some occasions in the wider literary debate. The importance of the local context has been highlighted throughout.

This research aims to answer three main questions revolving around what land tenure means in a household of rural northern Burkina Faso (1), how it impacts on people's ability to access natural resources and the household's livelihoods (2) and how land tenure and social relationships evolved over the course of the years based on related reciprocal influences (3).

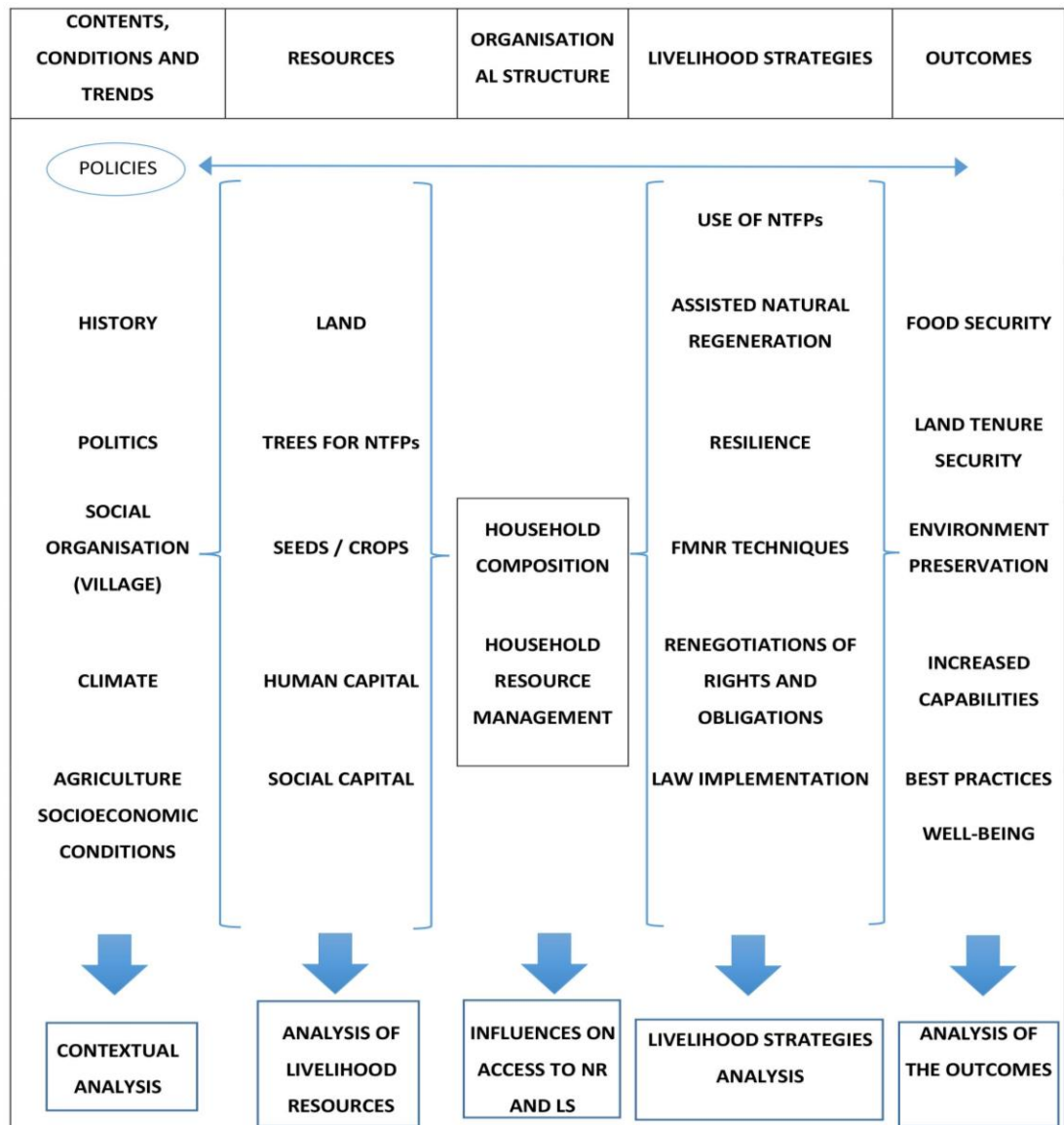


Figure 1 Research framework for analysis. Based on Scoones and own elaboration.

In order to start addressing these research questions and before presenting the research and analysing the data, the following chapter explores the history and socioeconomic, political and cultural context of Burkina Faso and the Mossi ethnic group.

Chapter 3. CONTEXT: SOCIO-ECONOMIC BACKGROUND, POLITICS AND ENVIRONMENT IN BURKINA FASO

3.1. *Historical overview*

To understand the issue of land tenure, resource management and the current struggle to better livelihoods, it is important to acknowledge how history, geography, politics and socioeconomic background have unfolded into the current situation. When trying to highlight the changes in the land tenure context and to identify the interactions between members of complex households, it is relevant to recognize and study the historical context in which they evolved. Therefore, in this case, it is crucial to have a broad view of Burkina Faso history.

Before the Europeans arrived on the African shores, West Africa was organized in different entities; that period was called “The golden middle ages of Africa” (Ki-Zerbo 1977) and covers from 12th to 16th Century. The bibliography on the West African history is relatively thin and incomplete; with specific attention to the modern-day Burkina Faso region, the main reference for this part will be Ki-Zerbo *General History of Africa* (Ki-Zerbo 1977).

After the Al-Morabetun’s conquest of the Ghana Empire and the diffusion of the Islamic religion, law and culture, the area was divided between two major and magnificent² empires: Malinké and Songhai (Cissoko 1966). Compared to these gigantic political entities, the Mossi Kingdoms seemed small, less structured and different in internal organization, socioeconomic and anthropological background, but nevertheless proved to be long lasting.

These Kingdoms covered the area that the French would then conquer and call French Upper Volta (modern-day Burkina Faso). The known facts about the population and its *mores* mostly come from oral legends and traditions, and manuscripts from Arabic geographers¹¹. There are different versions of the legend

¹¹ The most important of these geographers is Al-Bakri (c. 1014–1094). He was an Andalusian historian and geographer of the African golden Middle-Ages. He described the Western Africa Empires and Kingdoms in his *Kitāb al-Masālik wa-al-Mamālik* ("Book of

of the foundation of the Mossi Kingdoms; while it is not relevant to describe them here, it is noteworthy for this study that every version highlights a strong and basic link between women, agriculture and the foundation of the kingdom as well as the foundation of the family itself. The presence of a very strong woman figure¹², a princess warrior able to escape against her father's will and choose her husband is central to the legend (Diep 2006); the woman compares herself to a field of okra¹³. If the field is not well kept, the gumbo rots just like a woman without her husband; if the woman can look after the crops, they become edible, sellable, and the family can increase. This is central to the Mossi customs already in place that would develop over the years and build an ensemble of juridical and social rules that affects most aspects of a household life even today.

The customs of the early Mossi kingdoms are not well known (Bourguignon 2007); nevertheless, it is known that they lived under a conservative and patriarchal system. Politically, it was a monarchy with a caste system formed by the royal family, the warrior aristocracy (*nakomsé*), the free people (peasants and artisans) and several categories of slaves (Ki-Zerbo 1977). The Moro-Naba (King) was at the top of the hierarchy, responsible for his people and the public order. He put in place a complicated yet extremely efficient system of local authorities in power in the cantons, provinces and regions that formed a not-so-extended territory (Ki-Zerbo 1977). The importance of the horse, noble and symbolic animal for the people meant an extremely well trained and effective cavalry that enabled

Highways and of Kingdoms"). The book was composed in 1068, and was mainly based on the reports of merchants and travellers since Al-Bakri himself never left Al-Andalus. It is one of most important sources for the history of West Africa. Unfortunately, most of his work went missing, some was non comprehensible and some was never published.

¹² The most known adaptation of the legend sees Yennenga, daughter of the king of Dagomba (modern days southern Ghana), being a valiant warrior and an excellent amazon. For her qualities, his father forbid her to get married, scared to lose her abilities on the battlefield. One day, miserable and alone, Yennenga planted a field of gumbo, made it grow and then let it rot; she showed it to her father and told him that this field was like her life if she couldn't find a husband. Angry, the King locked her up in a cage. At nightfall, the Princess managed to escape and run away with her horse. Lost, she found a cabin along a river; the cabin belonged to an elephant hunter, Riâlê. From their love was born Ouedraogo ("male horse, stallion"), to be founder of the Tenkodogo Kingdom.

¹³ *Abelmoschus esculentus*, also known in English-speaking countries as okra, is a flowering plant in the mallow family valued for its edible green seeds pods. It usually is cultivated in tropical, subtropical and warm temperate regions.

these little kingdoms to resist the much bigger Empires around them. According to the legends, though, what saved the Mossi Kingdoms was their patriotic love for their land, gift of Gods and ancestors and primary source of well-being (Nao and Madiéga 2003). The complex structure of the Mossi kingdoms was not that different from the organisation of the Malinké or Ghana Empire, even though it lacked the bureaucracy these Empires had. It therefore maintained the same structure, with a specific attention for the authority of the “chief of land” (*chef de terre*) (Bourguignon 2007). While this figure is not so uncommon in the sub-Saharan area (Ki-Zerbo 1977), the *chef de terre* is even now particularly important for the Mossi society (Bourguignon 2007), emphasizing the people’s connection to their land and the importance given to it. In a Mossi village, the *chef de terre* is the only authority responsible for any transaction regarding land; he traditionally holds power over land, but does not own it, he is the link between the *genii* that own the land and the settlers. He manages the division of land, the permits to settle, the disputes and is the guarantor of the land boundaries (Ciparisse 2003).

The review of the few existing and previously cited literature regarding the early stages of the Mossi Kingdoms and the blossoming of their socioeconomic and political structure highlight a patriarchal society based on a conservative and hierarchical view of the relations of both the power and the social structure. While the importance of women is undeniable even in the local customs and legend, they are traditionally in an inferior role to men.

It is evident in the current legal, social and economic context of the country that colonisation changed the power structure by imposing a French juridical and territorial system onto the Mossi, already imposed on other minoritarian ethnic groups. However, some historians argue that it did not have a significant impact on the local customs partially because, formally, the juridical apparatus that the former colonial power wanted to be put in place was never implemented (Cissoko 1966; Giusti and Sommella 2007; Ki-Zerbo 1977). However, the influence of the colonial system found its way into less formalised relationships and mechanisms at different levels of the State. For example, to relate to the colonial State, most local chiefs learned the language (Bila Kaboré 2002).

The territory that France conquered at the end of the so-called “Scramble for Africa” (Giusti and Sommella 2007) was extensive but had relatively scarce resources. Therefore, the economic structure put in place to manage it was meant to be simple and aimed at securing the former colonial power’s monopoly on all resources; this translated into new communication routes useful for the exploration of the territory and the transportation of products (Droz 2006). Specifically in the territory of present-day Burkina Faso, the French put in place a tax structure based on regions, provinces and departments; the village chiefs maintained their power and were key actors at a local level. The control system was based on empowering the local authorities to maintain supervision and management of the colonies; these power games created a rich and corrupted local élite that was to play a significant role in the decolonization process (Ki-Zerbo 1977; Madiéga Yaméogo and Massa 1999).

World War II had a deep and devastating impact on Europe’s economy; it therefore affected the former colonial power’s relationship with its colonies as well as their economies (von Albertini 1971). Europe’s needs translated in an accelerated modernisation of the colonies’ productive system (Giusti and Sommella 2007; Pakenham 2010) that impacted the fragile, local socioeconomic structure based on an unresolved dualism between strong links to customs, traditions and culture, and an imposed and aspirational detribalization process (Meillassoux 1975).

A fragile economy, a power structure based on a corrupted élite and a drastic interruption of the relationship with the motherland resulted in political confusion and instability in the years following the independence of most of the African countries (Pakenham 2010). Upper Volta did not gain its independence with a war on the territory; however, the experience was nonetheless devastating for the country, both economically and politically. For two decades, until the early Eighties, the country was torn by riots, political confusion and military interventions (Nao and Madiéga 2003).

Between August 1960, when the country (as well as most of French-speaking West Africa) obtained full independence, after transitioning from French Empire, to French Union to French Community in the 1950s, and 1983, the country was

constantly shaken by coup d'états and an alternation of military chiefs and trades union leaders. In 1983, however, Thomas Sankara, a young Captain of the Army, was Prime Minister of the latest government led by Ouédraogo, a trade union leader. His leftist views got him imprisoned by leaders of his own party; efforts to free him led to a coup d'état with a wide and open support by the local population. Following the protestations and violent putsch, Sankara became President and, in the same year, declared the birth of a new country. He named this country Burkina Faso, the combination of a Mooré and a Dioula word meaning the Land of Honest People (Bourguignon 2007; Jaffré 1989; Ki-Zerbo 1977; Nao and Madiéga 2003).

The country evolved into its independence in the frame of a peculiar African Socialism¹⁴ (Andreocci 1969; Bénot 1969; Brockway 1963; Crawford and Rosberg 1964). The underlying dualism between customary and colonial started having an impact on the political pillars on which Sankara wanted to build the newly-born Burkina Faso. Sankara's idea of freedom was the guiding light of the reforms he put in place; freedom meant an independent country but also people freedom from sickness and hunger (Jaffré 1989; Gakunzi 1991; Somé 1990). The reform of the administrative system and education were aimed to reduce corruption while promoting the principles of the revolution, battling illiteracy and modernising the country. More importantly, the agrarian reform and the reform of the productive system aimed at "*produire et consommer Burkinabé*" (Gakunzi 1991). This is a typical expression of Sankara's government encouraging to produce whatever possible in country and to buy local products (Nao & Madiéga 2003) to democratise a sector since then linked and subjugated to European needs. While the importance of these reforms is undoubted (Jaffré 1989), their main weakness is to be inextricably linked to Sankara himself (Martens and Meesters 1989; Nao and Madiéga 2003). The limited period that Sankara effectively had to implement the reforms and the political confusion that followed his assassination in 1987

¹⁴ African socialism can be described as a trend that had a peculiar success in the African continent in the years following African countries' independence. The main idea underlying this trend is that there is a need to reject the European model and their colonial or post-colonial capitalist society as well as a need to enhance the societies of pre-colonial Africa keeping in mind the myth of an "Africa Felix" (Bénot 1969; Brockway 1963; Savonnet-Guyot 1986; Crawford and Rosberg 1964; Giusti and Sommella 2007).

(Batà 2003; Martens and Meesters 1989) led to instability and a central power vacuum that translated in the rural areas of the country into a massive come-back of the traditional juridical system, that had never been completely abandoned (Bourguignon 2007; Jaffré 1989; Nao and Madiéga 2003; Somé 1990). The land and village chiefs got back most of the illegitimate power that Sankara's policies against corruption had tried to undermine (Jaffré 1989).

After 1987 coup, Blaise Compaoré, former deputy in Sankara's cabinet and main responsible of the coup, assumed power and started a long process he himself defined as "transition to democracy", arguing that a rectification was necessary after the socialist period (Jaffré 1989; Martens and Meesters 1989). His concept of democracy, however, especially in the first decade of him being in power, translated into a systematic destruction of all symbols Sankara had built, a direct link with France and an opening to Europe and the United States, while geopolitically placing the country away from the socialist block (Englebert 1996).

Concerning land tenure, Compaoré's years were central to the main subject of this thesis, namely access to land, national laws and customary management. In an open effort to destroy his predecessor's footprint and to obtain and keep power in rural areas, Compaoré strongly supported local chiefs (village chiefs and land chiefs) to re-gain their power. This meant a system in place to monitor and keep control of the farmers. Moreover, in juridical areas, Compaoré's governments proceeded to modify and partially implement a national land law. The main land reform framework (RAF), that had strong socialist roots and that Sankara aimed at redistributing power in rural areas, was revised twice (1991 and 1996); the political changes impacted on the juridical framework and changed it as a whole, as will be described later.

For the past twenty-six years, Blaise Compaoré has been president of Burkina Faso, re-elected every five year with almost 100% of the votes and, for the last time in 2010, with over 80% of the votes. New elections were to be held in 2015; in regards to this presidential election, Compaoré tried to amend the (already amended) Constitution so that he could run again. The so-called presidential referendum led to increasing discontent among both the political opposition and the people in general.

In late October 2014, after several days of public and mostly peaceful demonstrations, the opposition called for a blockade of parliament. Anti-government rallies were held and street battles followed. A gathering of tens of thousands led to uprising and torching of government buildings as well as charging against Ministers' and important politicians' houses and families; police and army fired on demonstrators. At least 30 deaths were reported, while Compaore had already fled the country.

After a brief military government of transition, Lieutenant Colonel Zida called upon a "Conseil de designation" to nominate a civilian president for the transition towards a new government of national unity. President of the Transition Michel Kafando, former Minister of Foreign Affairs (1982-1983) was nominated in November 2014. The situation was peaceful for about a year. The Transition government continued to plan and organise for elections in November 2015, as originally planned. In September 2015, however, a new crisis evolved around the status of the RSP – Régiment de Sécurité Présidentielle, an élite military body created by former President Compaoré for his own protection. The Transition Government had been discussing the dismissal of such body for months; the National Reconciliation and Reforms Commission issued an official recommendation to disband the body on September 14th 2015. Two days after that, President Kafando and Prime Minister Zida were detained by RSP members. In Ouagadougou, Le Balai Citoyen, a grassroots Sankarist movement heavily involved in the 2014 uprisings, called for massive protest and popular protests were dispersed by gunfire from soldiers all around town. The situation was quickly evolving; the coup leaders announced their will to dismiss Kafando, create a new transitional body called National Council for Democracy (Conseil National de la Démocratie, CND) promising inclusive and peaceful elections. General Diendéré appointed himself as chairman of the council. The country's borders were closed and Burkina Faso was suspended by the African Union; a curfew was put in place and the situation remained tense for about a week. Presidents of neighbouring African countries travelled to Burkina to hold talks with Diendéré while the population in Ouagadougou was still ignoring the curfew and protesting in the streets. Despite the agreement issued at the end of those talks, granting the coup

leaders immunity and requiring the release of the President and Prime Minister, there was no common ground on who would lead the transition, the army pushing for Diendéré to remain in place while the agreement reported that Kafando was to be reinstated. Moreover, the agreement allowed all previously excluded candidates (mostly former members of Compaoré's party, banned from the elections for fraud) to participate in the upcoming elections, which was the RSP's key demand.

However, the CND was never able to establish authority beyond Ouagadougou and the regular army started marching from all over the country towards the capital on September 21st. To avoid direct fighting, the CND released the President and Prime Minister; however, the army continued its march towards Ouagadougou.

Negotiations started between the army and the RSP, with no fighting. Eventually, on September 22nd, the RSP agreed to withdraw to its barracks while the regular army withdrew from the capital. President Kafando was reinstated officially on the following day in the presence of ECOWAS leaders. The new transitional government reassured that elections were to be held in November and created a commission to identify those involved in the coup. Prosecutions were made against the former RSP soldiers who did not report for duty in their new assignments as well as for Diendéré, Djibril Bassolé who served as Minister of Foreign Affairs under Compaoré and was involved in the coup, for Colonel Sangaré and for many other politicians and military men. New elections were peacefully held in November 2015, as planned. They were the first national elections since 2014 uprising and allegedly the first democratic and open elections since before Compaoré, who had ruled for 27 years. All ministers from the transitional government were banned from running as well as many members of Compaoré's former party, deemed unworthy and charged with different crimes. Roch Marc Christian Kaboré was elected with 53% of the vote in the first round, with no need for a second round. His party, People's Movement for Progress (Mouvement pour le Peuple et le Progrès – MPP), received 1.668.169 votes out of 3.309.988, a 60% majority. The elections had been conducted in calm and serenity. The population

seemed satisfied with their ability to choose and the new President has been officially in charge peacefully since his election.

Burkina Faso's capital Ouagadougou has been a target for terrorist attacks in January 2016. A hotel and a café in the city centre were attacked with heavy weapons and damaged by outside car explosions. The attacks have killed at least 30 people of 18 different nationalities. Responsibility for those attacks was claimed by Al-Qaeda in the Islamic Maghreb (AQIM) and Al-Mourabitoun. The security situation in the country does not seem to be particularly altered and, despite how terrible and despicable, these attacks seem an isolated event. A curfew is still enforced from 1 to 4 am.

This overview of the literature, on the transition from a colony to an independent country, highlights numerous contradictions regarding the land tenure system that is relevant to this research; the formal colonial system imposed over a traditional one and then the new post-colonial state created several layers. None of those layers was completely able to erase the others, nor were they combined either, creating a confusing and complicated background of laws and cultural context. Moreover, it describes a context that made for livelihood strategies to evolve constantly, for risks of political events to impact on vulnerable rural communities, and therefore impact and be shaped by ever-changing social relations, which were also moulded by uncertainty in the cultural and political context. Without acknowledging this kind of context it would be impossible to understand the issues arising when talking about land rights as well as women and men relationship within households.

3.2. Environment

a. Agriculture: climate, crops, soils

The Sahel represents the southern part of the Sahara desert, extending more than 7000 km² from Cape Verde through Senegal, Mauritania, Mali, Burkina Faso, Niger and Chad, being limited to the south by the so-called Sudan-Sahel belt, a slightly less arid zone (Tacko Kandij, Verchot, and Mackensen 2006). It is difficult to give precise latitudinal limits to this area in reason of it being subject to annual differences depending on rainfall patterns as stated by CILSS presentation

document (CILSS 2004); the same document highlights that the Sahel is a transition between the completely arid North and a more tropical climate towards the South¹⁵.

The Sahel is an eco-climatic zone with precise yet variable characteristics, following three major axes. Climatic variations, with an annual rainfall range between 200 and 1000 mm, over a rainy season roughly happening between April and September and lasting three to six months. However, the average range is between 200 mm and 600 mm with coefficients of variation from 15% to 30% (Fox and Rockström 2003). The more than 80 million inhabitants of the Sahel stripe are principally employed in the agro-pastoral sectors. They represent almost 40% of the GDP for the countries of the Sahel stripe where they live, with nevertheless significant differences between the states.

The term Sahel, which means “shore” in Arabic, highlights the fact that it is the border of a gigantic ocean of sand, the Sahara (Dumont 2009). More than a climatic region, it is safe to say that Sahel also refers to geopolitical entity, especially since, in 1973, nine West African countries (Burkina Faso, Cape Verde, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, Senegal and Chad) formed an international organization that, according to their official homepage, invests in research for food security and the fight against the effects of drought and desertification for a new ecological balance in the Sahel (CILSS 2005). While more than 100 different ethnic groups are known to reside within the stripe, they share similar climatic conditions and have much in common in terms of ethnicity, culture and livelihood systems (including but not limited to, in rural areas, agriculture, livestock herding, short and long-distance trading, etc.) (Dumont 2007).

Because of the climate, agriculture is predominantly rain-fed and depends on the summer rainfall; droughts can vary in their degree of severity but occur in two out of every five years, making harvests of the major food and cash crops uncertain. Climate variability is therefore one of the obstacles to poverty reduction campaigns conducted in the region (Hengsdijk and van Keulen 2002).

¹⁵ The complete CILSS presentation document is available in French on their homepage at: www.cilss.bf.

Soil fertility is an issue in itself, since land is inherently fragile, low in carbon and poor in plants nutrients (Manlay et al. 2002). The major cereal crops in the region are millet, maize and sorghum; they are considered low value, do not generate a great income, and are for the most part local varieties that have low yield potential. For these reasons, as well as the fact that physical and economic access to markets in rural areas is difficult, the use of fertilizers is very limited in the region, aggravating the impact of the soil erosion process on the fertility of the land (Reenberg 2001).

The on-going population growth has been followed by an intensification of cultivation strategies, with the consequence of mining of soil nutrients, deteriorating land resources and overgrazing, as well as the disappearance of fallow periods and shrinking of pastures. This had over time devastating consequences on land resources (Dumont 2009).

In addition to human pressure and overuse of a soil itself on an already fragile region prone to degradation, the torrential summer rains worsen the soil quality. The composition of the majority of Sahel soils, with very high levels of sand and silt and very low levels of clay make water absorption difficult and a crusting phenomenon widespread, especially during the first storms (Fox and Rockström 2003). As a result, both water runoff and soil degradation by erosion are common in these countries; in the absence of trees, moreover, wind erosion adds to the annual topsoil loss (Omanya and Pasternak 2005). Some analysts, for example Warren, have initiated a debate regarding the relationship between soil loss and crop yield; yet if this relationship should be true, and since investing in soil erosion control is absent, the Sahel is recognized by others as likely to be headed towards environmental disaster (Batterbury and Warren 2001; Tacko Kandij, Verchot, and Mackensen 2006; Warren 2002).

Rainfall variability is arguably an important cause of the vulnerability of the Sahel; nevertheless, it is paramount to highlight that it is only one of the elements in a complex combination of processes that has made agriculture and livestock farming more and more unproductive over the last decades (FAO 2002).

However, it is safe to say that intertwined processes such as population growth, land degradation, desertification, erratic rainfall, lack of common development

and sustainable environmental policies have transformed a large part of the Sahel into barren land (W. M. Adams and Mortimore 1997; Batterbury and Warren 2001; Batterbury 2001; Tacko Kandij, Verchot, and Mackensen 2006).

Furthermore, it needs to be taken into account that a scientific consensus argues that global climate is changing¹⁶. A drastic reduction in mean annual rainfall throughout the Sahel region has been observed since the 1950s (Camberlin and Diop 2003; Dai et al. 2004; Diop 1996; Hulme 2001; Le Barbé and Lebel 1997). While rainfall seems to have normalized by the end of the 1980s, the causes of the years of droughts remain uncertain (CILSS 2005). The consequences, however, are well known, with an unprecedented tide of mass migration from North to South, within countries and in the wider region, from rural areas to urbanized cities, from landlocked to coastal states. It is stated that the rural communities are the most affected since they depend on farming and herding, with an estimated 100.000 drought-related deaths in a decade (Batterbury 2001; Mortimore and Adams 2001; Raynaud 1997).

Since the Eighties, the land degradation debate has been rich and full of contrasting opinions on causes, severity and magnitude of some changes that were mainly observed in African drylands (Dahlberg 1994). It is not the main focus of this research to investigate the ample literature; however, land degradation is mentioned as a cause for land-related conflicts and this study would position itself within this debate. The lack of common definition of “degradation” (Camilla Toulmin 1994), the diversity of the methodological and analytical tools used to measure it and the diverse underlying causes are partial seeds for this academic debate. Both biophysical and socio-economic approaches are usually used in most recent assessments to identify real causes as well as implementable policy mechanisms (Reed et al. 2015).

Burkina Faso is a landlocked West African country measuring 274.000 km² with an estimated population of 16.9 million¹⁷ (Belemvire, Sawadogo, and Savadogo

¹⁶ For a comprehensive literature review on climate change, see Carter et al. (Carter et al. 2000).

¹⁷ The last national census (*Récensement Générale de la Population et de l'Habitation*) was held in 2006 and the next one will be undertaken in 2016. The data used in the text are the World Bank projections for 2011.

2008). It is situated in a geo-climatic transition zone south of the Sahara desert, with part of it included in the Sahel. Burkina Faso is also part of the 41% of the world's land defined as drylands (Middleton et al. 2011).

Being situated in the Sahel stripe, Burkina Faso climate is dominated by a short rainy season variably situated between May/June to September/October, followed by a dry season for the rest of the year. Rainfall can vary significantly from one year to another as well as depending on the latitude but is approximately between 400mm to 1000 mm per year (Belemvire, Sawadogo, and Savadogo 2008). Over 75% of the country lies on a plain characterized by low hills with gentle slopes falling to valley bottoms, so-called *bas-fonds*. The soils have sandy surface horizon and poor in clay, resulting in an inherent low fertility (Belemvire, Sawadogo, and Savadogo 2008; Carter et al. 2000; Tacko Kandij, Verchot, and Mackensen 2006).

According to the 2006 RGPH and the World Bank data, the majority of the 81% of the population living in rural areas engage in a combination of farming and livestock keeping, with a rain-fed agriculture mainly devoted to household consumption (Belemvire, Sawadogo, and Savadogo 2008). The main rain irrigated crops are sorghum and millet; in wetter areas, maize and rice production have increased in part due to public investment in irrigation projects (Tincani 2012). The main export crop is cotton; according to a recent study, the cotton productions has greatly improved with Burkina Faso becoming the largest cotton producer in Sub-Saharan Africa (Kaminski and Thomas 2011; Tincani 2012).

The aforementioned low hills, or pen plain, are situated at an altitude of 250 and 300 meters, deeply dissected in two distinct blocks by the Mouhoun valley. The sandstone plateaux are mostly in the West and South West (Bobo Dioulasso, Banfora, Sindou). Leached ferruginous soils and poorly evolved soils of erosion cover more than two-thirds of the country. The first kind covers the greatest area and has sandy texture on its surface and clay in the deeper horizon; it has low porosity and permeability and drains badly, with poor cation exchange capacity. The second kind covers the northern half of the country, derived from granites, are also composed of a sandy surface horizon and underlying clay that affects root penetration and water regime (Fontès and Guinko 1995).

3.3. *Economy*

a. *GDP, sectors, poverty and literacy*

In 2011, Burkina Faso had a GDP per capita in purchasing power parity rate of 1,527 USD, according to the UNDP data and report, in line with its neighbouring West African countries¹⁸. Gross national income per capita was 1.590,7 USD in 2014 (UNDP 2015). It is important to add that while Burkina's year-to-year rates have fluctuated, the GDP has on average remained constant over the past thirty years. In 2010, 81% of the population was rural¹⁹ with agriculture being 39% of the GDP.

The primary sector therefore constitutes almost a third of national GDP; however, it engages 85% of the population. Due the previously analysed conditions, especially the irregular rainfall, agriculture is vulnerable to climatic conditions and arguably said to be amongst the least performing of the Sub-Saharan countries (Belemvire, Sawadogo, and Savadogo 2008). At least 10% of the country's budget was allocated to agriculture until 2009; however, in 2012, only 2.5% was allocated to the primary sector.

The secondary sector falls behind the primary one but is nevertheless growing. The large deposits of gold, manganese, zinc, phosphates, copper and nickel are for the most part underexploited. However, new gold mines set up after 2000 provoked an expansion in the gold mining sector, with its earnings surpassing those of cotton in 2009. Formally, there has been very little impact on GDP; nevertheless, the informal gold sector contributes significantly to local salaries in the gold-rich areas of the country (Tincani 2012), and incentivise migration from agriculture, particularly by young men.

These macroeconomic conditions contribute to the low performance of the country according to standard economic indicators, leading to a Burkina ranking

¹⁸ Statistics and projections available at the UNDP website at url: <http://hdr.undp.org/en/countries/profiles/BFA>

¹⁹ INSD, *Enquête burkinabé sur les conditions de vie des ménages 2003 et enquête annuelle sur les conditions de vie des ménages (EA – QUIBB) 2005/2007*. The data used in the text are INSD projections for 2010.

183 out of 188 countries according to the Human Development index²⁰; however, there are some other factors to take into account such as adult and youth literacy as well as healthcare conditions.

Adult literacy is a little above 29% according to World Bank 2011 projections from 2006 data and is consistent with Oxfam data from 2010; youth literacy is slightly higher with boys at 50% and girls at 29%, at an average of 40% throughout the country. Unfortunately, there are no updated literacy data for Burkina Faso. The education juridical framework is complex and will not be thoroughly discussed at not specifically relevant to the research topic. The main education law, The Education Act (*Loi d'Orientation de l'Education Nationale*), establishes among other things, the compulsory education from children aged 6 to 16, to be held following a precise national program, in French, with legal size classroom limit to 65 children and regulations for private, religious or moral education. It is worth mentioning that, just like the juridical national framework, the school system grows with an internal division between formal and informal education (Kamano et al. 2010). Therefore, it is important to keep in mind that the official United Nations and NGOs statistics do not take into account Qur'anic schools nor local education conducted in non-French languages (the most talked throughout the country being Mooré for the Mossi, Dioula and Foulfouldé). These informal phenomena are usually a result of the insufficient schools in the districts, costly equipment to be bought by the families and high fees of private education. Moreover, since it is estimated that only 10% of the Burkinabé speak French, there sometimes are cultural factors for choosing informal education, adding to the economic and practical ones (CIA 2013).

Healthcare is also very poor, with infant mortality at 176 every 1000 birth in 2011, an overall life expectancy of 55.9 years at birth in the same year, increasing from 47.9 years in 2004 according to World Bank 2011 statistics. A 2009 OECD document reported the presence of 400 doctors for the whole population estimated at the time at 13 million, mostly residing in the urban areas. Malaria is

²⁰ Complete statistics and data are available at the UNDP website Burkina Faso country profile at the url: <http://hdr.undp.org/en/countries/profiles/BFA>

the biggest threat, with the same OECD report estimating 36.000 cases per year; tuberculosis cases remain around 4,000 per year (2005 OMS data) but have increased since 2000. Meningitis is epidemic between January and April, the Harmattan season, with 1000-2000 deaths per year because of low vaccination availability. HIV/AIDS level, however, are below African average with 1.6% infection rate between 15-49 years. The 2010 MDG progress report showed that roughly than almost 40% of the children under the age of five consume less than the minimum level of dietary energy, resulting in diffused malnutrition and malnutrition-related diseases amongst young children. However,

*b. From MDGs to Sustainable Development Goals
(SDGs)*

Established in 2000 and having ended in 2015, the MDGs were seen as 8 realistic and easy to communicate goals to halve extreme poverty and hunger. In 2015, the original target date, overall extreme poverty was said to be halved. However, the results have been uneven and a new agenda was needed. This new agenda called for adding terms such as sustainability, social inclusion, and economic development on an equal basis.

As the UNDAF report states, Burkina wasn't able to achieve MDGs on poverty and hunger, literacy and primary education, child mortality and maternal health. However, improvements are noticeable in reducing gender disparity in primary and secondary education (parity index was 0.6 in 1991 and 0.81 in 2008, with a goal of reaching 1 in 2015), combatting HIV/AIDS (HIV/AIDS prevalence was 7,2% in 1997 and 1,6% in 2008, with a goal of 0 in 2015) and access to safe drinking water (18,3% of the population had access in 1993, 66,5% in 2007, a reached goal). The macroeconomic conditions contribute to making Burkina Faso a poor country ranking 183 out of 188 countries in the 2014 UN Human Development Index with 44.6% of the population living below the national poverty line²¹.

The MDGs came to an end in 2015. The United Nations Conference on Sustainable Development held in Rio de Janeiro in June 2012 focused on creating

²¹ Complete statistics and data are available at the UNDP website Burkina Faso country profile at the url: <http://hdr.undp.org/en/countries/profiles/BFA>

a new agenda for global development to be people-centred and fit into a global development framework that would go beyond 2015 and towards 2030. Stemming from this meeting, in July 2014, the UNGA OWG – United Nation's General Assembly Open Working Group proposed a new document containing 17 goals called Sustainable Development Goals or SDGs. To achieve these goals and building upon the lessons learned from the MDGs, an SDG fund was put in place to act as a bridge during the transition from MDGs to SDGs and to provide a concrete experience on how to achieve a more sustainable and inclusive world post-2015 (UNGA - Sustainable Development Goals Fund 2015).

2016 saw the first report on the SDGs, analysing the selected indicators to provide an overview of the transition between MDGs and SDGs and preliminary results. However, it does not provide insights per country and it is difficult to analyse these preliminary findings over such a short term. According to the trajectories presented for West Africa, it is likely to continue to achieve better results in the previously mentioned sectors (promoting gender equality in primary and secondary schools, combatting HIV/AIDS and access to safe drinking water). The recent political instability might have an impact on the process; further annual and periodic reports in 2020 and 2025 will be able to shed more light on where the country stands.

Nevertheless, a few considerations can be made on SDGs. A recent paper on *The Lancet* (Waage et al. 2015) highlights potential opportunities and challenges that accompany creating a new approach that provides better integration between the goals. In fact, one of the main critiques to the MDGs was framed around missed opportunities to realise positive interactions between the goals (Satterthwaite 2003). The SDGs are articulated around goals on wellbeing, linked to and supported by achieving goals around infrastructure and, as a third, outer layer, natural environment (Waage et al. 2015). This approach is interesting as it highlights the interconnectedness of the goals and one of the main shortcomings of the SDGs, namely the lack of clear focus on the institutional structures needed at the different layers, how they could interact and how they could be improved.

3.4. Social organisation

It is difficult to approach the social organisation of an ethnic group, while the people exist, interact and constantly evolve through interrelationships with their surroundings (social, cultural, economic and global). The Mossi are one of the 60 ethnic groups inhabiting Burkina Faso and represent almost 50% of the total Burkina population, therefore being the largest ethnic group (Englebert 1996). They mostly reside in the region known as the Mossi Plateau, in the North and Centre-North of the country; however, Mossi migrated (and originally conquered) throughout most of Burkina Faso and are scattered. The Mossi society can be characterised as highly hierarchical and has precise, strict and tight social structures that partly explain the high population density of the Plateau (Tincani 2012).

Following on the tradition of the ancestors, only royal lineage was originally allowed to have any kind of power; therefore, all the kings (*"moro naba"*), princes (*"dimdamba"*), chiefs of districts (*"kombemba"*) and chiefs of villages (*"nanamsé"*) claimed a royal descent (Skinner 1964).

The importance of different lineages needs to be stressed; there are two main lineages with no or very little inter-marriage between them, and a third category falling outside the Mossi hierarchy because of their late assimilation to the ethnic group. In the third category fall the smiths and their wives, usually potters; the traditional bards, storytellers, (*"griots"*), that often have a religious connotation and can be men or women; Muslim merchants who settled in the Upper Volta region between the 15th and the 17th Century; *marabouts*, Muslim religious leaders and guides often living at the edge of the communities and relying on donation that still maintain a great spiritual power (Englebert 1996).

This research focuses on seven households in the northern part of the country (Passoré province) and three in the western part (Boulkiemdé and Sanguié). The interviewees of Northern Burkina are all of Mossi customs and culture. However, in the West, the main represented ethnic group is that of the Lyélé branch of the Gurunsi people.

a. *Hierarchies, respect and gender in a Mossi society*

The people that have access to the *naam*, which means power, form the first category. They are called *nakomsé*, the people of power, and are among themselves organized in the aforementioned stratified hierarchy, with kings ruling over several districts formed by several villages (Engberg-Pedersen 1995). Their status allows them to become chiefs and, usually, to own more land than other villagers but they live in similar conditions in most cases, as their harvest is traditionally redistributed in times of drought or need (Skinner 1964).

The farmers represent the second lineage; although they have no royal descent and take no part in the struggle for power, they do control land rights. Being for the most part descendants of old ethnic groups of the Volta basin, they share a spiritual link with the ancestors and the land itself. They are called “*tengbiissé*”, children of the land, and are represented by the *chef de terre* (land chief), in Mooré “*tengsoba*”, that has the power to distribute plots and manage the land as well as deal with land-related conflicts (Skinner 1964). In each village, each family clan has a leader, the oldest living male ancestor. The leader usually gives his last names to the whole clan, the “*boodoo*”.

Hammond highlights how the geometry of the households reflects the hierarchy of the village since when the father dies, each son will build his home a small distance away, according to his family needs; in this way, in practice, every married man is head of his own family but responds to (or, more often, takes advice from) the head his clan (Hammond 1966). Therefore, families live in these so-called complex households. In Mooré, in order to avoid confusion, the single family is called *zaka*, while all the families part of the same clan are called *yiri* (Tincani 2012).

Since the Mossi society is so hierarchically structured, a similar skeleton can be found in the households. According to the INSD statistics for 2009, 64% of married men, nationally, are monogamous, 25% have two wives, 7% have three and 3% have four or more. Generally speaking, most Muslim or animist marriages can be polygamous, although Islam limits the maximum number of wives to four. These numbers mean very little as Muslim marriages are very rarely formally registered;

in rural areas, most Mossi Muslim men will be keen on having more than one wife to expand in terms of power, land and children. However, this need to be analysed in the context of a very strong social pressure pushing men to marry and have children.

The literature shows that the order in which the wives are married is often not the criterion for obtaining a higher status in the household; instead, the favourite wife, "*poug roudé*" in Mooré, has access to better lands or may receive more help from the husband. Moreover, wives may help each other depending on how well they might get along but usually keep tools and kitchen utensils separated and normally own a small piece of land each to grow cereals or, more commonly, spices and garden vegetables (Hammond 1966). However, the literature regarding household dynamics in the Mossi plateau is limited and out-dated; most recent studies in the area suggest much more articulated and dynamic mechanisms of relationship within the compounds (Tincani 2012). One of the objectives of this work is to explain in greater depths the evolution of these inter- and intra-household relationships.

The wider literature analysed in Chapter 2 around the evolution of the concepts of family and household highlighted how these core points can only be described as dynamic entities as they are inserted in a world they interact with constantly. While investigating household and village level relationships in the way they shape access to resources, this research aimed at putting forward new characteristics of the Mossi society in the Northern region of Burkina Faso. The limited sample gave this study an opportunity to go in depth into details, gain the interviewees' confidence and nuance initial findings on social traditions and relationships; however, the small numbers makes it impossible to generalise. It is interesting for future ethnographic, anthropologically oriented access to research studies to see, under new regimes and different local and international social and geopolitical dynamics, if or how the Mossi society has changed since this study was conducted.

The hierarchical structure of the Mossi society, however, seems to be constant and is accompanied by a strong patronage feature that leads to wealth distribution from those of higher status to those of lower status. For instance, Skinner depicts how the granary of the village chief is used as a reserve stock for times of shortage;

inside the compounds, the granary of the compound head serves the same purpose (Skinner 1964). This tradition that has been defined “moral economy” (Scott 1976) has been encouraged by Sankara’s socialist policies with the creation of village storage capacities administered by the local authorities (Jaffré 1989) and supported by one of the Islam pillars entailing to give a tenth of the harvest to a poor neighbour. This socio-economic tradition is still very much upheld and enhanced by the principle of mutual respect; although it does not mean that wealth is equally and equitably distributed, but it does mean that the poorest are helped by the community itself (Tincani 2012).

In Mossi society, status is determined by gender and age. Usually, gender hierarchy is more important and supersedes age, which means that an older woman is less respected than a younger man (Helmfrid 2004).

Male and female spheres are separate and occupy different physical spaces, with different routines and separate roles; Badini states that Mossi children are taught their society roles from an early age. Since children are considered hermaphrodites by Mossi, they are made women or men culturally, by learning their appropriate role and often through the ritual of circumcision²² (Badini 1994). These characteristics of the Mossi society are common factors as identified by older ethnographic studies (Skinner 1964; Hammond 1966) and confirmed by more recent sectorial reviews (Helmfrid 2004) and Tincani’s recent doctoral work in a neighbouring area.

Having specific reference characteristics helped frame the hypotheses and the overall research approach, including problem framing, methods and interviews. However, what have been defined as traditional roles have, in fact, changed overtime while remaining at the core of the Mossi traditions and that societies reorganise themselves as part of a bigger system (from the village to the nation to the interconnected global world). Most of these traits have been investigated in the field. The research wanted to focus on what access to resources meant for the 2014 Mossi society living in rural areas of Burkina Faso.

²² Female circumcision - or genital mutilation - has been illegal in Burkina Faso since 1997, but still widely practiced in often extremely unhygienic circumstances resulting in infections ending in lifelong pains, childbirth complications or death.

b. Land and its uses: main actors

The importance of land in the region highlighted in the previous sections makes it important to understand how land is managed at a local level in order to better understand underlying causes of possible conflicts over the resource. Throughout Burkina, the land is distributed according to the ethnicity; within an ethnic group, it is assigned by family clan (Brasselle, Gaspart, and Platteau 2002).

At a village level, the *tengsoba* or land chief is responsible for the allocation of the plots to the head of each clan, who will then distribute the parcels among his people. It is important to highlight that land always belongs to the head of the compound, but he cannot sell it or give it away permanently without consulting the *tengsoba*. In most cases, the land chief himself will decide about land related transactions. If there are migrants or new settlers in the area, land can be lent to them by any landowner they ask (which means every head of the compound). The *tengsoba* can intervene in the case of conflict and act as a negotiator (Skinner 1964).

However, within the family, the head of the compound allocates land rights to his wives and sons; keeping in mind the hierarchy that characterizes the Mossi society, it is straightforward that, given the role of personal and changing preferences of the husband and precarious nature of the rights, some tensions may arise (Engberg-Pedersen 1995).

Moreover, wives and sons only have usufruct rights but do not own land, creating a temporary and uncertain framework as the rights can be withdrawn at any time and for different reasons, such as the husband passing away or not farming the plot. In that case, if an owner or a user is not using a plot, farming it is a legitimate way to claim it (Hammond 1966).

Inheritance is patrilineal; each plot is inherited entirely from father to eldest son. Recent studies showed that livestock is more and more often divided among the members of the clan, while Mossi traditional practices regarding land inheritance still are the most used (Tincani 2012).

Gray and Kevane argue that women's usufruct land rights, although precarious, may also be negotiated through different channels (Gray and Kevane 2001). It is

necessary to state that the household is not a static unit and the rights and customs outlined here are traditional roles that are often applied with several discrepancies in the field (Tincani 2012). Households are naturally working towards achieving a common goal of sustainable livelihood; however, they do not function as a homogeneous group rather than an ensemble of individual goals, aspirations and tasks that may result in conflicting views; Tincani's research shows how different household members may (and often do) pursue access to different food sources (Tincani 2012).

Traditionally, as previously outlined, Mossi wives can only access land through their husbands; women usually farm garden vegetables and spices for household consumption. However, they may also start to grow their own cash crops (generally peanuts or groundnuts). These needs and goals are part of the relationships of power within the household that this research wants to investigate. For instance, if a wife grows her own cash crops and spends less time farming the common field, her husband is more likely to give her usufruct right to less land, smaller plots and poor-quality soils (Tincani 2012).

Lallemand argues in her research conducted in the late 1970s that the negotiation possibilities for women were limited and their rights often were withdrawn by their husband; she depicts the image of a household where women did not have any plot to farm and rather grew garden vegetables at the border of their husbands land (Lallemand 1977). However, Tincani's findings state that the channels through which women may gain access to different food or income sources is nowadays manifesting in many different ways, although it is still a mechanism of concealed nature and therefore difficult to assess and investigate (Tincani 2012).

Due to generalized low soil fertility, adaptation mechanisms are not uncommon and resulted, throughout Burkina and especially in the Mossi plateau, in local agricultural techniques investigated by NGOs over the years.

The widely promoted traditional technique of the *zaï*, for instance, is an ancient nutrient micro-dosing technique from the North of the country consisting in digging small holes partially filled with animal manure and letting them collect rainfall because of the small depression in the ground; seeds are sown in this

depression and therefore have added nutrients, moisture, and better water absorption since the beginning of rain season, resulting in improved productivity (Belemvire, Sawadogo, and Savadogo 2008).

Another diffused agricultural practice is the one called the *cordons pierreux* (stone boundaries) measuring between 10m and 30m and placed at the borders of the plots to avoid erosion and water dispersion and maintain soil humidity and moisture. The impact of the diffusion of simple improvement techniques of this sort has been evaluated by NGO project reports and proved to be significant over the recent years. However, they are mostly regional or local small-scale projects with limited impact on a national scale.

*c. Social organisation and access to land in the Lyélé,
Gurunsi area of Boulkiemdé and Sanguié provinces*

This research focuses on an in-depth small sample qualitative study of several households in the Northern part of Burkina Faso, a predominantly Mossi area. As the methodology will further explain in chapter 4, a secondary site was deemed useful to make the findings from the main site more interesting and highlight the specificity of the social organisation of the Mossi ethnic group.

The secondary site was chosen for its slightly different climate and different ethnic group. Three households were selected in the area between Koudougou and Réo, across the Boulkiemdé and Sanguié provinces. The interviewees are all Lyélé, a small branch of the Gurunsi ethnic group. The Gurunsi are a major ethnic group in West Africa; they are widespread mainly around the Burkina / Ghana border, in a diaspora all around Lake Chad.

There is not a lot of literature on the Gurunsi people in West French-speaking Africa. The main references for this section will be Duperray's work on the history of Gurunsi people in Haute-Volta, limited to prior World War 2 (1984) and Tauxier's colourful colonial notes on the Mossi and Gurunsi country (1924). There are two specific monographs on society and customs of the Lyélé people, both by Sabine Dinslage – Steinbrich; however, they are in German and have not been translated and therefore have not been analysed for this thesis.

Most of the social structure is very similar to the Mossi. The Lyélé branch of the Gurunsi live in fact in simple or complex households organised in a patrilineal family under a head of household who is usually male. After having been conquered by the Mossi, as section III explains, their customs changed and evolved accordingly. The power held by the land chiefs is a common characteristic, as well as the evolution of the two parallel systems of customary and official law. Just as the Mossi and most ethnic groups in Burkina Faso, with a few exceptions, they are mainly farmers. However, because of the 200mm more of rain that the area gets compared to Northern Burkina, they also have a tradition of cultivating rice (Duperrey 1984).

The Lyélé branch of the Gurunsi settled in the Western part of Burkina Faso, leaving behind a big part of the ethnic group that settled in the South and in Northern Ghana. The traditions revolving around cotton got lost after a few generations due to being in a different climatic zone not adapted to the crop.

The same main characteristics explored in the previous sections are true for the Boulkiemdé and Sanguié provinces.

Other than a more substantial rain season, the secondary site was interesting for being an area with massive NGO intervention. So is the Passoré, as it has been mentioned, but with different results. The “proud Lyélés” (Duperrey 1984) were conquered by the Mossi in the era of their strong kingdoms; as was customary, Mossi made slaves out of all the conquered ethnic groups and they were no different. However, because they were in the Western part of the country, relatively far from the capital and the richer South (where the rest of the Gurunsi had settled), they were able to maintain a degree of autonomy (Nao and Madiéga 2003). This allowed them to understand the opportunity that the French colonisation represented for them and kept playing a key role in the actual management of the area (Duperrey 1984).

This is important to understand the further social evolution of the Lyélé society, as depicted by the small qualitative research work carried out in the area. It is not entirely new for the literature, as Duperrey already argues that, in the Eighties, the Western part of Burkina Faso was evolving fast in terms of integrating new agricultural techniques. For instance, and while there is little literature to

document it, constant conversations with NGO staff confirmed that the area is particularly advanced in terms of deeply drilled wells (*forages*) and drip irrigation technique kits²³.

In this study, it is argued that specific social characteristics of the Mossi in Northern Burkina Faso have an impact on their choice of livelihoods and the evolution of local land tenure. Adding a secondary field site in Western Burkina allows underlining the importance of identifying land tenure as a social matter, embedded in a specific ethnic, cultural, customary and climatic context. Despite very few other differences, customary land tenure evolved in a different way in the area surrounding the town of Koudougou, as the interviews in the area clearly show. Contextualising it in time and in its relationship with the evolution of Mossi history and culture is important to link it to our methodological choice. Differentiating social contexts is also particularly relevant to this study as it helps identifying differences between areas where the government was willing and able to implement the latest land reform (Loi 0034) and characteristics of other provinces, such as Passoré, where the law could not be enforced.

3.5. *Trees and NTFPs: an overview*

Over the last three decades, policy and research sectors have recognised and valued the importance of non-timber forest products. The Food and Agriculture Organisation – FAO, published a Working Paper in 1997 summarising their definition and main characteristics of their use and management (Enters 1997) and another policy document in (FAO 1999). These documents acknowledge the increasing importance of NTFPs for policy, research and programming and focus on a universal definition of the products stemming from a FAO programme launched in 1991 to explore, gather information and analyse data towards an improved utilisation of NTFPs.

Since the Eighties and Nineties, a tremendous amount of research has been carried out across sectors and disciplines and going from policy to science to practice and from economics to anthropology to livelihoods studies. Combined

²³ As the methodology will explore, staff from iDE – International Development Enterprises focused on the area

with the increasingly important attention given to community-based natural resource management (CBNRM) theories and the deforestation crisis being mainly attributed to the timber industry, it led to a view of non-timber forest products strictly linked with sustainable development and a wiser management of natural resources, especially tropical forests (S. Shackleton, Shackleton, and Shanley 2011).

Numerous publications flourished around this new definition of NTFPs, especially focusing on Latin America and Asia²⁴. There was no specific push at the time to investigate Africa further, especially since most of the attention to tree products was inserted in wider complex livelihood systems rather than being a livelihood strategy in itself. However, FAO published another note in 1990, focusing on the integration of forest foods in local livelihoods and their contribution to diets in West African humid forest zone. This study showed renewed attention to the West African context and a perspective for analysing NTFPs as integral part of diets and livelihoods (Falconer and Koppell 1990). This note is particularly relevant to this study as it states the issue of who manages which products and how they are managed. Moreover, Falconer and Koppell put forward the connection between tree products and land tenure. They acknowledge the important and complex reality of West African tenure, its constant capacity to evolve and the profound impact it could have on surrounding resources and specifically local level management of natural resources. Finally, they highlight the specificity of West Africa lying in the fact that, usually, trees are not planted. In some regions this might have been caused by tree or land tenure regulations; in Burkina Faso, however, it is mainly dictated by culture and tradition.

The body of literature on non-timber forest products stemming from the initial excitement in the Eighties and Nineties has its major focus on the economic contribution these products might or should have on local, national then global economies (Lamien and Traoré 2003). An example could be Maisharou's study on

²⁴ Shackleton (2011) also argues that this is due to several causes, including other health related and political crises (HIV AIDS, famines , civil wars and revolutions) happening in Africa at the time pushed the environmental aspects and forest management down the agenda.

the NTFPs in the Sahel zone (2015) or Shackleton and Shackleton's paper focusing on South Africa (2004).

Relating to NTFP uses in Burkina Faso, it is important to cite here Zida's thesis on NTFPs commercialisation (1990), the previously quoted map of trees and other vegetation (Fontès and Guinko 1995), another important detailed study on commercialisation and use of NTFPs by Guinko and Pasgo (1992) as well as Lamien and Vognan's perspective on the importance of NTFPs in women's economies (2001). In the new millennium, the body of literature became even more consistent but started challenging the perspective of NTFPs being inherently sustainable, good for ecosystems and positive for livelihoods.

A policy brief published by the Overseas Development Institute – ODI represents this critique (Belcher and Schreckenberg 2007). The authors put forward the idea that while it might have been tempting for policy makers and NGOs to invest in the NTFP market, it is actually a complex world mixing resource tenure, value chains and local, national and global market dynamics.

In fact, the literature of the last decade still focuses on the commercialisation of NTFPs but adds the sustainability aspect and points towards integrating local knowledge (Faye et al. 2010). Moreover, more recent studies highlight the important contribution to local diets and focus on NTFPs role in more complex livelihoods, especially agroforestry or agro pastoralism that also contemplates forestry (Audia et al. 2014; N. Poole et al. 2016). Three decades of studies and research demonstrate that the importance of NTFPs does not need further proof. The more recent attention to traditional knowledge and customary tenure also shaped a new approach that is wary of global commercialisation of products at the expense of the local populations (Tchatat and Ndoeye 2006).

This research will pay attention to three NTFPs widely present in the selected area of Northern Burkina Faso. Preliminary data proved that all the selected households have access and use these products, although differences will be analysed in the result section. The analysis of the role that baobab, shea and néré have in the Mossi society is an important part of the overall research that aims to frame intra-household resource management. Moreover, the peculiarity of these trees and the specific traditional tenure revolving around their access and use

makes them an important case study. They are part of the household livelihoods and are managed by a complex tenure system bringing elements of traditional social order together with daily necessities. It adds evidence to prove our hypothesis that land tenure is a social matter; access to trees is regulated by unwritten, written and more or less evident laws that have roots in land tenure, Mossi societies, livelihood imperatives and environmental constraints. This is the system that this research is exploring.

Having argued the importance of NTFPs contribution, it seems fit to attempt a non-exhaustive list of the main trees and products that can be found in Burkina Faso. The following NTFPs were mentioned by a recent FAO study in the Passoré province (N. Poole et al. 2016). Another criterion is the trees inclusion in an agroforestry system because of their properties, nutritious or symbolic.²⁵

Balanites aegyptiaca, (in Mooré, *kiegelga*) is common in the northern areas of Burkina. It is a very tolerant and resistant plant, surviving in difficult environments. Its roots are rich in steroids and used boiled in local pharmacopoeia, and so is its bark. Both leaves and grains are edible, and the pulp is rich in protein and sugars. The oily seeds are mainly used for soaps, because further transformation needs to be applied for the oil to be edible. Where it is most spread, in the Oudalan province, it is also considered a magic plant inhabited by genii and often preserved by local populations.

Baobab (*Adansonia digitata*) is well known and easily found in the Centre and North of the country. Every single part of the tree, called *tweega* in Mooré, is used by local people, on top of the strong symbolic power it has been known for. Roots have medicinal power, the leaves, rich in protein, are the most often used in sauces as they keep nutritious qualities and flavour when dried and therefore are used throughout the year. The baobab superfruit is rich in vitamin C, A, calcium and phosphorus. This so-called “monkey bread” can be well preserved for a long time and is sold on the market in various forms. The trees provide shadows, the bark is used as textile when dried, and even dead, empty logs are used as burial

²⁵ For this sub heading, the main reference is Alexandre (2002). Additional information comes from Gueye (2014), FAO (1995a), Ouedraogo et al (2003), (Fontès and Guinko 1995), (S. Shackleton, Shackleton, and Shanley 2011).

grounds. Its importance for food security is shown in the literature but also by the fact that, for example, in haoussa language baobab leaves and sauce are the same word (*miya*).

The *Guiera Senegalensis*, *wilinwiiga* in Mooré, deserves a place because it is one of the most important medicinal plants, because of its antidiarrheal properties. For this, it is often preserved in specific areas near the villages, where their bushy aspect helps to conceal spaces designated for defecation.

Muguniga, Mooré term for jujuba (*Ziziphus Mauritiana*), is appreciated for its fruit, extremely rich in iron. The fruit is often sold on markets but mostly consumed by children who can reach them directly on the trees.

Kapok (*Bombax costatum*, or *voaka* in Mooré) is known for its flowers, used as base for a glutinous sauce eaten with millet or rice, very much appreciated in Burkina. Its bark is also used to dye (bright red).

Shea (*Vitellaria Paradoxa*) is extremely important for several reasons, the first being its income generating capacities, especially for women. *Tanga*, as the Mossi call it, produces fruits rich in iron and vitamin C. However, the fruits do not keep well and are for the most part eaten by children who can easily climb the relatively small stature of the trees. If the trees are in someone's field, it is required that the nuts are left on the ground. In fact, the oily nuts are at the basis of the long transformation process that turns them into shea butter. Shea butter is used for home cooking, further turned into soap or sold on markets. Even though the transformation process can be long, it is relatively easy and constitutes a major source of income for many households.

Parkia biglobosa, or African locust bean tree, is known as *roaaga* by the Mossi. In Mossi country, it is a tree traditionally assigned to chiefs and overall managed by men. Its most nutritious part are the seeds, usually transformed in *soumbala*, a fermented seasoning rich in flavour, used as a stock cube. The seeds are rich in protein and *soumbala* is a renowned traditional ingredient in local cuisine; however, it is gradually disappearing because of its high price on the market in counter-season. Most industrial stock cubes are in fact easier to find and much cheaper.

Moringa (*Moringa Oleifera*), or drumstick tree, is usually known as a women's tree because it is found close to the huts. Its French vernacular name, neverdié, is an adaptation of the English terms "never die", referring to its capacity to resist absence of water, flooding, sandy and clay soils. The leaves and seeds are edible; moreover, they are naturally rich in vitamins, iron, protein and fibre and have consistent medicinal benefits (headache relief, anti-bacterial and anti-inflammatory effects, gastric ulcer protection).

Saagba, or African grape (*Lannea Microcarpa*) has edible leaves and much appreciated sugary fruits. Their use is not so systematic in the North, but widespread in the Western part of the country. The juice, high in sugar, is used to regain energy during harvest.

The gumvine (*Saba Senegalensis*) fruit is known to prevent meningitis; while this is not medically proved, gumvine fruits are indeed edible, rich in vitamin C and B6. They ripen during harvesting season and are important during those months. It produces natural latex, a rubber used by locals to repair tires, agricultural tools (hoes), make rubber bands and shoes.

The tamarind (*Tamarindus Indica*), called *pusga* in Mooré, is valued for its leaves, used at home or sold on markets to make a vinegar-like sauce for the millet. Its fruits are preserved and sold even in counter-season; they are squeezed in juices or used in the sauce. While it is known to be a women's tree, this has more to do with the magic symbolism linked to it than with the actual management of the products. For the Mossi, tamarind trees have the ability to turn into women, move at night and make people insane. For this reason it is rarely grown close to the huts.

As for the Boulkiemdé and Sanguié, the interviews being in a limited time-frame, they focused more on mechanisms of accessing land. Moreover, there wasn't a recent study that I could draw from in terms of quantifying trees. As a baseline, I used the official government monographic guide to the Boulkiemdé province²⁶.

²⁶ I obtained the guide from the local land agent of the Tenado commune. The government has started making provincial monographies available online and most of them can be found at: <http://www.inforoute-communale.gov.bf/>.

The guide assesses that, in the area, the most common trees to find are shea, African grape, African locust bean tree, several kinds of acacias, tamarind and baobab. This list has been triangulated with information from the NGOs Tree AID and iDE, specialising in producing and selling drip irrigation kits, both present in the area. This list is far from exhaustive and those trees are cited in no particular order. However, mentioning them and their symbolic, medicinal and nutritious qualities will help to link them to the broader framework of social relations and access to land, trees and livelihoods.

Chapter 4. METHODOLOGY

This study focused on eleven households. The aim was to interview every active member of the households, intended as members actively providing help for the household's livelihoods. The interviews were carried out repeatedly through a whole dry season and the beginning of the rain season to investigate their households' internal management of land and natural resources. This chapter will explain how these households were chosen and studied drawing on quantitative data but mainly using qualitative methods.

Fieldwork was supported financially and logistically by the British NGO Tree AID, which has been present in the area carrying development projects since 1994. Their mission, as stated on their website, is to alleviate poverty sustainably whilst improving the environment; more specifically, their mandate is to help villagers living in the drylands of Africa unlock the potential of trees to reduce poverty and protect the environment²⁷.

4.1. *Approach*

The purpose of this study is to explore intra-household mechanisms of accessing and managing different natural resources, their recent evolution and ultimately their role in achieving household livelihood security.

The research takes into account traditional patterns of accessing land and trees as well as new mechanisms and changes in the relationships between husband, wives and other members of the household. Ultimately, the scope is a better understanding of the socioeconomic structure of a Mossi family and patterns and processes of natural resources management that would allow policies to be shaped at a local level and focused on the household rather than on regions or areas (see policy recommendations).

Most studies regarding land law evolution in Sub-Saharan countries proved that a simple solution cannot be the codification of all traditional customs nor it can be the persistence of a confusing and complicated dualism in the field. Furthermore, the literature reviewed in chapter 2 proves that social relations at a household

²⁷ More information can be found on Tree AID's website at: <http://www.treeaid.org.uk/about-us/what-we-do/>

level have been investigated, although there is a lack of documentation regarding Burkina. The land related kinship liaisons at an intra-household level are relatively unexplored, and so are the rules that define access to trees and management of tree products, especially when unrelated to market access.

The New Household Economics authors have researched and analysed within a specific theoretical framework the intra-household resources allocation; nevertheless, they only roughly outline the issues of natural resources entitlements and management inside a household. It is necessary to stress that what the French technical papers call *la question foncière* (the land tenure, land rights and land laws issues and mechanisms) goes beyond the important, complicated yet partial view of gender analysis (Colin 2002).

The literature has a tendency to leave at its borders the intra-household dimension when it comes to land tenure security; in the process, and while a social dimension is often taken into account, there are only a few papers regarding the insecurity deriving from intra-household land-related dynamics.

The analysis of the literature and the secondary data compelled this research, looking at a micro-local level, to anchor land tenure issues to social relationships within the household. The previously acknowledged lack of success of national and regional land tenure policies to ensure security and clarify the legal situation on the matter has been attributed to lack of implementation (Naughton-Treves and Day 2012). While this is definitely true for Burkina Faso (Brasselle, Gaspart, and Platteau 2002), the motivations that have been explored in the literature review such as lack of dedicated structures, decentralisation process leading to bureaucratic disorganisation and so on are only a facet of the issue. As the analysis of conceptual livelihoods frameworks highlighted, it is necessary to connect land tenure and access to resources back to the household, identifying precise actors and their roles in contributing to their household livelihood security (Le Meur 2002).

The interview process that will be explored in the following paragraphs naturally led to the acknowledgement, confirmed by the literature, of the contribution non-timber forest products add to a household food security (Pouliot et al. 2012).

This study therefore focuses on the intra-household dimension of the land tenure and household livelihood security issues. It analyses these kinship dynamics and envisions them as a significant part of the intra-household resource management theories that lead to better livelihoods.

Therefore, the research aimed at examining different questions, revolving around three major axes, as follows.

- a. The first scope has been to define the household itself as a dynamic and changing social, economic and anthropological ensemble. Therefore, the research questioned the basic economic assumptions that see the household as an economic unit of analysis, and will try to assess whether this position is valid. Further, having defined the intra-household dynamics, the research aimed at identifying new indicators useful in the study of local economic household and family land management in the rural West African context. This first step was necessary to apprehend the social context the research was exploring. Going back to Figure 1 (p. 70) and the research design, this is a paramount element of the analytical framework – at the centre of Scoones’ elaboration as well as Ribot and Peluso’s theory of access.
- b. Having identified the main object of the research, it has then been necessary to address the subject of intra-household resource management with special attention to the complicated local land tenure and tree access systems. This was paramount for a comprehensive analysis of the combination of social and economic rights, obligations and entitlements that exist within the household. Moreover, this allowed looking at local level land and natural resource management from the household point of view. This is relevant to the study because it explores the linkages and relationships across formal, informal, legal, illegal rights and all different ways of accessing resources within this specific context. Since this thesis’ aims at deepening stakeholders and policymakers’ understanding of local dynamics regarding access to, rights over and ownership of land in view of more comprehensive and applicable reforms, this step provides crucial information.
- c. The exploration of intra-household resource management, the identification of decision-making patterns and the study of land and tree product access led to

an investigation of impact factors on household livelihoods security. Moreover, the distribution of the study on several households of several villages within the same province allowed for further analysis on land and resource management impact on social relationships at a village level.

4.2. *Research Design*

Before explaining the conceptual research framework in detail, the main concepts that emerged from the literature review will be reiterated, as determinants of the methodology choices.

The overall lack of implementation of the national land law in Burkina Faso led to working in a province (Passoré) where the latest national land reform (*Loi 0034*²⁸) has not yet been enforced. Therefore, the land tenure framework emerging from the interviews is mainly based on ethnic customs, local traditions and intra-household mechanisms of negotiations. However, because of the importance of the national legal framework, knowledge of the law, or lack thereof, has been assessed via specific interviews not only addressed to members of the households but also to land chiefs (*chefs de terre*) and village chiefs.

The literature shows how land is central to Mossi culture and social organisation; to be able to look at land from perspectives as different as possible given the small sample, the households were also purposively selected in order to include landowners, land borrowers, land chiefs, village chiefs, Christians and Muslims, woman-headed households, monogamists and polygamists and varying in size and age of the interviewees.

A comparative case study approach is appropriate to study intra-household resource management and livelihoods in rural Burkina Faso. Case study research enables to investigate certain topics or behaviour that cannot be manipulated (Yin 2014). This research tackles a question of how and why people access land and other resources, especially trees, as well as how or why relationships within a household or a village may be influenced by, or may influence this resource management process. It looks into human behaviour and needs literature review,

²⁸ The full text of the 2012 Burkinabe national land law is available at http://www.hubrural.org/IMG/pdf/Loi_034_portant_regime_foncier_en_milieu_rural.pdf

knowledge of the context as well as direct observation and systematic interviewing, as mentioned by Yin (2014). Because Yin's method can assess the influence of a variable by the effect its presence or absence cause, it was necessary to target households similar enough to allow comparisons. This study uses different households to be able to give a more complete and well-rounded answer to the "how" and "why" questions mentioned above. Bearing this in mind, the households were selected over two communes in the same province, having access to similar agro-ecological characteristics and to both agricultural plots and market gardening land closer to the local artificial dam. All the interviewees in the Passoré province were part of the same ethnic group, Mossi²⁹ or married into a Mossi family. Unusual cases such as female-headed households or socially higher ranked families were not excluded because they provided extra information on household structures, patterns of resource management and decision making, and food security. Three households were selected and interviewed in a non-Mossi Western area over two provinces (Boulkiemdé and Sanguié). This allowed to add depth and breadth to the research and to avoid generalisation. Moreover, adding details and information on different patterns allowed the thesis to argue the importance of social constructs and customs for access to and management of natural resources more widely.

Moreover, because the main concern of this thesis is to identify intra-household mechanisms of accessing and managing specific natural resources, the sample was also purposively selected to include, in the North, those households which had access to at least one of the chosen trees. As a result, all of them had access to, gathered and at least consumed and/or sold shea (fruits, nuts or processed products), baobab (leaves, fruits or processed products) or néré – locust bean (fruits, powder, seeds, fermented seeds or processed products).

This approach, based on a comparison of different case studies with similar backgrounds, allows the researcher to deduce what Lawson defines as "demi-laws" (Lawson 2005). The authors argue that demi-laws are not universal and therefore can only apply to similar societies or ecosystems (Downward 2002). It

²⁹ Burkina Faso ethnic composition has been explored in chapter 3.

needs to be stated that these case studies were not chosen to be neither average nor representative because, in fact, even extreme cases can reveal trends that are present elsewhere but embedded in other patterns so that they appear hidden. For example, only after having interviewed a woman, head of her household yet under her husband's brother's authority, did it become evident that negotiation for new agricultural land for cereal crops was only possible for a woman if her husband was living with her, even though other women in male-headed households had gone directly to the chief of land or local land owners in different conditions. Thus extreme cases are valid in themselves, and also may illustrate a process whereby norms are being changed by innovation at the margin.

This approach is meant for refining existing theories; for the purpose of this research, it will help by enlightening specific patterns through detailed observation and analysis.

4.3. Conceptual framework

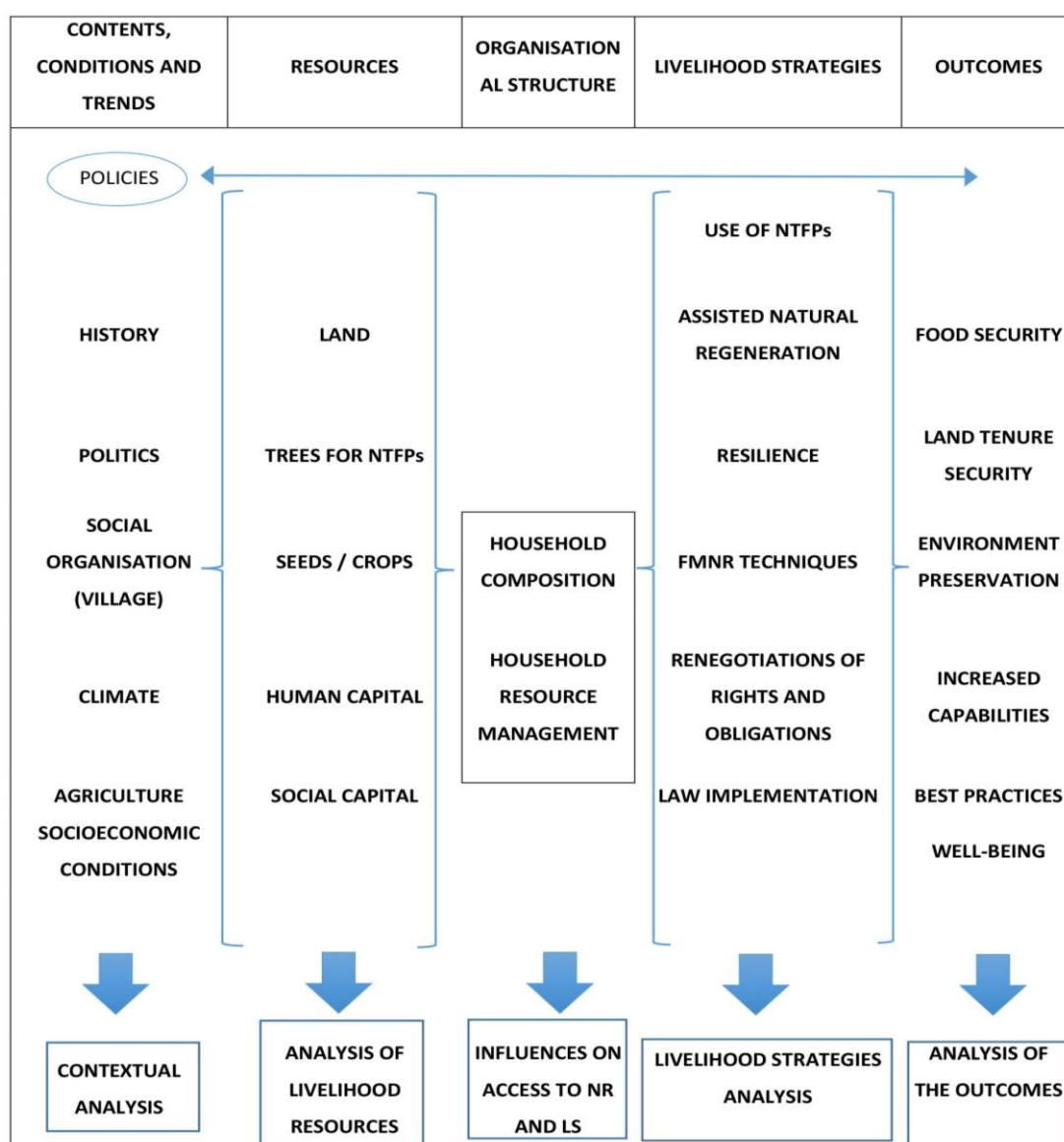


Figure 2 Research framework for analysis. Based on Scoones and own elaboration.

Drawing on the livelihoods framework, and adapting it to an intra-household research environment, Figure 1 illustrates how the research unfolded.

The figure can be read from top to bottom, in a vertical perspective, keeping in mind that the horizontal evolution is vital to the development of meaningful policies.

The contextual analysis comes first. Drawing both from the literature, other case studies and recent NGO work in the area, it informed the methodology in terms of assessing historical, political and socioeconomic context. Due to few cross-disciplinary studies and to the anthropologic more complete work dating the

70s and the 80s, the gaps in the literature were addressed in the first part of the in-depth qualitative study. This allowed me to familiarise myself with the context, build relationships with the interviewees and enrich the first column of the framework.

Several livelihood resources were identified. While the main focus was initially around the land, it appeared quickly that trees and their products were treated separately and managed by different members of the household. At the same time, on a broader scale, the social customs and traditional laws revolving around land were not the same for trees. Therefore the two resources were treated separately.

Because all the interviewees lived on agriculture, seeds and crops were targeted for their importance for the household's livelihoods, especially to highlight patterns of diet variety. Moreover, land for trees, agriculture and other uses is treated separately from both a national law and a customary law point of view.

This research aims at exploring the reshaping of relationship and emerging social patterns within the households but also to highlight criteria that can be applied inter-households. Therefore, human and social capital are paramount in small tight-knit communities that rely on the extended family and friends for help when needed.

The household is the main organisational structure in local societies and therefore the best place for this specific research to identify livelihood strategies. These strategies vary deeply but maintain similar goals and usually include attention to trees and their products, traditional and non-traditional techniques of soil conservation and enrichment as well as external factors. Those factors can be inputs from the outside (such as implementation of a specific law but also intervention from an NGO or association) or stir within the household itself (a continuous renegotiation of rights and entitlements through modification of seemingly still power relations intra- and inter-households).

Looking at livelihoods means keeping an eye on a practical outcome. The last part of the conceptual framework highlights how the analysed factors within a

specific organisational structure might affect the lives of its members and the neighbouring community.

To more immediate results such as a household's food security or land tenure and access to natural resources this study adds community-level / village-level outcomes that may include sharing best practices, increased human capital and important social capital. Policymaking is an important line of the framework that needs to be read horizontally, as a cross-cutting theme of the research. While this research is based on a small sample and does not aim at generalising results, from observation and analysis it will be possible to produce policy recommendations that might influence the outcomes throughout the levels of data collection and analysis.

4.4. Methods

a. Research questions summarized

This research aims to answer three main research questions revolving around what land tenure means in a household of rural norther Burkina Faso (1), how it impacts on people's ability to access natural resources and the household's livelihoods (2) and how land tenure and social relationships evolved over the course of the years based on related reciprocal influences (3).

What are the linkages and relationships between entitlements, rights and obligations of the actors responsible for resources management within households in rural Burkina Faso?

How do entitlements, rights and obligations of households members interact and influence their resources management and livelihoods in rural Burkina Faso?

How does customary land tenure evolve and adapt in relation to the national law?

What are the social, legal and moral entitlements to a natural resource among different categories of people within households and villages?

How do the following factors influencing entitlements, rights and obligations?

These initial research questions have been summarised in the table below, associated with the methodological components that have been chosen to answer them over the course of data collection and analysis.

Initial research questions and methodological components used to answer them. (SSI: semi-structured interviews; PO: participant observation).

Research Question	Quantitative	Qualitative
<p>What is the main framework of reference for land tenure in a northern Burkina Faso rural household?</p> <p>Sub Question 1: What is a rural Mossi household in Northern Burkina?</p>	<ul style="list-style-type: none"> • Disaggregation of data within groups of actors within the household (men/women, wives/children, boys/girls, elderly/young etc.) • Aggregation of data across the village • Survey of the members of the household, main occupations, relations, ages, ethnic group, religion • Survey of access to basic goods and infrastructures • Typology of members classed by access and management of certain assets (land, livestock, tree products) 	<ul style="list-style-type: none"> • SSI and PO of common purposes and aims • SSI and PO on routines, rights, obligations and entitlements • SSI and PO on intra- and inter-household dynamics • SSI and PO of customs, local practices and family-specific patterns of accessing land and natural resources • SSI and PO of perceptions of the household, main activities carried out together or with the same aim • SSI and participatory maps construction of the perception of spatial location of the household resources and access to basic services and infrastructures
<p>How does that impact on a Mossi household's access to natural resources, especially regarding access to trees, and livelihoods?</p>	<ul style="list-style-type: none"> • Survey of most used non-timber forest products • Survey of occurrence of non-timber forest products in family meals • Survey of use of non-timber forest products • Survey of plots of land owned / borrowed / purchased / cultivated • Disaggregation of data within the household 	<ul style="list-style-type: none"> • SSI and PO of meal routine, perception of food security, basic nutrition concepts, wild foods use and "coping" • SSI of the perception of accessing and managing land and trees
<p>How has that natural resources access framework evolved within the complex web of intra and inter households relations?</p>	/	<ul style="list-style-type: none"> • SSI, FGDs and "Life histories" type interviews to highlight changes in time

Table 1 Research Questions and methodological components used to answer them.

b. Temporal context

It is important to see this study in its temporal and spatial context. Chapter 3 analysed Burkina's historical, political and socioeconomic context; moreover, it was noted that the study was conducted in a Northern Province, where the climate is Sahelian and the main ethnic group is Mossi. This means that trends and patterns identified in social relationships within the household and throughout villages are specifically related to a Mossi context in an area of variable rainfall and crops yields. It has been already concluded that it is a risky context and therefore livelihood strategies may follow patterns that are specific to it.

Recent statistics from UN agencies (World Food Programme, Food and Agriculture Organisation etc.) have demonstrated that, at least since 2009-2010, Burkina has not gone through a famine year, with both rainfall and harvest quantities consistently within the ten-year average. A study carried in early 2012 by The World Food Programme highlights that the national gross staple production was stable in both 2009/2010 and 20120/2011, averaging between 4.000.000 and 4.500.000 tons in both years (of millet, sorghum, maize, rice and *fonio* combined). It decreased significantly in the 2011/2012 harvest, with a gross national cereal production of 3.666.405³⁰. The 2011 famine was particularly felt in risky regions, especially in the Northern provinces bordering the Sahel.

In 2013, the average national gross staple production almost hit the 5.000.000 tonnes that the government agencies had predicted, with a 33.6% increase from the previous year and 26.9% increase in average over the previous five years (PAM (WFP) and FAO 2013). This data is relevant to understand the overall situation of Burkina. However, because of the variety of eco-climatic zones throughout the country, it is not representative of all provinces or regions. Specific data will be analysed later, as it was part of baseline secondary data used to build a context to this study.

³⁰ This is the data diffused at the first session of the Comité de Prévision de la Situation Alimentaire (CPSA) that was held in February 2012 in Burkina Faso. For more details on the data and further analysis, please see the WFP Report available at <http://home.wfp.org/stellent/groups/public/documents/ena/wfp249892.pdf>.

FAO data available on Aquasat³¹ also confirms that the annual rainfall is consistent with an average of around 748 mm *per annum* since 2003. Moreover, as it has been argued, variations in total rainfall have less of an impact on crop production than unforeseen variability in timing and intensity of rains. For example, it will be analysed later that the 2014 rain season had mixed effects on the Sahelian climatic zone of Burkina. While rainfall quantities remained well in the average, the distribution of rains (some very early in the season, as early as May-June, with dry spells lasting over a month and then massive rainfall in September) compelled for a change of crops mid-season, proving yet another angle of the impact of climate change in agriculture, as well as the capacity of the population to react and adapt.

This explains why this thesis examined access to land for cereal farming (*agriculture céréalière*), to plots for garden farming (*cultivation maraîchère*) but also non-agricultural strategies such as non-timber forest product consumption. Other strategies, such as migration and engagement in wage labour, have not been studied but are livelihood strategies frequently employed by rural people in addition to the natural resources based economy which is the focus of this study. In this climatic context, none of those agricultural and non-agricultural strategies were adopted as a response to a drought or famine. Moreover, it has been argued that the Sahel is itself an area of variable rainfall and crops yields when compared to average and regional statistics. However, as it will be shown, Burkinabé farmers do not perceive it as such, as what are called “shocks” by the literature are in fact considered “normal” and expected.

Those spatial and temporal clarifications explain how this thesis distinguishes itself from other studies examining strategies following a shock (whether really unexpected or not) and from those not considering “secondary” non-agricultural strategies as an integral part of the livelihood.

³¹ Comprehensive data on trends for climate change and agriculture are available in French at http://www.fao.org/nr/water/aquastat/countries_regions/bfa/indexfra.stm.

4.5. *Sample size and study sites*

Several studies have proven the importance of intra-household social relationships in managing natural resources (Van de Walle 2006; Gittelsohn and Mookherji 1997; Browning and Chiappori 1998; Sen 1981b).

In order to shed light on such dynamics, the household was chosen as the sampling unit. Chapter 2.2 explored at length the conceptualisation of a household, usually defined as a group of people who eat the same meal, as summarized by Beaman and Dillon (2008). This was the basis for the initial quantitative data collection consisting in sampling the whole household, identifying its active members, all of whom were interviewed.

It has been noted that one understanding of a 'household' is those people who regularly share meals. It was important to also take into consideration where the consumed meal came from. This meant identifying a "consumption group" (people who eat the meal together) as well as a "production group" (the people who farm the same field that produces the basis for the eaten meal). It has been argued that the consumption group may not correspond exactly to the production group. This has been taken into account and will be analysed later.

It appears already clear that applying this definition of household was not straightforward in this research for the following reasons:

- The definition of household and an extended household, i.e. the family compound, were often overlapping and were confusing for the interviewees. Also, because of scheduling reasons, a strong sense of solidarity or particular – yet recurrent – circumstances, households may decide to merge and eat together from the head of the compound's granary. Consumption groups also vary during the agricultural cycle, with households merging (in different ways) towards the end of the dry season, when granaries run low. For similar reasons, production groups also vary depending on season, rainfall and choice of crops, with older children helping out in their mother's fields. It needs to be stated that the family common field was mandatory to farm for all active members of the household.

- In families with a high number of young children (usually more than ten), wives might decide to give the children a priority and deprive themselves of eating while still cooking on alternate schedules from their own granaries. While the sum of the cereal eaten may not vary, the people are actually eating do, therefore complicating the concept of the household. At the same time, because in a Mossi society men and their elder sons eat separately from women and younger children (Savy et al. 2005; Rohatynskyj 1988) and because most of the children aged eight to fourteen went to school and ate a meal there, the plates of the active members of a household might have had some differences, that arguably impacted on individual's protein and vitamin intake.
- While several previous studies argue that, usually, the head of the compound and / or head of the household's granary was used when the wives' granaries ran low, in exceptional circumstances and occasions (marriage, baptism, funeral, social situations), this did not seem to apply to this research sample. Patterns of staple cereal consumption therefore varied as well as groups of people eating them.

This thesis is concerned with livelihood security at a household level including food security, rather than nutrition. For this reason, minor variation in ingredients and specific issues directly linked to nutritional values were not studied.

The food focus therefore shifted towards the providers of specific meals, motivations and explanations regarding the choice of different ingredients and preoccupations and concerns regarding food security within the households.

The main sampling unit is, as mentioned, the household (in French *ménage*), as opposed to the complex household (in French *concession*). As the reviewed literature highlights, complex households are larger social units that can count up to thirty *ménages*. While the importance of the *concessions* has been previously stated, for the purpose of this research social interactions are better grasped in the restricted nuclear household (or *famille*). This thesis argues that inter-household dynamics are based on intra-households relationships; the analysis hence focuses on both household and village level relationships. The task of exploring or grasping relationships in a *concession* is a major one, that would have

entailed a different sampling strategy. It would have been particularly complicated to focus on such a large number of people without the basis that this research could have provided. Because of its importance in the Mossi culture and society, however, it could be interesting for this theme to be pursued in a further study.

In order to detect the importance of social patterns in defining a household livelihood strategy, and because of timeframe concerns, the focus was on Mossi society, the main ethnic group in the Northern area of Burkina Faso. Therefore, only Mossi households were taken into account, over six villages of the same Commune.

As a secondary group of interviewees and for a complete data, three additional households were also in a western region. The two western provinces, Boulkiemdé and Sanguié, enjoy a slightly different climate with a longer rainy season, the possibility of planting more crops, such as rice and maize, and a different ethnic group. The purpose of adding a secondary site was never to compare two areas. It was rather to have more information on specific intra-household patterns while testing the hypothesis of their strong relation to social customs and traditions.

Due to time constraints, problems in logistics and difficult access to the communities in Boulkiemdé and Sanguié, however, the depth of the interviews and therefore data quality was overall less accurate than the main sample unit. It has been included here for better understanding of the bigger national picture, where, I argue, other ethnic groups have shaped their communities on their own social rules, impacting deeply on *in loco* institutions, policy making and law making processes. Economic theory would predict that different choices are made as social position within the village and a number of family members change, as well as in relation to proximity to larger market centres, artificial lakes (*barrages*) with access to water, richer plots and overall land availability.

a. Description of the commune and villages

Six villages were chosen in total in the main study site. Three other villages were chosen in the secondary site.

The exact choice of villages was a practical and purposeful decision based on feasibility, reflecting the sites where the partner NGO, Tree AID, operated as well

as the households' availability and willingness to participate, composition and size. Appendix 2 shows maps of the provinces and communes of the chosen sites.

All the villages in the Passoré province share similar characteristics, all six of them around the Gomponsom commune. The commune comprises of 15 villages over an area of 112 square meters.

Except for Kouni, further from the main road, closer to the region's big dam (Barrage Oumarou Kanazoé), all other villages are close to the main road. All the inhabitants have access to a water pump or well within thirty minutes walking distance from their houses, all villages have a mill nearby (two hour walk for the furthest), primary and middle schools are within an hour walk and fields surround both the compounds and the villages, usually divided between household fields and rural fields (further away).

Three of the villages (Kounkané, Lablango, and Zambélé) have between 7-900 habitants. Gomponsom (*chef-lieu*) and Tinkoaglega have a little more than 1000 while Kouni has more than 2000 habitants.

Selected villages data					
	Administrative name	Province	Region	Chef-lieu (urban town)	Population (total)
GOMPONSOM	Commune rurale et chef-lieu de département	Passoré	Nord	Yako (chef-lieu de province)	18268 in 2006 for the fifteen villages' area.
KOUNI	Village	Passoré	Nord	Yako (chef-lieu de province)	2000 hab. *
TINKOAGLEGA	Village	Passoré	Nord	Yako (chef-lieu	1000 hab. *

				de province)	
KOUNKANE		Passoré	Nord	Yako (chef-lieu de province)	700 hab. *
LABLANGO		Passoré	Nord	Yako (chef-lieu de province)	900 hab. *
ZAMBELE		Passoré	Nord	Yako (chef-lieu de province)	800 hab. *

Table 2 Sampling: selected villages.

It is important to note that there are no official data at the rural village level in terms of population. The * in the table indicate that the data was obtained by asking the facilitator and local government representatives. However, it appeared to be based on personal estimates and localised knowledge of the area rather than on an official census. While the final report from the 2006 census was published in 2008, it does not provide data at the village level. These numbers have been cross-checked against data from Tree AID previous unpublished surveys and conversations with staff and seem to be accurate. It is important to keep in mind that they are averages and not actual figures. For the province, these six villages are middle to large-sized, where in-depth and long-term action has been carried out by several NGOs over the course of the last twenty years. Most of the NGOs interventions resulted in the villages having access to one or more basic services.

For the secondary site, three households were selected in three villages: Koulkouldy of Tenado commune, Goundy, in the Réo commune and Koudougou (chef-lieu). Maps of these provinces and communes can be found in Appendix 5.

While they are physically in two different provinces they are part of the same zone and region share the same culture. The area is dominated by the Lyelé branch of the Gurunsi ethnic group. All the interviewees spoke French and the interviews were carried out directly.

b. Choice and selection of the households

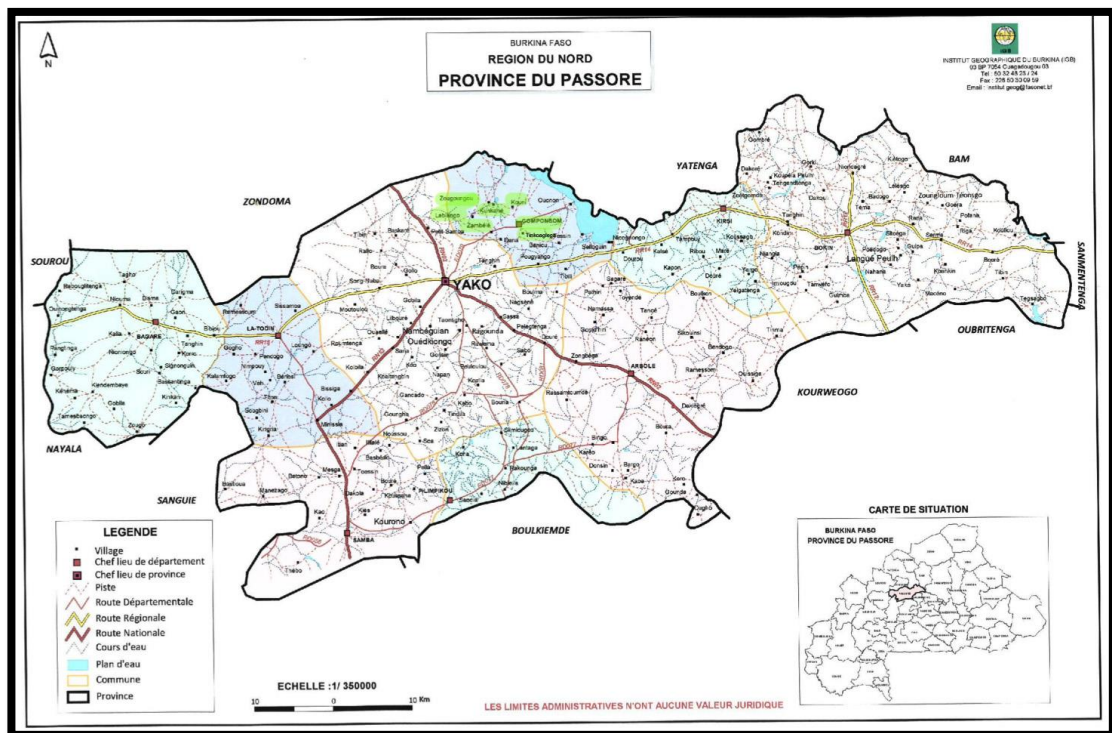


Figure 3 Map of the Passoré province. Institut Géographique Burkinabé.

Within each village of the Passoré province, one household was chosen, except for Lablango, where two different households were interviewed for their specific characteristics (one for religious affiliation and one for being a female-headed household with a living husband).

People's access to basic services was determined through a participatory maps exercise (see Appendix 4). Everyone was able to identify key spaces and draw a broad map of the area around his or her households. This provided additional information on space perception, needs and services, and became a learning and bonding experience that allowed the researcher to better relate to the communities.

The analytical chapters will analyse the differences, similarities and mechanisms of intra-household resource management, particularly as it pertains to land and the selected trees (baobab, shea and néré). The main characteristics, members and resources of each household have been summarised in Appendix 1 for Passoré and Appendix 2 for Boulkiemdé and Sanguié (the secondary site). It is worth mentioning here some details that further support and justify the selection of these households.

Households T1 and G1 are both Muslim polygamous land-owning families. They are located in different villages, but only one has direct access to the main road. The analysis will focus on the differences between resources, internal relationships, roles and responsibilities and personal interests and personalities. They were chosen for this study as they mirror two kinds of Mossi households. T1 is highly valued at the village level and broader area; in fact, TW1 the first wife comes from a lineage of neighbourhood and land chiefs. G1 is respected for different reasons; the head of household is a former combatant and the overall average age is higher. It offers a different perspective of intra-household relationships across generations including daughters-in-law and older unmarried sons. Moreover, the presence of a handicapped person proved to be extremely useful (for details see Appendix 1).

Household L1 is also a land-owning lineage, known and respected at the village level and beyond. It is a Christian household, which makes intra and inter households' dynamics interesting to observe and analyse. This also means that the household is monogamous; moreover, in this particular family, head of household, wife, sons and daughter-in-law proved to be literate and fluent French speakers. This had an impact on the quality of the collected data and the relationship with the family. LaW1, the wife, also had a prominent role at the village and commune levels as she was part of several women's groups, a savings and credits association and acted as spokesperson in a lot of meetings at the village level despite not having a formal role.

Households K1 and L2 are women-headed households. However, they are inherently different from each other and both interesting cases. K1 sees a widow-headed family with young children that do not help with the agricultural work. It

is definitely considered an extreme case and the collected information is particularly useful to illustrate inter-household relationships and resource management when in particular situations. The context itself is actually proof towards our original hypothesis that land tenure is a social matter in Mossi Northern rural Burkina Faso.

Household L2 has a different background story. Originally, I was led to believe that the head of household was the interviewed woman, whose husband was living abroad in Ivory Coast for work, sending regular remittances. Deeper conversations, however, showed that the woman in fact lived with her husband's brother cowives. Despite caring for her children separately, it was considered as one household. This situation allowed to deepen the exploration and analysis of intra-household relationships adding a layer to the complexity. It also gave more breadth to the analysis of access and use of resources, especially land and trees.

Household Z1 is a Muslim monogamous household. They described themselves as lineage owners but had to borrow land from other lineages as well to be able to feed the family. Differences could be observed between management and access of the two kinds of plots. Moreover, the head of household could never be interviewed as he had a job at the Commune, his wife also worked at the school canteen. This diversification was analysed because of its impact on the household's livelihoods. The family also live in a big compound with several other households of relatives. While a separation in resource management was clear from the start, the earned income of the husband and wife had a broader impact on the compound. This offered an interesting perspective of both intra and inter household relationships.

The last household of the primary site offers another distinct case. Household Ko1 is the household of the village chief. This automatically means the head of household has an important role at the village level and beyond. Moreover, the household is by far the biggest of the selected and dynamics between the eleven co wives offered a different perspective on internal resource management. Geographically, its location closer to the artificial dam opened for the possibility of constant garden farming that follows a different tenure than arable land. Finally, the age difference between the wives, the different levels of literacy and

their number made for a lot of extremely useful data on women's resource management within and outside the household, including the relationship with the head of household.

In the secondary site, the selection was purposeful and targeted households with French-speaking members to comply with logistic and organisational constraints. An effort was made, through cross-checking with iDE staff based in the area, to select households with different backgrounds (religiously, culturally or economically).

Households S1 and GR1 are land owning lineages that also negotiated other plots with other lineages to be able to provide for their families. The main difference was the involvement of the wives and this has been used as an insight on intra-household relationships. As it will be discussed later, both households are familiar with formal division of plots and the ancestors' land as a means to avoid conflict. However, S1 is a monogamous household where two brothers farm the same fields and along with their two wives eat from the same pan at night. Both were interviewed and the dynamics between them added a layer to the complexity of intra-household social tissue. GR1 is a polygamous household but the wives could not be interviewed.

Finally, Koudougou's household is different from all of the above. The literate head of household used to work for the National Administration and is now a retired senior citizen. However, despite living in a bigger town, he's negotiated access to his ancestors' land and has kept farming it on the side in his free time, helped by his sons, wives and daughters-in-law. The other distinguishing factor is the economic and practical possibility this household has of investing in land and of following appropriate legal procedures to obtain titling.

Overall, the sampled households in the first site represent the variety of the Mossi ethnic group in the North of Burkina Faso. In the South, they offer a perspective on social organisation and dynamics of a different ethnic group and provide useful data to further prove the hypotheses.

4.6. *Survey design and data collection*

Twelve months total were spent in Burkina Faso between September 2013 and March 2015. This included three months of planning, piloting and baselining, eight months of quantitative and qualitative active data collection and one month of data verification in 2015. Feedback on study design and results was a continuous process from a constantly growing network of local colleagues. Final feedback and data validation were obtained during the month of focus groups and reporting and validation workshops in March 2015. While the repeated visits to the field and exchanges with interpreters helped in terms of picking up the local language, a facilitator whose main language was Mooré was nonetheless necessary for the main field site.

The facilitator was chosen during the first three months of planning, had previously worked as interpreter and *animateur* for Tree AID and was a resident of the local study site. His knowledge of the area and the familiarity with the studied households and villages greatly facilitated contact and establishment of a good trusting relationship with the interviewees.

In the western provinces, the baseline data was collected by a facilitator, working with the local NGO iDE and based in the area. The same criteria applied and similar conditions were established. However, for the in-depth qualitative data, interviews were conducted in French, targeting French-speaking households in order to be able to carry out the work without intermediaries and for time restrictions. In households where older members did not speak French, younger literate members translated for their relatives. Targeting French-speaking families introduced a bias to this study as well minimising another one. While the bias has been acknowledged, time and resource constraints made it impossible for the researcher to handle it in any other way. Moreover, given limited time in the area, speaking directly in French shortened the time required to put in place a relationship with the interviewees. The language bias was eliminated, making the interviews more straightforward. The difference in data quality has been acknowledged in this thesis. Despite the bias, taken into account at both data collection and data analysis stages, it felt important to include the results in the

study. They deepen the understanding and allow to argue even more precisely towards the importance of the local context and its interactions with wider social values when analysing shifts in land access, management and ownership in the Sub Saharan context.

Both facilitators were respected in the community and able to put me in contact with local traditional chiefs (village chiefs, land chiefs, *chefs de canton*, mayors, representatives of the Comité Villageois de Développement) and *in loco* experts working for established NGOs or associations.

After assessing and adjusting the baseline data, a so-called deep dive approach was deliberately applied to the research, including decisions in the frequency of discussion, the necessity of focus groups and distinct and separate interviews with different members of the household. Dietary surveys were introduced to cover a few weeks in the crucial *soudure* season. The *soudure* is considered as starting when the previous year harvest is about to finish and the new season has not started yet, resulting in it being the period of major work in the field and at the same time characterised by the lowest availability of food resources. Moreover, it coincides with the period of main availability of non-timber forest products of various types. An ethnographic approach was chosen, resulting in a small sample to enable depth of understanding and improve data quality.

I was based in the capital, Ouagadougou, but drove almost every week to the Passoré site to spend 3 to 4 days based in Yako, the chef-lieu de province, driving to the villages during the day. The last 4 visits were followed by a visit to the western province. For those visits, I was based in Yako first and then drove to Koudougou. During the day I was able to drive to different villages over two provinces either by car or on the facilitator's motorbike.

a. Baseline quantitative data

The main source of quantitative primary data was a survey designed as part of the FAO project on access to local markets for non-timber forest products. Having designed and tested the questionnaire personally, I was able to have it provide socio-economic information including lists of household members and their

relationship to household and village members, demographics, ethnic group information and access to assets.

This questionnaire, due to the specificity of the FAO project, only targeted women. However, questions were included to explore asset holdings within the household, quantifying them separately for each active member. Several indicators were used, such as:

- **Land** ownership (men/ boys) and rights over land (women/ girls)
- **Livestock** ownership and management
- **Tree** access, **tree products** access and management
- **Finance** as in income and expenditure streams
- **Education** level
- **Access to social capital**, consisting in identifying lineages and power relationships within households by enquiring if the interviewees were original settlers or migrants.
- **Food reserves** were considered but not specifically quantified. Wild foods and crops were taken into account for diet diversity analysis.

In addition to those, the questionnaire focused on differentiating ownership and usufruct rights over an asset (livestock buyer / livestock carer, for example). However, quantitative approach for this information resulted in overall poor data quality. This aspect was deepened by qualitative semi-structured interviews.

This baseline questionnaire was administered by a facilitator affiliated with Tree AID working on the project. However, I was able to program several trips to the field to accompany the facilitator, reassess the questionnaire's validity and ensure that aims and goals were met. There is a bias when collecting data under a specific NGO / international organisation umbrella, and it needs to be acknowledged here. It is important, however, to stress that similar topics were then explored in the qualitative part of the study, during which I had the opportunity to explain my position as a researcher and PhD student. It is also important to note here that quantitative data collection provided the opportunity to have around 200 questionnaires administered by myself and the facilitators. It would not have been possible to reach this kind of breadth otherwise. Moreover,

the quantitative data has been analysed within the specific context of this study, making it a first step of a two-step process where quantitative data analysis provided important information to be deepened by further qualitative data collection.

In order to capture diet diversity and decision-making processes about nutrition as well as possible variation in food acquisition strategies, a survey targeting women was administered addressing those issues. Over a month, in the *soudure* period of the dry season, it was completed twice to enable a comparison. In this “cooking and food questionnaire” each adult woman quantified in detail what she had cooked, and for whom, over the course of a week. Each adult man was later asked to quantify what he had eaten and who had prepared the meals in order to highlight patterns of decision-making. Men and women were interviewed separately, with the goal to interview each adult who had a personal food reserve. However, in many households, continuous collaboration and dialogue between wives and sometimes involving daughters and daughters-in-law resulted in small focus group discussions with all or some of the women being interviewed together. It proved to be an efficient method to improve data quality and deepen the study.

All active members of the households were involved, considering them as adults with no particular attention to their age, but focusing on their role within the household. Some of the elderly were excluded as they were no longer active in any way, being either physically immobile or partially or fully blind.

Unmarried boys and girls were included, although sometimes aged 12-16, as 16 is the average age for marriage. While their role within the household increases greatly after they get married, their income and contribution to meals and the household’s livelihoods have been considered as important. Moreover, because younger generations were more likely to speak French, carrying out those interviews without an interpreter allowed for data quality control and more depth.

One field assistant who had previously worked with Tree AID was employed in the northern site to interpret and facilitate the administration of the questionnaire. However, I was always present. I organised the work in order to be able to discuss first hand with the facilitator prior to going to the villages. The

facilitator was familiar with both the interviewees and the topics that helped considerably the relationship building process. Even though the assistant was male, his knowledge of the area and of the households contributed significantly to improved data quality. Because he wasn't a woman, women talked to him freely without fear of gossip. Because he was well-known for his job, the men allowed him to talk to the women without hesitation.

Maintaining the same assistant throughout the study contributed to building a relationship of trust with the families and a better understanding of the themes, aims and goals of the survey. The same research assistant was able to attend and facilitate the workshops administered a year after the main work had been carried out.

b. Qualitative data

In addition to these quantitative surveys, qualitative methods were used to highlight patterns of decision-making within the households.

Semi-structured interviews and focus groups were the main tools used and conducted on a variety of topics (interview guides available in Appendix 3). Longhurst defines semi-structured interviews as verbal exchanges between the interviewee and the interviewer, the latter having an outline of the questions but the willingness to follow the conversation rather than predetermined questions, to see how and where it unfolds (Clifford, French, and Valentine 2010, 103 chap. 8).

Baseline questionnaires gave me the capacity to formulate the semi-structured interviews (thereafter SSI) around a scenario with follow-up questions to understand the reasoning and social patterns behind given answers. The interview questions were discussed with the facilitator in French and reassessed by his knowledge of the area. I administered them in French, with the facilitator translating them into Mooré. Basic Mooré skills picked up during fieldwork helped to create a trust relationship with the families but did not suffice to interview them directly.

The scenarios were revolving around main topics, as follows:

- **January – February 2014** Deepening the demographic information on the selected households (age, ethnic group, marital status, number of co-wives, number of children, literacy, household composition, extended household composition) and access, use, consumption and sale of selected tree food products (baobab, shea, néré – locust bean tree).
- **January 2014 and June 2014** Community drawn maps were used as a bonding process at first as it allowed me to interact directly with the interviewees with the main aim of assessing access to basic services and geographical landmarks of each village. In June, the second round of maps were drawn with the interviewees, giving useful information on the position and internal organisation of their ménages and concessions, huts and granaries, stables, including a guided tour of all areas (documented by photographs). Fields and land plots were also visited and roughly mapped to verify measurements and to understand patterns of land attribution.
- **March 2014** Ethnographic interviews and SSI in order to explore the so-called "historique foncier" (land family history). This included how the land for the house and the fields for agriculture and other purposes were obtained, when, by whom, by what methods, how much land, how it is split between family members who can cultivate it, how this division is made, by whom, who manages what land, changes in cultivated fields, level of land tenure security, customary processes of securitization, general knowledge of the national land law and so on.
- **April 2014** Household resource management and decision-making patterns. Including but not limited to who cultivates what in what field/plot of land, decision-making processes regarding crops and agricultural techniques, field management, tree plantation or replantation, level of individual tenure security within the household, rights, obligations and entitlements of each active family member over the field he/she cultivates, relationship with land owners, customary

resolution of conflicts over land, management of irrigated perimeters. April being a month of the dry season with very few social events or obligations, it was the most intense month of research fieldwork. Therefore, I was also able to investigate daily routines, social obligations, rights, use, decision-making ability and restrictions on household management (as in: land for agriculture, for livestock, irrigated perimeters, water management, food management, and what society expects from each active member of the household. This also included focus groups with all the wives in polygamous households.)

- **April/May 2014** Household food patterns. The baseline surveys mentioned above were followed by focus groups between women of the same household to better understand meals and nutrition decision-making dynamics such as how many meals are eaten a day, who cooks, from what granary the cereals come, what is bought, what is produced, what is exchanged, who decides what is cooked, how many people eat in each complex household, when, where and with whom people eat, decision-making regarding quantities and dietary diversity, impact of holidays and common meals.
- **June 2014** Focus groups between men/boys and women/girls to address data gaps in changes between dry and rain season, the importance of irrigated perimeters in nutrition habits, general knowledge of nutritional contents, use of local NTFPs, dietary diversity. Participatory maps exercises were done during this time to confirm the diversity of the selected households in terms of access to mills, roads, wells, schools and distance from the fields. Moreover, to maintain a focus on land, soils, agriculture and other uses of land were explored with men and women, separately (soil productivity, soil regeneration techniques, rights obligations entitlements on soil and its implications, relationships with land owner, decision-making ability of the interviewee, interviewee's ability to invest in the land, to plant/replant trees, social, moral, cultural implications...).

- **July 2014** The pending rain season meant that the interviewees had to sow and attend social events resulting in very few days spent in the field for that month. It was therefore dedicated to interviewing customary chiefs (*chefs de village, chefs de terre, chefs de canton*) to deepen the information on inter-household dynamics, on their roles, on conflict over land and plots, relationship with state authorities at different levels, customary laws on land and trees, knowledge of land titling and *Loi 0034*, relationships between new settlers and migrants, possible issues between farmers and herders, land tenure security concepts, the role of women in land tenure and overall inheritance matters. The main goal was to deepen knowledge regarding propensity to securitize land via customary measures; via national land law (titling) and overall methods of conflict prevention or regulation over land and trees.

c. *Secondary data*

In addition to the collected data, a variety of contextual secondary data were used to verify data quality and representativeness. The main sources of secondary data were:

- Annual agricultural production statistics per province were obtained from the Ministry of Agriculture;
- Tree AID reports on access to wild foods and NTFPs as income-generating activities catalysts;
- Action Contre la Faim reports on nutrition, malnutrition and diet variety; Ministry of Water and Forests report on specific tree species and their uses;
- iDE reports on impact of new irrigation techniques in the land titling process;
- PDRD data on Passoré land conflicts and land conflict prevention methods;
- GRET studies and report on the implementation of the *Loi 0034* in several communes.

Secondary data was checked for missing points or unrealistic outliers. Continuous feedback from Tree AID and iDE staff allowed for double-checking data quality for both primary and secondary data.

4.7. Data analysis

Quantitative data from the baseline survey was entered and analysed in SPSS (IBM 2013). Because of the nature of the data themselves, group comparisons and regressions were computed using Version 22 of the SPSS software to extract meaningful statistics. Data, also mainly quantitative, collected from the cooking questionnaire, was entered and coded in Microsoft Excel.

Semi-structured interviews, focus groups and general observations, remarks and main quotes during fieldwork were audio-recorded. The translation process happening during the interview allowed me to take copious notes both by hand and on a tablet (in French). A full transcription was judged unnecessary; however, the data were classed by date and by household (as well as by interviewee per household) and copied in Microsoft Word tables while listening to the recordings for missing data and a complete set of notes. All quotes cited were anonymised and identified using a system explained in Appendixes 1 and 2.

The core of the collected data, including interviews, general discussions and remarks were analysed using qualitative data analysis. Because the material was vast, unstructured and unwieldy, definition, categorisation, theorisation, explanation and exploration were necessary tools of the analysis, as stated by Huberman and Miles (2002). The process will be broken down in the following sections. However, it followed various steps, starting from a definition of the concepts (such as households, villages, livelihoods, active members and so on), categorising according to different natures of the phenomena needing exploration (such as different kinds of land access, different types of rights, obligations and entitlements, different uses of resources and so on), finding association that fit into the conceptual framework and allow to understand outcomes, or livelihood strategies improvements.

a. Determining land access

Examining how people acquired ownership, access to and rights over land were used as a basis for understanding the underlying social constraints reflected in the construction of livelihood strategies. Livelihood strategies were broadly defined as a strategy to ensure food security and well-being of the household.

This methodology reflects the aim of the thesis to investigate intra-household resource management and household tenure security as social constructs aimed at better livelihoods rather than looking at land availability, distribution and specific uses.

Personal histories and ethnographic methods were used to understand the overall institutions governing a household's rights over arable land. These interviews were mainly carried out targeting men, heads of households and older men with knowledge of previous generations' settlements. The interviewers' notes were coded into four main categories:

- **Lineage ownership (original settlers)**
- **Migrants (latecomers)**
- **Family land (long-term loan from the main lineage)**
- **Unstable loan (short-term or non-secure)**

This categorisation has been validated by the facilitator, Tree AID staff in Ouaga and the interviewees.

However, overall land access was not the main goal of the thesis while rights over land and security of those rights are the most important data. They were determined by two combined methods. A "daily routine" interview was administered to all the active members of the household separately to assess their roles and responsibilities. The aim of this interview was also to understand what was expected from each of them both from other members of the household and more broadly from the society (community/village level).

To validate data and dig deeper in the household decision-making processes and structure, focus group discussions were held around the same topics. The groups were identified thematically using data from the daily routines. Women and men were usually interviewed together and separately from one another.

Moreover, in polygamous households, some of the wives were grouped with daughters or daughters-in-law according to their meal preparation duties. Younger children (usually aged 10/14) were also grouped according to their school's schedule and the tree products they gathered, sold or provided to the household. Chiefs of households were interviewed separately a second time with a more narrative, open-ended approach to be able to let the interviewees highlight recurring or more important themes. This helped the disaggregation of the total data according to the categories identified. These interviews were coded in two different ways.

Categories of actors handling similar chores and sporting similar rights over land and resources were identified:

- **Wives**
- **Wives and older daughters (15+, unmarried)**
- **Wives and daughters-in-law**
- **Women of the household**
- **Children (10-16)**
- **Boys (12-18)**
- **Girls (10-18)**

Secondly, the main types of resources were recorded and highlighted:

- **Cereal (agricultural land)**
- **Cash crops (mixed)**
- **Garden farming (*marai*chage)**
- **Trees (mixed)**
- **Water (*forage*)**
- **Wood (as the main source of fuel)**
- **Other income-generating activities**

This was particularly useful in identifying the most important resources that might cause conflict, negotiation or change in household decision-making patterns. Moreover, it highlighted the role of trees and helped identified specific contributions of some tree products to livelihoods.

b. Role of trees

The quantitative baseline data highlighted the importance of non-timber forest products during the *soudure* period that coincides when the granaries are at their lowest and the new harvest is awaited. It is at the same time the period when nutrition is most needed as it is the core of the sowing but also when food is most lacking. However, the role of trees was not, for this research, considered as more important than other sources of meals or nutrition. It was identified as vital and not to be underestimated in the analysis of livelihood strategies and therefore taken into consideration and categorised as a factor just like access to agricultural land. However, it was acknowledged and recognised as one source of nutrition intake and revealed to be a good part of the daily meals routines.

For the same reason, tree products were categorised close to cash crops or cereal, considered a choice in a particular livelihood strategy. Moreover, they were vital in analysing the detail of a household's socioeconomic structure. Information on how many and how different members of a household are involved in collecting, transforming, using, selling or replanting trees and their products added specificity to each strategy employed. As such, it was treated as another variable arguably influencing a particular livelihood strategy, close to overall wealth, access to basic services, proximity to agricultural land or forest and so on.

The role of trees has also been considered as a possible mirror of other influences. This thesis argues that households and their livelihood strategies are constantly changing and evolving because of internal factors but also in response to changing markets, policies, wider social shifts, cultural influences, and migration. Shifts in interest from both the stakeholders and the policy-makers in forest goods and services will often be impelled wider change.

Particular attention has been given to access to trees through a gender lens. Differential resource use by certain groups has been thoroughly documented by a number of studies³². There can be significant gender differences on the valuing of the tree, rights over the wood or non-timber forest products, the use and the

³² For example, a case-study on tree foods has been carried out in Eastern Tanzania by Luoga et al. (2000).

overall knowledge of trees. As already argued by Quisumbing (2001), men's and women's knowledge of trees may be divided according to species, product uses as well as social restrictions, customs and cultural taboos. The research argues here that while their domains of interest and expertise may be different, men and women both acquire, widen and pass on knowledge important to the overall household and community-level strategies. In this sense, the role of trees has been used as a way to identify gender-specific patterns within household livelihood strategies.

Finally, this thesis aims at arguing that access to specific trees and their products has to be considered as separate from broad access to land, as the aforementioned literature seems to suggest. Patterns of customary laws, shifts in rights and obligations, re-negotiation of entitlements and overall change has been analysed as a social construct both different from land tenure and independent from it, even though the multiple links between the two were obvious and acknowledged.

c. Examining resource management and livelihood strategies

The baseline for analysing livelihood strategies comes from the Household Economy Approach as defined by Boudreau (RHVP, FEG, Save TheChildren 2008).

The households were first selected in villages with similar livelihood zones, dominated by agricultural activities with livestock kept as a buffer or source of income. Moreover, the communes were affected by similar levels of policy and national law implementation. Adding to the socioeconomic context, the same chief seemed to have traditional power over the whole area, the mayor of Gomponsom. Consequently, households across the area had a similar level of risk exposure that allowed comparison of arguably different livelihood strategies. Otherwise, specific shocks, risks or disasters could have impacted deeply on the households' capacity to shape their livelihood constructions.

Several factors allowed classification of households in categories according to their size, overall wellbeing, religion (as an important factor in agricultural practices and livestock choices) and polygamy or monogamy (as it changed deeply

the dynamics of intra-household resource management and decision-making patterns.

The comparison therefore happened between one Christian monogamous household, two high-placed lineages compounds, one chief of village's family, two women-headed households (one widow and one where the husband was away) and one Muslim monogamous household with higher levels of literacy and head of household being a government representative.

The proximity of the villages and the overall similarities of the context allowed for deep comparison specifically focused on each household's capacity to transform their assets into livelihood strategies with different degrees of efficiency, longevity and sustainability. Key findings will be presented in chapter 6.

To complete this analysis, different ways to access land as well as the presence or absence of specific socioeconomic and cultural factors was taken into account in the coding of the interviews.

All the household's activities have been considered, as mentioned by the active members. During the analysis, all the activities have been considered as equally contributing to the creation of a livelihood strategy. Particular attention has been given to strategies for food security. Because of their specificity, they have been analysed thoroughly separately to highlight patterns of decision-making regarding meals and to further explore cereal and non-cereal contribution to the household food security.

To highlight the overall outcome of better livelihoods, the activities have been considered a means to an end. Thus, the focus of the analysis has shifted towards everyone's rights, obligations and entitlements within the household. Moreover, an effort has been made to identify the main aims and goals of active members. While the hypothesis assumed that all the actors within a household work together for the goal of a better livelihood, this seemed simplistic and has been tested thoroughly in the field.

It was rapidly highlighted by the interviews that the household is a complex structure, confirming what the literature argued. This led the analysis of daily routines and goals to be focused on the negotiation and re-negotiation of each member's rights and obligations, trying to map power relations and highlight

decision-making patterns identified as new or changing when compared to the literature review or input from local experts.

As mentioned, access land within a household was also analysed according to presence or absence of specific factors such as scarce land security or difficulty to access specific land. Moreover, this data has been disaggregated according to the original lineage of the family and the village land situation. This was to highlight other factors that might impact the household's capacities to transform assets into livelihood strategies.

The literature analysed in chapter 2 argues that resource management is a social construct. This hypothesis has been maintained throughout the research, testing constantly the variables of the construct (aforementioned rights, obligations, specific power over resources, negotiations, etc.) against reality.

To analyse the lists generated by the communities, Russell's pairwise ranking advice was adopted (1997). Two main lists were created, one concerning factors of land tenure insecurity (short and long term) and another one of NTFPs accessed, used, consumed and sold. This method involves comparing each item ranked in a systematic way. For example, for this research, five main trees were identified by the wives of household#1; the results led to the construction of the following table.

For each identified NTFP the facilitator and I asked if they were more important than another product. For example, as per the following table, baobab leaves were more important than shea. Néré was judged more important than shea as well as than the African grape collection, and so on. I was then able to rank them to see which product was the most important contributor to the household's meals.

NTFP	NTFP number					Score	Rank
	1	2	3	4	5		
1. Baobab leaves		1	1	1	1	4	1
2. Shea nuts for butter			3	2	2	2	3
3. Néré for <i>soumbala</i>				3	3	3	2
4. African grape (fruit)					5	1	4
5. Liane Saba (fruit)						0	5

Table 3 Pairwise ranking of cited non-timber forest products. Household #1 Tinkoaglega. June 2014.

The characteristics of livelihood strategies were analysed by trying to identify the strategy as resilient to shocks and climate extremes. As argued in the literature, definitions of resilience are numerous and frameworks abundant. For this research, because of the specifics of the West African climate, Béné and his colleagues' definition (Béné et al. 2012) seemed the most appropriate. By asking simple questions to the interviewees during the first round of data validation, the strategies were categorised as follows:

- Able to cope with a shock (short-term, in Béné's framework: absorptive)
- Able to adapt to a shock (medium to long term, as an incremental adjustment of the household, adaptive capacity)
- Able to transform to avoid further similar shocks (long term response, transformative capacity).

Findings and policy recommendations based on that categorisation and its analysis will be presented in Chapter 9. In the following Chapters, while presenting the results, limitations of the study will be discussed. While the chosen approach combined quantitative and qualitative methods, the qualitative data is deeper, more complete and more important in the analysis than the quantitative, that principally gave the data collection its baseline.

However, this research argues that because the goal is to highlight patterns of decision-making and livelihood strategies of resource management, deeply rooted

in a specific context, the social aspect is more important for the aim of the research than quantifications.

4.8. *Data quality assessment*

As previously described, efforts were made to ensure and improve data quality throughout the data collection phase. By discussing themes of the interviews beforehand with the facilitator, key concepts were reiterated when needed and fully disclosed from every angle. Data were continuously re-read from week to week. Whenever inconsistencies were revealed between responses in the same household, the nature of the issue was discussed with the field assistant first and then brought up to be further explored with the interviewees if deemed reasonable.

As argued by Kevane, *a woman's field is made at night* (1999 p.1). This entails not only a more nuanced understanding of resource managing patterns within a household, but also underlines how vital it is, especially in Burkina Faso, to observe and analyse the unspoken.

By using both quantitative and qualitative methods of data collection and analysis, a first triangulation was ensured. Discussions with the research assistant was the main source of validation maintained throughout the process. Casual discussions with different people (NGO representatives, high school teachers, drivers, coffee shop owners, bakers, etc.) at cafés and local *maquis* were used as alternative theoretical backgrounds to analyse findings.

While the study was mainly carried out during the dry season, to avoid what Chambers has defined “convenience sampling” (Chambers 1994), particular attention was dedicated to mentioning previous harvests, following rain seasons, forecasts and temporal shifts to allow more context. Secondary data allowed for comparison with long-term trends.

Vulnerable, shy, quiet or marginalised people that contributed to the household's livelihoods were always given a voice by explicitly asking for their point of view. On particular topics, when it was noted that certain individuals were not comfortable talking openly in front of others, the discussion was continued individually, when possible (see example below).

Quote *Wife #3 is always quiet. I think starting next week I will have to talk about meal preparation separately with each wife. Inoussa [the field assistant] says it will not be a problem as they are the first ones to define their different roles. (Personal observation, Tinkoaglega, April 2014).*

Quote *Wife #3 has such an interesting point of view in negotiating her rights. Should have done separate interviews sooner! Will spend more time there next week! (Personal observation, Tinkoaglega, April 2014).*

Particular attention was dedicated to the exploration of abstract concepts such as well-being or entitlements, carefully translated into the local context and asked only when the facilitator was fully comfortable with them. Local input was included in the design of all surveys and semi-structured interviews.

Two field days were specifically left for visiting the households and compounds as well as the surrounding fields. This allowed for further triangulation of measurement of land plots and measuring distances (between fields, between households, between basic services). Moreover, data quality improved massively after those visits, as the facilitator waited outside and I was the only one allowed inside all huts and the trust relationship grew. Before presenting preliminary results, they were checked against notes and pictures from those visits and questions were asked again and specified. An inductive approach dominated my data collection, with adjustments being constantly made to best ensure data quality. Overall, as previously mentioned, to avoid misinterpretation or misrepresentation, all data were validated by the interviewees first, by the facilitator and by continuous informal and formal discussions with Tree AID staff as well as other key informants well-informed of the local context and sector.

4.9. Ethics

Significant ethical considerations were kept in mind during the data collection, entry, analysis and writing up of the thesis. During the first visits, time was allocated to clearly state the aim of the task, my position as a researcher, my affiliations in-country and overseas and to clarify that it was not part of a cooperation project.

To avoid embarrassment, written consent forms were judged unnecessary; permission was given orally by the interviewees to both the facilitator and me. Moreover, it was stated at the beginning of each interview that everyone was free to withdraw from the study or refuse to answer specific questions at any point. I tried to always keep an open dialogue with my research assistant, well-known in the area, and followed his logistical, monetary and behavioural suggestions. In-kind compensation was provided for time spent answering questionnaires. The compensation coincided with the peak of the dry season and goods were identified by the study itself as being more important than other forms (goods included cooking oil, rice and local *soumbala* for the women, cola nuts for the head of households and elders, pens and sweets for the children).

The interviewees were familiar with Tree AID and knew the research assistant and thus also had the possibility to make comments or complaints through him. Sometimes, to the assistant's request, our driver, a stranger to the area, was also interviewed to increase the credibility of the research to the interviewee's eyes.

Anonymity was respected where verbally requested; specifics of individuals or focus group interviews were never discussed with other households or family members to maintain confidentiality and avoid stirring conflict. When interviewing children (less than 15 years old), specific attention was made to ensure that the parents or guardians were aware of interviews and allowed to sit in if they wished to. Moreover, because an interpreter was needed, I was never alone with vulnerable people such as children or women.

Even though it was made clear that some interviews had to take place separately, I followed the field assistant's advice and carried on joint interviews when it was not possible. Although every effort was made to create a trusting relationship with the families, some individuals were less eager to participate than others. Cross-checking data occasionally revealed consistent lies (especially regarding quantities harvested, collected, used or sold). Moreover, casual encounters with the interviewees in places different than their households allowed to identify gaps or unsaid truths (see example below).

Quote *Even though (because?) it is the last interview, the depth [of collected data] was impressive and it took two hours – it was HOT. Rains have started and I*

was able to interview her in her own field, with just her school-aged daughter and baby grand-daughter around. I now have to revise all the information I gathered on her, because she told me to. She couldn't simply tell the truth in front of her husband's younger brother, her official keeper, always around when we did previous interviews. She insisted on anonymity which of course I will do anyway (personal observation from Lablango2, June 2014).³³

As it would have been disrespectful to confront issues similar to this one openly, data was discussed with the field assistants and cross-checked with other households to try and identify inconsistencies. I am well-aware, however, that repeated enquiry can only go so far but decided that respect of the local culture was more important than errors.

In order to ensure dissemination, preliminary results were presented back to the villagers at the end of the data collection period, resulting in questions from them, new exchange and deeper data for me. The results were presented to Tree AID staff in Ouagadougou in June 2014, for interest, further dissemination and feedback. Moreover, reporting workshops were held in March 2015, nine months from the previous interview, at the SEMUS headquarters in Yako. This allowed for further data validation but was important for the interviewees to fully comprehend how the results would be used.

³³ As previously mentioned, all my notes from the field are in French. They were personally translated when quoted in the text to facilitate the reading of the thesis.

Chapter 5. LAND TENURE CHANGES IN MOSSI VILLAGES OF PASSORÉ

The literature review presented in Chapter 2 highlighted how land tenure is an intricate web of arrangements and norms that cuts across politics, social constructs, economic circumstances and livelihoods at different levels, locally, nationally and regionally.

One of the initial hypotheses of this research was that, in Burkina Faso, the new land law finalised in 2011 (*Loi 0034*) had had an impact on social relations and customary laws. However, this hypothesis easily proved to be void because the law in question hadn't been implemented in the province under analysis. While the focus of the research progressively shifted towards an understanding of livelihoods and the evolution of social relations within Mossi households, land tenure was still kept as a fundamental part of the thesis. More precisely, the thesis aimed at understanding social relationships at the household and village levels when relating to accessing or owning land and its products, specifically trees and non-timber forest products (see Chapter 6). It is argued here, therefore, that even though it is not possible at this time to assess the impact of a national law as it hasn't been disseminated and implemented in the field, the evolution of the national legal framework has contributed to changes in the Mossi society, at least at intra and inter-household levels.

5.1. Legal framework

a. National law evolution

The evolution of Burkina Faso's traditional land tenure has been analysed in Chapter 2. Before moving on to the arguments, a brief summary of the latest legal changes will be reviewed to make the context easier to grasp. The starting point of the national tenure framework is the 1984 reform passed by the socialist government of President Sankara and called *Réorganisation Agraire et Foncière* (RAF). Due the peculiar historical conjuncture, it included obvious displays of the Sankariste's regime. It vested all land in the state and outlawed sales of land regardless of customary tenure status. In his fight against the abuses of local

traditional chiefs, who became even more powerful after the French colonisation, Sankara was aiming at reducing local powers while guaranteeing access to land to all Burkinabé citizens through government-determined rules, making an unambiguous step against customary rights. Our main reference for the land law evolution has been Cotula (2004) due to his up to date work crosscutting African countries. Specifically referring to Burkina and the West African region, however, it is important to quote Thiéba (2010), Ouédraogo M. (2002, 2007), Ouédraogo H. (2006) and Toulmin (2000) as well. They describe how individuals could apply not only for land titles but also for allocations of the right to rural lands for different uses (subsistence farming, cash crops, etc.). While it was never written in the law, according to our main authors, there was a widespread interpretation that the land belonged to whoever was cultivating it, disregarding customary rules and written titles.

Two important modifications have rephrased this law. Its importance is considerable, since it still is the framework for the Rural Land Tenure Law published in 2009 under the name of *Loi 0034*, currently being implemented.

The 1991 RAF is one of the first laws launching the political era called the *Rectification*, aiming at establishing a stable democratic system denying as much as possible the social experiment and the chaos that ensued. This amendment was signed by President Compaoré, who had just won his first presidential elections after being in charge since the assassination of Thomas Sankara in 1987. It allowed land to be privatised, eliminated all allusions to a socialist state and recognised long-term leases as well as different use rights.

In 1996, Compaoré signed another modification, enabling the State to cede (or sell) land to private operators. The original text remained intact and since then the reform has started being implemented throughout the country. The RAF stipulated the creation of the *Commissions Villageoises de Gestion des Terroirs* (CVGT), a structure for managing land at the village level, part of a broader national land-use management programme. The CVGTs represent the villages through the creation of a committee of representatives of all groups, including members of the underrepresented or vulnerable groups.

However, the delocalisation process that has taken place parallel to this process, the political stagnation of the Nineties and first years of the new Millennium and the lack of funds made the overall implementation of these laws extremely difficult. Moreover, the local chiefs maintained their power over the communities and, as noted earlier, in most regions the communities continue to follow local practices even when they are in conflict with the national law.

In fact, the MCC report (MCC 2010) assessed that customary institutions remain very much intact. The 2004 decentralisation law, introducing the *Commissions Foncières Villageoises* and the *Comités Villageois de Développement*, is an example of Burkina Faso's push for delocalisation of powers and the government's will to transfer responsibilities to grassroots communities aiming at tailoring methods to diverse local conditions. In this context, CVGTs are meant to be intermediaries not only between the central government and the communities but also between NGOs and organisations and villages on different land tenure related projects.

Several laws promoted aimed at managing local conflicts over land, institutionalising alternative dispute resolution mechanisms and instituting infrastructures for land registries and management (Rural Development Strategy in 2003, the aforementioned Decentralisation Law in 2004, Rural Land Policy in 2007). These regulations provided the foundation and framework for the new Rural Land Tenure Law published in 2009 (GRAF 2012).

The *Loi 0034*, or new Rural Land Tenure Law, was adopted in 2009. Following the government's opening to wider markets, especially the neighbouring Ivory Coast, France and more generally Europe and the United States, the law was meant mainly to protect property rights, eliminate references to State-owned land and socialist tenure, potentially prevent land conflicts and ideally ensure rural land tenure security. Moreover, on paper, it aimed at promoting equal access to rural land as well as investments in agriculture, forestry and pastoralism and sustainable management of natural resources.

As GRAF's analyses point out, it is a law that falls under the RAF and is the basis for building a framework that includes both customary rights and national legislative principles (GRAF 2012). It enables the communities to draft local land charters based on the customs and land uses relating to conservation of shared

natural resources and land loans and disputes. These charters are to be created at the village level in a participatory manner including representatives of all stakeholders, aided by a state representative, adopted at the village level, validated and recorded in a register. It is a paramount law, as it recognises not only the transfer of certificates of rural land possession through inheritance but also land leases, both oral and written. It addresses local conflicts by stating that parties should first attempt to resolve the situation with local authorities, per procedures in the local land charter.

The law also includes pastoralists; however, pastoralism is still governed by the 2002 Pastoralist Policy Act that has been added to the 2009 Rural Land Tenure System Law. It is important to understand that under the *Réorganisation Agraire et Foncière*, the state still owns all the untitled land, until claimed. The state may cede ownership of rights of land to private users upon application and payment, and only then the land can be freely bought, sold and leased (Cotula, Toulmin, and Hesse 2004).

To test the hypothesis that the implementation of the RAF had impacted social customs, a preliminary set of questions (Appendix 5) were addressed to the local representative of Tree AID, in order to base the questionnaire for local authorities on updated information. Both the project manager and the country manager of Tree AID quickly confirmed that the *Loi 0034* was yet to be implemented countrywide. An International Land Coalition representative, interviewed for further information and follow-up on the implementation of the law, confirmed that the implementation was carried out via a series of pilot villages (47) carefully selected by Millennium Challenge Corporation (MCC) and its local body MCA (Millennium Challenge Account – Burkina Faso) in several provinces of Burkina.³⁴

³⁴ The 47 communes are: Di, Banfora, Bama, Sabou, Léo, Guiba, Boudry, Zam, Mogtédou, Loumbila, Ouargaye, Pama, Kongoussi, Ouahigouya, Sono, Djibo, Kampti, Bourasso, Kassoum, Lanfiéra, Gassan, Sidéradougou, Moussodougou, Niangoloko, Douna, Padéma, Toussiana, Banzon, Samorogouan, Djigouè, Kokologho, Poa, Didyr, Ténado, Sapouy, Cassou, Béré, Bindé, Koubri, Saaba, Lalgaye, Tansarga, Bittou, Rollo, Zimtenga, Tangaye and Pobé-Mengao. More information on MCC pilot project on rural land legislation can be found on MCC website <https://www.mcc.gov/where-we-work/program/burkina-faso-compact#bf-rural-land-governance-project>. More details on the project can be found in French here http://www.mcaburkina.org/public/realisations_foncier.php.

Passoré, where this research has taken place, was not considered among the pilot provinces and therefore there was very little impact to test. However, it is important to note here that the Boulkiemdé was amongst the communes selected for piloting the implementation of the law. The nature of the secondary site did not allow for an in-depth assessment of the implementation of the law that would have been tangent to the main topic of the research and based on circumstantial evidence. Nonetheless, a few questions were integrated into the semi-structured interviews administered in the area to highlight that aspect in approaching the subject.

For a complete understanding of how local customs constitute the only form of recognised land tenure in the selected province, several local authorities were interviewed, including local chiefs (*chefs de terre, chefs de lignage, chefs de cantons*, mayors and CVGT representatives at the commune level). The results of these interviews are presented in the next section that follows the evolution of local Mossi customary laws on land tenure. The difference between the data collected in the first and secondary site constitutes further proof of the importance of power relations and underlying social structures in the study of the so-called “*question foncière*”.

b. Customary laws

Chapter 3 analysed Burkina Faso’s political, socioeconomic, geographic and cultural history. It focused on the customary land tenure of the Mossi ethnic group, the main target of this thesis. The importance of local customs and customary tenure of land is widely recognised by the aforementioned literature.

This research argues that, while it was impossible to grasp the complicated relationship between traditional management and the Rural Land Tenure Act because the national law has yet to be implemented countrywide, customary laws are still the main reference for managing land at a village level. Even more, interviews and findings suggest that the land related customs and traditional tenure are the bases of social interactions. They constitute a unique and complex web of rights and obligations that extend beyond the management of land and create the context for all social relationships at household and village levels.

Quote *Voisinages, solidarité, alliances...rien n'échoue à la négociation foncière. (...) Tout est non-dit, sous-jacent mais toujours présent. (Man, Validation Workshop in Yako, March 30th 2015).*³⁵

All the interviewed *chefs de terre* mentioned three things, as it was highlighted in the data analysis process. First, all of them talked about their spiritual role, mentioning the genies living underground, protecting the land and communicating with them and only them. Secondly, they all highlighted the importance of the chiefs of lineages in conferring right to land on newcomers. Thirdly, when asked about conflicts over land, they all mentioned stability over the territory as their main responsibility. These three concepts are key to understanding Mossi practices over land, especially in a province like Passoré, in a semi-arid zone with no major cash crops.

Confirming what was mentioned in the Seventies and Eighties studies analysed in Chapter 2, the land chief proves to be a spiritual figure as well as a political one. They relate with the land genies and are in complete charge of all ceremonies concerning newcomers as well as settling disputes over land plots. It is interesting to note how spiritual and political powers are connected and exert an influence on the role of a land chief as well as on how people relate to them and to land tenure in general.

However, this arbitrator's role always keeps a strong spiritual component:

Quote *Il dit que son rôle, bon, c'est la stabilité du terroir, la bonne entente des gens et puis surtout la bonté des génies de laquelle dépend la fertilité de la terre. (Interpreter on Chief of land, Tenkoaglega, May 22nd 2014).*³⁶

Keeping the genies in a good mood so that they can provide a good rain season and high fertility of land: that is what a *chef de terre* is traditionally about. That is not to say that they land chiefs do not have a political weight or authority. As several chiefs have highlighted during the interviews and lineages chiefs have confirmed during the data validation workshops, most of the time people go to

³⁵ Neighbours, friendships, alliances...nothing is left out of land negotiations. Nothing is said out loud but everything is clearly underlying and ever-present.

³⁶ My role is, well, to keep stability on the territory, good relationships between people and keeping the genies in a good mood as the soil fertility depends on it.

them to handle all kinds of issues. In that perspective, the land is the central part of the village. Intuitively, anyone can see that, since land gives food and merchandise to sell, it is vital to keep it fertile, used and well managed. Spiritually, it is paramount to keep a good relationship with the genies of the ancestors, who first chose the emplacement of the village for good reason and had sworn to keep the land fertile and in good shape.

Politically, *chefs de terre* are known to be isolated. Tree AID representatives as well as interpreters and facilitators familiar with the region agree in saying that because they are old, most of the time extremely powerful and sometimes corrupt, they tend to be avoided by all local authorities. This mechanism has contributed over the years to the creation of two parallel land tenure systems, evolving side by side with very little interaction or integration of one in the other.

When asked about their knowledge of the latest land tenure act, the answers were all extremely confused and mostly out-dated. Most of the *chefs* remember a socialist state trying to overpower them by declaring ownership over all unclaimed national land and disrespecting their traditions and their spiritual role. The state is still seen as a malignant entity, ready to steal land plots, able to privatise land and even more allowing people and organisation to sell it, a major crime in the Mossi culture.

While the national law allows a land market to develop for those in possession of titling since the Nineties, the process of selling a plot of land is not well seen or accepted in the Mossi culture.

As the literature analysed in Chapter 3 assessed, Mossi traditions see land as property of the genii and the ancestors that are buried in it. A man can have more or less extensive rights over a plot of land and claim it as his own, or rather as the land belonging to his lineage because his ancestors claimed it first.

The interviews with the *chefs* suggest that this is still the feeling in the communities. The fact that all the interviewed chiefs have identified themselves as the person responsible for the village's peace and justice is emblematic.

Quote *Son rôle, dit-il, c'est de veiller à la paix et à la justice dans le village. La paix, c'est la justice sociale et la résolution juste des conflits. Tous les jours les gens viennent et puis posent des problèmes. Il veille à la tradition, au bien-être de la*

*communauté, à ce que les plus forts ne profitent pas des plus faibles. Et si lui il ne trouve pas de solution, il transfère au chef de Gomponsom (closest commune, A/N), qui est chef de canton (...). (From the facilitator, interview to the chef de village, Kouni, May 22nd 2014).*³⁷

The role of the Mossi *chefs de terre* is therefore still anchored in tradition, extremely spiritual, well recognised and accepted. However, as previously noted, spiritual, political, traditional and modern law seem to be so intricately connected that it appears to be difficult to distinguish one from the other. It is quite an interesting factor when looking at how people relate to chiefs of land and, more generally, speak about land tenure. The historical analysis of the politics of Burkina Faso highlighted in Chapter 3 the colonial State willingness to give more power to local chiefs, including land chiefs, for them to rule effectively in rural areas. Moreover, it was noted how Sankara's government and reforms were in fact trying to address an issue of omnipotence of local chiefs by introducing new delocalised actors and potentially new mechanisms and dynamics, quite closely monitored by the State.

It appears from data analysis and direct observation that Mossi chiefs in the sampled area are at the same time respected, feared, spiritual and political authorities, controversial figures for both the formal decentralised system of local authorities and the social organisation at the village level and below.

In this research, this adds to the argument of the intricacy of a social system that puts land at its centre. Because of the centrality of land, the number of actors involved increases complexity; one could almost argue that access to land and its ownership are a factor linking together social and cultural traditions, formal national land laws and all the different authorities involved. For example, an interviewee from household L1 stated that it would be impossible to take a political stand in the village in contrast with the land-owning lineage whose land you sow on. His opinion on the land reform was quite explicit.

³⁷ His role, he says, is to keep peace and justice in the village. Peace is seen as social justice and a just conflict resolution process. Every day people come and ask for his advice on their issues. He ensures tradition, the community's wellbeing and that the powerful don't abuse the weak. And if he cannot find a solution, he transfers [the issue] over to the chief of Gomponsom (the closest commune, A/N), who is *chef de canton* (...).

Quote *Tu vois non, quand il y avait les socialistes, la terre appartenait à l'Etat. Donc la réforme ne pouvait pas se faire parce que les gens avaient peur que l'État vient et il prend. Les gens ont toujours peur qu'on vient leur prendre la terre. Donc maintenant, en plus, tu as peur que ton voisin il prend aussi. Parce que la terre c'est politique et compliqué et si il est plus d'accord avec le chef de lignage et que ta famille n'est pas propriétaire terrien, c'est pas la peine, il va gagner. Après, bon, on peut toujours négocier mais à la longue on est fatigués. Et le gouvernement il se fatigue aussi de vouloir faire les lois et puis impossible de les respecter parce que à la fin on a plus peur de son voisin que des lois. C'est pas bon hein! (Man, Validation Workshop in Yako, March 30th 2015)³⁸.*

This perspective is quite central as from the data it emerges quite clearly that land drives most renegotiations of relationships at the village level. Any reform needs to take this into account; it is argued here that one of the reasons that the latest Loi 0034 couldn't be easily implemented is, in fact, that it tried to design a new structure (technical agents for land demarcation, for example) that would impact on local powers, without taking into account the necessary capacity building, knowledge sharing and learning that could enable people to be part of a greater social transformation. We also argue that this transformation needs to include a land tenure reform in order for it to happen and start working towards land tenure security.

Having had the chance to interview the land chief, village chief, *chef de canton* and Mayor of Gomponsom, from the interview in that situation traditional and spiritual issues are kept strictly separate from the administrative ones.

Quote *Interviewing his Majesty in Gomponsom. After having a hard time getting an appointment, the facilitator came through – we are here waiting for*

³⁸ You see, when the socialists were there, the State owned the land. So the reform couldn't be implemented because people were scared that the State would come and take the land. People are always scared that their land is going to be taken away. So now, you are also scared that your neighbour is going to take your land. This is because land is very politicised and it's complicated; if your neighbour gets along with the lineage chief better than you do and your family doesn't own land, don't bother, he's going to win. Then, sure, you can always negotiate and arbitrate but it's tiring. The government is tired, too of not being able to make laws and in the end people are more scared of their neighbours than the laws so they don't respect them. It's no good.

him. His servant has asked us if we are here to see him as Mayor or as traditional chief – still keeping powers separate. (...) The interview has started – he will only speak Mooré on traditional issues. He will speak French regarding his administrative business. He never talks to me directly, always to the facilitator, even in French. (...) Finished interview. Facilitator says that his Majesty never speaks to unmarried women directly – so it wasn't because I'm white (...) (Personal observations, Gomponsom, June 2014).

Because this study aims at analysing the evolution of land tenure, both led by tradition and based on national jurisdiction, this is an important element to take into consideration. The research argues here that, while the two ways of managing land are being kept separated, they both evolved stimulated by very similar socioeconomic, cultural and political scenarios. From the literature analysed in the previous chapters emerged the picture of a traditional tenure based on hierarchies and lineages at the village level. The validation workshops added several layers of information, deepening the knowledge in the area.

While lineage and a patriarchal model of society still constitute the boundaries to the evolution of local practices, land management has evolved with the society itself. The social changes will be presented in the next chapters, and this one will focus here on land tenure security only.

The literature widely recognises the cohabitation of pastoralists and farmers as one of the main causes of conflicts over land. While this has been mentioned by most *chefs de terre* interviewed for this research, it is a reality that concerns the provinces closer to the Sahara and the ones that border with other states. The conflicts that can be found in the small area selected for this research concerns inheritances, access to other natural resources and most of the times borders between plots. Rather than the conflicts described in the aforementioned literature, it emerged from the interviews that animals that roam free and wander are the main cause of conflicts, mainly because most households practice agro-pastoralism. While the conflicts over land most cited by the literature consist in violent acts of retaliation after cattle devastation in the fields, the *tengsobse* agree in stating that, in their experience, ranging from 20 to 45 years as chiefs, the issues

arose when someone refused to take responsibility for his or her livestock actions or denied to repay for the damages.

This is why the role of land chief in this area can still be as a calm arbitrator, a spiritual guide leading the way toward pacification of the parties and peaceful resolution of controversies. After the conflict has been arbitrated and the dispute settled, the land chiefs are also charged with erasing all curses that might have been thrown from one lineage to the other, communicate the new peaceful order with the underground genii and forgiving everyone involved in the dispute.

There is one other important factor that was mentioned by the *chefs* and that needs to be taken into account when looking at the evolution of local Mossi customary land tenure law, and that is that they unanimously affirm that nobody ever approached them to ask for land for any other purpose than agriculture or livestock.

While several of the mentioned analysis of the *Loi 0034* argue that the modifications made to the original RAF over the course of the years, starting in the Nineties, all aim at making the land available for foreign investors other than for private use, this has not happened in Passoré (GRAF 2012; Loehr 2012; Doss, Summerfield, and Tsikata 2014).

The causes may be several. For instance, as it has been mentioned in previous chapters, there is extremely low soil fertility in the Sahelian zone of Burkina. It might be that potential local or foreign investors do not feel that it would be useful to purchase that kind of land. Moreover, the Mossi culture puts a lot of social pressure on local investors, making the sale a process to be ashamed of and incredibly difficult to carry out publicly. This is, in fact, another interesting point that has emerged from the interviews. In reality, land markets do not exist in small villages in outer provinces. It is emblematic of the failure to implement the newest national rural tenure act, since it encouraged land titling to facilitate transactions over land. The verdict from the traditional authorities over land is unanimous: one does not sell land.

Quote *Il dit que personne n'est jamais venu demander la terre pour d'autres fins que l'agriculture ou l'élevage. Dans ce cas même il s'opposerait parce qu'on peut prêter la terre ou bien les droits dessus mais jamais la vendre. Quand on*

*commence à vendre la terre on privilégie l'argent, on oublie la cohésion sociale et le respect des normes traditionnelles alors que lui, le chef, il est responsable de cela dans son village. Il ne veut même pas dire sécuriser car il dit que selon lui ça devient privé et ce n'est pas envisageable. On ne peut pas avoir la terre individuellement, pour un seul individu pour faire une seule chose dessus. Elle appartient aux ancêtres.*³⁹ (Facilitator translation of the interview to a chief of land, Tinkoaglega, May 22nd 2014).

This idea of a non-existent land market has been discussed and analysed with the facilitator, Tree AID representatives and consultants in Ouagadougou. It seemed strange that what the chiefs were arguing, in continuity with the tradition that saw land sales as spiritually disrespectful for the ancestors and socially offensive for the land owning lineages, did not trigger “black” markets on the side.

Consultants and the facilitators seem to agree that, in their opinion, it wasn't possible to talk about a land market such as the one that exists, for example, in Ghana (easy comparison as it is a neighbouring country with some similar agro-climatic characteristics). However, they also said that, in exchange for land, part of the harvest, other produce (e.g. vegetables from market gardening) or are, *de facto*, implicitly expected. This means that while monetary transactions are still unthinkable and officially prohibited, a shift is being felt in how land is treated. However, as previously argued, the spiritual value of land is still strongly felt and in opposition with any money exchange over land. This was tested in the field. Men from land owning lineages confirmed they expected to receive “cadeaux” (gifts) from whomever was labouring their fields. Women who were working on land that wasn't owned by their husband's families also confirmed that they were always making sure a part of their cereal harvest would be taken to the land owners.

³⁹ “He says that nobody ever came to ask land for other purpose than agriculture or livestock. And even in that case, he would say no because you can loan land and rights over land but you can never sell it. When you start selling land you are putting money first, forgetting about social cohesion and traditional customs whereas him, the chief, he is responsible for keeping social cohesion within his village. He does not want to talk about securing land rights because he says that's when the land becomes privatised and it cannot happen. You cannot have a plot of land for yourself, for one person to do one thing on it. The land belongs to our ancestors.”

Going into more depth also showed that the gifts were expected to be proportional to the harvest and vary accordingly to the season. From direct observation, the feeling was that it was seen as a normal imposition, a factor that was automatically taken into account when planning for the household's expenses. In the final round of interviews, I tried asking more about changing methods of accessing land but the interviewees seemed quite firm about the need to keep this tradition of "giving back". Some mentioned social cohesion, some mentioned solidarity, some honour and the household's or their husband's reputation. They all seem to agree on the fact that this transaction was a better system than money, especially because it allowed the poorest, who may not have access to sums of money at all, to feed their families. This reflection is interesting when looking at family dynamics and overall household's livelihoods; it weighs on the value of cereal and on relationships between households and lineages. In relation to the Loi 0034, it also has repercussions on the legal processes that land owners need to go through to formally obtain land titles, implying quite a lot of money transactions. It is argued here that this law could negatively impact on the social solidarity system, heavily weighing on how the most vulnerable households may negotiate their access to land. This could also be one of the factors that led to a very difficult implementation of the said law.

None of the interviewed *chefs* (land chiefs, mayor, village chiefs, neighbourhood chiefs, canton chiefs) mentioned the land law by themselves. However, because I was trying to get a picture as complete as possible, I asked several questions about it, trying to grasp local understanding and knowledge of the law. As I previously mentioned, there is a lot of misinterpretation, confusion and lack of information on the new law. All the interviewees had knowledge of an existing national law on land tenure. However, the reactions were different.

Two village chiefs commented upon the state wanting to dispossess people from their land and destroy customary laws in the name of national unity. According to the literature analysed in chapter 2, and specifically to the analysis of the latest land reforms in Africa, these concerns might be normal and, coming from traditional authorities, explain pretty clearly their point of view on accepting a national law regulating land tenure (Doss, Meinzen-Dick, and Bomuhangi 2014;

Widman 2014). One chief talked about the new law as a big event able to profoundly upset the national order of things but added that it was a necessary upheaval.

Quote *Il dit que on est venu lui proposer une sensibilisation et une formation. La loi amènera à son avis des bouleversements mais il pense qu'il y aura beaucoup plus d'avantages, surtout dans ce contexte où la plus grande cause de conflits sont les prêts de terre qu'on conteste parce que souvent il n'y a plus les témoins d'origines et tout est à l'oral alors que avec la loi on aurait des documents écrits, clairs et donc on pourrait éviter beaucoup de conflits. (Facilitator on interview to the village chiefs, Kouni, May 2014)⁴⁰.*

However, a land chief pointed out clearly that, in his opinion, the issue was not about how to handle land conflicts and how to implement a national law, whatever the law said. His words led further comments and research on the relationship between customary land tenure and social relationships evolution at inter and intra-household level.

As the quote below reports, he said to have been informed and was aware of the new law concerning land tenure security and titling. He wasn't only diffident; he admitted to being scared of the law. When asked about the reasons, the answer was extremely clear and helped clarify the bigger picture in which national and customary land tenure are following parallel paths and evolutions with very little chance of crossing and mixing.

He said that the implementation of any law on land titling would have to go slowly and to be extremely careful when entering the traditional land tenure part. He thinks that any implementation led by the government (or its decentralised bodies) would be brutal and upset the land tenure order. Moreover, and more importantly, in his opinion, it is a matter of annihilating social cohesion and it would be too big of a break point for Mossi culture and social norms.

⁴⁰ He says someone did come to offer different kinds of trainings. In his opinion the new law will bring some changes but he does think it will bring more advantages than pains in a context where the main cause for conflict is contesting loaned land when the original witnesses are dead and there is no paper trail and well with the law and land titles you could avoid all this.

Quote *Il dit qu'il est très sensible aux problèmes fonciers. Si la loi s'insère brutalement, et ça risque d'être le cas si c'est à travers le gouvernement, là, ça risque vraiment de bouleverser son village, les rapports sociaux et de casser toute cohésion sociale acquise et maintenue jusque-là. Les inquiétudes sont grandes à son niveau (Facilitator on interview to a village chief, Tinkoaglega, May 2014)⁴¹.*

This further proves how while the initial hypothesis of this research based on impact and relations between national juridical context and customary laws had to be discarded, it is still a valid issue strongly felt by the local authorities. However, and adding to what has been said by the aforementioned literature, the matter is more profound and complex than a simple refusal of progress or scepticism towards the state and its laws. The interviews and the validation workshops, carried out as focus groups, introduce the idea that a land tenure law could not be compatible with local customs in a Mossi culture, however carefully the legal innovations might be implemented so as not to step on them.

As I argue here and as was proved in this chapter, understanding and modifying land tenure is a matter of penetrating a complex cultural territory. This multifaceted context goes beyond land laws and implies impacting routine and social structures that have been in place for centuries.

c. Non-Mossi customary laws: the Gurunsi of Western Burkina Faso

This research has been designed to provide qualitative information on a specific ethnic group and their customs in rural villages of Northern Burkina Faso. While the research has been carried out in a small number of households of a specific region, in this section the results from the Passoré province will be referred to as "Mossi society land tenure". However, this study acknowledges that it is difficult to generalise given the small sample and this section does not imply that what may be true in Passoré happens in every Mossi area of Burkina Faso.

⁴¹ He says he is very sensitive to land tenure issues. If the law is implemented in one go, as the government usually does, it will definitely upset the village, the social relationships and to break the social cohesion they've acquired and maintained. There is a lot of concern around it.

The main method of this thesis was not an analysis by comparison. Because of its nature, this small sampling study does not aim at being generalised for the whole country or region. However, to complete information and add to the complex national framework in which land tenure laws evolve, it seemed appropriate to collect similar data from a secondary site. This site has been selected, as indicated in the methodology, after exchanging with Tree AID representatives and other relevant NGO representatives in Ouagadougou. It is located (see map in Appendix 6-7-8) in the Western part of the country, further from the semi-desert area and in a slightly different climatic zone characterised by more rainfall, a greener landscape and a more fertile soil.

The main ethnic group is the Gurunsi that has been presented in the literature review in section II. It has been said throughout the work that the Mossi are the main ethnic group in Burkina Faso. As mentioned, they have successfully conquered many other smaller or weaker kingdoms in the area, including the Gurunsi. The Mossi colonisation has been different and adapted to the importance of the area (in terms of natural resources or strategic location). Gurunsi people of the Western region have been touched and transformed by colonisation by adopting several distinctive traits of the Mossi society. For example, over the years, the land chiefs became more powerful; because the village chief / land chief / zone chief (*chef de canton*) is a social organisation familiar to the Mossi, it was not only left intact, also exploited as an entry point to easily manage the territory.

For these historical reasons as well as for the common origin of Mossi and Gurunsi as West African ethnic groups, the social structure in the two regions might seem very similar at a first glance. Some interesting and diverse findings come when assessing how a Gurunsi household manages and accesses resources; which resources are available in that zone and, last but not least, power relations underlying those choices. Moreover, Boulkiemdé is one of the provinces where the implementation of the most current land reform (the aforementioned *Loi 0034*) has been carried out over the past few years. The three households that were interviewed were scattered around two provinces and very different from one another.

(1) Land in Gurunsi society

The first key point that emerged from the analysis is that dividing the family land into several plots to give to the heirs is a customary practice that seems to be accepted by the community and by the land and village chiefs.

Other than the three heads of households, all men that were interviewed in the area, land and village chiefs were asked some questions concerning conflict over land. Because of time and logistic constraints, those interviews were less deep than the ones carried out in Passoré with local customary authorities. However, the idea that emerged is clear. Relying on the concept of preventing conflicts over land, at some point and at least two or three generations prior to the one I met, parents started dividing the land between their sons.

Quote « *Les grands parents ont légué la terre á mes parents. Eux-mêmes déjà avaient partagé pour éviter les problèmes. Après mes parents ont partagé aussi. Il y a déjà des soucis pour les limites, il n’y a pas besoin de soucis entre frères.* » (SM1, Koukouldy, June 2014).⁴²

Quote « *C’est la terre de mes grands-parents, je suis né ici, resté dans ma cour et après on a loti notre zone, j’ai mes deux parcelles, pour moi et pour ma femme. J’ai une attestation d’appartenance, mais j’ai pas encore payé la procédure pour l’attestation foncière rurale.* » (SW1, Tenado, June 2014).⁴³

Quote « *C’est comme ça. Quand un petit papa meurt la famille divise les terres qui lui ont été attribuées entre tous les fils. Les femmes vont se marier dans d’autres familles, donc on en tient pas compte.* » (GRM 1, Goundy, June 2014).⁴⁴

Quote « *Je suis né á Koudougou mais je suis originaire de Kyon, au Sanguié. Mon père m’a fait obtenir ma parcelle á Koudougou. (...) J’ai hérité la cour de mon père et ses parcelles qui ont été loties, donc j’ai tous mes papiers. J’ai commencé*

⁴² The grandparents transferred the land to my parents. They had already split the land to avoid problems. Then my parents also divided the plots. There have been a few issues around the limits but no nonsense between me and my brothers.

⁴³ It’s my grandparents’ land, I was born here and I stayed in the compound, then they came and made it official, so I got two plots, one for me and one for my wife. I have papers proving the process but I haven’t started the procedure for titling because it’s expensive.

⁴⁴ It’s exactly like this. When a father dies his family splits the land between the sons. Women will be married into other families, so they don’t really count in this.

*le bornage avec la technique GPS mais je n'ai pas encore entamé mes actes officiels. J'ai aussi un champ à Nedjelpoum vers Réo. » (B1, Koudougou, June 2014).*⁴⁵

The picture of Mossi households, as analysed in the previous paragraph, highlights the spiritual value of the land as place for the ancestors to reach eternal rest and stay close to their descendants. Dividing the family land in an official way would be seen as an act of defiance of customary laws and judged by traditional authorities.

In a different society, such as the Gurunsi of Western Burkina Faso, it is a natural process and positively seen and that seem to be accepted and recognised by the community. While the sample of the study was too small to generalise, it is important to highlight that the interviewed men talked freely in the presence of other members of the households and older people. The interviews were held at the side of the fields as it was at the start of the rainy season to ensure minimal disruption to the work of the interviewees. The land chiefs and chiefs of the village were interviewed in their homes, with their council of elderly around them and other important traditional authorities.

The confirmation from the local customary authorities seems particularly relevant to this study. Just as the *tengsobsé* in Passoré, Boulkiemdé and Sanguié chiefs stated that their primary role was to avoid land conflict and handle all questions relating to land and settlers in the area. However, the concept of preventing land conflict by encouraging and legitimising the habit of dividing the land of the ancestors, that seemed natural around Koudougou and Réo, was never mentioned in the North.

This further validates the hypothesis that land tenure is a social matter. It is interesting to analyse that in two neighbouring provinces in Burkina Faso, the difference in social structures led to different land management therefore leading to different livelihood strategies.

⁴⁵ I was born in Koudougou but I am originally from Kyon, in Sanguié [province]. My father did the paperwork to get me a plot in Koudougou (...). I inherited my father's compound and all of his plots that had been officially acquired so I do have the paperwork. I have started the GPS delimitation but not the official procedure yet. I do also have a field in Nedjelpoum, near Réo.

This hypothesis opens up the second key theme emerging from the analysis of the data of the secondary site. Having acknowledged that land management is a social matter and that ethnicity impacts strongly on customary laws, a group of questions was asked to assess the routines of the households. Just as the interviews administered in Passoré, the goal was to identify roles and responsibilities in relation to accessing and managing natural resources. In terms of analysis, this translated into insights on how social structures and power relations underlie and shape rural livelihoods.

(2) Gurunsi livelihoods

The main difference between the two sites in this context is the aptitude for investing in the land. It needs to be noted that the sample was chosen among people all interested or directly involved in buying drip irrigation kits from a local NGO. However, as shown by the pictures in Appendix 9, the landscape showed a number of wells for agriculture, easily distinguishable from the deep wells for drinking water (*forages*). Moreover, the fields were often clearly enclosed by grids or wooden enclosures. This makes a landscape which is extremely different from the great stretch of sandy land that was familiar in Northern Burkina Faso.

The routine surveys administered in the secondary sites highlighted that the activities performed regularly over the course of the days and according to the seasons are quite similar to the ones that emerged in Passoré. Everyone mentions eating, cultivating the family field first and then usually going to take care of the smaller personal fields, animal rearing activities, and night prayers.

However, and strictly related to the concept of individualising plots and investing on them, they all mentioned checking the weather via traditional forecasting and radio weather forecasts, verifying if it had rained or if it was likely to rain, and planning how and when to water the fields or the garden vegetable plots. Smaller fields dedicated to garden vegetables for home consumption or small-scale selling are not uncommon in Burkina Faso, as the contextual literature review previously highlighted.

In Passoré, the fields for cultivating greens are usually restricted to more fertile areas or the surroundings of water points (ponds, lakes, dams, etc.). This is due to

the fact that the main and often only irrigation technique consists in carrying buckets of water. The most common garden vegetables in Burkina Faso, as assessed by the NGO iDE in a survey in several provinces, are courgettes, tomatoes, local brand of aubergines, onions, cauliflowers and spinach; these crops require regular irrigation (as opposed to main staple crops) and therefore need to be close to a water source (iDE 2013).

The task of watering vegetables seemed to be part of the routines of the interviewed households; moreover, the answers reflected that the techniques for watering might have included drip irrigation or other methods. For example, because they couldn't buy a drip irrigation kit, despite their interest in it, one of the households made an agreement with neighbours owning a donkey-powered cart. At the end of the work day, assuming it hadn't rained, the neighbours would bring back some water on the cart and would be rewarded with vegetables after harvest⁴⁶. This seems to suggest that dividing the family land, a well-established tradition embedded in local culture and part of customary tenure, opened the door for investments in the land, possibly because other family members might be less inclined to challenge them for it.

This conclusion cannot be generalised and is based on a small sample; however, its interest lies in the fact that it shows how different local contexts can be. Boulkiemdé and Passoré are neighbouring provinces connected by a big, relatively safe and easily accessible "red road". The social organisation of the Gurunsi people of Western Burkina, as previously argued, has some similarities with the Mossi society. However, their livelihood strategies are different as they are based on different land tenure concepts, particularly the idea of dividing the land and investing in personal plots or fields.

Ultimately, the comparison constitutes further evidence that the attempts to include customary tenure in a national law and implement it have been weak and sometimes unsuccessful due to a lack of efficient delocalisation in terms of context and decentralisation in terms of administrative bodies.

⁴⁶ Interviews at household S1.

The *Loi 0034* that has been analysed in the literature review and in the land tenure section proves to be an overall good attempt to put an end to the superimposed and over-complex system based on customary, colonial and several different state laws. However, this research starts to look into how cultural contexts, so different from one province to another, can impact on the implementation of the law. This has been obviously taken into account by the leaders of the reform, as the literature review proves. The lack of anthropological and ethnographic studies on the Gurunsi of Western Burkina Faso, however, confirms a lack of attention for the specificities of local context.

As the analysis of the literature and the current policies highlight, a process of decentralisation has been put in place in Burkina Faso, specifically including the creation of new bodies to help to implement the land law. One of the issues of implementing *Loi 0034* has without a doubt being the lack of competent bodies in the hinterlands; the lack of adaptation to the local context is one of the reasons of the lack of aptitude. In a nutshell, this might constitute partial yet interesting evidence supporting the argument that a national and valid road to implement efficient land tenure law might be accompanied by a push for further decentralisation of bodies and delocalisation of control for resources. The debate is still widely opened; however, competent delocalised bodies can provide local context for national law, assuming they are appropriately supported in terms of resources, skills and authority.

d. Islamic jurisprudence influences

Burkina Faso is multi-ethnic and multi-religious country. When investigating the evolution of land tenure, none of the interviewees mentioned Islamic law, despite only one of the households being Christian. The *chefs* did not mention it either and one of the validation workshops, carried out as a focus group, had the Islamic influences on land tenure and social constructs as a theme.

It is a particularly delicate topic and I let the facilitator and interpreter introduce it slowly, without asking specific questions on personal behaviours or beliefs and trying to focus on how it impacts customary land tenure and intra-household relations.

The response was mainly of the men attending the focus group; the focus groups attendees were a mix of traditional land chiefs, lineage chiefs, and heads of households, both Muslims and Christians. Nevertheless, the answer was complete and unanimous. Interestingly enough, to further prove how Burkina Faso is a strange, complex and unique country in West Africa, it came from a Christian man, while everyone else around him acknowledged the thought and nodding their agreement. This is emblematic of their view of Islamic influences and proves their point exactly.

Quote *La loi islamique ne modifie pas la loi coutumière d'abord. Même si les deux sont appliquées, l'une ne va pas modifier l'autre. Le Burkina est un pays laïc d'abord même. Le coutumier arrive en premier et forcément avant les religions, toutes les religions, et je dis ce n'est pas seulement chez le Mossis. La tradition est forte. Rien que tous nos noms de famille renvoient forcément à quelque chose, et à nos ancêtres. Cela n'empêche pas que l'on a des chefs coutumiers qui sont aussi El Hadj et qui ont fait le pèlerinage à la Mecque. Mais ils assurent quand-même d'abord le coutumier. (Man, Validation Workshops, Yako, March 2015).⁴⁷*

This quote exemplifies how important to Burkinabés is to keep their country's secularism and how proud they are of being able to let their traditions come before their religious beliefs. Moreover, this was said by a Christian man, but accepted by all men present, including one El Hadj. This is paramount to understand the social changes and evolution in household relationships that will be considered over the next chapters. Social lineages, age and traditional hierarchies are more important not only than a national law on how to manage land, but also than personal beliefs. This further proves how difficult a dialogue could be between a national juridical framework and local customs on a central matter such as land tenure.

⁴⁷ The Islamic law does not modify our customary law. Even when both laws are applied, one does not impact the other. Burkina is a secular country first. Customs come first, and they come before religions, all of them, and not only for the Mossis. Tradition is strong. Even just by looking at our last names you know they all mean something, recalling our ancestors. This doesn't mean that we don't have customary chiefs who are also El Hadj and have made the pilgrimage to Mecca. But first of all they ensure traditions.

5.2. *Women's access to land: evolution of a rural society*

Another important area of interest for this thesis was, originally, to analyse and understand women's access to land. Just like the previous hypothesis, this one had to be quickly discarded at the arrival to the field and after the first conversations with local and international NGO representatives with experience in the selected province.

Quote *Les femmes n'ont pas d'accès à la terre. (Consultant. Ouagadougou, October 2013)*⁴⁸

Even if the quote, out of context, might seem strong and dogmatic, this is the main feeling in the NGO community. This is supported by several reviews of the gender and land topic analysed in the first chapter (FAO 2008; Kevane and Gray 1999; Widman 2014; Doss, Summerfield, and Tsikata 2014; Cecile 2003). While this is not a gender-focused thesis, it is a paramount aspect of land tenure; moreover, because of the practice of polygamy, most of the household members were women. Therefore, over the course of the fieldwork year and during several interviews, both men and women were asked about their access to land.

The main conclusion argued here is that while there is no doubt that under traditional tenure that is in use, women do not have property rights or ownership of any land, they do have rights, more or less extensive, constituting a bubble of negotiations within the household and proof that the society is in constant evolution and women might have a wider spectrum of rights now than a few years ago.

First of all, the analysis of polygamous households gave me the opportunity to interview the co-wives, both together and separately. While the hierarchies between the wives, that will be analysed later on, were an evident bias in the collective interviews, their interactions proved to be the most meaningful pieces of collected information. Usually, in the interviewed households, the oldest and first wife is without a doubt the most powerful, combining age and her coming first in the family. Specifically concerning access to land, first wives were said to

⁴⁸ Women do not have access to land.

have the first choice of the plots. A woman will not have rights over land in her parent's household once she is married. The status that she might have affects all of her life, as this proverb exemplifies:

Quote *Quand une fille est née on dit que c'est une étrangère. Elle est étrangère car elle va se marier dans une autre famille; mais elle est étrangère là-bas aussi, car elle vient d'une autre famille. (Proverbe Mossi)* ⁴⁹

So women are strangers in their own homes since their childhood. This is confirmed by the literature (Cecile 2003) but has to be nuanced in a case-by-case study. Growing up, they will probably ask for and obtain a plot of land to start learning how to grow crops, especially easy cash crops at the beginning, such as Bambara nut (niébé) or peanuts. As a woman told me, this is not only an education practice to teach them a skill or empower them; it is to keep them occupied as well as to have them earn their own "pocket money", as the girls are generally allowed to sell their crops and keep the income for their personal expenses (usually clothing, hair products, accessories, etc.).

Quote *Elle dit qu'elle a un petit champ et puis qu'elle est aussi bergère. Elle arrive à produire huit plats de haricots, elle les vend et puis elle dit à sa maman ce qu'elle veut faire avec l'argent mais sa maman la laisse faire parce que comme ça elle ne va pas demander son argent de poche. Elle peut choisir ce qu'elle plante et elle négocie les semences avec sa maman. Son frère lui apprend aussi la RNA. (Facilitator on ZD1, in presence of her mother, Zambélé, April 23rd 2014).* ⁵⁰

Similar stories were told across the households and the villages. The women and their daughters were talking at ease without their husbands and fathers and it seemed interesting to deepen the conversation.

⁴⁹ When a girl is born, we say a stranger is born. Stranger here, because she will marry into another family; stranger there as well, because she comes from another family (Mossi proverb).

⁵⁰ She says she has a small field and she is also a shepherd. She harvests up to eight plates of Bambara nuts and she sells them, then she tells her mother what she wants to do with her money but her mother usually lets her do whatever because it means she won't ask for pocket money later on. She can choose freely what she wants to sow and has to ask her mother for the right seeds. Her brother is also teaching her about ANR – assisted natural regeneration.

One of the things that quickly emerged is that the literature focuses mainly on the lack of long-term security and lack of ownership when looking at women's access to land. While this is true, according to the results of my interviews, it is important to understand that the women themselves, often, do not perceive long-term security as the main issue.

Evidence from the interviews undertaken in several villages in Mossi communities in Passoré, suggested that for this reason women have no interest in thinking more than one agricultural season ahead. This has serious implications in terms of advocacy for women's rights over land; however, this research does not focus on women's empowerment and will therefore acknowledge this topic without discussing it further.

What is interesting to this thesis is how girls and women access land. As previously mentioned, age and hierarchies matter a lot in a Mossi society and this is also true in managing land in a polygamous household. The first wives decide where they would like their field to be and communicate it to their husbands. If the husband comes from a lineage of landowners, he either gives it to the wife directly or asks the head of the lineage for permission. Because the matter is handled within the family, it is almost automatic and issues rarely arise from this kind of process.

If the husband and his family are not owners, the husband will negotiate with the lineage that manages that land. While a woman has to go to her husband if she wants to pick a new field, change field or expand, it might be that the husband lets her negotiate the land by herself. This is an interesting perspective hinted at in the literature (Kevane and Gray 1999). Women will never ask for ownership, as it would never be allowed by their husbands; women usually ask for small fields, as they don't have enough time to cultivate bigger ones; women are responsible for a household's food security and feeding their children, they will therefore take good care of the land and soil as their families' survival depends on it; women, in a Mossi society, and as it has been mentioned before, are not allowed to plant trees and therefore claim land as their own; this implies that if the land owner allows women to practice assisted natural regeneration, they might keep some rights over tree products but the trees will belong to the landowner forever.

Assisted natural regeneration or ANR is a straightforward and almost no-cost technique that can contribute effectively to restore more productive forests (Shono, Cadaweng, and Durst 2007). It is conceived to accelerate the natural reforestation process by removing or reducing barriers (such as weeds or other disturbances) and encouraging special care of spontaneously born trees or bushes (Food and Agriculture Organization of the United Nations and Forestry Department 2016).

All of those reasons were mentioned by several women across the interviewed household and then discussed with Tree AID's representatives as well as at the validation workshops, with both men and women. While a consensus would not always be explicit, the feeling remained that long-term security was not a burning issue and that, when negotiating for the following agricultural season, men might be more inclined towards women due to their status.

Quote *On ne va pas généralement refuser la terre si c'est pour planter des céréales pour nourrir sa famille. (Lineage chief, Tinkoaglega, April 2014).*

Quote *On ne refuse pas la terre à une femme pour nourrir sa famille. (Village chief, Kouni, May 2014).*

Quote *On accorde la terre si c'est pour cultiver pour la famille et souvent aussi si c'est pour vendre le surplus. C'est ça, notre société. (LaM1, Lablango, April 2014).⁵¹*

This study does not want to argue here that secure access to land is useless. Women are extremely aware that land could be taken from them with virtually no notice or reason. Village and land chiefs confirmed that, in their jurisdiction, the main issue that might give rise to such circumstances concerned relatives returning from abroad and claiming back their ancestors' land for the following agricultural season. This issue has been addressed at the validation workshops; the answers proved it was part of the tradition. All women confirmed that,

⁵¹ Nobody would refuse land if it's for sowing cereal crops and feed the family.

You don't refuse land to a woman who wants to feed her family.

You always grant land to harvest for the household and sometimes also if you sell what you don't eat. This is how our society works.

sometimes, they feared to see their field taken away and it made them wait longer to use soil conservation and improvement techniques, therefore contributing to soil degradation. However, village and land chiefs confirmed that, once the fields have been prepared for sowing, the claimant has to wait until harvest is finished.

Furthermore, the interviews proved that women are concerned about one agricultural season at the time and all the interviewees agreed that negotiating access to land further than that is inconceivable.

This thesis argues here that, when talking about women's access to land, this short-term dimension should be taken into account as it appears from this research to be the main reference timeframe in a Mossi context in Northern Burkina Faso. Moreover, all interviewed women confirmed that, while their husbands are in charge of the seeds and they do sometimes need to ask them for new or better seeds for the following sowing season, they have complete freedom over what to plant in the land assigned to them, how to organise their field and what to do with the harvest and income, assuming their obligations within the household have been completed.

Quote *Oui je plante ce que je veux. Oui je peux aussi vendre. Bon, je demande la permission à mon mari mais c'est parce que je le respecte. Oui c'est moi qui garde l'argent. C'est simple. Moi je dois avoir la récolte pour nourrir mes enfants, garder de côté pour les occasions spéciales et gérer le grenier pour qu'il en reste toujours un peu, parce que la famine est toujours derrière la porte. Si mes semences n'ont pas bien rendu, oui, je demande à mon mari, sinon je les garde depuis l'année d'avant. On se respecte et on communique et ici ça marche comme ça. (LaW1, Lablango, March 2014).⁵²*

Quote *Oui je plante, je choisis, je garde l'argent. Je m'organise avec mes coépouses, et ici nous on s'entend bien. On s'organise pour que tout le monde*

⁵² Yes, I can plant whatever I want. Yes, I can also sell. Well, I do ask my husband for permission but it's because I respect him. Yes, I can keep the money. It's simple. I have to keep enough to feed my children, to be prepared on special occasions and manage my granary so that it's never empty, because famine is always close. If my seeds are bad, I will ask my husband but otherwise I keep mine from the previous year. We respect each other and we talk. That is how it works here.

*mange et tout le monde travaille et prépare. Mais chacune plante ce qu'elle veut et chacune garde l'argent. S'il y a des dépenses non prévues, on gère si ça arrive, pas à l'avance. On est femmes et puis on est amies. (TW1, Tinkoaglega, March 2014).*⁵³

In addition to rights over land as prescribed by the laws of society at a village level, women also seem to have freedom over how to manage their field within the household, as long as they fulfil their duties towards their husband and children.

When acknowledging that school-aged girls were also involved in accessing land and often had their own fields, the way girls accessed land has also been explored, mainly by interviewing their mothers on the topic. It quickly emerged that girls only go to their mothers if they want to start cultivating their own field, and not to their fathers. This is important not only because it further proves that girls are seen as strangers to the family, but also because it means that women can manage their land by assigning part of it to their daughters and daughters-in-law.

The society remains patrilineal and men are in charge of the communal family field and of the negotiations of new land on behalf of women. However, land that has been negotiated by themselves or by their husband with the lineage chief is entirely in their jurisdiction and they are free to decide not only what to sow and harvest but also how much to give their daughters. Because it is a temporary loan of rights, the fathers assume the girls will go to their mothers and are not involved. Naturally, things change when it comes to boys, who have to follow a process of negotiation with the landowner lineages accompanied by their father but claiming land rights on a longer time scale in view of, one day, starting a family.

Finally, the social cohesion so often mentioned by local authorities proves to be true not only when understanding how conflicts over land are arbitrated and usually peacefully and spiritually settled. A girl is born a stranger to her own family;

⁵³ Yes, I plant what I choose and I keep the money. I talk with my co wives and we get along well here. We organise ourselves so that everyone can eat and everyone contributes and prepares and works. But we all pick what we want to plant and keep our money. If there are unexpected expenses to be made, we'll handle it as it comes, not in advance. We are women, and we are friends.

however, on some rare occasions and with good reason, a married woman might return to her parents. She might be a widow before giving birth to a child; this leaves her with no actual link to the in-laws who may or may not treat her like family. She might also leave her husband's family in order to escape extreme violence, or be repudiated because of being infertile or having given birth to handicapped children. In those extreme and apparently rare occasions, the woman might choose to go back to her parents rather than negotiate her place in her husband's family. In that case, re-entering her natal family and gaining access to land are decision of the head of household on a case by case scenario. Household, village and land chiefs confirmed that she could be given a small field and hut somewhat removed in location from the family compound, but would be involved in the family's activities and be expected to contribute to their livelihoods. The literature, as well as an initial round of interviews with the heads of household, seems to suggest that those are rare cases and that the husband's family usually accepts the woman who married into it. To repeat what has been mentioned earlier, it is another case where one does not refuse a small field to a woman who wants to cultivate it for her own or her children's subsistence and survival.

This research does not argue that the Mossi social and cultural traditions act as a barrier for things to change. It points out, however, that, in line with what happens in most Sub Saharan countries, formal land laws are difficult to implement when they openly seem in contrast with what local traditional authorities have been enforcing for centuries. Moreover, this study wants to highlight that, because the Mossi (or any) society is inserted in a wider context of interconnected dynamics (what is sometimes called a globalised world), relations and mechanisms between people are constantly changing. One of the arguments here is that while, at first glance, the society looks rigid within its patriarchal structure and land related norms, the internal negotiations have been modifying the essence of the society, while leaving its exterior intact.

*a. Women's access to land in the Western part of
Burkina: insights from the Boulkiemdé and Sanguié
provinces*

This section is going to follow a structure similar to the one used to introduce the secondary field site data. Since it is argued that land tenure is one of the pillars of the Mossi society in rural Burkina Faso, it is interesting to explore further the same topic in the Western region inhabited by Gurunsi of the Lyélé ethnic branch.

At first glance, as previously described, the patrilineal society model applies to the Gurunsi households and villages. As previously argued, however, households cannot be fully grasped as an unilinear entity. The differences here are, in fact, substantial. Because of the small sample of people interviewed in Boulkiemdé and Sanguié, it needs to be stated that, again, this does not necessary apply to the whole ethnic group and much less to the whole country.

However, it seemed interesting to present a case-study from that region to highlight the possibility for women to invest in a land that they don't own and for which they only have certain user rights.

The first finding coming from the analysis of the collected data concerns the internal management of some crops. Similarly to the Northern site, the women interviewed confirmed they had access to the family-owned plots. The fields were differentiated between those close to the compound and those further away and between the familial field and the individual plots. This disposition looks extremely similar to the one found in Passoré. However, in the case of the Western households, significant attention is dedicated to the field the household has invested in. As noted earlier, the interviewed households had all purchased a drip irrigation kit. This seemed an interesting factor since land tenure insecurity and the lack of implementation of the latest national land law would suggest that such investments might not be a wise option.

The peculiarity of the product sold denotes a specific attention to the Burkina Faso context. In fact, these households were able to invest in their land because the kit formed of a plastic tank and micro tubes for irrigation can easily be disassembled and re-assembled. This process is interesting for this study. In fact,

the NGO selling these drip irrigation kits considered land tenure issues within its social context when approaching Burkina Faso. Representatives of iDE have confirmed that the kit they advertise and sell around Burkina Faso is significantly different from those sold in other countries. Despite it being a somewhat isolated example, it is worth mentioning here as it adds to the empirical evidence pointing towards the fact that land tenure is a social matter in Burkina Faso.

In Boulkiemdé and Sanguié, some households were able to invest in a land that, according to most definitions, would be considered non-secure, especially looking at it on a long-term perspective⁵⁴. This fact adds a new layer to our analysis of tenure security. Some products, such as this particular drip irrigation kit, can have a double function of catalyser and incentive. They can contribute to people's livelihoods because they allow for more crop varieties or more cycles during the same season; at the same time, people are more inclined to make arrangements to obtain final ownership of the land to be able to continue using the purchased kit.

In this area, as mentioned in the previous paragraphs, dividing land is not unusual and all the interviewees had inherited part of the family land that their parents had split to avoid conflicts. This is obviously the main difference with the Mossi households interviewed in Passoré. The NGO that sold these drip irrigation kits hadn't started a market in the Northern area of Burkina Faso. iDE representatives confirmed that it was mainly since the national land law (Loi 0034) hadn't been implemented there yet.

This seems to suggest that social pressure is an important factor to be considered when looking at the Mossi society. Because dividing land is seen as insulting for the ancestors and absurd for the traditional tenure, achieving a long-term tenure security as the Loi 0034 suggests is still unthinkable.

Once again, it is argued here that land tenure is embedded deeply on different levels of the Mossi society; contemplating change involves looking at transformation for a whole society. The implications will be partially addressed in Chapter 8.

⁵⁴ See Chapter 2.

5.3. *Key findings*

This first empirical chapter has analysed relevant data and come up with some insightful findings.

These can be summarised as follows:

- In fact, the 2009 Rural Land Tenure Act or *Loi 0034* has not yet been implemented in Passoré. The root causes can be found, among other things, in the lack of flexibility and adaptability to the local social, customary and economic context.
- In rural Passoré, customary land tenure is the main instrument for managing land. Even more, it dictates unspoken or evident rules that shape the whole society from intra household resource management to interactions at the community broader level.
- In a Mossi society, traditional authorities handle land conflicts keeping a strong spiritual role within the communities; because the land tenure law has yet to be implemented, the spiritual aspect adds credibility and authority to the land chiefs.
- Land tenure transcends the bureaucracy of land titling and land conflict management in Northern Burkina Faso. In the context of the Mossi society, land tenure more deeply defines social relationships and evolution within households and villages.
- In the Mossi society, women do not have land ownership; however, they do have rights to the land and their so-called user rights influence their status within the household, therefore affecting all intra-household relationships.

Chapter 6. ACCESS TO RESOURCES: EVIDENCE FROM TREES AND NON-TIMBER FOREST PRODUCTS MANAGEMENT

6.1. *Land and trees nexus: a case of power and intra-household relationships*

The literature analysed in chapter 2 highlighted that trees constitute a strong spiritual entity throughout Africa. Moreover, it pointed out that when looking at people's livelihoods, studies need to keep in mind that they are indeed looking at an integrated agroforestry system where trees interact with men, livestock and are part of the patterns of subsistence. Furthermore, chapter 3 showed the importance of trees in the Sahelian Burkinabé context. Their role is spiritual and paramount in the traditional and customary constructs but also practical and vital in contributing to better livelihoods.

Because parklands are a widespread agricultural system in Burkina Faso, as argued by the literature analysed in Chapter 2, trees are present on almost all farmers' fields. The impact of decades of awareness raising campaigns by Tree AID, SEMUS and IFAD (PDRP project) resulted in a more attentive selection of trees renowned for contributing to water retention in fallow land. Almost all species are left to grow in fields dedicated to farming despite losing valuable arable land because of their use to improve soil and because they are a vital source of medicine and food for the households. There is virtual absence from the literature of national-scale in-depth studies regarding market access and commercialisation of such products.

A practical difficulty to these studies is how to measure the contribution of this sector to the national economy (Lamien, Sidibe, and Bayala 1996). This points towards tree products being an informal sector; because of it, mechanisms underlying this sector can be better found in smaller units such as the household. Tree regeneration is therefore a consequence of the awareness of the good qualities of some trees in promoting soil conservation; it is a practice entirely integrated in the farming system, providing further evidence that rural production

is an agroforestry-based livelihood system, and not founded only on cereals production. Moreover, as discussed in Chapter 2, natural assisted regeneration has become widespread as it helps improving soil quality, trees quantity and fits in perfectly in the local social and cultural context of the Mossi traditions.

Quote *Il y a comme une connexion, une très forte liaison entre le foncier et puis les arbres pour les Mossi. (Tree AID project manager, January 2014).*⁵⁵

As stated in Chapter 1, this study has looked into access and uses of trees and their products as a crosscutting lens through which some of the complex mechanisms behind social structures and land tenure systems become clear. Moreover, the importance of non-timber forest products (NTFPs) in Mossi culture and their contribution to the households' livelihoods make them even more interesting and important to analyse for our purposes.

This chapter aims to assess rights over, access to and contribution to rural livelihoods of trees and non-timber products of baobab, shea and néré trees in northern Burkina Faso. In line with the research questions, this part of the study puts an emphasis on gendered roles and rights as well as evolving social relationships and customs. It is also relevant to mention here that trees offer an example of evolving social relationships and their impact on access to natural resources and vice-versa, as well as that, according to the literature, trees and their products could potentially massively contribute to Sahelian households' food security by being consumed at important times during the agricultural year (Ickowitz et al. 2014; Nanama and Frongillo 2012).

It is been argued throughout the thesis that household decision-making in Burkina Faso is inserted in and influenced by social systems and political mechanisms (Brasselle, Gaspart, and Platteau 2002; N. D. Poole, Chitundu, and Msoni 2013; N. Poole et al. 2016). Tincani's 2012 study (Tincani 2012) argues for a dynamic and continuous renegotiation of entitlements to natural resources by household members, with specific differences according to seasonality, gender, age and social position of the household itself.

⁵⁵ There is something like a big connection, a nexus between land tenure and trees for the Mossi.

The collected data on access to trees allows for an exploration of how non-timber products of baobab, shea and néré are accessed, used, consumed, conserved and managed; this adds details to roles and responsibilities of household members as well as more information for new policy approaches to tree resources, historically part of national agrarian reforms in Burkina Faso.

This study is based on data collected both quantitatively and qualitatively. Initial baseline quantitative data was collected by the researcher and facilitators as part of a FAO study carried out through the NGO Tree AID in three targeted provinces (Audia et al, 2014), as explained in Chapter 4. The questionnaire was designed after a careful literature review and focus group discussions were subsequently held, acting as validation workshops. This data has been combined with the in-depth qualitative questionnaires administered over the course of fieldwork to the households selected by the study, according to the methods summarised in table 1, p.114.

The areas selected for the quantitative study aimed at capturing different social and agro-ecological variations of Burkina Faso, focussing on different patterns and amounts of rainfall and exposure to markets (N. Poole et al. 2016). While acknowledging the limitations of using purposive sampling, especially on such a limited number of households and villages, time and political insecurities made it the most appropriate for the study. It is important to note that the quantitative questionnaire administered in the three provinces of Passoré, Zoundwéogo/Nahouri and Gourma were targeting female both wives and heads of households.

An analysis of the quantitative data highlighted a particular place of three trees: baobab (*Adansonia digitata*), shea (*Vitellaria paradoxa*) and néré (*Parkia biglobosa*) (Audia et al. 2014). They are going to be central to this chapter and research as they exemplify the relationship between people and land. Moreover, they constitute an interesting angle from which to look at patterns of accessing resources and household management structure including insights on gender, roles and responsibilities. Lastly, they proved to be particularly important to the households' food security and resilience strategies over the course of the agricultural year.

This chapter is going to present results, analysis and reflections around the three trees separately, highlighting insights that are relevant to land tenure as well as to rural livelihoods. It is important to note that the quantitative data and the focus group discussions held regionally in February 2014 confirmed massive differences between the southern and northern provinces. For the purpose of this thesis, it is useful to highlight three main overarching themes that will be looked at in detail in the following paragraphs. First, the Sahelian climate in the North allows at the same time for different and often not immediately consumable trees; however, the length of the dry season in that climate also pushed for a much wider exploitation of NTFPs and a strong culture on transformation possibilities. Secondly, and in line with what has been argued in Chapter 5 regarding access to land, husbands usually play a big role in granting or mediating access to trees and their products. Finally, it is worth noting that, in the South, there was a consensus that economic needs and recognition of women's knowledge on transforming NTFPs combined with traditional taboos are enabling women to take charge and exploit a wider range of tree-related resources as well as market opportunities. The data collected in Passoré over the course of fieldwork does not seem to confirm this conclusion (true to the Southern provinces); however, some patterns highlighted here and in Chapter 7 may be a step in that direction.

6.2. *Baobab*

Baobab trees grow naturally and are very rarely planted; it is extremely difficult to plant a tree from a seed. Replanting has the traditional implications for land tenure that constitute an issue to many and use of natural regeneration is therefore a possible cause for dispute happily avoided.

Baobab have been defined as “trees for men”⁵⁶. Qualitative and contextual interviews revealed that there is a very loose control of access and collection; moreover, it was evident from the collected data that decisions were collectively taken concerning quality and quantity of access, uses and transformation of baobab products in all of the interviewed households, including the ones from the Boulkiemdé and Sanguié provinces.

⁵⁶ Validation Workshop, Yako, March 2015.

A first round of conversations with the elderly and customary authorities confirmed what the literature argued about the important role of some of the trees to local culture and society. The village and land chiefs agreed that, according to their culture and the tradition of which they are guardians, baobab and néré are trees that hold a specific status and need to be treated separately from the others when discussing their importance in a Mossi context.

These trees are mainly managed by men and also have a central place in land tenure customary systems. Analysing the role of baobab will add evidence to the fact that people's decision-making processes and social structures at the household level shape and are shaped by the customary and national land tenure systems.

In Northern Burkina Faso, baobabs can be found in non-cultivated areas, sacred forests or common village land. The tree which is said to have been punished by the Gods and planted backwards, roots towards the sky, is in fact sacred and a symbol of communion with spiritual entities (Wickens 1982). In Mossi culture, baobabs are not planted: they grow naturally. As mentioned above, assisted natural regeneration has been tolerated over the past few years. While this might seem like small step forwards, it has started making a difference in terms of replantation of baobab trees (Jamnadass et al. 2011).

Land and village chiefs are responsible for the health of baobab trees placed in common areas; they are their guardians and they communicate with the genies through them. The baobabs are part of the symbols that ensure soil fertility and a good harvest in a Mossi society.

Quote *Il dit qu'il peut entourer le baobab pour que les chèvres ne détruisent pas ses jeunes pousses ou pour que les singes ne volent pas les fruits. C'est un arbre sacré, et cela ne concerne que les hommes. (Facilitator translating the interview to the village chief, Kouni, March 2014).*⁵⁷

The spiritual aspects of planting a tree and owning a plot of land previously highlighted (see Chapter 2) support the results from a FAO study, highlighting that

⁵⁷ He says he can also surround the baobab [with a fence] to keep away the goats from the young trees and the monkeys from the fruits. It's a sacred tree and it only concerns men.

baobab products collection is an activity mainly practised by men in a Mossi area (Audia et al. 2014).

However, the data validation workshops proved that women are indeed aware of the importance of baobab for the household's diet. In practice, this translates into a very loosely controlled access to baobab trees. Women were able to negotiate access to trees in land owned or farmed by their husbands but also, generally, to other baobab trees in either communal or other lineages' land. Women, mainly in charge of the household food security, are in fact aware of the importance that baobab products and their transformation into biscuits or juices have for their household.

The initial quantitative baseline confirms that almost all of the interviewed women are involved in collecting baobab products (N. Poole et al. 2016). Moreover, most of family members seemed to be involved, from head of households to children and regardless of their gender and age. When this was explored in longer conversations in the Passoré households, some men argued that, in fact, collecting leaves and fruit was a man's task because it was dangerous to climb the high trees. Some men also stated it would have not been dignified for women to do so. However, women-only FGDs nuanced this view. It was stated repeatedly that, while men strongly held their connection to baobab trees because of the aforementioned spiritual and power-related customs, women made it their task to harvest its products while men were busy in the fields, at markets or praying at the Mosque. Since a religious aspect was mentioned, more questions were asked to the Christian household regarding baobab harvesting responsibilities. However, both husband and wife argued there that, in their opinion, within the household, patterns of renegotiating access and discussions regarding roles and responsibilities were usually based on practical aspects such as fitness, age, time and willingness.

It is also interesting to note that, in the Southern province, harvesting baobab products was determined to be a responsibility of adult women with the help from young daughters. When it came to understanding the decision-making processes around baobab kernels, powder and fruits, the collected data showed that, in Mossi households, it was a family process involving everybody. While men were

usually in charge of handling the commercialisation of the product, the quantity of sold leaves or fruits was decided together.

The literature, recent studies and the collected data confirm that, in rural Northern Burkina Faso, women are mainly in charge of the household's food security system. This is explored by Tincani (2012) and confirmed by conversations with both household members, facilitator and local NGO staff.

The traditional livelihood system of a Mossi household sees all members farming the family field and all the harvest from that field being put in the big granary; women, however, almost always have their own smaller fields. Products sown and harvested in their fields are kept in personal, smaller granaries, physically placed in each woman's hut. This includes co wives in polygamous households, daughters-in-law and widows that may live in the compound.

Tincani's study (2012) shows that, usually, smaller granaries are used when the family granary is empty or to face unexpected shocks or a particularly bad harvest. This means that they are opened and emptied over the *soudure* period, when previous harvest products have finished and the new one is awaited.

That same period is key for NTFPs; as the literature in Chapter 2 argues, this is partly due to the trees seasonality and partly due to their contribution to the household's food supply at that particular time.

The complex reality of Mossi household will be analysed in Chapter 7. Trees provide an interesting example of how spiritual imperatives and seemingly rigid cultural and social traditions collide with food security necessities. This can be seen in the patterns through which a household handles the decisions on access, collection, use and transformation of baobab products. For example, quantitative baseline data and the FAO 2014 research show that 98% of the interviewees who confirmed to have access to baobab fruits needed their husbands' permission to collect them. This does not happen in some Southern provinces of Burkina Faso (N. Poole et al. 2016) nor in the Western provinces.

The 2014 FAO study results seem to confirm what the literature suggested about baobab being a tree for men. This opens for an interesting perspective that links tree tenure to the household's internal organisation. Numerous studies highlight the nutritional importance that the baobab tree and its products have

for the household's diets and livelihoods (Faye et al. 2010; Bayala et al. 2011). Moreover, the literature analysed in Chapter 2 and the previous chapter showed that women are usually responsible for the household's meals (Elias 2015).

Data from informal conversations as well as data from the semi-structured interviews held with women confirm that baobab is a tree that holds a special role in traditional Mossi culture. At the validation workshops, men said that, most of the time, they were the ones who were climbing the trees to get the kernels because of the height and dangers that these trees represented.

However, most of the interviewees confirmed that children had free access to the trees as a sort of unspoken rule and that they gathered the fruits and leaves for the household. At the validation workshop, men seem to widely acknowledge the importance of baobab leaves, a staple food they recognised daily in their meals. It was argued in the literature review that this research embraces the critiques to the unitary household model (Gary Stanley Becker 1998). It conceives the household as a complex and everchanging entity closer to Sen's ideas (1987). It helps this analysis to look at the Mossi household as a place where men and women may have coinciding and competing interests at the same time and where their respective fields of decision-making are separate but related. The literature suggests that the situation between African spouses (husbands, wives, co wives) is usually one of separation or conflict (Elias 2015).

However, looking at intra-household baobab management in a Mossi household results from this research suggest that, in fact, to allow for informed decision-making that men seem to make, there has to be exchange of knowledge between spouses. It points towards an informal, almost hidden transfer of knowledge that leads to a more gender-inclusive decision-making.

This seems particularly surprising when talking about baobab, that has been defined at the validation workshop "a tree for men" (Man, Validation Workshop, Yako, March 2015).

Ultimately, it supports the hypothesis that the on-going clash between spiritual or traditional imperatives and the household livelihoods or, more specifically, food security issues and necessities lead to change in intra-household relationships. Extrapolating this conclusion from the tree context, it gives us an interesting angle

on transformation at the household level that may be prompted by new necessities for land tenure. The constant research for more fertile plots and the peculiarity of a woman asking for some land may be leading towards an internal transfer of knowledge between men and women that calls into question the social imperative and literature assumption that women do not have access to land.

6.3. *Néré*

The second tree this research has chosen to focus on is *néré*, or African locust bean. Just like the baobab, it has products that contribute greatly to the household's livelihoods. As the literature review explained, it is turned into *soumbala*, a very popular condiment that preserves food and is used as stock cubes.

Similar to baobab trees, *néré* plants also have specific cultural values; the validation workshops, the 2014 FAO study and conversations with Tree AID representatives all pointed towards *néré* (African locust bean) being very similar to baobab in its management and place within the Mossi tradition and culture.

Néré trees cannot be planted by women; they can be planted by men under some conditions. A widely recognised symbol of man ownership (N. Poole et al. 2016), it is still traditionally pretty much linked to male control and plays a central role in traditional land tenure. Horticulturally speaking, *néré* is a difficult tree to plant from seeds and Tree AID representatives confirmed that, in fact, it is mostly planted from a sapling grown in a tree nursery. The 2014 FAO study revealed that the most common technique for replanting *néré* is actually assisted natural regeneration, requiring that someone will follow, protect and care for a tree to help it grow.

In the area where main data collection took place, the Passoré province of Northern Burkina Faso, *néré* can be found in fallow land as well as in agricultural plots, inter-cropped with millet or sorghum (Gausset, Yago-Ouattara, and Belem 2005). *Néré's* fruits are of high value and importance; validation workshops and further conversations showed that women were very conscious of the culinary value of the fruits. The process of turning *néré* into *soumbala*, an extremely common condiment used in most food to preserve and season it, is part of

traditional women's knowledge. In the North, once again, women agreed that they needed their husbands' permission to access *néré*. It was previously explained that, because planting a tree means owning a plot of land, no woman would be allowed to do so. However, ANR (Assisted Natural Regeneration) is tolerated, welcome or encouraged since the landowners will find themselves with richer land and one more tree. It is interesting to note here that, in the South, women said that the presence of NGOs implementing projects related to the Loi 0034 – land tenure law – as well as ANR and market access were in fact leading to a slow but steady change in customary access tenure, making it easier for women to practice ANR. However, they did highlight that their husbands or male village authorities always had to be informed beforehand.

Despite this rigid rule regarding planting and replanting, tenure of access to fruits, bark, leaves and all other tree products seems to be less regulated. Women usually possess the traditional knowledge to handle the process of separating seeds from a yellow powder (that usually gets eaten by children straight away, or baked into biscuits, or sold), boiling, crushing, fermenting and preserving the product that is usually sold on the market. The following chapter will explore in depth the roles, responsibilities and routines in Mossi households, comparing men's to women's to understand how much of what Sen calls "knowledge transfer" can be found in this specific context.

Most of the interviewees from Passoré agreed that, while they had to get permission from their husbands or the landowner – sometimes both – and while men were sometimes involved in collecting the product, the whole process ultimately was part of their responsibility of feeding the family. They confirmed that they were able to sell the product if they wanted to because the men knew they were doing it to fulfil the household's needs.

This fact is interesting in itself and mirrors the findings from the baobab management. Looking at it from Sen's perspective, it can be analysed as an intra-household negotiation of rights (to access trees and their products) that impacts greatly on the household's livelihoods. More broadly, it can help to suggest that the Mossi society that is usually described as patrilineal and rigid in fact is a much more complex reality. In this example, while *néré* are trees for men, they are

handled by women. Social pressure contributes to a slow change that can be seen when looking at relationship within the households rather than at village or commune level.

The case of *néré* is also peculiar because of the importance the *soumbala* has in nutrition and diets. *Soumbala* is an important product for Mossi households' livelihoods because it increases the value of *néré* products by transforming them and because it is extremely rich in protein, so much in fact that it has been often referred to as a cheese substitute (Teklehaimanot 2004). It is not the main focus of this study to analyse the contribution of non-timber forest products to the household's livelihoods. However, *néré* offers an interesting example of the relationships between social status, nutrition values and household economy. It is worth mentioning here because it links intra-household relationships and resource management to social relations, which is the focus of this research.

As previously mentioned, the interviews showed that women and sometimes men were aware of the nutritional value of *néré*, especially when transformed into *soumbala*. Moreover, some studies estimated that earnings from selling *soumbala* may constitute, in Burkina Faso, up to 28.8% of the income per household (Guinko and Pasgo 1992; Teklehaimanot 2004).

However, the 2014 FAO study suggests that it is sold and consumed less frequently and transformed less consistently across the households, especially in the Southern region but also in the North, due to scarcity (Audia et al. 2014), even though it is commonly found in markets in Ouagadougou.

Some causes were suggested and discussed at the validation workshops. The women agreed that the transformation process was long, time-consuming and extremely heavy in terms of work, which meant it couldn't be done by younger girls. This, in turn, also meant that they would need to spend considerable amounts of time exclusively on this process. Men added that *néré* are sometimes considered sacred trees, generally have become more rare to find in communal areas and that climbing these trees is time-consuming and dangerous. Once again, it cannot be entirely delegated to children. Finally, women added that the dried fish used to preserve fermented *soumbala* for sale is increasingly expensive and more difficult to find. Men and women also suggested that the marketing system

the products go through before they can be sold is increasingly long and complex and diminishes the returns to producers.

However, these causes were not the main reason why soumbala is increasingly expensive and more difficult to find both in local markets and in household diets. The alternative seems to be stock cubes of different brands, that can be found roughly everywhere and are quicker, cheaper and more convenient. It is important to add that women were aware that regular stock cubes do not have the same nutrients that can be found in soumbala. It was suggested that being able to buy stock cubes was an indicator of social status particularly important for the household. This meant that people were sometimes more inclined to purchase ready-to-eat products for two reasons: it meant more time for other activities and it meant a different social status for the household.

Within the household, this also meant that women could be doing other things, men could be less involved in collecting and gathering non-timber forest products and children's help was not needed. It also meant that, nutritionally, the family was losing important nutrients such as protein. From informal discussions and from the validation workshops, it seemed like women were mainly in charge of deciding to buy stock cubes rather than soumbala. It was partly due to access to trees and options to buy them and partly because of the social status it gave the household.

This is an interesting example that points towards a connectedness between social relationships and resource management, especially land and trees. The consequences of this shift towards commercial products meant the need to find income to buy stock cubes; less negotiation between men and women to manage access to trees and their products; and a different way of approaching *nééré* trees management.

In terms of replanting *nééré* trees, however, only one respondent in Passoré said that they or someone in their household replanted a *nééré* tree; it is interesting that, in contrast, in the Southern provinces, 30% of the respondents said they had done so. While most women agreed it had been a learning curve with a lot of failed experiments, they also said that new NGO projects were aiming at constituting tree nurseries that would help their purpose.

Ultimately, some households seem to transform soumbala for sale rather than home consumption; others seem to collect it for the powder – which does not need to be transformed – and for medicinal purposes, and because seeds and leaves can serve as a fertiliser to help improve soil quality.

6.4. *Shea*

The third tree this study focused on is shea. A lot has been written on the collection, consumption and sale of transformed shea products, since shea is one of the major rural income-generating products (N. Poole et al. 2016). This paragraph will focus on shea management as an example of intra and inter household collaboration.

Elias (2015) argues that collection and transformation of shea nuts into butter is usually associated with the female sphere of activities. The 2014 FAO study suggests the same, in line with a strong body of literature. However, because of its contribution to household income, the process has become increasingly interesting to men in the region (Kent, Bakaweri, and Poole 2014). Data show that trees in both Northern and Southern provinces were considered a private matter; rights over trees and their products are therefore strongly linked to access the plot of land.

The transformation process for shea is as long, complicated and time-consuming as the one to turn *néré* seeds into soumbala. The lack of a quicker and cheaper alternative, however, leaves it to be a huge part of women's responsibilities and activities for the household. Shea butter consumed at home is used daily to enrich the preparation of food, to which it gives a very distinctive flavour. The household routines surveys and interviews that will be analysed in more depth in the next chapter indicate that processing shea is a task that most women carry out alongside their other usual chores. It is a very important activity that contributes to household nutrition and income (Sidibe et al. 2014).

In fact, shea is mentioned as one of the main income-generating products with sesame, peanuts and local beans. The home consumption is only a very small part of the collected products. In fact, the 2014 FAO study highlighted that shea fruits, rich in carbohydrate and protein, are rarely eaten and often left to rot in holes in

the ground around the trees to collect the nuts. This is explained by two things: collecting shea fruits is children's activity. Children will eat some of the fruits but because they only last for a few hours after collection and due to a lack of possibilities to preserve them for longer, fruits are only valuable for their nuts. Moreover, the nuts are worth a lot and it is therefore counter-productive to sell the fruits as the nuts would be lost in the process.

Access to shea trees offers another angle on Mossi tree management and tenure. In fact, in Passoré, shea trees are considered a common property. Unless they are on someone's cultivated agricultural field, access to fruits and nuts is considered free.

In the traditional North, where rules seem to be set and strict concerning baobab and néré, it looks like access to shea is less regulated. Women do not need their husbands' or the landowners' permission to collect fruits. In fact, because there is no climbing required, children gather them all the time. Unspoken but widely known rules prohibit stealing nuts from the holes in the grounds, usually around someone's fields, as it is recognised that the person claimed the fruits to transform them.

As previously mentioned, there is very little control over who accesses the fruits; with low branches, plenty of fruits with a very short life, children were said to be the main gatherers. They consume the fruits right off the trees before and after school or work in the fields; there are no rules as to which trees they can accessed and no limitations in quantities, as long as they left the nuts on the ground. This means that, naturally, selling the fruits is forbidden as the tree owners would lose the nuts, which are the most important part to make butter and related products.

During the FGDs, women strongly restated that transforming shea was a female activity in which men took no part (N. Poole et al. 2016). Moreover, because of the long, manual transformation process, intra- and inter-household collaboration is a major factor when looking at shea nuts and butter. Women within the same household coordinate their schedules to be able to help each other with this lengthy activity. More importantly, neighbours might do the same. In fact, the higher the quantity women can sell by putting together their individual

household's shea production, the higher the price they can negotiate with buyers, selling directly from the household. By doing so, the intermediaries are eliminated as well as the travelling to the markets, increasing the returns.

When looking at intra-household resource management, it is particularly interesting to analyse a resource that seem to be strongly linked to gender and handled mainly by women. Within the households, it was suggested that one's contribution to collection and transformation of shea into butter can be used as a bargaining chip for other activities. The importance that income from shea has at the household level also meant that women may have negotiating power with their husbands. In fact, in two of the selected households, wives argued that they can negotiate access to other resources better when shea production is good.

In this research perspective, this can prove two things. Social status within a household can be deeply impacted by access to a specific resource, such as shea. Secondly, it highlights the link between land, trees and livelihoods. In line with the literature, the study on these trees and their products showed differential gendered access and rights over these resources (Haddad, Hoddinott, and Alderman 1997). Moreover, as suggested by Tincani (2012), decisions over NTFPs are made through negotiation amongst the different members of the household and wider community. The workshops showed at the same time the huge role that customary rules of access and power over resources play in achieving and better livelihoods, as well as their potential to add to it; the *néré* example, where trees are a male's prerogative and fruits are nutritiously paramount for the household's food security is quite interesting to read in this framework.

This chapter has been arguing for an agroforestry nexus involving a strong link between land and tree management. This adds a final piece to the puzzle by showing that intra-household relationships as well as the household's livelihoods are inter-connected and inter-dependent from both land and tree management processes.

Chapter 7. STRUCTURE, DYNAMICS AND POWER

RELATIONSHIPS FOR LAND AND LIVELIHOODS IN MOSSI

HOUSEHOLDS

7.1. *Households resource management in Passoré*

The literature puts forward the idea that there is no univocal definition of the household. The body of texts, papers, books and documents revolving around the definition of household as well as the flourishing quantity of adjectives and attributes such as simple, complex, unitary, nuclear and so on prove that the debate is still open, cross-disciplinary and enriching. This study contributes to the debate by highlight the contextual structure of complex households in rural Northern Burkina Faso. Despite it focusing mainly on the Passoré province and for consistency with previous chapters, some evidence will be brought from the Western part of the country to deepen the analysis and prove our point.

The literature and the data concur in acknowledging that societies are dynamic, heterogeneous entities evolving constantly. However, the ethnographic work that has been presented in Chapters 2 and 3 has sometimes fallen into the trap of stereotypical generalisations. These assumptions translated into the household sometimes presented as a unit ‘frozen in time and space’ perpetuating traditions with very little acknowledgement of how these traditions have changed over time.

This research tries to avoid the same pitfalls and argues that, while patrilineal values of the Mossi societies seem intact, a closer look an intra-household relationships proves that the society is dynamic, and customs have had a chance to modify and change in response to external and internal factors, despite keeping a rigid appearance.

The unit of analysis has been chosen, as presented in the methodology section, amongst other things, because of the peculiar characteristics West African households and families have had for centuries. As Pilon (2006) argues , they are an evolving phenomenon, changing constantly and often in an environment full of constraints and contradictions. Not wanting to analyse households as unitary and entities of social (and economic) organisation, the thesis has tried to grasp some of the mechanisms underpinning Mossi social structures, shaping and being

shaped by rules cross-cutting customs, family relationships, formal laws and repercussions of climate change, economic crises and political instability. It is a unit of analysis where an in-depth qualitative piece of work can find meaningful evidence of larger scale changes. In this case, families and complex households mirrored the difficult process of adapting to new and different climatic scenarios, economic difficulties and decoupling of formal laws and customary land tenure. The household and its members are actors of social change at different levels, as they have the capacity to shape and innovate within existing structures (D. Ouédraogo, Kaboré, and Kienou 2007).

This in-depth qualitative study has some limitations; it is worth mentioning here that the limited period of data collection was too short to analyse possible change. However, the analysis wishes to focus on showing how mechanisms of continuous renegotiation within the household impel a rearrangement of traditions regarding access to land, trees and overall resource management, sometimes resulting in different or better livelihoods.

The literature explored in Chapter 2 highlights that most of the theoretical debate on Sub-Saharan African families is outdated, out of context or contradicted by more recent evidence. This section offers an interdisciplinary picture of the Mossi household and puts forward a critical point of view of household dynamics across ethnographic research, social science analysis of land tenure, historical perspective and livelihoods.

The initial hypothesis revolved around a new idea of the Mossi household. The analysis of the social structure is to be linked with land tenure organisation at the household, village and commune level. The chosen households offer a variety of perspectives, being from different socioeconomic backgrounds, status and religion. The data on the household members' roles, responsibilities and routines highlights two main findings. First, it shows how land tenure is intrinsically embedded in the society, driving not only intra- and inter-household relationships on accessing plots and fields, but also informal relationships between actors. Secondly, it highlighted certain mechanisms of decision-making and accessing resources that might have been only hinted at or overlooked by most of the literature.

Before starting to present the results of the data analysis, it is important to recall here that ethnographic studies of the Mossi households are outdated, focus on a specific area or driven by economic theories that cannot be applied anymore. The socioeconomic and traditional contexts explored in Chapter 3 show a patrilineal society. This study, by investigating routines and relationships, has tried to address this gap in the literature that assumes the household to be a unitary phenomenon. The focus of the analysis has been on how land tenure influences and is influenced by the constant renegotiation and reshaping of relationships that happen within the household. While keeping an exterior “shell” of timeliness and rigidity, it seems that Burkina Faso rural Northern Mossi societies have been in fact changing, as is especially exemplified in the access to trees Chapter (see Chapter 6).

The collected data presents huge differences, as mentioned in Chapter 5, between first and last interviews. Other factors such as presence or absence of men, sons, daughters and village elders influenced the quality and depth of the collected data.

It was clear, in line with the literature, that the women-headed households had an inferior social role in the compounds. It was argued in Chapter 5 that women have access to more resources than expected, despite a lack of mechanisms to ensure long-term security. The two women-headed households proved to be socially dependent from other male-headed structures of the society.

Quote *On ne s’attend pas d’elle qu’elle emmène la même quantité de nourriture ou offrande en cas de funérailles, mariage ou évènement social, mais elle dépend de son beau-père avec qui elle a gardé une très bonne relation.*⁵⁸ (Facilitator on Kou1, Kounkané, March 2014)

⁵⁸ Nobody expects that she bring the same amount of food or goods on occasions such as funerals, weddings or social calls, but she is considered part of her father-in-law’s family, with which she has a very good relationship.

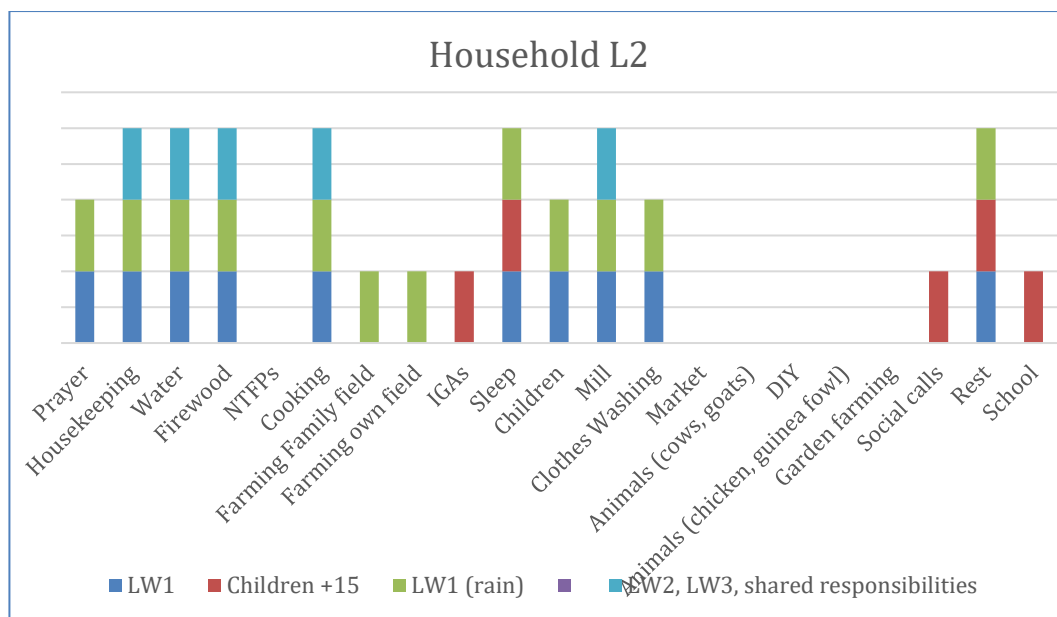


Figure 4 Household L2; division of tasks during rain and dry seasons. For full referencing see Appendix 1.

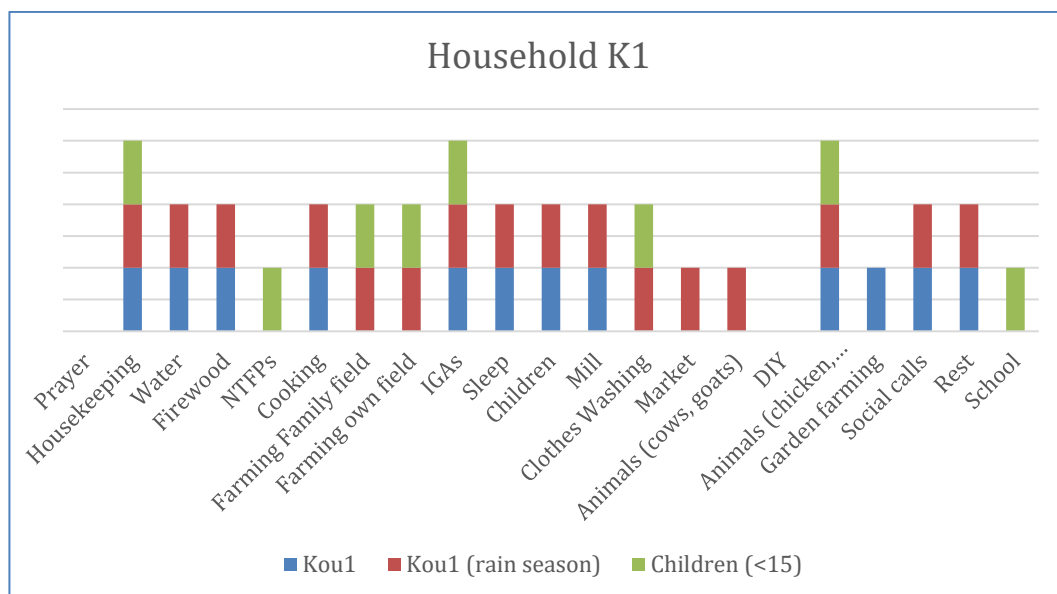


Figure 5 Household K1; division of tasks during dry and rain seasons. For full referencing see Appendix 1.

The figures above show the results of the collected data on tasks and responsibilities over the course of the agricultural year, harvest to harvest. Routines appeared to be overall homogeneous across the households, confirming the rural livelihoods activities that the literature and contextual analysis had

identified. Specifically in these female-headed households, the women unsurprisingly lead on most activities, both during rainy and dry seasons.

Disaggregated data also show that, while the significant change during rainy season is obviously the presence of farming, other activities do not change.

Quote *En saison des pluies, on se lève plus tôt et l'activité champêtre prend le dessus. La routine est différente pour préparer les champs. Elle va commencer dans quelques semaines avec le fumier et les zaï. Mais les autres activités ne changent pas, on ajoute seulement (Facilitator on LW1, household L2, Lablango, May 2014)⁵⁹*

This survey data is very useful to have a broad picture of the reality of a woman-headed household in rural Northern Burkina Faso. However, the deeper qualitative semi-structured data framed the analysis: the two households look similar but have very different livelihood contexts articulated around them.

Household K1 is composed of a widow and her two young daughters; they are dependent from her late husband's family as a temporary solution. Because of the good personal relationship developed with the in-laws, the widow was able to maintain access to all plots and resources. Looking at her household's situation from a livelihood's perspective, nothing much has changed. She has her own plots and one of her daughters, who is old enough to farm, sporadically helps taking care of it. The same goes for gardening and selling what she can at the market. The main difference revolves around the family field; since land is managed according to patrilineal traditional laws, the land belongs to her in-laws. As uncovered by the interviews, land was actually negotiated by her in-laws but has been theirs to farm for generations. Since her husband passed away, she is still required to be actively involved in farming activities on her in-laws' field.

Some of the initial literature on Mossi households seemed to suggest that widows may return to their original families and live with them, yet separated from the rest of the compound both physically and socially. This meant that they would be assigned a hut placed outside the walls or compound perimeter and that

⁵⁹ During rainy season, we wake up earlier and the farming activities take over everything else. The daily routine is different while we prepare the fields. She is going to start preparing in a few weeks with manure and zaï pits. But all other activities are maintained, [the farming] is just added to those.

she could only attend certain social events. However, this also meant that she and her children would be taken care of, up to a certain point, by her parents and extended family (Lallemant 1977; Rohatynskyj 1988). The widow, once gone back to her parents, would lose any claim over farming the in-laws' land as well as to her own granary. This is not to say that the ethnographic studies on Mossi society ignored the recognised practice of levirate. Both papers mention that widowed women often had to marry their late husband's brothers or cousins.

This structure and rigid system of rules does not seem to be true anymore. Both woman-headed households were being taken care of by their husband's original families rather than theirs. Despite one of the women living with her husband's brother, it cannot be considered a case of levirate since her husband is effectively still alive, but works in another country.

In household K1 case, the woman and her daughters kept on living in the small compound where they used to live when the husband was alive. However, socially, they acted as linked to the husband's family, not the widow's. Having a good relationship with the father-in-law is key to avoid social exclusion. However, as already stated in **Chapter 5.2**, land is rarely refused to women who needs to farm it to feed their children. On a short-term perspective, this had no impact on the widows' situation regarding land and other natural resources management.

However, looking at long-term security, it makes a massive difference if someone – and specifically a man – is able to negotiate land. Combining male authority with the women's position, this translates into more long-term security than what the literature seemed to argue.

The hypothesis that long-term tenure security has less impact on achieving better livelihoods in rural Northern Burkina Faso is once again tested in woman-headed households that the literature qualifies as more vulnerable.

Semi-structured interviews were drafted to understand what land tenure security meant to households considered to be more socially excluded, then adapted for all the sample sites. It is crucial to understand that the central element of discussion is the possibility to prepare fields for the following agricultural season. Interviews of all households highlighted that, while harvesting, farmers have the next sowing in mind. The long process of selecting seeds, harvesting in

different ways and quantities and testing soil quality in assessing the quality of the harvest takes place simultaneously.

Quote *Il lui arrive de gérer des conflits fonciers car les gens trichent sur les limites de leurs champs. Et les prêts de terre sont difficiles quand les gens ne savent pas s'ils auront la terre la saison suivante. (Facilitator on Land Chief, Kouni, May 2014)*⁶⁰

The first step is ensuring the land for the following agricultural season. However, the discussion around land tenure security was deepened and it became evident that activities to prepare for the sowing period only take place really late during the dry season.

This process has been illustrated in Chapter 5.1.b. Our analysis of roles and responsibilities adds evidence to support the theory that land tenure security is sought in terms of one agricultural year. Exploring roles and routines of the households also showed continued support between women; co-wives in polygamous households and mothers, daughters and daughters-in-law in both polygamous and monogamous households, as shown by the figures below.

⁶⁰ Sometimes he has to handle land related conflicts due to the fact that people cheat on their perimeters. Land leases are difficult when people don't know if they will have the land for the following season.

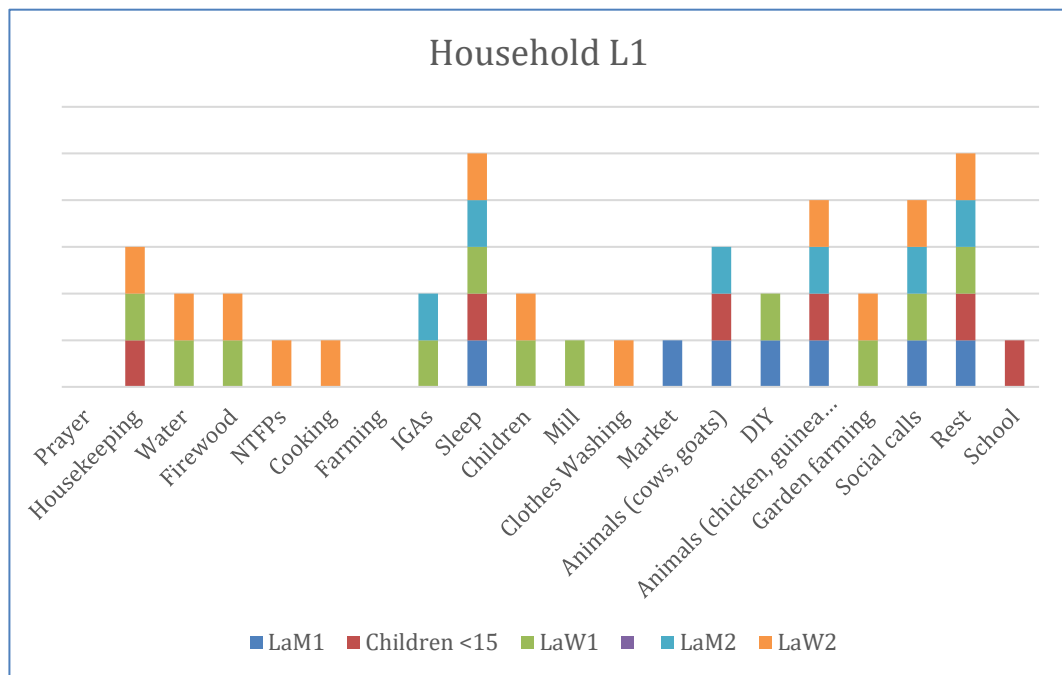


Figure 6 Distribution of tasks in household L1 during dry season

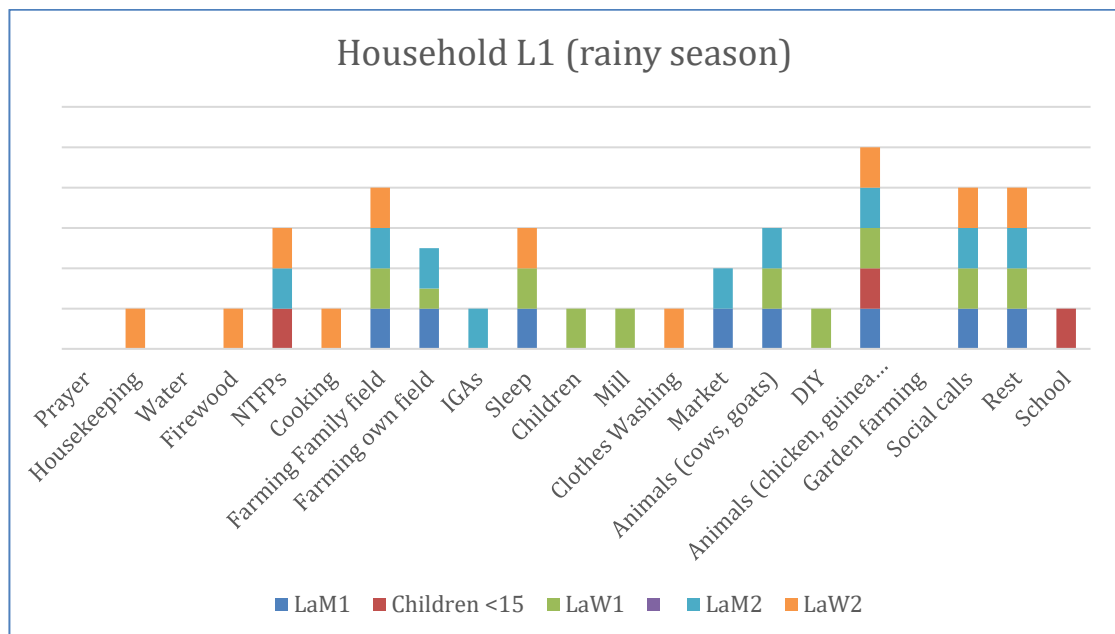


Figure 7 Distribution of tasks in household L1 during rainy season

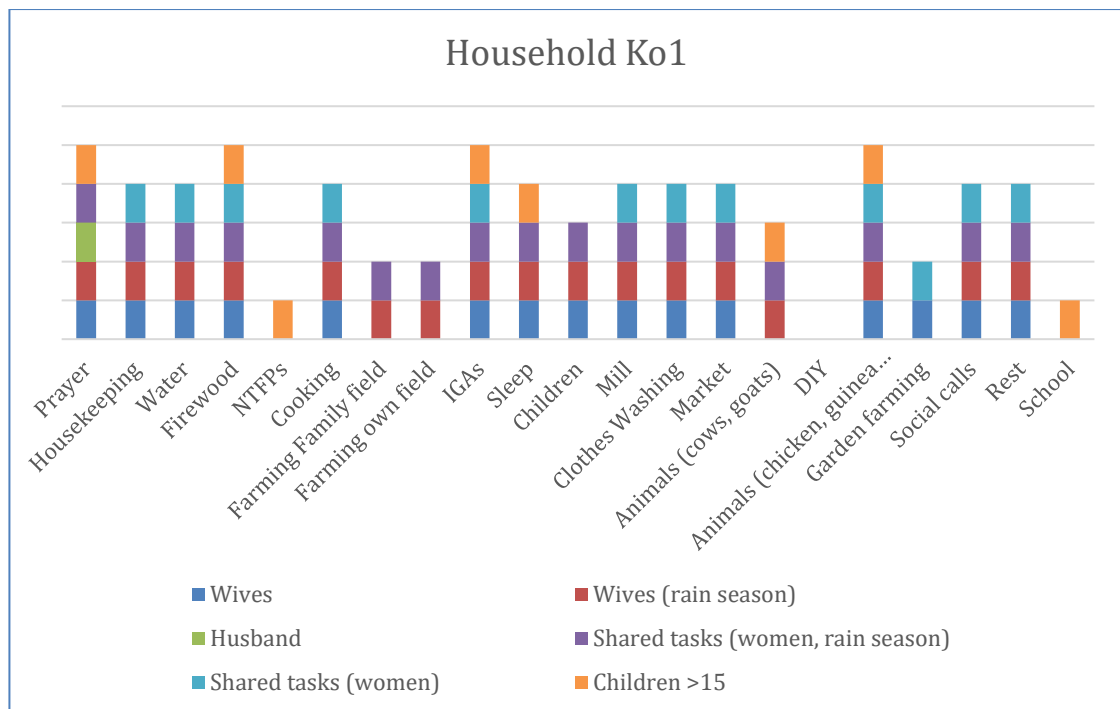


Figure 8 Distribution of tasks during dry and rain seasons in household Ko1

Solidarity amongst women, once again, is nothing new to the literature. These charts seem to show a very similar society to the one that was observed and described in the Eighties. The differences became more apparent towards the end of my data collection period. Just as important as within the households, the trust relationship I had built with the interviewees kept growing.

The validation interviews held at the very end of fieldwork, with most of the interviewees already working in the fields, and in the landscape they were most at ease in, were the most fruitful.

These interviews (see Appendix 2) showed that solidarity went well beyond the sharing of daily tasks such as cooking or collecting water and firewood. In fact, it showed an important web of hidden and untold internal relationships, evolving much faster than the broader context surrounding them. For example, the literature argued that, most of the time, in a Muslim polygamous household, the first wife will have more power coming from her status, but the last one might be favoured by the husband, granting her particular rights (Rohatynskyj 1988).

On the surface, this still appeared to be true. As per Chapter 5.2, there is a hierarchy between co-wives and it does shape intra-household relationships.

However, in depth conversations with household T1 showed that co-wives were able to put more pressure on their husband by showing cohesion rather than benefitting from their personal statuses.

They are telling me about one time where the third wife wanted a different plot of land and usually the husband prohibits it. First, they decided between themselves what plot was going to be better for the whole household. Then they approached the husband without rivalry but with a practical solution: he could eat one more plate of millet per week than the usual quantity. He agreed quite easily! (Own translation of field notes, Tinkoaglega, June 2014)

It has been argued here that Mossi woman-headed households have seen an evolution over the course of the years, as a result of changing society and different needs. This has translated into widows and lone women being more socially included in societies and able to provide for their households.

Moreover, this thesis argues that, within households, the relationships go through constant changes, difficult to grasp via surveys but easy to understand from in-depth conversation and qualitative data collection processes.

Another interesting angle has emerged from the data: the relationships between parents and children and their impacts on the household's livelihoods. Despite national data indicating poor literacy and low schooling rates (33.2% of children nation-wide are not enrolled in any primary education according to 2015 UNICEF data⁶¹), the percentage of enrolled children has been steadily growing over the past 15 years, as a combined effect of aid, information and urbanisation of the population.

Interviews on roles and routines also asked several questions about responsibilities and rights. This is important to paint a picture of the household's internal relationship map. The concept of responsibilities, as argued by the ethnographic studies, confirmed by more recent researches and by the interviews is highly regarded in Mossi society.

⁶¹ Data available online at http://www.unicef.org/french/infobycountry/burkinafaso_statistics.html

They don't hesitate when I ask about responsibilities. The facilitator tells me he uses the Mooré word for it that literally translates into "what should you do that is morally important to God". (Translation of own field notes, Kouni, June 2014)

The aggregated data in the figure below shows that different heads of households with different social positioning within the village, in different villages mentioned similar themes when asked about responsibilities.

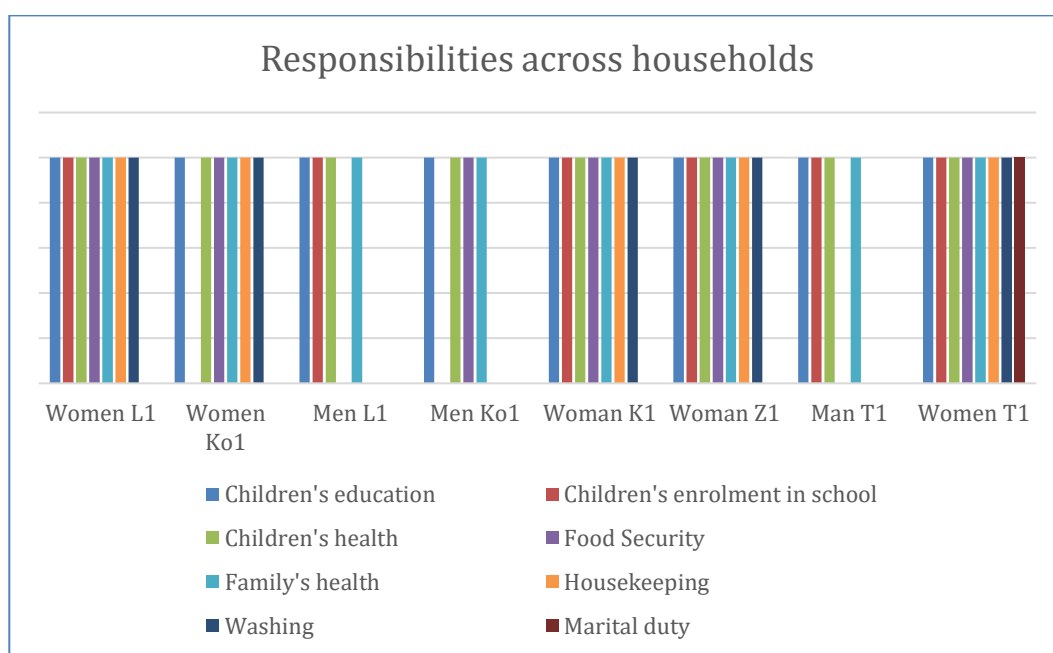


Figure 9 Mentioned responsibilities across men and women of the selected households.

This figure shows an impressive homogeneity in thinking about the household members' core responsibilities. Disaggregated data between men and women also shows similar patterns according to gender. One more time, this superficial image seems similar to what has been suggested by the literature: a clear and formal division of roles, with men officially in charge and women conducting most of the house-related tasks but dependent on their husbands in the decision-making process about management of resources.

It is interesting to show this data because it partially explains why the Mossi household is still considered as a unilineal entity anchored in some traditions that are difficult to abandon. Semi-structured interviews showed that, in fact, internally, children are building different relationships with their parents. Despite

the appearances – they eat separately, are told what to do, are given tasks and educated when needed – the young members of the households that were interviewed (over 15 years old, unmarried members contributing to the household's livelihoods) highlighted internal mechanisms of renegotiation between them and their parents.

Chapter 5.2 proposed the existence of a separate land tenure system handled by mothers, daughters and daughters-in-law; the analysis widens to take into account views from sons and other children on how they are able to influence their parents' decisions towards better livelihoods.

An important factor comes from the initial quantitative data survey. All the interviewed women but one had a cell phone; all interviewed children had access to a cell phone. Out of the seven households, five had access to smartphones connected to the cellular network, although intermittently. This is proof of a more connected world has had huge impact at the household level. Between members of a household, children have gained visibility. They are still important actors in the fields and are taught to sow, harvest and care for the household and the livestock from a very young age. The possibility to communicate more has translated in an awareness about their future and the impact of their parents decisions on their lives.

Quote *Moi je sais que je vais me marier donc j'ai demandé à me construire ça la, dans la concession. Mais je suis aussi au collège. Mon papa et mon petit papa aiment dire que je vais au collège. Ça rajoute avec les autres. (TS1, Tinkoaglega, April 2014)*⁶²

With regards to access and management of natural resources, this has sometimes been translated into more awareness of future needs and led to discussions regarding dividing land. These seem to be isolated conversations and the small sample of this research does not allow identification of a pattern. However, it is a novelty and deserves to be mentioned as it opens the way to new opportunities, challenges and questions.

⁶² I know I am going to get married someday so I have asked permission to build this [hut] here in the compound. But I am in middle school. My father and grandfather love to say I go to middle school. It adds [to their social status] with the others.

Could this be an opening for an effective implementation of national land laws? Is it a clue that the Mossi society is slowly moving towards a systematic division of the family land? Is it a generational change that can only be measured in a few generations time? The combination of higher literacy rates, aid programmes targeting youth and young leaders and closeness with an interconnected world are influencing the Mossi society starting with the household level. A follow up in the next decades will be able to assess the direction in which this is going. Intra-household modifications such as the ones mentioned above have an impact on mechanisms of land tenure described in Chapter 5.

It has been argued that land tenure is a social matter. Going well beyond accessing plots and trees, it constitutes the inner thread of the social fabric of the Mossi society. It is a society founded on the household; the patrilineal model is expressed in the structure of the complex households and apparently dictates roles, responsibilities and task distribution between its members.

It is important to note here that the households' data, as they were analysed and presented in this chapter, aims at showing and proving two main points. The first is to highlight, as noted earlier, that ethnographic and anthropological literature have a tendency to present a static picture of societies. While they are usually exhaustive and full of details regarding habits, they don't necessarily focus on dynamic patterns underlying these habits. The examples provided here argue towards a more nuanced vision of households, where patrilineal traditions are still quite strong, especially from an outsider's perspective but which hides a much more complex and dynamic puzzle of continuous renegotiations that are, in time, contributing to modifying "set customs".

The second argument is more specifically on land tenure. Why is it so important to study mechanisms of negotiating power over resources within a household when talking about land tenure? It is because accessing land becomes an important part of these social relationships. Attempts to modify power over land and other resources, including trees and their products, risk significantly upsetting social relationships at all levels. This needs to be taken into account when planning to write and implement a national law on access to land.

Modifying the inner structure of the household means a modification of that same social fabric based on land tenure. Findings from this analysis such as the female land tenure system or the importance of social responsibilities towards the family members seem to point to the direction of significant change. While a year is too short a timeframe to measure change, these findings are an interesting starting point for further research.

a. Households in a Gurunsi region, patterns of household decision-making and gender aspects

As seen in the previous chapter, it appears that different cultural, climatic and socioeconomic contexts engender different concepts of household, land tenure and natural resource management. Similar routines surveys and in-depth follow up interviews were conducted in the Western site populated by Lyelé / Gurunsi ethnic group.

The Lyelé land tenure organisation that has been analysed in Chapter 5.1.c is the first significant different that is particularly evident at the household level and in the routines.

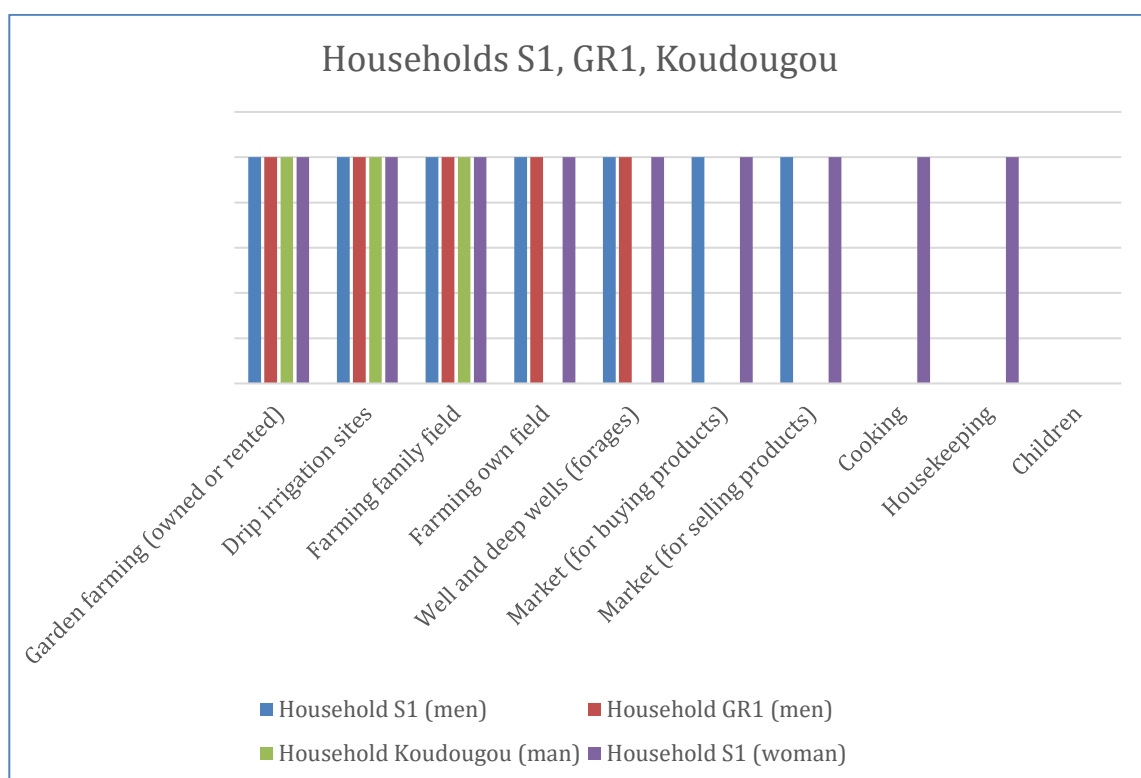


Figure 10 Tasks distribution across households from the Western Burkina Faso field site. For full referencing see Appendix 2.

The land division tradition becomes apparent as well as the impact of the titling in one of the areas where the national law is being implemented as a pilot test. The interviews in this site were conducted well into the rainy season. Moreover, and as previously stated, these interviews only aim at adding evidence to our main argument rather than attempting a comparison. They were conducted in a limited timeframe over a very limited sample of households and cannot be considered representative.

All interviewees, male and female, mention the working in the family and own fields as well as garden farming and drip irrigation sites. This is a direct consequence of having invested in the regularly registered enclosed plots of land, formally and traditionally owned. The investments open up a new set of possibilities, including garden farming all year long, as well as to a new set of tasks and responsibilities, such as taking care of the drip irrigation equipment, wells and more farming activities.

The livelihoods of these households seem similar to the ones in Passoré. The main interesting difference is found in the capacity for and interest in buying and selling products at the market as a consequence of having access to garden farming all year long. In the Mossi context, most of the women and some of the younger men identified going to the market to sell part of the harvest or to buy essentials for cooking such as oil or stock cubes. The youngest son of household L1 sells cereal as his main income generating activity, women of household Ko1 sold local finger food and some of the women also sold garden vegetables. However, according to the data, going to the market was not a daily activity.

It appears that the selected households in Boulkiemdé and Sanguié provinces consider going to the market to be part of their routine. This indicates the presence of hard cash, a concept that never appeared in the other interviews. The interviewees mentioned the need to buy cooking oil or salt, pricey products that are considered a luxury in the other region. Moreover, interviews highlighted that the main resilience strategy for these households is to buy things that aren't provided by the harvest.

Quote *Si la récolte est insuffisante on va acheter au marché. Parfois y en a beaucoup et la femme ne peut pas transporter donc c'est moi ou bien j'envoie les enfants avec la charrette. (...) Non, souvent c'est la charrette prêtée des voisins.*⁶³
(Interview to GRM1, Goundy, May 2014)

In Passoré, as the previous sections highlighted, there are two main strategies emerging from the collected data to survive a bad harvest or the *soudure* period, when the previous harvest is finished and the following one is awaited. One is to make more use of the first non-timber forest products of the season or to use dried leaves previously collected. The other one is to sell livestock to face an emergency or to pay for expected expenses such as traditional regular social occasions or school fees.

This difference in resilience strategies has repercussions in the social structure of the household. Availability of hard cash makes a difference in terms of better livelihoods and allows for investing in land that has been officially acquired. This constitutes further proof that changes in land tenure mechanisms have huge influences on intra-household livelihood strategies. The timeframe makes it impossible to analyse or measure impact of the national land tenure law. However, the difference between a province that has seen some implementation of the national law and one that hasn't is clearly seen through the ability of the actors to invest in their land. This in turn engenders more surplus products hence more ability to sell them; more hard cash and more diversification in resilience strategies that seem to point towards better livelihoods for the Western region.

Once again, it is important to understand the data cannot be generalised. Moreover, the tight-knit communities of the Mossi provinces provide social support and solidarity mechanisms that are embedded in their land tenure systems.

These mechanisms are difficult to quantify but evident from the collected qualitative data. Access to land is even more of a social matter as it permeates all areas of the social fabric and is an integral part of intra household structures and

⁶³ If harvest is not enough [to feed the family] we go to buy [cereal] at the market. Sometimes we need to buy a lot [of cereal] and the women cannot carry it so I will go or will send the children with a cart. (...) No, it's often the neighbours' cart we borrow.

relationships. Similarities between the two sites are more evident when analysing the households' decision-making structures, as the following section will highlight.

b. Social organisation, lineage and land tenure

Despite the differences in customs highlighted by the literature, the global and more interconnected context allows the discovery of important similarities in the intra-household organisational structure in the two sites. This is partly due to similar rural contexts and partly to cultural correspondences.

Men and women seem to have the analogue routines as the Mossi of Passoré. Men are involved in managing the household's tasks and women carry them out, care for children, housekeeping and cooking. Confirming what has been argued by the literature, men's central activity is farming; garden farming and care for new equipment or investments in land is a novelty and a peculiarity of the selected Lyélé households. Because of time constraints, only two women were interviewed (one was interviewed with her husband present). Questions trying to assess roles and responsibilities within the household were answered just as quickly as in the Northern site.

Quote *Ma responsabilité c'est d'abord de vérifier que tout le monde va bien au ménage, dans les champs, que les enfants s'occupent des animaux et puis qu'ils aillent à l'école.*⁶⁴ (Interview to SM2, Koukouldy, May 2014).

Household S1 in particular is very similar to the ones in Northern Burkina Faso. The two men of the households, brothers, live with their wives and children in the same compound and eat and work together. It is an extended and complex household that sees similar patterns in women sharing responsibilities and taking turns in some of the daily tasks. Other than wood and water collection, however, women also take turns to help the husbands with the wells and drip irrigation systems in the fields. This definitely adds to the workload of women, but it also gives them more credit with their husbands.

One interview proved to be particularly interesting in determining the social benefits deriving from having invested in land. The wife of household S1 talked

⁶⁴ My responsibility is first to ensure that everybody is healthy, [that all is well] in the fields, that the children are taking care of the livestock and that they are going to school.

about herself and her new positioning within the village after her husband decided to invest in their land.

Quote *Moi je peux avoir mon grenier comme je suis seule femme. Oui on fait le zai e d'autres pratiques, tout le monde fait ça aussi ici. Mon mari a toujours accès à mon grenier et ça aide si le grand grenier est vide ou si y a besoin. Bon comme mon mari a acheté le goutte á goutte là, au marché les gens savent et on achète mes produits aussi. Je sais que une femme dans un autre village a pris pour son champ á elle aussi. Même si on lui retire son champ elle peut enlever et puis remettre. Maintenant tout le monde l'écoute au village et on lui demande comment elle a fait⁶⁵. (Interview to SW1, Koukouldy, May 2014)*

In a different context to the Mossi one, where land is divided into often enclosed plots and fields, customary land tenure mechanisms seem less evident. However, the nexus between accessing land and social structures at the village and household levels is still strong; investing in a plot or field, even if not owned, comes with certain social status benefits and may contribute towards women's empowerment.

In Boulkiemdé and Sanguié some communes have been identified to pilot the implementation of the Loi 0034 (see Chapter 2). Impacts of the law at the household level can be seen although they can be difficult to measure, especially in a small sample like the one selected for the study. The idea of promoting social inclusion and women's empowerment is interlinked with the idea of gaining social status, adding evidence to our main argument that land tenure is a social matter.

In this context, customary tenure has evolved in parallel with a new socioeconomic order, setting the society to be more malleable and a better fit to accept the implementation of the new national land law.

⁶⁵ I can have my own granary as I am the only wife. Yes, we practice zai pits and other [soil and conservation techniques]. My husband has free access to my granary and it helps if the family granary is empty or if need be. Well since my husband bought the drip irrigation [kit], people at the market know [it] and the buy my products. I know a woman in another village, she bought [the drip irrigation kit] for her own field. Even if they take away her field [during rainy season] she can take off [the drip irrigation kit] and then put it back. And now everybody listens to her in the village and is asking how she did it.

In depth interviews were conducted in situ with two village land chiefs, to deepen the knowledge and contextual analysis of traditional ways of accessing land. The land chiefs proved to be a recognised traditional authority and in charge of handling land related conflicts just like in Passoré. They both highlighted their spiritual role and link with the land and what lies underneath it; however, both of them also recognised the importance of dividing the family land as a mechanism to prevent future conflict.

A new system was described by the land chiefs. It obviously has roots in the customary tenure that the society has been based on for centuries, but expresses some novelties and significant differences from Passoré.

For example, the land chiefs have maintained that their role of handling land matters and land owning lineages are still a very important division in the society. For this reason, land division can only happen after having been ratified by the customary authorities.

Men from household S1 confirmed they went straight to the Mayor and local government representative for land tenure implementation to obtain a land title. This was only possible because their father had divided the land in front of customary authorities and they were already recognised landowners from a traditional land access point of view.

The interconnections between customary tenure and the formal law are particularly interesting as they are added proof that the society is, in fact, changing and evolving in response to external factors as well as internal forces.

The data collected from the Western trip also strengthens the idea that the national land tenure law might be implemented in areas where dividing lineage land has already been accepted and integrated in the customary system. Because land is strictly interlinked with social structures, this analysis has tried to use the land tenure focus and lens to look at social cohesion between households. The two provinces offer a diverse and interesting glimpse of the possible impacts, causes and consequences of the national land law implementation.

As previously argued, within the households, resilience strategies are similar between the interviewees in Passoré and revolve around selling livestock or

collecting NTFPs. In Boulkiemdé and Sanguié, they are more hard-cash oriented and might also include buying whatever is needed to achieve food security.

In Passoré, however, a highly mentioned element is found in family and neighbours' solidarity. All the interviewees hinted to giving out seeds to people who needed them, whether from the same household, compound, village or family. This is entirely absent from the Western provinces interviews. Because of the limited sample, the data might be biased. However, this provides some indications of a more separate and less supportive society. For example, household S1, as previously stated, is the most similar to the extended families interviewed in the Northern part of the country. Two brothers live in the same compound with their wives and children. Initial information assessed that they all ate from the same plate. Further conversations, however, seemed to point towards a more separate resource management within the two families.

Quote *Avant on mangeait tous ensemble avec le frère de mon mari aussi. Mais maintenant chacun est libre de faire ce qu'il veut, c'est plus facile. (...) Oui on s'aide. Parfois on fait des choses la à tour de rôle. Non, c'est pas tous les jours.*⁶⁶ (Interview to SW1, Koukouldy, June 2014)

This highlights a change in the intra-household resource management and in relationships between the actors. More or less consciously, the land divided by the head of lineage has created divisions within the family. This translates into nuclear, smaller households, on good terms with each other and open to collaboration and mutual support, without the systematic unity that appeared to be evident in the Passoré site.

Polygamy is obviously a huge factor in creating larger households and connecting different lineages in family in one unique household or compound. But the evidence emerging from the data about linkages with the families of origin of married women, the many references on inquiring about the neighbours' health status, and the hints to shared child care point in a different direction as well.

⁶⁶ Before we used to eat together with my husband's brother, too. But now everyone is more free to do what they want, things are easier. Yes we help each other. Sometimes we take turns doing things but no, not every day.

Keeping land united at the village level and following the lineage land system is a contributing factor to a tightly knit, supportive community. Interestingly enough, and at the same time, it creates a fertile ground for disputes and conflicts over uncertain and unmarked boundaries and limits to farmed land plots.

As assessed by Chapter 5, nobody in the Northern area stated that their lineage land could be divided formally. It may be that a national law such as Loi 0034 may not be contextualised and adapted to that particular social context to be implemented without encountering opposition from customary authorities and deeply influences the foundations of society.

c. Outsiders and migrants

A land tenure system must take into consideration the arrival of new actors that may claim land for different uses and purposes. The national land law, by introducing a project of rural land titling, assumes that newcomers would start the process of getting a certificate, as explained in Chapters 2 and 5. The latest land law in Burkina Faso has partly been inspired by the Code Rural in Niger, dated 1993 and implemented effectively since 1995⁶⁷. The main issue of this very complete and complex Code Rural was identified in the years following its implementation as the lack of specific rules aimed at managing land used by both nomadic pastoralists and agro-pastoralist or farmer ethnic groups. In 2010, the Niger government passed a sector-specific law on pastoralism, stemming from increased conflict in the Nineties and written after the organisation of more than 100 workshops country-wide to focus on the bottom up participatory approach to land tenure. The Code Pastoral asserts new principles and diminishes ambiguities; the process leading to it built a stronger pastoral society but created new political and social barriers. It is however a good example of the impact that different uses of land in the same country can have on the effective implementation of a land law.

Because of the lack of evidence concerning the effectiveness of the Loi 0034 in Burkina, it is more interesting at this stage to analyse what customary tenure allows on the matter.

⁶⁷ Information on the Code, latest updates and full text can be found in French at: <http://coderural-niger.net>

To assess traditional mechanisms of access to land for outsiders, several interviews were conducted targeting customary authorities at the village, neighbourhood and *canton* level. The analysis of the data highlighted roles and responsibilities of customary chiefs that have been explored in Chapter 5. This section is only going to talk about migrants and outsiders received into a Mossi and Gurunsi village.

Once again, the comparison of the sites allows to deepen the analysis and extrapolate emerging concepts that may be linked to a social structure or particular province.

All customary authorities explained in detail the spiritual ceremony that happens when someone arrives from another village, town or country and expects to settle in their village. Data on internal migration in Burkina Faso suggest that there are endemic recurrent processes of migration from rural to urban areas at a constantly increasing rate.

However, it also shows that rural to rural migration is a reality that is much harder to grasp and quantify but nevertheless happens in response to climate extremes, unexpected natural hazards or shocks and food security issues. Passoré as a province experiences little internal migration although data might be unreliable, according to local experts at SEMUS organisation. Being between the more desert-like Sahelian North and the peri-urban belt of the capital, collective memory of the interviewees recalls regular migrations from the Sahara resulting in some Peuhl and Tuareg ethnic groups having settled in the province a few generations ago. Pastoralists and nomadic communities that settled generations ago are now integrated into society and, according to the locals, married their daughters into Mossi households, finalising by that act their stability in the territory.

Because there is no availability of official reliable data, this section is based on conversation with key informant interviews, local government representatives, SEMUS and Tree AID staff and has been validated at the validation workshops (see Chapter 4).

All land chiefs recalled at least five or six huge groups of newcomers asking for land. Being a widely recognised customary authority, the people were able to go

straight to them and validate their claim. However, the validation workshops highlighted that, sometimes, in reality, outsiders looking to settle in a new village actually negotiate land with the landowner lineages before going to the land chief. This allows their claim to be easily supported by the landowners and the procedure with the traditional chiefs is easier and more straightforward. All confirmed that in no way this is seen as lack of respect of the hierarchies as the landowner lineages would want to have the chief ratify their decision in all cases without exception.

In some cases the newcomers might feel that going to the chief first might give them more chances to negotiate with the head of lineages. When that happens, the land chief calls for the head of lineage and they all go identify the chosen plot of land. Some negotiations usually happen around boundaries and a compensation in some form is agreed with the landowner lineage. Everybody confirmed that the process never involves money transactions. However, part of the harvest is usually given as a thank you gift to the landowner lineages.

The landowners, as previously explained, keep all property rights over the fields, including the right to take them back. Customs seem to suggest that this does not happen after someone has initiated activities to improve soil quality and the landowners give “an agricultural year’s notice” to the people who farm their land. After negotiating the land, traditional sacrifices are undertaken.

Quote *On indique au chef de village où on souhaite s’installer, puis on identifie le lignage propriétaire et on va lui demander. On identifie ensemble l’endroit pour habiter et l’endroit pour cultiver. On s’assure que l’étranger ne veuille pas semer la zizanie, à travers des rituels qu’on ne veut pas partager avec une étrangère. Puis le chef de terre intervient et demande aux génies. Comme ça il pourra résider et puis cultiver sans problèmes dans l’endroit choisi. Si personne ne soulève de problèmes et les rituels se déroulent normalement, on tue le poulet blanc pour dire que tout va bien. Le poulet lui-même va décider si tout va bien se passer en fonction de comment il meurt. (...) Non, il ne donne pas plus de détails. Oui, ça arrive aussi que le poulet remette tout en discussion et on demande à l’étranger de partir (...) [à part : non, moi je ne pense pas]. Si tout va bien on va informer le chef de*

*Gomponsom, sa Majesté, qui veille que tout soit en ordre dans sa commune.*⁶⁸
(Facilitator on interview to land chief, Tinkoaglega, May 2014)

The process might be long but is straightforward, showing at the same time an openness towards new settlers as well as the fact that it does not happen that often. The validation workshops confirmed that, in fact, most of newcomers are not foreigners, rather returning from long trips abroad or distant families from neighbouring countries. This explains the very low number of land related conflicts reported in Passoré by the customary authorities.

The other important aspect is that when conflicts do happen, most of the time the contenders go to the land chief and they are settled in an amicable manner. Workshops and key informants in situ confirmed that conflicts do happen but are rarely violent and most of the time resolved by reciprocal compensation in cereal, vegetables or labour form. This constitutes further proof that Mossi people have maintained a supportive and unified society as very few migrants have come to the Passoré province. The closeness and tight social structure allows for very little conflict over land.

A slightly different treatment is given to pastoralist nomadic communities that sometimes pass through the province during seasonal migrations to find better land or water for the cattle. This issue deserves to be acknowledged although it wasn't the scope of the research to analyse such migrations in detail. Conversation with local government officials, customary authorities and local NGO staff suggest that migrants are rarely welcome and are the main cause of violent conflicts. This is due to the peculiarity of their migration, choosing specific corridors that cattle

⁶⁸ They [the newcomers] show the land chief where they would like to stay and he identifies the landowning lineage for that area, calls for him and they all go together to choose the field to live and then the field to farm. Some rituals are performed to make sure that the foreigner won't bring bad luck to the village but he won't share the contents with you, a foreigner too. Then the land chief communicate with the land genies, so that the newcomers can stay with no issues. If all goes without problems and the rituals are successful, a white chicken is killed as a last positive sign. The chicken also plays a part in deciding if the chosen place is suitable according to how it dies (...) no, he won't share more details. Yes, it does happen that the chicken raises new issues and the foreigners are asked to leave [facilitator to me: no, I don't think it happens often]. If all went well, though, then his Majesty chief of Gomponsom is informed as he is overall responsible for the wellbeing of people and land in the whole commune.

will recognise year after year. This has been highlighted and state by the literature reviewed in Chapter 2.

The element that all interviewees put forward is regarding the fact that because nomadic people are, in fact *nomadic*, the absence of a stable place to find them and the inability to create a trusting long-term relationship collides with the tightness of the Mossi society. They are considered a threat and while they are ignored most of the time, are a widely recognised cause for land tenure conflict and longer term insecurity, as argued both by the literature and the key informants. Practices for welcoming outsiders and their implications are considered further proof of our main argument. The following paragraph will summarise and present more empirical facts of the Mossi complex households that this research has explored and presented so far.

7.2. Participatory map exercise: spatial perceptions in a Mossi society

The literature review highlighted the role and influences of participatory approaches and this thesis methodology has been based on participant observation as a complementary tool to semi-structured interviews, questionnaires and focus group discussions⁶⁹.

As previously stated, the data quality got better with time and the last interviews were, in some occasions, the ones where I got the best quality data in both quantity and depth. The methodology section has acknowledged the biases of this research. The main difficulty to overcome was the lack of knowledge of the local language. To partially resolve the issue, only French-speaking households were targeted in the Western region. This wasn't possible in Passoré province and a lot of time was spent with the facilitator to make sure we had common understanding of goals of the research, concepts, terms and aim of each interview.

As the previous methodology section states, the facilitator was well-known in the area and accepted by the local communities. Being a man, he was respected

⁶⁹ See Chapter 2 for the more comprehensive literature review and Chapter 4 for the full methodology.

by the heads of households and accepted by the women. He had been involved in several other projects targeting women and the interviewees all knew him and seemed to be at ease.

Informal discussion with a SEMUS officer informed me that, sometimes, women are more likely to trust a local male facilitator than a woman because men are less inclined to gossip. In addition to this, a male facilitator will have a more equal ground to talk with the head of household and, finally, the facilitator that shadowed me had been living there for a while and was known by all members of society. While this might have had some biases that have been analysed in the Methodology section of this thesis, it also came with the advantage of being trusted.

However, a more direct approach to the interviewees seemed like a good opportunity to add more depth to the data and to offer different perspectives on some of the questions. The lack of knowledge of the local languages created a barrier that I tried to address by suggesting a participatory mapping exercise that would be helpful to the research and to the community. The exercise was conducted in June 2014, before a final round of interviews and the validation workshops.

Chambers (2006) argues that amongst the participatory methods of research in development studies, participatory mapping is one of the most widely adopted techniques. IFAD's guide for participatory mapping defines it as a process aiming to highlight the link between land and local population through the known and renowned language of completing a map.

For this study, participatory mapping was mainly used to understand the connection between spatial identification of local landmarks and intra-household relationships. Maps are presented in Appendix 5 and will be here analysed and discussed according to some major points. The exercise consisted in asking the participants to collectively map their compound and households, the main road and the landmarks they thought were important for a foreigner to understand their lives. A discussion preceded the exercise to fully understand the request and some examples were given to guide the maps. Heads of households usually weren't involved in the exercise that was considered a bit childish. However, some

of them participated and women and their sons were the main authors. Physically the maps were drawn with pen and paper; most of the time, because of literacy, younger sons or daughters were the ones holding the pen and following collective instructions on how and where to place landmarks.

The maps were analysed in the perspective of using them to add depth to the analysis of the social tissue that this thesis connects with land tenure management. In order to do so, some of the main findings are presented, revolving around spatial perceptions of distances, shapes of plots and land and its role in land tenure and highlighting the choice of drawing certain landmarks over others, pointing towards a more complete picture of household livelihood strategies.

a. Key findings

The first theme that appeared when analysing the information is a different choice of the main landmark drawn. The participants were asked what they would show a foreigner when coming to the village to try and understand how their household is organised.

All the maps show the position of the mill. The attention to food security and main source of meals is evident. There was no need of asking to point out the mill; every time, it came right after the location of the household. Nor there was need to ask for the location of the plots. This was partly biased as all the interviewees were well aware of the fact that the research concerned land tenure. Moreover, I had already anticipated I would have wanted to visit the plots, and some thought they needed to draw a map for me to use.

This seems to constitute further proof that land and livelihoods are inextricably linked for an agro-pastoral society. The difference in livelihoods also appeared in the choice of the roads drawn.

In Kouni, the women quickly identified, with pride, the path to the plots they tended to, where they could grow garden vegetables. As previously mentioned, most women of that households had small commercial activities on the side to complement subsistence agriculture and were also allowed to keep and manage the earned money. It is not surprising that they would draw the road leading to these plots and the allotments themselves before drawing the main road.

However, special attention was given to the road that gave them access to the markets. It appears to be particularly long, highlighting their perceptions of living at the edges of the selected area and their need for time-consuming walks or means of transportation to be able to sell their products.

In Gomponsom, the road was only drawn after I asked for it specifically in order to be able to read the map accurately. The household was formed by elderly people; they would rarely leave the compound unless they were still able to farm. The younger generations weren't present at the time of the participatory mapping exercise. It is important to reiterate that these participatory tools can only provide further evidence that would be meaningless without the context but actually supports the hypothesis that land and livelihoods are linked. Moreover, these data put forward the idea that different livelihood strategies and different intra-household social organisation reflect on spatial organisation. In all the maps that can be found in Appendix 4 it is evident that distances are wrong and disproportionate.

One element of this exercise adds evidence to the idea that while they are able to renegotiate their rights, women usually have to cultivate in the communal family field first. The big communal field is usually drawn much closer to the compound than reality proved it to be.

Visits to the fields proved that, most of the time, individual smaller plots were usually close to the compound land. Routines highlighted, however, that women usually either tended to their own fields at dawn, before heading out to care for the family land with the rest of their family, or late after having finished the activities on the big field. It is interesting to see that women were placing their own fields further than their real position, proving that going there necessitated more effort than going to the family field. Obviously, the sizes also reflect the importance that the communal plot have in the household livelihoods.

In a nutshell, communal plots are bigger than individual ones, and that is reflected by the participatory mapping exercise. In proportion, they look even bigger in the drawings, possibly because they provide the majority of food and crops for the household.

Finally, they are a priority over individual fields and therefore look closer to the compound. All the members of the household sow, harvest or generally take care of the communal field first, when they are less tired.

It seemed interesting to include some data from the participatory mapping exercise. It adds to the interviews data and further proves the importance of undertaking a holistic approach when analysing land tenure. The social dimension of land and natural resource management cannot be overlooked and is apparent when exploring spatial perceptions. Moreover, this could provide an interesting baseline or opening for further studies and a different and innovative angle to add to the economic studies of resilience and livelihoods.

7.3. Negotiations in a seemingly rigid society

The ethnographic literature about the Mossi, Gurunsi and most ethnic groups in Burkina Faso is outdated. This research aims to make a contribution to that field while analysing households as a whole and providing new data that are anthropologic but also anchored in socioeconomic assessments.

This small sample, in-depth, mixed methods research provides insights that cannot be generalised but constitutes interesting case-studies and, in fact, opens for further studies. One of the original hypotheses tested by this study was that intra-household resource management has a deep impact on livelihoods. This has been sustained by the literature analysed in Chapter 2 and constituted the basis of the semi-structured interviews.

Land tenure and socioeconomic, political and cultural evolution have had an impact on intra-household relationships. This research argues that the goal of better livelihoods has contributed to keeping customs intact and has had a big role in redefining household members rights and responsibilities. The evolution of land and trees management follows such radical albeit small or slow changes: social relationships evolution, land tenure and tree access management are so intertwined in a Mossi society that they need to be analysed together.

In approaching the interesting and complex issue of land tenure, it was therefore a priority to analyse livelihoods. The analytical framework chosen for

this research led to a specific focus on the household as an important unit of analysis.

Analysis of the data proved that, spiritually and religiously⁷⁰, the Mossi seem a rigid, patrilineal, spiritual and strictly organised society. However, looking at the Mossi household, highlighted mechanisms emphasised continuous internal negotiations processes leading to small changes that are sometimes difficult to grasp but nonetheless fundamental.

It is important at this point to acknowledge that the dynamism evident in the data and analysed in this chapter as a characteristic of the Mossi household has to be put in a context of longer term more general factors that started before the data collection and are undoubtedly ongoing. This analysis has mentioned that most interviewees possess a cell phone; some of the younger people also possessed smartphones. The presence of certain types of government or NGO-led projects has also already been mentioned as an important factor in driving renegotiations within a household. This chapter has also mentioned migrants, newcomers, outsiders and, more generally, movement of people and how it could impact relationships between and within households. Moreover, current research on climate change adaptation in Northern Burkina Faso also suggests that male absence and migration to neighbouring countries affect gender relations deeply.

The analysis presented in this thesis acknowledges that the household is inserted in a much wider context and, therefore, changes observed in relationships and negotiations over access to resources are a result of everyone interacting with the social, cultural, economic environment.

Because it is necessary to adopt a holistic approach and analyse land tenure and livelihoods as a whole, this research argues that a slow redefinition of intra-household roles, responsibilities and entitlements might, on the longer term, change land tenure mechanisms at the wider level, for example going from within to between households, and then at village and commune levels.

⁷⁰ In this context we talk exclusively about the underlying animism permeating most Burkina Faso ethnic groups. Influences on and from Islam have been analysed in Chapter 5.

Chapter 8. CONCLUSIONS AND FURTHER IMPLICATIONS

8.1. *Main findings*

The aim of this research is to contribute to the field of land tenure and livelihoods by providing a holistic analysis of intra household relationships in rural Northern Burkina Faso. It wants to address local, national and international stakeholders and policy makers to add to their understanding of local dynamics regarding access to, rights over and ownership of land, in view of more comprehensive and applicable reforms.

Personal interest backed up by first-hand experience, rigorous methodology and scientific data collection and analysis led to a few main lessons to be learned around household resource management, land tenure evolution and rural livelihoods in Passoré, Northern Burkina Faso.

This research is set out to understand how Burkinabé manage land and resources and the consequent impacts on their livelihoods and relationships.

Three main themes that have been explored in the previous chapters. This chapter synthesises the main lessons around what land tenure means in a household of rural northern Burkina Faso (a), how it impacts on people's ability to access natural resources and the household's livelihoods (b) and how land tenure and social relationships evolved over the course of the years based on related reciprocal influences (c). Land tenure changes, the role of trees and the dynamics of social interactions at the household and village levels, highlighting contributions to the academic literature and ultimately bringing the study back to its entry point: how is land managed in a rural Mossi society in Northern Burkina Faso?

a. Access to land and resources: land tenure of a Mossi household

In the introductory chapters to this study, adaptation to climate change and risk management in a vulnerable context were mentioned as important factors to take into account when exploring land tenure security since they could be potential

causes and consequences of livelihood changes as well as changes in the actors' perceptions of land tenure security.

In looking at land tenure, the focus has been put on how members of a household negotiate rights over land, access to plots and responsibilities over different resources, crucial to the household's livelihoods.

This thesis argues that land tenure is a social matter for the Mossi people of Burkina Faso.

The complex dualism underpinning Burkina Faso's legal framework concerning land prompted the first research question of this thesis concerning the actual implementation of the latest national land law (*Loi 0034*).

The analysis of the latest land reform highlights the efforts made to accompany the process with decentralisation of offices, resources and skills for a smoother implementation.

However, only a few pilot communes have been selected for initial implementation and evidence of the *Loi 0034* are not visible yet in Passoré.

This led to a series of questions presented in Chapter 1 and supported by the literature analysed in Chapter 2.

The data supports the hypothesis that land tenure is deeply embedded in social customs of the Mossi ethnic group; due to absence or lack of clarity in legal frameworks, traditional mechanisms of land management are the most widely diffused form of tenure in Passoré. This is not to say there is a lack of authority figures in charge of managing the most important resource for an agro-pastoralist society. In fact, village chiefs, land chiefs and a plethora of similar customary authorities have different and integrated responsibilities revolving around conflict management, settlement of newcomers and land management in general. At the community level, this shows that some of the most important personalities of the Mossi societies are inextricably linked to land ownership or management. The dualism is reflected at the community level in the fact that mayors and civic representatives are preoccupied with land management in their capacity as government officials.

At a first glance, this proves that customary and official authorities maintain separate activities and perform different tasks, thereby enhancing the dualism and

contributing to confusion and lack of clarity. The spiritual role of traditional authorities such as land chiefs is the main difference between them and government officials. It is also an important lesson to be learned.

The data amply proved that the Mossi society isn't entirely rigid and, in fact, is well interconnected with the wider world that Burkina is part of. Looking at the number of cell phones and smart phones, it is possible to understand that it is an evolving society, changing and adapting to current times.

This research argues that the relationship Mossi people may have with land has deeply evolved over the last decades of land reforms. In this context, the adaptation literature mentioned in Chapter 1 provides an interesting point of view to be acknowledged in these Conclusions.

However, land has kept an important spiritual role, not uncommon in West African societies, as the literature has previously argued, but specific to the Mossi ethnic group as it defines the rules of the game. Customary authorities are, in this context, important institutions and vital points in articulating the rules of society, handing down culture, and constantly reframe the bases of the Mossi ethnic group. It is obvious that the land chief and his spiritual role as "earth priest", able to facilitate the communication between the dead and the living, has a much larger role within the society than the government representative charged with the implementation of a land reform.

Considering the land tenure issue as a whole, it is natural to start by analysing the authorities that manage land officially and informally. The collected data supports the hypothesis that, while customary authorities are still the main reference for managing land at the village level, the context has deeply influenced the dynamics in which the land and village chiefs operate. This is particularly true when looking at women's access to land. The flourishing debate concerning the difference between property rights and user rights as well as the best ways of protecting these rights for vulnerable groups, including women, is still wide open.

Findings from this research contribute to the debate by highlighting a different perception of gendered land tenure security. It was noted that long term tenure security is rarely perceived as a burning issue by women. Their role as food providers, suggested by Tincani's study from which this thesis is partly stemming

and confirmed by the literature, allows for a vision of livelihoods that is usually linked to an agricultural season. No major changes were assessed in women's ownership of the land; the idea itself still looks unthinkable, far from socially viable and possibly seen as silly by both interviewed men and women.

However, the ability that Mossi women have to negotiate land to feed their families and the non-threatening nature their status offers has often, and most recently, triggered some changes at the household level. The gender case-study is interesting because it shows that, while spirituality is never discussed, traditional authorities are never doubted and men-women relationships seem unaltered. Nevertheless, women have in fact been able to renegotiate their role and consequent power within the household and at the village level. Land is central to this process as it is central to the Mossi society. The lack of clarity in the overarching national law has, in fact, allowed for a peculiar evolution of the land tenure mechanisms within an everchanging society. This small sample and mainly qualitative study cannot be generalised and therefore these conclusions are difficult to apply to the whole country or area. However, they offer interesting reflections and bring the discussion back to the entry point concerning the implementation of the latest land law.

The centrality of land within the Mossi society calls for more attention to the local context. Despite its efforts, the *Loi 0034* does not allow enough space for customary tenure; or rather, while it does take some traditional mechanisms into account, it cannot grasp the complexity of a society revolving around the authority of land owning lineages and land chiefs.

The case-study of a different region inhabited by a different ethnic group backs up the idea that attention to the context cannot be overlooked. In Gurunsi societies, land is also central. However, this ethnic group, in the Western part of the country, experience a different climate, history and different overall external and internal factors influencing social change. The data presents a society that keeps land as a central factor while, at the same time, losing a sense of spirituality around it. When compared to the Mossi society, it is a system organised around practical solutions to land issues including dividing land.

The *Loi 0034* has the merit of trying to pay attention to the local context and include local practices, in an effort to resolve the dualism permeating Burkina Faso's land tenure history. It is no surprise that the Western area of the country was chosen to pilot the reform; the social organisation recognises land division. Oral but clear agreements are usually reached by the people wanting rights over plots and land titling isn't a social stigma. As it is framed, the national land law cannot be, in fact, implemented nation-wide. Flexibility and attention to local contexts would need to have a much bigger place in the overall reform.

This first key finding concerning land tenure evolution in Mossi villages leaves the ground open for further studies. A holistic and inclusive approach is recommended, taking into account anthropological and ethnographic studies to reach appropriate conclusions on a law that needs to protect the rights of local actors and, at the same time, allow for a more formal structure of control over land.

Decentralisation seems to be a push in the right direction; however, the process is young in Burkina Faso and socioeconomic reasons have prevented the nomination of local government officials to be followed by the development and distribution of appropriate skills and resources, effectively creating empty shells of institutions, and contributing to the lack of clarity and superimposed legal systems at all levels.

Anthropologically speaking, and because this research keeps an eye on livelihoods to reach comprehensive conclusions, having assessed how central land tenure is for a whole society, some questions need to be put forward for further consideration.

The debate on adaptation and transformation that has been mentioned in Chapter 2 (Béné et al. 2012) needs to be looked at from a new angle. While about the thesis discusses the ability a society has to adapt or transform in response to a shock, expecting a full and proper implementation of any land reform implies profound transformational change within a society. This analysis highlights that all of the selected households are, to different extents, adapting to land tenure related inputs. For example, in the Gurunsi area, the change can be defined as society-wide and transformational; while titling is still at its early stage. Dividing

the land to avoid conflict between heirs and obtaining certification from local government authorities has become part of the local customs. The local chiefs are aware and supportive of the practice and people seem to be more inclined, for example, to invest in land they know will not be easily taken away.

In the Mossi context, the adaptational change is more subtle and this is where what has been presented in this thesis constitute a valuable finding. In fact, by looking at the Mossi household as composed of actors with different interests and aspirations in the same context, it is possible to start unravelling how members of a family respond to a changing land tenure context. For example, some husbands said that having women negotiate their own land is starting to become not only acceptable, almost preferred. While it reinforces the idea that a woman cannot own land – women have more bargaining power specifically because they will never be able to claim a plot as their own – it improves women's short term security since they have more power when negotiating land for one or two agricultural seasons. This research, in line with Tincani's findings (2012), highlights that short-term security is locally much more valuable than longer term ownership and constitutes a significant achievement for women.

Because the land reforms are conceived at a national level and no document is unbiased, external factors would be the main drivers for these adaptational and transformational changes.

Mirroring the debate in the 1980s and 1990s concerning the kind of development that most aid-providing States were trying to promote, a similar debate needs to be initiated around land tenure reforms: Is it unavoidable to call for deep social transformation? What are the biases in doing so for policy makers? For government representatives who implement laws? For local and international NGOs and other civil societies organisation who work in the same context?

*b. Access to other natural resources: non-timber
forest products and households' livelihoods*

Trees, as suggested by the literature, are a key point in customary land tenure. They provide an interesting case-study of resource management at both household and village levels and point towards the necessity of having an

integrated approach to land tenure and livelihoods. Chapter 6 has analysed the sacred and spiritual powers attributed to trees as well as the importance a tree has in Mossi culture as pertaining to land ownership. Moreover, in an agro-pastoral society mainly living on rainfed subsistence agriculture, non-timber forest products are of crucial value in terms of livelihoods (Tincani 2012; Audia et al. 2014; N. Poole et al. 2016).

The conclusions concerning trees are straightforward and in line with the previous literature concerned with the nutritive value of tree products, especially during the *soudure* period, at the beginning of the so-called hunger season, when granaries are empty and harvest is awaited. Trees and their products were particularly important in this study because they provide evidence to support the argument towards a holistic and comprehensive approach to land tenure and livelihoods. Both case-studies, from the Northern and Western sites, showed that trees are managed differently and separately from land tenure.

This research highlights specific areas of local and customary tree management. Evidence points towards a comprehensive management system designed to protect user rights, encourage assisted natural regeneration, allow for most fruits to be picked up by children and generally promoting a common and shared right to harvest fruits and leaves.

This thesis argues that customary tenure, by recognising the specific role of trees, has interiorised and explicitly recognised their value for people's survival. Hitherto, tree management also provides further evidence of how resource management is embedded in social organisation. Finally, it is important to recall here that tree management has followed its own evolution, responding to external factors such as climate change, global warming and, more specifically, longer dry seasons. The interviews proved that access to trees and rights over the different products they offer has become more and more explicit in response to interconnected causes. The recent studies focusing on NTFPs as assets and the development of local and wider markets for these products prove that, in this case, customary resource management has been changing and evolving along with wider and global dynamics.

An important finding is that a new rural land act must not overlook trees and their products and I believe they shouldn't be separated from the main text or treated separately. Specific attention to trees, and not only communal forests but also on land to which households and household members have specific but varied entitlements, and rules concerning replantation, assisted natural regeneration and user rights could be an effective entry point through which the law could be implemented in the field.

Trees are of the utmost importance for the Mossi society. The difference between land and tree management is, however, fundamental. Land hasn't lost its spiritual value as main factor of social organisation. Trees, while remaining organisms with both branches and roots, and linking the dead and the living, are managed in a different manner because of their importance in terms of livelihoods.

The evidence presented in Chapter 5 highlights that, in terms of tree management and especially in Southern provinces of Burkina Faso, adaptation to climate and economic change has been radical over the past few years. For Mossi households in rural Northern Burkina, this has translated in a more significant but still hidden dynamic of negotiating access to tree products, markets and income. While this seems to remain a domain controlled by men, women agreed that increasingly they have voice in how some tree products are used and how the income is managed within the household.

Because I argue that land tenure is a social matter, the holistic approach focusing on several different aspects of a society trying to achieve better livelihoods are inextricably linked and inseparable.

c. Land tenure evolution and social relationships.

One of the hypotheses that this research tested is that traditional land tenure has evolved in parallel with national laws and both have impacted on a new order of society. The data showed that, in the case of the Mossi of Northern Burkina Faso, this society is ever-changing and constantly integrating internal needs with external pushes. This research aims at filling the gap since very little interdisciplinary literature has focused on Mossi households, and ethnographic

and anthropological studies are mainly outdated and sometimes fall into the trap of presenting the society as a-historical and timeless.

This study puts forward that the Mossi society is characterised by constant negotiations of rights and obligations at a household level. The in-depth analysis of selected households was able to highlight specific patterns of resource management and allocation, that have been presented in Chapter 7.

Several indications of deep change are visible and can be analysed within the context of adaptation. At the village and community level, the evolving arrangements and overall lack of open conflict over land is proof. Within the household, women's access to land and their ability to negotiate their own user rights has definitely changed, as was argued in Chapter 5.

The main findings of are that natural resources, and especially land and trees, while traditionally being owned by men, are in fact accessed, processed, and used according to a pattern of negotiations between members of the household, including women. The research argues that women have more access to specific non-timber tree products and more bargaining power when trying to access land (provided the husband is aware and supportive). This thesis explores how factors other than gender and age and relating to wider social status and different circumstances can explain mechanisms of traditional access to land that don't seem to follow customary patterns. For example, a widowed woman-headed household is usually able to keep access to the late husband's resources and *de facto* manage them as her husband would have done had he been still alive. It is important to highlight once more that these changes only emerged during the last steps of data collection, when the relationship with the interviewees, especially the women, was deeper and more confidence was established.

More widely, changes in the roles of traditional authorities concerning land management are visible, while the spiritual value of land itself is not questioned. It seems obvious that, within a Mossi household, the goal of achieving better livelihoods hasn't changed. However, the rigid patrilineal society that the outdated ethnographic studies present looked massively different, as the examples presented in the previous chapters prove.

From embracing new agricultural techniques to obtaining higher status within and outside the household, like in the Western Gurunsi area, to the internal patterns of matrilineal land management between wives and daughters in the Mossi Northern provinces, it seems evident that strategies to achieve better livelihoods have evolved. The Mossi and their seemingly rigid society proved to be more malleable and able to adapt than what it would look from the outside, as changes are small and slow but continuous.

The Rural Land Act impact could not be measured for obvious reasons, as the law hasn't been implemented in the chosen province yet. However, by adding a secondary field site and looking at the data collected in the Boulkiemdé and Sanguié provinces, it is possible to infer that laws, especially when it comes to land management, are bound to impact deeply on society and all its components, including organisation, relationships, resource management, livelihoods and overall social constructs.

At the household level, the Mossi society proved to be a complex entity in constant evolution. Analysing routines, entitlements, duties, roles and responsibilities has allowed for a dynamic picture of the current status of a Mossi household in rural Northern Passoré. Moreover, it highlighted that, according to the data, a Mossi household is definitely formed by several different members, with individual rights and obligations leading to different responsibilities and opportunities. The relationships between mothers, daughters, fathers, men, women constitute an intricate web extremely difficult to grasp because they are constantly renegotiated. This can be framed as a process of constant evolution and adaptation, impelled by the idea of resilience. These entitlements cannot be studied separately from the land tenure aspects as they are factors of respective change and evolution.

Ultimately, this research explores livelihood strategies of Mossi households in rural Burkina Faso. It unpacks some of the explicit or hidden mechanisms of managing land and trees, which are the principal natural livelihood assets available to rural people. It provides important insights into tenure mechanisms that underpin social organisation, hinder social inclusion, and which shape and are shaped by the overarching land management and organisation. This new

knowledge is particularly important when looking at national land tenure legislation. In fact, exploring in more depth how land is *de facto* managed at the household level could potentially influence new policies on how to manage land that could be easier to implement and more widely recognised.

8.2. *Policy implications*

It is important to keep in mind that new policies should aim at promoting long term land tenure security. At the same time, because land tenure and livelihoods are here presented as indivisible, they should protect property and user rights of all involved actors, with special attention given to gendered and local land rights.

The history of Burkina Faso has already provided evidence that policies around land and other natural resources are important to improve decentralised administration. Vice-versa, the decentralisation process has put forward the importance of recognising existing tenure systems and enhancing protection of local rights. Decentralisation has benefits and constraints; one of the constraints is that collaboration between and across different authorities at different government level may be more difficult.

Ministries involved in land tenure reforms, such as Ministries of Agriculture, Water and Water Resources, Environment and Territorial Administration and Decentralisation would have to work together with agents at different levels (national, regional, communal) to make sure all interconnected aspects of the reform are taken into account. Moreover, since land tenure is so embedded in Mossi society, a process of co-production including government agents at different levels, knowledgeable organisation in relevant fields and, most importantly, representatives of local communities could, in fact, help create a law more easily accepted and therefore quickly implemented. Co-production of a new land tenure law based and focusing on local needs as well as different expertise, experiences and knowledge is an interesting process. Local and international NGOs such as TreeAID, GRAF (Groupe de recherche e d'action sur le foncier), GRET (Groupe de Recherche et Echange Technologique), l'AFD (Action Francaise de Développement) and national organisations such as the ONF-BF (Observatoire National du Foncier au Burkina Faso) all carry extensive operational experience

and knowledge of land tenure issues in the country. They will be essential in further reforms and a process of co-production would allow them to have an active, proactive and positive role in writing a new land reform. Further work could be carried out to explore and map Burkina Faso's decentralised bodies' competencies and communication, to help streamline the process and maximise the use of time and resources. This thesis offers social science operational experience and knowledge that can help frame further processes of co-producing a national land law.

When talking about new land reforms, it is also necessary to highlight that the importance of promoting investment in land and the accent put on its productive uses can lead to an over-ruling of these local user rights and an opening-up to new actors, such as the business sector. This can lead to processes of economic growth as well as, more often than not, land grabbing and unbalanced implementation of such policies. The fact that land tenure is so deeply embedded in the dominant ethnic social organisation in Burkina Faso further proves that local institutional actors need to be massively engaged with and in the land tenure reform implementation process. Evidence from across West Africa proves that rural local governments and locally agreed bylaws can play an important role in the implementation of a new land reform. A new rural reform seems to be necessary in Burkina Faso; the current non-implemented one provides a good starting point, trying to address issues of decentralised bodies and to take into account customary tenure.

This piece of research aims at proving that what has frequently been seen as customary tenure and therefore sometimes systematically discarded by the national frameworks, is only partially acknowledged, or used by only focusing on actors (such as land chiefs). In doing so it reinforces negative patterns of power over resources, while at the same time is in fact a dynamic mix of traditional patrilineal rules, renegotiated and changed (as presented in Chapter 5). By showing how some of these traditional rules have changed, this study hopes to be of use for further land policies in Burkina Faso.

However, there are weaknesses in the process of formal change and policy development with respect to the more vulnerable population sectors. In fact, local

actors' rights do not seem to be adequately protected. Moreover, and more importantly, new reforms that aren't based on a profound understanding of current practice in land access and management are unlikely to be implemented throughout the country.

It needs to be acknowledged that there are many reasons in the wider context for the lack of implementation of the Loi 0034, most of which were not the main object of this thesis, including inadequate decentralised bodies, limited resources and insufficiently skilled officials. This thesis adds to these reasons a so-called 'social incompatibility' between how the reform was conceived and the nature of the societies destined to receive, be governed by, and make use of it. A more up-to-date and accurate picture of how land is, *de facto*, managed in rural households of Northern Burkina Faso, provides inputs to policy makers so that further national land laws can take into account some specificities of Mossi culture and customs. This would help laws being accepted and implemented more easily and sooner.

As previously mentioned in this Chapter and more widely discussed in Chapters 2 and 5, taking into account local practices to reach a consensus, so that what is implemented is already part of the social fabric, is only one of the elements that could make nationwide implementation easier. The process of decentralisation and the resources, capacities and professionalisation needed to reach local levels are a different issue of capacity building that needs to be addressed. However, this thesis points out that leaning on traditional authorities to cover an official and spiritual role may not be the most appropriate answer in this specific context.

A new reform would need to look at land tenure as a factor inextricably linked to local rural and urban livelihoods. This assumption would lead a new law to being automatically promoting and protecting local user rights. In an effort to make it sustainable, a new land law should have a clear distinction between property rights and user rights as well as between ownership and other rights. This research suggests that specific attention to different tree species and access to non-timber forest products, their use, management and commercialisation is needed.

As explained in the analysis chapters, the data pointed towards a much needed short-term security for women. This local need, when confirmed by a larger sample, would have to be taken into account in a revised policy. I suggest that a

step by step policy approach may be more efficient, guaranteeing women some sort of security for the most urgent needs of the following agricultural season while still pushing for longer term security of rights and ownership. Moreover, the specificity of agro-pastoral societies calls for an inclusive national law taking into account pastoralists as a means to avoid potential further conflicts over land. While this has not been a focus of the thesis, it has been mentioned by some of the land chiefs and provides interesting background for further research.

The process of conceptualising a new rural land act can be overwhelming. In Burkina Faso, recent changes at the government level and the first democratic elections in thirty years provide an interesting framework. People wholeheartedly called for a wind of change during the revolutionary period of 2014 and 2015. New personalities and a new parliament might use land tenure reforms as an important first steps towards a safer, socially inclusive, sustainable Burkina Faso. The process is undoubtedly long and tortuous.

Having reframed a new rural land act, the implementation will be difficult, even if accompanied by adequate decentralised bodies, sufficient resources and skilled actors. Studying, knowing and recognising the potential of current customs may be a step in the right direction.

Conceptually, and as has been noted elsewhere, implementing a new rural act nationwide would require effectively building of new and sustainable institutions and mechanisms (Cleaver 2012). Land tenure security is definitely a main factor in keeping national peace and can greatly contribute towards social cohesion. Moreover, in an agro-pastoral society whose livelihoods have roots in rainfed subsistence agriculture, livestock and integrated forestry, it has a fundamental value for the overall welfare of the State and its population. Eradicating the confusion and dualism around land tenure, by moving towards an integrated approach by taking into account local actors, customary tenure, contextualised needs and national interests is an important process, as well as an extremely difficult one.

BIBLIOGRAPHY

- Adams, Martin, Ben Cousins, and Siyabulela Manona. 1999. "Land Tenure and Economic Development in Rural South Africa: Constraints and Opportunities." In . Johannesburg: Overseas Development Institute.
- Adams, Martin, Sipho Sibanda, and Stephen Turner. 1999. "Land Tenure Reform and Rural Livelihoods in Southern Africa." *Natural Resource Perspective*, Overseas Development Institute, 39 (February).
- Adams, W.M., and M.J. Mortimore. 1997. "Agricultural Intensification and Flexibility in the Nigerian Sahel." *Geographical Journal* 163:150–60.
- Adato, Michelle, and Ruth Meinzen-Dick. 2002. "Assessing the Impact of Agricultural Research on Poverty Using the Sustainable Livelihoods Framework."
- Adepoju, Aderanti, and Wariara Mbugua. 1997. "The African Family: An Overview of Changing Forms."
- Adger, W. Neil. 2010a. "Social Capital, Collective Action, and Adaptation to Climate Change." In *Der Klimawandel*, edited by Martin Voss, 327–45. VS Verlag für Sozialwissenschaften. http://dx.doi.org/10.1007/978-3-531-92258-4_19.
- . 2010b. "Climate Change, Human Well-Being and Insecurity." *New Political Economy* 15 (2):275–92. <https://doi.org/10.1080/13563460903290912>.
- Adger, W. Neil, Saleemul Huq, Katrina Brown, Declan Conway, and Mike Hulme. 2003. "Adaptation to Climate Change in the Developing World." *Progress in Development Studies* 3 (3):179–95. <https://doi.org/10.1191/1464993403ps060oa>.
- Agarwal, Bina. 1994. *A Field of One's Own: Gender and Land Rights in South Asia*. Cambridge South Asian Studies. Cambridge [England] ; New York, NY, USA: Cambridge University Press.
- Akram-Lodhi, A.H. 2008. "(Re-)Imagining Agrarian Relations? The World Development Report 2008: Agriculture for Development." *Development and Change* 39 (6):1145–61.
- Albertini, Rudolph von. 1971. *La Decolonizzazione*. Torino: SEI.
- Alden Wily, L. 2000. "Land Tenure Reform and the Balance of Power in Eastern and Southern Africa." *Natural Resource Perspectives* 58. ODI.
- . 2003. "Governance and Land Relations. A Review of Decentralization of Land Administration and Management in Africa." *Drylands Programme Journal, IIED*, Land Tenure and Resource Access, .
- Alexandre, Daniel-Yves. 2002. *Initiation à l'agroforesterie En Zone Sahélienne : Les Arbres Des Champs Du Plateau Central Au Burkina Faso*. IRD Ed. [u.a.].
- Alinon, Koffi, and Antoine Kalinganire. 2016. "Bylaws as Complementary Means of Tenure Security and Management of Resources Conflicts: Synthesis of Various West African Experiences." *Forests, Trees and Livelihoods* 25 (2):114–19. <https://doi.org/10.1080/14728028.2016.1158667>.
- Amjath-Babu, T.S., Timothy J. Krupnik, Sreejith Aravindakshan, Muhammad Arshad, and Harald Kaechele. 2016. "Climate Change and Indicators of Probable Shifts in the Consumption Portfolios of Dryland Farmers in Sub-Saharan Africa: Implications for Policy." *Ecological Indicators* 67 (August):830–38. <https://doi.org/10.1016/j.ecolind.2016.03.030>.
- Andreocci, Paolo. 1969. "Democrazia, Partito Unico e Populismo Nel Pensiero Politico Africano." *Africa* 2–3.
- Ann, Whitehead, and Tsikata Dzodzi. 2003. "Policy Discourses on Women's Land Rights in Sub-Saharan Africa: The Implications of the Re-Turn to the Customary." *Journal of Agrarian Change* 3 (1–2):67–112.

- Aquino, P. d'. 1998. "Quels Choix Fonciers En Zone Agropastorale Sahélienne? Le Cas Du Nord Du Burkina Faso." *Revue Tiers Monde* 39 (153):175–88.
- Arnold, J.E.Michael, and M.Ruiz Pérez. 2001. "Can Non-Timber Forest Products Match Tropical Forest Conservation and Development Objectives?" *Ecological Economics* 39 (3):437–47. [https://doi.org/10.1016/S0921-8009\(01\)00236-1](https://doi.org/10.1016/S0921-8009(01)00236-1).
- Arnot, C. D., M. K. Luckert, and P. C. Boxall. 2011. "What Is Tenure Security? Conceptual Implications for Empirical Analysis." *Land Economics* 87 (2):297–311. <https://doi.org/10.3368/le.87.2.297>.
- Atwood, David. 1990. "Land Registration in Africa: The Impact on Agricultural Production." *World Development* 18 (5):659–71.
- Audia, Camilla, N.D. Poole, Barthélémy Kaboret, Rebecca Kent, and Tony Hill. 2014. "The Contribution of Tree Crop Products to Smallholder Households A Case Study of Baobab, Shea, and Néré in Burkina Faso." Working Paper 49. FAO COMMODITY AND TRADE POLICY RESEARCH WORKING PAPER. FAO / SOAS London.
- Badini, A. 1994. *Naître et Grandir Chez Les Moosés Traditionnels*. Paris: Sépia.
- Bahadur, Aditya V., Katie Peters, Emily Wilkinson, Florence Pichon, Kirsty Gray, and Thomas Tanner. 2015. "THE 3AS: TRACKING RESILIENCE ACROSS BRACED." ODI Overseas Development Institute.
- Balick, Michael J., and Robert Mendelsohn. 1992. "Assessing the Economic Value of Traditional Medicines from Tropical Rain Forests." *Conservation Biology* 6 (1):128–30. <https://doi.org/10.1046/j.1523-1739.1992.610128.x>.
- Banzhaf, M, B. Drabo, and H. Grell. 2000. "From Conflict to Consensus: Towards Joint Managamenet of Natural Resources by Pastoralists and Agropastoralists in the Zone of Kishi Beiga, Burkina Faso." *IIED / SOS Sahel, Securing the Commons*, .
- Baro, M., and T.F. Deubel. 2006. "Persistent Hunger: Perspectives on Vulnerability, Famine and Food Security in Sub-Saharan Africa." *Annual Review of Anthropology* 35:521–38.
- Barrière, Caroline, and Olivier Barrière. 2002. *Un droit à inventer*. IRD Editions.
- Barrière, Olivier, and Alain Rochegude. 2007. *Foncier et Environnement En Afrique. Des Acteurs Aux Droits*. Laboratoire d'anthropologie Juridique. Paris: Karthala.
- Barrows, R., and M. Roth. 1990. "Land Tenure and Investment in African Agriculture: Theory and Evidence." *Journal of Modern African Studies* 28 (2):265–97.
- Bassett, Thomas, and Donald Crummey. 1993. *Land in African Agrarian Systems*. African Issues. Madison Wisconsin: University of Wisconsin Press.
- Basu, Kaushik. 2006. "Globalization, Poverty, and Inequality: What Is the Relationship? What Can Be Done?" *World Development* 34 (8):1361–73. <https://doi.org/10.1016/j.worlddev.2005.10.009>.
- Batà, Carlo. 2003. *L'Africa Di Thomas Sankara. Le Idee Non Si Possono Uccidere*. Verona: Achab.
- Batterbury, SPJ. 2001. "Landscapes of Diversity: A Local Political Ecology of Livelihood Diversification in Southwestern Niger." *Ecumene* 8:437–64.
- Batterbury, SPJ, and A. Warren. 2001. "The African Sahel 25 Years after the Great Drought: Assessing Progress and Moving towards New Agendas and Approaches." *Global Environmental Change* 11:1–8.
- Bayala, Jules, Niéyidouba Lamien, Innocent Butare, Sibiri Jean Ouédraogo, and Oscar Eyog-Matig. 2011. "Editorial." *New Forests* 41 (3):277–79. <https://doi.org/10.1007/s11056-011-9261-0>.
- BBC News. 2016. "What Is behind Ethiopia's Wave of Protests?," August 22, 2016, sec. Africa. <http://www.bbc.co.uk/news/world-africa-36940906>.
- Becker, Gary Stanley. 1998. *A Treatise on the Family*. Enl. ed., 1. paperback ed., 4. print. Cambridge, Mass.: Harvard Univ. Press.

- Becker, G.S. 1976. "Altruism, Egoism, and Genetic Fitness: Economics and Sociobiology." *Journal of Economic Literature* 14 (3):817–26.
- Beckett, F. 2013. "Researching Within-Household Distribution: Overview, Developments, Debates and Methodological Challenges." *Journal of Marriage and Family* 75 (3):582–97.
- Bedi, Nikki, Madilynn Bishop, Ukiah Hawkins, Olivia Miller, Rodrigo Pedraza, Anna Preble, and Angela Rico-Rairan. 2014. "Linking Resilience and Good Governance: A Literature Review." *Anthos* 6 (1):15–49.
<https://doi.org/10.15760/anthos.2014.15>.
- Behnke, R.H., and I. Scoones. 1992. "Rethinking Range Ecology: Implications for Rangeland Management in Africa." *Drylands Programme Journal, IIED* 33.
- Belcher, Brian, Manuel Ruiz-Perez, and Ramadhani Achdiawan. 2003. "Global Patterns and Trends in NTFP Development." In , 19–23.
- Belcher, Brian, Manuel Ruíz-Pérez, and Ramadhani Achdiawan. 2005. "Global Patterns and Trends in the Use and Management of Commercial NTFPs: Implications for Livelihoods and Conservation." *World Development* 33 (9):1435–52.
<https://doi.org/10.1016/j.worlddev.2004.10.007>.
- Belcher, Brian, and Kathrin Schreckenber. 2007. "Commercialisation of Non-timber Forest Products: A Reality Check." *Development Policy Review* 25 (3):355–77.
<https://doi.org/10.1111/j.1467-7679.2007.00374.x>.
- Belemvire, Adama, Hamada Sawadogo, and Moumini Savadogo. 2008. "Evaluation Des Impacts Biophysiques et Socioeconomiques Des Investissements Dans Les Actions de Gestion Des Ressources Naturelles Au Nord Du Plateau Central Du Burkina Faso." Rapport de synthèse. CILSS.
- Benda-Beckmann, Franz von. 2002. "Who's Afraid of Legal Pluralism?" *The Journal of Legal Pluralism and Unofficial Law* 34 (47):37–82.
<https://doi.org/10.1080/07329113.2002.10756563>.
- Béné, Christophe, Rachel Godfrey Wood, Andrew Newsham, and Mark Davies. 2012. "Resilience: New Utopia or New Tyranny? Reflection about the Potentials and Limits of the Concept of Resilience in Relation to Vulnerability Reduction Programmes." *IDS Working Papers* 2012 (405):1–61.
<https://doi.org/10.1111/j.2040-0209.2012.00405.x>.
- Benjaminsen, T., and Christian Lund. 2002. *Securing Land Rights in Africa*. London: Frank Cass.
- Bénot, Yves. 1969. *Idéologies Des Indépendances Africaines*. Paris: F. Maspero.
- Berquó, Elza, and Peter Xenos, eds. 1992. *Family Systems and Cultural Change*. International Studies in Demography. Oxford, England : New York: Clarendon Press ; Oxford University Press.
- Bhamra, Ran, Samir Dani, and Kevin Burnard. 2011. "Resilience: The Concept, a Literature Review and Future Directions." *International Journal of Production Research* 49 (18):5375–93. <https://doi.org/10.1080/00207543.2011.563826>.
- Biggs, Reinette, Henk Simons, Michel Bakkenes, Robert J. Scholes, Bas Eickhout, Detlef van Vuuren, and Rob Alkemade. 2008. "Scenarios of Biodiversity Loss in Southern Africa in the 21st Century." *Global Environmental Change* 18 (2):296–309. <https://doi.org/10.1016/j.gloenvcha.2008.02.001>.
- Bila Kaboré, Roger. 2002. *Histoire Politique Du Burkina Faso : 1919 - 2000*. Paris: L' Harmattan.
- Blaikie, Piers, Terry Cannon, Ian Davis, and Ben Wisner. 2014. *At Risk II-: Natural Hazards, People's Vulnerability and Disasters*. Routledge.

- Boone, Catherine. 2014. *Property and Political Order in Africa: Land Rights and the Structure of Politics*. Cambridge Studies in Comparative Politics. New York: Cambridge University Press.
- Bouis, H., and C.L. Pena. 1997. "Inequality in the Intrafamily Distribution of Food: The Dilemma of Defining Individual's 'Fair Share'." In *Intrahousehold Resource Allocation in Developing Countries: Models, Methods, and Policy*, 179–93. Baltimore and London: Johns Hopkins University Press.
- Bourdieu, Pierre. 1993. *The Field of Cultural Production: Essays on Art and Literature*. Columbia University Press.
- Bourguignon, Jean-Claude. 2007. *Traditions et Modernité Au Burkina-Faso*. Paris: Harmattan.
- Brasselle, Anne-Sophie, Frederic Gaspart, and Jean-Philippe Platteau. 2002. "Land Tenure Security and Investment Incentives: Puzzling Evidence from Burkina Faso." *Journal of Development Economics* 67 (2):373–418.
- Braun, Joachim von. 2005. "Agricultural Economics and Distributional Effects." *Agricultural Economics* 32 (s1):1–20. <https://doi.org/10.1111/j.0169-5150.2004.00011.x>.
- Brockway, Fenner. 1963. *African Socialism*. London: The Bodley Head.
- Brosius, J.P. 1997. "Endangered Forest, Endangered People: Environmentalist Representations of Indigenous Knowledge." *Human Ecology* 25 (1):47–69.
- Brown, A, M. Gawith, K. Lonsdale, and P. Pringle. 2011. "Managing Adaptation: Linking Theory and Practice." Technical Report. Oxford, UK: UKCIP.
- Browning, Martin, and Pierre-Andre Chiappori. 1998. "Efficient Intra-Household Allocations: A General Characterization and Empirical Tests." *Econometrica*, 1241–78.
- Bruce, John W. 2014. "The Variety of Reform: A Review of Recent Experience with Land Reform and the Reform of Land Tenure, with Particular Reference to the African Experience." *Occasional Paper*, no. 9:13–56.
- Bruce, John W., and S.E. Migot-Adholla, eds. 1994. *Searching for Land Tenure Security in Africa*. Iowa: Kendall Hunt Publishing Company.
- Bruce, John W., Kelly J. Wendland, and Lisa Naughton-Treves. 2010. "Whom to Pay? Key Concepts and Terms Regarding Tenure and Property Rights in Payment-Based Forest Ecosystem Conservation," Land Tenure Center - Tenure Brief, , no. 15 (December). <http://nelson.wisc.edu/ltc/docs/whom-to-pay.pdf>.
- Brujin, M.E. de, and H.J.W.M. van Dijk. 1999. "Insecurity and Pastoral Development in the Sahel." *Development and Change* 30:115–39.
- Bryceson, D. 2002. "The Scramble in Africa: Reorienting Rural Livelihoods." *World Development* 30 (5):725–39.
- Byron, R.N., and M. Ruiz-Pérez. 1996. "What Future for the Tropical Moist Forests 25 Years Hence?" *Commonwealth Forestry Review* 75 (2):124–29.
- Camberlin, P., and M. Diop. 2003. "Application of Daily Rainfall Principal Component Analysis to the Assessment of the Rainy Season Characteristics in Senegal." *Climate Research* 23:159–69.
- Carney, Diana, ed. 1998. *Sustainable Rural Livelihoods: What Contribution Can We Make?* London: Dept. for International Development.
- CARRI. 2013. "Definitions of Community Resilience: An Analysis." Community and Regional Resilience Institute.
- Carter, T.R., M. Hulme, J.F. Crossley, S. Malyshev, M.G. New, M.E. Schlesinger, and H. Tuomenvirta. 2000. *Climate Change in the 21st Century - Interim Characterizations Based on the New IPCC Emissions Scenarios*. The Finnish Environment 433. Helsinki: Finnish Environment Institute.

- Cecile, Jackson. 2003. "Gender Analysis of Land: Beyond Land Rights for Women?" *Journal of Agrarian Change* 3 (4):453–80.
- Chagomoka, Takemore, Sophie Unger, Axel Drescher, Rüdiger Glaser, Bernd Marschner, and Johannes Schlesinger. 2016. "Food Coping Strategies in Northern Ghana. A Socio-Spatial Analysis along the Urban–rural Continuum." *Agriculture & Food Security* 5 (1). <https://doi.org/10.1186/s40066-016-0052-x>.
- Challinor, Andrew, Tim Wheeler, Chris Garforth, Peter Craufurd, and Amir Kassam. 2007. "Assessing the Vulnerability of Food Crop Systems in Africa to Climate Change." *Climatic Change* 83 (3):381–99. <https://doi.org/10.1007/s10584-007-9249-0>.
- Chamberlin, Jordan. 2008. "It's a Small World After All. Defining Smallholder Agriculture in Ghana." Discussion Paper 00823. IFPRI Discussion Paper. Washington DC: International Food Policy Research Institute (IFPRI).
- Chambers, Robert. 1992. *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*. DP 296. Brighton, England: Institute of Development Studies.
- . 1994. "Participatory Rural Appraisal (PRA: Analysis of Experience." *World Development* 22 (9):1253–68.
- . 2006. "Participatory Mapping and Geographic Information Systems: Whose Map? Who Is Empowered and Who Disempowered? Who Gains and Who Loses?" *Electronic Journal on Information Systems in Developing Countries* 25 (2):1–11.
- Chambers, Robert, and Melissa Leach. 1987. "Trees to Meet Contingencies: Savings and Security for the Rural Poor." IDS Discussion Paper 288.
- Christiaensen, L., L. Demery, and J. Kuhl. 2010. "The Evolving Role of Agriculture in Poverty Reduction: An Empirical Perspective." UNU World Institute for Development Economics Research.
- CIA. 2013. "CIA World Factbook: Burkina Faso." CIA. 2013. <https://www.cia.gov/library/publications/the-world-factbook/geos/uv.html>.
- CILSS. 2004. "CILSS Presentation." www.cilssnet.org/anglais/index_anglais.htm.
- . 2005. "Lutte contre la désertification." CILSS.
- Ciparisse, Gérard. 2003. *Multilingual Thesaurus on Land Tenure*. Rome: FAO press.
- Cissoko, Sékéné-M. 1966. *Histoire de l'Afrique Occidentale. Moyen Age et Temps Modernes*. Paris: Présence Africaine.
- Cleaver, Frances. 2012. *Development through Bricolage: Rethinking Institutions for Natural Resource Management*. Abingdon, Oxon ; New York, NY: Routledge.
- Clifford, N. J., Shaun French, and Gill Valentine, eds. 2010. *Key Methods in Geography*. 2nd ed. Thousand Oaks, CA: Sage Publications.
- Coldham, S. 1978. "The Effect of Registration of Title upon Customary Land Rights in Kenya." *Journal of African Law* 22 (2):91–111.
- Colin, Jean-Philippe. 2002. "Contrats Agraires Ou Conventions Agraires?" *Economie Rurale* 272:1–17.
- Cotula, Lorenzo. 2002. "Gender and Law: Women's Rights in Agriculture." Rapport de synthèse. Rome: FAO press.
- Cotula, Lorenzo, Camilla Toulmin, and Ced Hesse. 2004. "Land Tenure and Administration in Africa: Lessons of Experience and Emerging Issues." Rapport de synthèse. IIED / FAO.
- Cousins, Ben, ed. 2000. "At the Crossroads: Land and Agrarian Reform in South Africa into the 21st Century." In . Pretoria: National Land Committee Braamfontein.
- Crawford, William H., and Carl Jr Rosberg. 1964. *African Socialism*. California: Stanford University Press.
- Crichton, Margaret T., Cameron G. Ramsay, and Terence Kelly. 2009. "Enhancing Organizational Resilience Through Emergency Planning: Learnings from Cross-

- Sectoral Lessons." *Journal of Contingencies and Crisis Management* 17 (1):24–37. <https://doi.org/10.1111/j.1468-5973.2009.00556.x>.
- Cutter, Susan L, Christopher T Emrich, Jennifer J Webb, and Daniel Morath. 2009. "Social Vulnerability to Climate Variability Hazards: A Review of the Literature." *Final Report to Oxfam America* 5.
- Dahlberg, Annika. 1994. *Contesting Views and Changing Paradigms: The Land Degradation Debate in Southern Africa*. Discussion Paper 6. Uppsala [Sweden]: Nordiska Afrikainstitutet.
- Dai, A., P.J. Lamb, K.E. Trenberth, M. Hulme, P.D. Jones, and P. Xie. 2004. "The Recent Sahel Drought Is Real." *International Journal of Climatology* 24:1323–31.
- Davidson, O. 2003. "The Development and Climate Nexus: The Case of Sub-Saharan Africa." *Climate Policy* 3 (November):S97–113. <https://doi.org/10.1016/j.clipol.2003.10.007>.
- Davison, William. 2016. "Ethiopia's Regime Prioritizes Power over Reform as Ethnic Protests Continue." *World Politics Review* (blog). August 30, 2016. <http://www.worldpoliticsreview.com/articles/19769/ethiopia-s-regime-prioritizes-power-over-reform-as-ethnic-protests-continue>.
- Deininger, Klaus. 2003. "Land Policies for Growth and Poverty Reduction." World Bank Series. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2003/08/08/000094946_0307250400474/Rendered/PDF/multi0page.pdf.
- Dekker, Henri A. L. 2003. *The Invisible Line: Land Reform, Land Tenure Security, and Land Registration*. International Land Management Series. Aldershot, Hants, England ; Burlington, VT: Ashgate.
- Demsetz, Harold. 1967. "Towards a Theory of Property Rights." *American Economic Review* 57:347–59.
- Deshingkar, Priya. 2012. "Environmental Risk, Resilience and Migration: Implications for Natural Resource Management and Agriculture." *Environmental Research Letters* 7 (1):015603. <https://doi.org/10.1088/1748-9326/7/1/015603>.
- Dessai, Suraje, and Mike Hulme. 2007. "Assessing the Robustness of Adaptation Decisions to Climate Change Uncertainties: A Case Study on Water Resources Management in the East of England." *Global Environmental Change* 17 (1):59–72. <https://doi.org/10.1016/j.gloenvcha.2006.11.005>.
- Devereux, Stephen. 2009. "Why Does Famine Persist in Africa?" *Food Security* 1:23–35.
- Devereux, Stephen, and Simon Maxwell. 2001. *Food Security in Sub-Saharan Africa*. ITDG Publishing.
- DFID. 2002a. "Better Livelihoods for Poor People: The Role of Agriculture." Department for International Development, London. www.dfid.gov.uk.
- . 2002b. "Better Livelihoods for Poor People: The Role of Land Policy." Department for International Development, London. www.dfid.gov.uk.
- Diep, François. 2006. *Les Funérailles de l'éléphant: Contes Du Burkina Faso*. Aubais. Lirabelle.
- Dijk, T. v. 2011. "Livelihoods, Capitals and Livelihood Trajectories: A More Sociological Conceptualisation." *Progress in Development Studies* 11 (2):101–17. <https://doi.org/10.1177/146499341001100202>.
- Diop, M. 1996. "A Propos de La Durée de La Saison Des Pluies Au Sénégal." *Sécheresse* 7:7–15.
- Dixon, Jami, K. Taniguchi, H. Wattenbach, and A. Tanyeri-Arbur. 2004. "Smallholders, Globalization and Policy Analysis." Rome: FAO. <http://www.fao.org/docrep/007/y5784e/y5784e00.htm>.

- Dong, Xiao-Yuan. 1996. "Two-Tier Land Tenure System and Sustained Economic Growth in Post-1978 Rural China." *World Development* 24 (5):915–28. [https://doi.org/10.1016/0305-750X\(96\)00010-1](https://doi.org/10.1016/0305-750X(96)00010-1).
- Dorward, Andrew, Nigel Poole, Jamie Morrison, Jonathan Kydd, and Ian Urey. 2003. "Markets, Institutions and Technology: Missing Links in Livelihoods Analysis: Markets, Institutions and Technology: Missing Links in Livelihoods Analysis." *Development Policy Review* 21 (3):319–32. <https://doi.org/10.1111/1467-7679.00213>.
- Doss, Cheryl, Ruth Meinzen-Dick, and Allan Bomuhangi. 2014. "Who Owns the Land? Perspectives from Rural Ugandans and Implications for Large-Scale Land Acquisitions." *Feminist Economics* 20 (1):76–100. <https://doi.org/10.1080/13545701.2013.855320>.
- Doss, Cheryl, Gale Summerfield, and Dzodzi Tsikata. 2014. "Land, Gender, and Food Security." *Feminist Economics* 20 (1):1–23. <https://doi.org/10.1080/13545701.2014.895021>.
- Downward, P. 2002. "Critical Realism, Empirical Methods and Inference: A Critical Discussion." *Cambridge Journal of Economics* 26 (4):481–500. <https://doi.org/10.1093/cje/26.4.481>.
- Droz, Bernard. 2006. *Storia della decolonizzazione nel XX secolo*. Milano: Bruno Mondadori.
- Duflo, Esther, and Christopher R. Udry. 2003. "Intrahousehold Resource Allocation in Cote d'Ivoire: Social Norms, Separate Accounts and Consumption Choices." *Yale University Economic Growth Center Discussion Paper* 857 (June).
- Dumont, G-F. 2007. *Démographie Politique. Les Lois de La Géopolitique Des Populations*. Paris: Ellipses.
- . 2009. "La Géopolitique Des Populations Du Sahel." *Cahiers Du CEREM* 13 (December):33–46.
- Duperrey, A.-M. 1984. *Les Gourounsi de La Haute-Volta. Conquête et Colonisation 1896-1933*. Vol. 72.
- Easterly, William. 2009. "How the Millennium Development Goals Are Unfair to Africa." *World Development* 37 (1):26–35. <https://doi.org/10.1016/j.worlddev.2008.02.009>.
- Eaton, Peter. 2012. *Land Tenure, Conservation and Development in Southeast Asia*. Routledge Contemporary Southeast Asia Series. London: Routledge.
- Elias, Marlène. 2015. "Gender, Knowledge-Sharing and Management of Shea (Vitellaria Paradoxa) Parklands in Central-West Burkina Faso." *Journal of Rural Studies* 38 (April):27–38. <https://doi.org/10.1016/j.jrurstud.2015.01.006>.
- Ellis, F. 2000. "Household Strategies and Rural Livelihood Diversification." *Journal of Development Studies* 35 (1):1–38.
- Engberg-Pedersen, L. 1995. "Creating Local Democratic Politics from above: The Gestion Des Terroirs Approach in Burkina Faso." *Drylands Programme Journal, IIED* 54.
- Englebert, Pierre. 1996. *Burkina Faso : Unsteady Statehood in West Africa*. Nachdruck. Boulder, Colorado: Westview Press.
- Enters, Thomas. 1997. "Technology Scenarios in the Asia-Pacific Forestry Sector." Working Paper APFSOS/WP/25. Asia-Pacific Forestry Sector Outlook Study Working Paper Series. Rome / Bangkok: FAO.
- Falconer, Julia, and Carla R. S. Koppell. 1990. "The Major Significance of 'Minor' Forest Products: The Local Use and Value of Forests in the West African Humid Forest Zone." Note CF Note 6. Forestry Department. Rome: FAO.
- FAO. 1992. "Forest, Trees and Food." Rome: FAO press.

- . 1995a. "Non-Wood Forest Products for Rural Income and Sustainable Forestry." FAO press.
- . 1995b. "Technology Scenarios in the Asia Pacific Forestry Sector." FAO Working Paper No APFSOS/WP/25.
- . 1999. "FAO Forestry." *Unasylva - an International Journal of Forestry and Forest Industries* 50 (3).
- . 2002. "Land Tenure and Rural Development." *Land Tenure Studies* 3.
- . 2008. "Land Access in Rural Africa: Strategies to Fight Gender Inequality." In . Brussels.
- . , ed. 2015. *Meeting the 2015 International Hunger Targets: Taking Stock of Uneven Progress*. The State of Food Insecurity in the World 2015. Rome: FAO.
- Faye, Mbène Dièye, John C. Weber, Bayo Mounkoro, and Joseph-Marie Dakouo. 2010. "Contribution of Parkland Trees to Farmers' Livelihoods: A Case Study from Mali." *Development in Practice* 20 (3):428–34.
<https://doi.org/10.1080/09614521003710013>.
- Field, Christopher B., ed. 2014a. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B, Regional Aspects*. Cambridge: Cambridge University Press.
- . , ed. 2014b. *Global and Sectoral Aspects*. Climate Change 2014, impacts, adaptation, and vulnerability ; Part A. New York, NY: Cambridge Univ. Press.
- Firmin-Sellers, K., and P. Sellers. 1999. "Expected Failures and Unexpected Successes of Land Titling in Africa." *World Development* 27 (7):1115–28.
- Fisiy, Cyprian Fonfuy. 1992. *Power and Privilege in the Administration of Law: Land Law Reforms and Social Differentiation in Cameroon*. Research Reports / African Studies Centre, 1992/48. Leiden, the Netherlands: African Studies Centre.
- Fontès, J., and S. Guinko. 1995. "Carte de Végétation et d'occupation Du Sol Du Burkina Faso. Note Explicative." Toulouse / Ouagadougou: Centre National de la Recherche Scientifique / Université de Toulouse III. Institut du Développement Rural / Faculté des Sciences et Techniques de l'Université de Ouagadougou.
- Food and Agriculture Organization of the United Nations, and Forestry Department. 2016. *State of the World's Forests 2016: Forests and Agriculture : Land-Use Challenges and Opportunities*.
- Foucault, Michel. 1982. "The Subject and Power." *Critical Inquiry*, 777–95.
- Fox, P., and J. Rockström. 2003. "Supplemental Irrigation for Dry-Spell Mitigation of Rainfed Agriculture in the Sahel." *Agricultural Water Management* 61:29–50.
- Fujimoto, Akimi. 1996. "Rice Land Ownership and Tenancy Systems in Southeast Asia: Facts and Issues Based on Ten Village Studies." *The Developing Economies* XXXIV (3).
- Gakunzi, David, ed. 1991. *"Oser Inventer l'avenir" : La Parole de Sankara (1983-1987)*. Paris: Pathfinder & L'Harmattan.
- Galiani, Sebastian, and Ernesto Schargrotsky. 2005. "Property Rights for the Poor: Effects of Land Titling." Universidad Torcauto di Tella, Centro de Investigacion en Finanzas.
- Gastaldi, Jacques. 1995. "Niger. Etude d'une Stratégie de Croissance Agricole Durable. Sécurité Foncière et Développement Agricole Durable Au Niger." Niamey: World Bank / Ministère de l'Agriculture et de l'Elevage du Niger.
- Gausset, Quentin, Emma Lucie Yago-Ouattara, and Bassirou Belem. 2005. "Gender and Trees in Péni, South-Western Burkina Faso. Women's Needs, Strategies and Challenges." *Geografisk Tidsskrift-Danish Journal of Geography* 105 (1):67–76.
<https://doi.org/10.1080/00167223.2005.10649527>.
- Geiser, Urs, Patrick Bottazzi, Michael Epprecht, Gilbert Fokou, Astrid Fritschi, R. Ramakumar, Babar Shahbaz, Bernd Steinmann, and Balz Strasser. 2011. "Access

- to Livelihood Assets: Inclusion, Exclusion and the Reality of Development Interventions." In *Research for Sustainable Development: Foundations, Experiences, and Perspectives.*, Swiss National Centre of Competence in Research (NCCR) North-South, 6:313–30. Perspectives. Bern: Geographica Bernensia.
- Gittelsohn, J., and S. Mookherji. 1997. "The Application of Anthropological Methods to the Study of Intrahousehold Resource Allocation." In *Intrahousehold Resource Allocation in Developing Countries: Models, Methods, and Policy*, 165–78. Baltimore and London: Johns Hopkins University Press.
- Giusti, Francesca, and Vincenzo Sommella. 2007. *Storia Dell'Africa*. Rome: Donzelli.
- Goldstein, Marcus, and Christopher R. Udry. 2008. "The Profits of Power: Land Rights and Agricultural Investment in Ghana." *Journal of Political Economy* 116 (6):981–1022.
- GRAF. 2012. "La Loi Foncière Rurale de 2009 à l'épreuve de Stratégies Locales d'anticipation Au Burkina Faso." In . Ouagadougou - Amsterdam: KIT Publishers.
- Gray, Leslie C., and Michael Kevane. 2001. "Evolving Tenure Rights and Agricultural Intensification in Southwestern Burkina Faso." *World Development* 29 (4):573–587.
- Griffon, Michel. 2006. *Nourrir La Planete. Pour Une Revolution Doublement Verte*. Paris: Odile Jacob.
- Griffon, Michel, and Jacques Weber. 1996. "La révolution doublement verte: économie et institutions." *Cahiers Agriculture CIRAD* 5 (4):239–42.
- Grossbard, S. 2010. "Independent Individual Decision-Makers in Household Models and the New Home Economics." Discussion Paper 5138. Bonn, Germany: IZA.
- Gueye, Mathieu, Nicolas Cyrille Ayessou, Souleye Koma, Seydina Diop, Leonard Elie Akpo, and Papa Ibra Samb. 2014. "Wild Fruits Traditionally Gathered by the Malinke Ethnic Group in the Edge of Niokolo Koba Park (Senegal)." *American Journal of Plant Sciences* 05 (09):1306–17. <https://doi.org/10.4236/ajps.2014.59144>.
- Guillaud, Dominique. 1993. *L'ombre Du Mil : Un Système Agropastoral Sahélien En Aribinda (Burkina Faso)*. Orstom.
- Guinko, S., and L.J. Pasgo. 1992. "Récolte et Commercialisation Des Produits Non Ligneux Des Essences Forestières Locales Dans Le Département de Zitenga, Au Burkina Faso." *Unasylva - an International Journal of Forestry and Forest Industries*, Forestry Department, 43/1 (168).
- Guyer, J., and Pauline Peters. 1987. "Conceptualizing the Household. Issues in Theory and Policy in Africa." *Development and Change* 2 (18).
- Haan, Leo de. 2012. "The Livelihood Approach: A Critical Exploration." *Erdkunde* 66 (4):345–57. <https://doi.org/10.3112/erdkunde.2012.04.05>.
- Haan, Leo de, and Alfred Lakwo. 2010. "Rethinking the Impact of Microfinance in Africa: 'Business Change' or Social Emancipation." *European Journal of Development Research* 22 (4):529–45. <https://doi.org/10.1057/ejdr.2010.32>.
- Haan, Leo de, and A. Zoomers. 2005. "Exploring the Frontier of Livelihoods Research." *Development and Change* 36 (1):27–47.
- Haddad, L., J. Hoddinott, and H. Alderman. 1997. *Intrahousehold Resource Allocation in Developing Countries: Models, Methods, and a Policy*. Baltimore and London: Johns Hopkins University Press.
- Hagos, Fitsum, and Stein Holden. 2006. "Tenure Security, Resource Poverty, Public Programs, and Household Plot-Level Conservation Investments in the Highlands of Northern Ethiopia." *Agricultural Economics* 34 (2):183–96. <https://doi.org/10.1111/j.1574-0864.2006.00117.x>.

- Hammond, P.B. 1966. *Yatenga: Technology in the Culture of West African Kingdom*. New York: Free Press.
- Hazell, P., S. Poulton, S. Wiggins, and A. Dorward. 2010. "The Future of Small Farms: Trajectories and Policy Priorities." *World Development* 38 (10):1349–61.
- Helmfrid, S. 2004. *Towards Gender Equality in Burkina Faso*. Stockholm: SIDA.
- Hengsdijk, H., and H. van Keulen. 2002. "The Effect of Temporal Variation on Inputs and Outputs of Future-Oriented Land Use Systems in West Africa." *Agriculture, Ecosystems and Environment* 91:245–59.
- Herrick, Clare. 2014. "(Global) Health Geography and the Post-2015 Development Agenda: Commentary." *The Geographical Journal* 180 (2):185–90. <https://doi.org/10.1111/geoj.12061>.
- Holmgren, Karin, and Helena Öberg. 2006. "Climate Change in Southern and Eastern Africa During the Past Millennium and Its Implications for Societal Development." *Environment, Development and Sustainability* 8 (1):185–95. <https://doi.org/10.1007/s10668-005-5752-5>.
- Huberman, Michael, and Miles, eds. 2002. *The Qualitative Researcher's Companion*. Thousand Oaks / London / New Delhi: Sage Publications.
- Hulme, M. 2001. "Climate Perspectives on Sahelian Dessiccation: 1973-1998." *Global Environmental Change* 11.
- IBM, Corp. 2013. *IBM SPSS Statistics for Windows* (version 22.0). Windows / Mac. English. Armonk, N.Y: IBM Corporation.
- Ickowitz, A., B. Powell, M.A. Salim, and T.C.H. Sunderland. 2014. "Dietary Quality and Tree Cover in Africa." *Global Environmental Change* 24:287–94.
- iDE. 2013. "Etude de Planification." internal document.
- Intergovernmental Panel on Climate Change, and Ottmar Edenhofer, eds. 2014. *Climate Change 2014: Mitigation of Climate Change: Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. New York, NY: Cambridge University Press.
- IPCC. 2014. "Climate Change 2014. Impacts, Adaptation and Vulnerability. Summary for Policymakers." IPCC Fifth Assessment. Intergovernmental Panel on Climate Change.
- Jackson, Cecile. 2003. "Gender Analysis of Land: Beyond Land Rights for Women?" *Journal of Agrarian Change* 3 (4):453–80. <https://doi.org/10.1111/1471-0366.00062>.
- Jaffré, Bruno. 1989. *Burkina Faso : Les Années Sankara de La Révolution à La Rectification*. Paris: L'Harmattan.
- Jamnadas, R.H., I.K. Dawson, S. Franzel, R.R.B. Leakey, D. Mithöfer, F.K. Akinnifesi, and Z. Tchoundjeu. 2011. "Improving Livelihoods and Nutrition in Sub-Saharan Africa through the Promotion of Indigenous and Exotic Fruit Production in Smallholders' Agroforestry Systems: A Review." *International Forestry Review* 13 (3):338–54. <https://doi.org/10.1505/146554811798293836>.
- Joireman, S.F. 2008. "The Mystery of Capital Formation in Sub-Saharan Africa: Women, Property Rights and Customary Law." *World Development* 36 (7):1233–46. <https://doi.org/10.1016/j.worlddev.2007.06.017>.
- Jones, H. 2011. "Taking Responsibility for Complexity." ODI Overseas Development Institute.
- Jones, Peter G., and Philip K. Thornton. 2009. "Croppers to Livestock Keepers: Livelihood Transitions to 2050 in Africa Due to Climate Change." *Environmental Science & Policy* 12 (4):427–37. <https://doi.org/10.1016/j.envsci.2008.08.006>.

- Kamano, Pierre J., Rakotomalala Ramahatra, Jean-Mark Bernard, Guillaume Husson, and Nicola Reuge. 2010. *Les Défis Du Système Éducatif Burkinabè En Appui à La Croissance Économique*. Washington DC: World Bank Series.
- Kaminski, Jonathan, and Alban Thomas. 2011. "Land Use, Production Growth and the Institutional Environment of Smallholders: Evidence from Burkinabé Cotton Farmers." *Land Economics* 87 (1):161–82.
- Kanu, B.S, A.O. Salami, and K. Numasawa. 2014. "Inclusive Growth: An Imperative for African Agriculture."
- Kazianga, Harounan, and Zaki Wahhaj. 2013. "Gender, Social Norms, and Household Production in Burkina Faso." *Economic Development and Cultural Change* 61 (3):539–76.
- Kent, R., C. Bakaweri, and N.D. Poole. 2014. "Facilitating Entry into Shea Processing: A Study of Two Interventions in Northern Ghana." *Food Chain* 4 (3):209–24.
- Kevane, Michael, and Leslie C. Gray. 1999. "A Woman's Field Is Made at Night: Gendered Land Rights and Norms in Burkina Faso." *Feminist* 5 (3):1–26.
- Ki-Zerbo, Joseph. 1977. *Storia dell'Africa Nera*. Italian. Torino: Einaudi.
- Kurukulasuriya, Pradeep, and Shane Rosenthal. 2003. "Climate Change and Agriculture. A Review of Impacts and Adaptations." World Bank Environment Department.
- Lallemand, Suzanne. 1977. "Une Famille Mossi." *Recherches Voltaïques* 17.
- Lamien, Niéyidouba, Amadou Sidibe, and Jules Bayala. 1996. "Use and Commercialization of Non-Timber Forest Products in Western Burkina Faso." *Domestication and Commercialization of Non-Timber Forest Products in Agroforestry Systems, Non-Wood Forest Products*, no. 9:51–64.
- Lamien, Niéyidouba, and San Traoré. 2003. "Commercialisation des produits non ligneux des arbres de la zone semi-aride du Burkina Faso: cas des feuilles sèches de baobab (*Adansonia digitata* L.)." In *Compte rendus*. Bamako: ICRAF - PRS / Université LAVAL.
- Lamien, Niéyidouba, and G. Vognan. 2001. "Importance of Non Wood Products as Sources of Rural Women's Income in Western Burkina Faso." In *Proceeding of the Conference Combating Desertification with Plants.*, 69–79. Beer Sheva, Israel.
- Lastarria-Cornhiel, S. 1997. "Impact of Privatization on Gender and Property Rights in Africa." *World Development* 25 (8):1317–33.
- Lavigne Delville, Philippe. 1998. "Harmonising Formal Law and Customary Land Rights in French-Speaking West Africa." In *Seminar CNASEA/AFDI/FNSAFER*. Réunion: CNASEA/AFDI/FNSAFER.
- Lavigne Delville, Philippe, and Jean-Pierre Chauveau, eds. 1998. *Quelles Politiques Foncières Pour l'Afrique Rurale?: Réconcilier Pratiques, Légitimité et Légalité*. Economie et Développement. Paris: Editions Karthala : Coopération française.
- Lavigne Delville, Philippe, GRET, and CNRS. 2008. *Gouvernance Foncière et Sécurisation Des Droits Dans Les Pays Du Sud. Livre Blanc Des Acteurs Français de La Coopération*. Paris: Foncier et Développement.
- Lawson, T. 2005. "The Nature of Heterodox Economics." *Cambridge Journal of Economics* 30 (4):483–505. <https://doi.org/10.1093/cje/bei093>.
- Le Barbé, L., and T. Lebel. 1997. "Rainfall Climatology of the HAPEx-Sahel Region during the Years 1950-1990." *Journal of Hydrology* 188–189:43–73.
- Le Bris, Emile, Etienne Le Roy, and Paul Mathieu. 1991. *L'appropriation de La Terre En Afrique Noire, Manuel d'analyse et de Gestion Foncières*. Paris: Karthala.
- Le Meur, P. Y. 2002. "Approche qualitative de la question foncière. Note méthodologique. Document de travail de l'UR095 n°4." IRD Ed. [u.a.].

- Le Roy, Etienne, Alain Karsenty, and Alain Bertrand. 2000. *La Sécurisation Foncière En Afrique*. Paris: Karthala.
- Leach, Melissa, Robin Mearns, and I. Scoones. 1999. "Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management." *World Development* 27 (2):225–47.
- Leary, Neil, ed. 2008. *Climate Change and Vulnerability*. London ; Sterling, VA: Earthscan.
- Little, P.D., and D.W. Brokensha. 1987. *Conservation in Africa. People, Policies and Practice*. Cambridge: Cambridge University Press.
- Loehr, Dirk. 2012. "Capitalization by Formalization?—Challenging the Current Paradigm of Land Reforms." *Land Use Policy*.
<http://www.sciencedirect.com/science/article/pii/S0264837712000038>.
- Lund. 1998. *Law, Power and Politics in Niger. Land Struggles and Rural Code*. Hamburg: LIT Verlag.
- Lund, Christian, Rie Odgard, and Espen Sjaastad. 2006. "Land Rights and Land Conflicts in Africa: A Review of Issues and Experiences." Danis Institute for International Studies.
http://pure.diis.dk/ws/files/68278/Land_rights_and_land_conflicts_in_Africa_a_review_of_issues_and_experiences.pdf.
- Luoga, E.J., E.T.F. Witkowski, and Kevin Balkwill. 2000. "Differential Utilization End Ethnobotany of Trees in Kitulanghalo Forest Reserve and Surrounding Communal Lands, Eastern Tanzania." *Economic Botany* 54 (3):328–43.
- Madiéga Yaméogo, Georges, and Gabriel Massa. 1999. *La Haute-Volta coloniale. Témoignages, recherches, regards*. Paris: Karthala.
- Maisharou, A., and M. Larwanou. 2015. "Market Potential of Non-Wood Forest Products in the Sahelian Countries." *International Forestry Review* 17 (S3):125–35.
- Manlay, R.J., D. Masse, J.-L. Chotte, C. Feller, M. Kaire, J. Fardoux, and R. Pontanier. 2002. "Carbon, Nitrogen and Phosphorus Allocation in Agro-Ecosystems of the West African Savannah. Plant and Soil Components under Semi-Permanent Cultivation." *Agriculture, Ecosystems and Environment* 88:233–48.
- Mano, Reneth, and Charles Nhemachena. 2007. "Assessment of the Economic Impacts of Climate Change on Agriculture in Zimbabwe: A Ricardian Approach." World Bank Policy Research Working Paper Series. <http://ssrn.com/abstract=1004406>.
- Marc Pilon et Kokou Vignikin. 2006. *Ménages et Familles En Afrique Subsaharienne*. Éditions des archives contemporaines.
- Martens, Ludo, and Hilde Meesters. 1989. *Sankara, Compaoré et La Révolution Burkinabè*. Berchem (Anvers): Editions EPO.
- Maruyama, Megumi, and Noboru Morioka. 1998. "The Impact of Deforestation in Brazilian Amazonia: The Indigenous People of Rondonia State." *Journal of Forest Planning* 4 (2):71–75.
- Maseland, Jos, ed. 2010. *Governance, Inequality and Urban Land Markets*. The State of African Cities 2010. Nairobi: UN-HABITAT.
- Mathieu, Paul. 1995. "Le Foncier et et La Gestion Des Ressources Naturelles." *Cahiers Du CIDEP* 27.
- Maxwell, Daniel, and Keith Wiebe. 1998. "Land Tenure and Food Security: A Review of Concepts, Evidence and Methods." Land Tenure Center - Institute of Wisconsin Madison.
- McAuslan, P. 1998. "Making Law Work: Restructuring Land Relations in Africa." *Development and Change* 29:525–52.
- MCC. 2010. "Property Rights Resource Governance - Burkina Faso." 19. USAID COUNTRY PROFILE. Washington, DC: Millennium Challenge Corporation.

- http://usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Burkina_Faso_Profile.pdf.
- Meillassoux, Claude. 1975. *L'economia Della Savana. Antropologia Economica Dell'Africa Occidentale*. Milan: Feltrinelli.
- Middleton, N., L.C. Stringer, A. Goudie, and David S. G. Thomas. 2011. "The Forgotten Billion: MDG Achievement in the Drylands." New York / Nairobi: UNCCD-UNDP.
- Mitchell, Tom. 2012. "Options for Including Disaster Resilience in Post-2015 Development Goals." *ODI Background Note*, September.
- Mortimore, M.J., and W.M. Adams. 2001. "Farmer Adaptation, Change and 'Crisis' in the Sahel." *Global Environmental Change* 11:49–57.
- Muindi, Mathias. 2016. "Why Ethiopia Is Making a Historic 'master Plan' U-Turn." *BBC News*, January 18, 2016, sec. Africa. <http://www.bbc.co.uk/news/world-africa-35325536>.
- Myers, Norman. 1988. "Tropical Forests: Much More than Stocks of Wood." *Journal of Tropical Ecology* 4 (02):209. <https://doi.org/10.1017/S0266467400002728>.
- Nair, Kusum, and Ester Boserup. 1971. "Woman's Role in Economic Development." *American Journal of Agricultural Economics* 53 (3):536. <https://doi.org/10.2307/1238241>.
- Nanama, S., and E.A. Frongillo. 2012. "Altered Social Cohesion and Adverse Psychological Experiences with Chronic Food Insecurity in the Non-Market Economy and Complex Households of Burkina Faso." *Social Science & Medicine* 74 (3):444–51.
- Nao, Ouramou, and Yénouyaba Georges Madiéga. 2003. *Burkina Faso: Cent Ans d'histoire*. Paris: Karthala.
- Narayanan, S., and A. Gulati. 2002. "Globalization and the Smallholders: A Review of Issues, Approaches and Implications." Washington, DC: International Food Policy Research Institute & The World Bank. <http://www.ifpri.org/sites/default/files/pubs/divs/mtid/dp/papers/mssdp50.pdf>.
- Nath, Pradosh K., and Bhagirath Behera. 2011. "A Critical Review of Impact of and Adaptation to Climate Change in Developed and Developing Economies." *Environment, Development and Sustainability* 13 (1):141–62. <https://doi.org/10.1007/s10668-010-9253-9>.
- Naughton-Treves, Lisa, and Cathy Day. 2012. "Lessons about Land Tenure Forest Governance and REDD.Pdf." University of Wisconsin - Madison. <http://www.nelson.wisc.edu/ltc/docs/Lessons-about-Land-Tenure-Forest-Governance-and-REDD.pdf>.
- Neumann, R.P., and E. Hirsch. 2000. *Commercialization of Non-Timber Forest Products: Review and Analysis of Research*. CIFOR. Bogor Indonesia: CIFOR.
- O'Brien, K, M Pelling, A Patwardhan, S Hallegatte, A Maskrey, T Oki, U Oswald-Spring, T Wilbanks, and P.Z Yanda. 2012. "Toward a Sustainable and Resilient Future." In *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC)*, edited by K.L. Ebi Field C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, 437–86. Cambridge University Press. <https://hal.archives-ouvertes.fr/hal-00991827>.
- Oheneba-Sakyi, Yaw, and Baffour K. Takyi, eds. 2006. *African Families at the Turn of the 21st Century*. Westport, Conn: Praeger.
- Omanya, G., and D. Pasternak, eds. 2005. *Sustainable Agriculture Systems for the Drylands*. Patancheru: ICRISAT.
- Ouédraogo, Denis, Moussa Kaboré, and Blaise Kienou. 2007. "Insécurité alimentaire, vulnérabilité et pauvreté en milieu rural au Burkina : une approche en termes de

- consommation d'énergie." *Mondes en développement* 140 (4):65.
<https://doi.org/10.3917/med.140.0065>.
- Ouédraogo, H. 2006. "Land Rights for African Development. From Knowledge to Action." In *Land Rights for African Development. From Knowledge to Action*, Esther Mwangi, 36–38. CGIAR / UNDP / ILC.
- Ouedraogo, Lambert G., Haoua Sary, Christiane S. Yameogo-Gamene, and Oblé Neya. 2003. "A Participatory Approach for Conservation of Forest Genetic Resources." In *Conserving Biodiversity in Arid Regions*, edited by John Lemons, Reginald Victor, and Daniel Schaffer, 63–71. Boston, MA: Springer US.
http://link.springer.com/10.1007/978-1-4615-0375-0_5.
- Ouédraogo, Moussa. 2002. "Land Tenure and Rural Development in Burkina Faso." *Drylands Issue Pap* 112:1–24.
- . 2007. *La Communalisation En Milieu Rural : Les Élus Locaux Peuvent-Ils Relever Le Défi ? : Analyse de l'expérience Du Burkina Faso*. l'Harmattan.
- Pakenham, Thomas. 2010. *The Scramble for Africa*. London: ABACUS.
- PAM (WFP), and FAO. 2013. "Note conjointe FAO-PAM. Sécurité alimentaire et implications humanitaires en Afrique de l'Ouest et au Sahel." WFP.
<http://home.wfp.org/stellent/groups/public/documents/ena/wfp255991.pdf>.
- Pedersen, Rasmus Hundsbaek. 2015. "A Less Gendered Access to Land? The Impact of Tanzania's New Wave of Land Reform." *Development Policy Review* 33 (4):415–32. <https://doi.org/10.1111/dpr.12121>.
- Pelissier, Paul. 1980. "L'arbre En Afrique Tropicale. La Fonction et Le Signe." *Cahiers de l'ORSTOM, Sciences Humaines*, XVII (3–4):127–30.
- Pelling, Mark. 2010. *Adaptation to Climate Change: From Resilience to Transformation*. Routledge.
- Pelling, Mark, and Chris High. 2005. "Understanding Adaptation: What Can Social Capital Offer Assessments of Adaptive Capacity?" *Global Environmental Change* 15 (4):308–19. <https://doi.org/10.1016/j.gloenvcha.2005.02.001>.
- Peters, Charles M., Alwyn H. Gentry, and Robert O. Mendelsohn. 1989. "Valuation of an Amazonian Rainforest." *Nature* 339 (6227):655–56.
<https://doi.org/10.1038/339655a0>.
- Peters, Pauline. 2007. "Challenges in Land Tenure and Land Reform in Africa: An Anthropological Perspective." In . Humboldt University, Berlin: Working papers, CID Harvard University.
- Peters, Pauline E. 2004. "Inequality and Social Conflict Over Land in Africa." *Journal of Agrarian Change* 4 (3):269–314. <https://doi.org/10.1111/j.1471-0366.2004.00080.x>.
- . 2009. "Challenges in Land Tenure and Land Reform in Africa: Anthropological Contributions." *World Development* 37 (8):1317–25.
<https://doi.org/10.1016/j.worlddev.2008.08.021>.
- Pilon, Marc, and Kokou Vignikin. 2006. *Ménages et Familles En Afrique Subsaharienne*. Savoirs Francophones. Paris, France: Éditions des archives contemporaines.
- Place, Frank. 2009. "Land Tenure and Agricultural Productivity in Africa: A Comparative Analysis of the Economics Literature and Recent Policy Strategies and Reforms." *World Development* 37 (8):1326–1336.
- Platteau, Jean-Philippe. 2000. *Institutions, Social Norms and Economic Development*. Amsterdam: Harwood.
- Pollak, Robert A. 2003. "Gary Becker's Contributions to Family and Household Economics." *Review of Economics of the Household* 1 (1):111–41.
<https://doi.org/10.1023/A:1021803615737>.

- Poole, N.D., M. Chitundu, and R. Msoni. 2013. "Commercialisation: A Meta-Approach for Agricultural Development among Smallholder Farmers in Africa?" *Food Policy* 41 (August):155–65.
- Poole, Nigel, Camilla Audia, BartéLéMy Kaboret, and Rebecca Kent. 2016. "Tree Products, Food Security and Livelihoods: A Household Study of Burkina Faso." *Environmental Conservation*, June, 1–9.
<https://doi.org/10.1017/S0376892916000175>.
- Pouliot, Mariève, Thorsten Treue, Beatrice Darko Obiri, and Boureima Ouedraogo. 2012. "Deforestation and the Limited Contribution of Forests to Rural Livelihoods in West Africa: Evidence from Burkina Faso and Ghana." *AMBIO* 41 (7):738–50.
<https://doi.org/10.1007/s13280-012-0292-3>.
- Quisumbing, A.R. 2001. *Land, Trees, and Women: Evolution of Land Tenure Institutions in Western Ghana and Sumatra*. IFPRI.
- Raynaud, C., ed. 1997. *Sahels, Diversité et Dynamiques Des Relations Sociétés-Nature*. Paris: Karthala.
- Reed, M.S., L.C. Stringer, A.J. Dougill, J.S. Perkins, J.R. Athlapheng, K. Mulale, and N. Favretto. 2015. "Reorienting Land Degradation towards Sustainable Land Management: Linking Sustainable Livelihoods with Ecosystem Services in Rangeland Systems." *Journal of Environmental Management* 151 (March):472–85. <https://doi.org/10.1016/j.jenvman.2014.11.010>.
- Reenberg, Annette. 2001. "Agricultural Land Use Pattern Dynamics in the Sudan-Sahel: Towards an Event-Driven Framework." *Land Use Policy* 18 (February):309–19.
- Research Institute (IFPRI), International Food Policy. 2016. "Food Security in a World of Natural Resource Scarcity The Role of Agricultural Technologies." Washington, DC: International Food Policy Research Institute.
<http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/130207>.
- RHVP, FEG, Save TheChildren. 2008. *The Practitioners' Guide to the Household Economy Approach*. London: Save the Children, FEG.
- Ribot, Jesse C., and Nancy Lee Peluso. 2009. "A Theory of Access*." *Rural Sociology* 68 (2):153–81. <https://doi.org/10.1111/j.1549-0831.2003.tb00133.x>.
- Rigg, Jonathan. 2006. "Land, Farming, Livelihoods, and Poverty: Rethinking the Links in the Rural South." *World Development* 34 (1):180–202.
<https://doi.org/10.1016/j.worlddev.2005.07.015>.
- Rohatynskyj, Marta. 1988. "Women's Virtue and the Structure of the Mossi Zaka." *Canadian Journal of African Studies*, Current Research on African Women, 22 (3):528–51.
- Rowlands, Jo. 1997. *Questioning Empowerment: Working with Women in Honduras*. Oxford [England] : Atlantic Highlands, N.J: Oxfam ; Humanities Press International [distributor].
- Russell, Tim. 1997. "Pair Wise Ranking Made Easy." *PLA Notes IIED London*, no. 28:25–28.
- S. Asuming-Brempong. 2011. "The Exposure and Adoption of New Rice for Africa (NERICAs) among Ghanaian Rice Farmers: What Is the Evidence?" *AFRICAN JOURNAL OF AGRICULTURAL RESEARCH* 6 (27).
<https://doi.org/10.5897/AJAR11.882>.
- Sachs, Jeffrey D. 2012. "From Millennium Development Goals to Sustainable Development Goals." *The Lancet* 379 (9832):2206–11.
[https://doi.org/10.1016/S0140-6736\(12\)60685-0](https://doi.org/10.1016/S0140-6736(12)60685-0).
- Satterthwaite, David. 2003. "The Millennium Development Goals and Urban Poverty Reduction: Great Expectations and Nonsense Statistics." *Environment and Urbanization* 15 (2):179–90. <https://doi.org/10.1177/095624780301500208>.

- Savonnet-Guyot, Claudette. 1986. *Etat et Sociétés Au Burkina : Essai Sur Le Politique Africain*. Paris: Karthala.
- Savy, M, Y Martin-Prével, P Sawadogo, Y Kameli, and F Delpéuch. 2005. "Use of Variety/Diversity Scores for Diet Quality Measurement: Relation with Nutritional Status of Women in a Rural Area in Burkina Faso." *European Journal of Clinical Nutrition* 59 (5):703–16. <https://doi.org/10.1038/sj.ejcn.1602135>.
- Scoones, Ian. 1998. "Sustainable Rural Livelihoods: A Framework for Analysis." ———. 2009. "Livelihoods Perspectives and Rural Development." *Journal of Peasant Studies* 36 (1):171–96. <https://doi.org/10.1080/03066150902820503>.
- Scott, J.C. 1976. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press.
- Sen, Amartya. 1981a. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Clarendon Press.
- . 1981b. "Ingredients of Famine Analysis: Availability and Entitlements." *The Quarterly Journal of Economics* 96 (3):433. <https://doi.org/10.2307/1882681>.
- . 1987. *Gender and Cooperative Conflicts*. Citeseer.
- Shaanker, R.U, and et.al. 2004. "Livelihood Gains and Ecological Costs of NTFP Dependence: Assessing the Roles of Dependence, Ecological Knowledge and Market Structure in Three Contrasting Human and Ecological Settings in South India." *Environmental Conservation* 31 (3):242–53.
- Shackleton, C. M., and Sheona Shackleton. 2004. "The Importance of Non-Timber Forest Products in Rural Livelihood Security and as Safety Nets: A Review of Evidence from South Africa." *South African Journal of Science* 100 (December):658–64.
- Shackleton, Sheona, C. M. Shackleton, and Patricia Shanley, eds. 2011. *Non-Timber Forest Products in the Global Context*. Tropical Forestry. Heidelberg ; London: Springer.
- Shapouri, S., M. Peters, S. Allen, S. Rosen, and F. Baquedano. 2010. "Food Security Assessment, 2010-20. A Report from the Economic Research Service GFA-21." Washington, DC: United States Department of Agriculture.
- Shipton, Parker. 1989a. *How Private Property Emerges in Africa. Directed and Undirected Land Tenure Reforms in Densely Settled Areas South of the Sahara*. Boston: Harvard University Press.
- . 1989b. "Land and the Limits of Individualism, Population Growth and Tenure Reforms South of the Sahara." Discussion Paper 320. Cambridge: Harvard Institute for International Development.
- Shipton, Parker, and Mitzi Goheen. 1992. "Understanding African Land-Holding. Power, Wealth and Meaning." *Africa* 62 (3):307–25.
- Shono, Kenichi, Ernesto A. Cadaweng, and Patrick B. Durst. 2007. "Application of Assisted Natural Regeneration to Restore Degraded Tropical Forestlands." *Restoration Ecology* 15 (4):620–26.
- Sibhatu, Kibrom T., Vijesh V. Krishna, and Matin Qaim. 2015. "Production Diversity and Dietary Diversity in Smallholder Farm Households." *Proceedings of the National Academy of Sciences* 112 (34):10657–62. <https://doi.org/10.1073/pnas.1510982112>.
- Sidibe, A., S. Vellema, F. Dembele, B. Teme, H. Yossi, M. Traore, and T.W. Kuyper. 2014. "Women, Shea and Finance: How Institutional Practices in a Malian Cooperative Create Development Impact." *International Journal of Agricultural Sustainability* 12 (3):263–75.
- Sikor, Thomas, and Daniel Müller. 2009. "The Limits of State-Led Land Reform: An Introduction." *World Development* 37 (8):1307–1316.

- Simbizi, Marie Christine Dushimyimana, Rohan Mark Bennett, and Jaap Zevenbergen. 2014. "Land Tenure Security: Revisiting and Refining the Concept for Sub-Saharan Africa's Rural Poor." *Land Use Policy* 36 (January):231–38. <https://doi.org/10.1016/j.landusepol.2013.08.006>.
- Sjaastad, Espen, and Daniel W. Bromley. 1997. "Indigenous Land Rights in Sub Saharan Africa. Appropriation, Security and Investment Dynamics." *World Development* 25 (4):549–62.
- Skinner, Elliot Percival. 1964. *The Mossi of the Upper Volta: The Political Development of the Sudanese People*. Stanford: Stanford University Press.
- Small, Lee-Ann. 2007. "The Sustainable Rural Livelihoods Approach: A Critical Review." *Canadian Journal of Development Studies/Revue Canadienne d'études Du Développement* 28 (1):27–38.
- Somaliland Press. 2016. "Ethiopia: 20 Dead in Gondar Riots Disputing Ethnic Boundaries." *Ayyaantuu News* (blog). July 15, 2016. <http://www.ayyaantuu.net/ethiopia-20-dead-in-gondar-riots-disputing-ethnic-boundaries/>.
- Somé, Valère D. 1990. *Thomas Sankara : L'espoir Assassiné*. Paris: L'Harmattan.
- Southall, A. W. 1998. "Analyzing the Sahelian Ecosphere *Societies and Nature in the Sahel* . By Claude Raynaut with Emmanuel Gregoire, Pierre Janin, Jean Koechlin, and Philippe Lavigne Delville, Assisted by Phil Bradley. Translated by Dominique Simon and Hilary Kaziol. London and New York: Routledge, 1997. 351 Pp." *Current Anthropology* 39 (5):740–42. <https://doi.org/10.1086/204803>.
- Sunderlin, William D., Arild Angelsen, Brian Belcher, Paul Burgers, Robert Nasi, Levanina Santoso, and Sven Wunder. 2005. "Livelihoods, Forests, and Conservation in Developing Countries: An Overview." *World Development* 33 (9):1383–1402. <https://doi.org/10.1016/j.worlddev.2004.10.004>.
- Tacko Kandij, Serigne, Louis Verchot, and Jens Mackensen. 2006. "Climate Change and Variability in the Sahel Region: Impacts and Adaptation Strategies in the Agricultural Sector." Rapport de synthèse. UNEP & ICRAF.
- Tauxier, L. 1924. *Nouvelles Notes Sur Le Mossi et Le Gourounsi*. Paris: E. Larose.
- Tchatat, Mathurin, and Ousseynou Ndoeye. 2006. "Etude Des Produits Forestiers Non Ligneux d'Afrique Centrale: Réalités et Perspectives." *Bois et Forêts Des Tropiques*, Non-Timber Forest Products, 289 (3):27–39.
- Teklehaimanot, Z. 2004. "Exploiting the Potential of Indigenous Agroforestry Trees: Parkia Biglobosa and Vitellaria Paradoxa in Sub-Saharan Africa." *Agroforestry Systems* 61–62 (1–3):207–20. <https://doi.org/10.1023/B:AGFO.0000029000.22293.d1>.
- Thiéba, Daniel. 2010. *L'élaboration de La Politique Nationale de Sécurisation Foncière En Milieu Rural Au Burkina Faso*. Paris Ouagadougou: Agence Française de Développement / Ministère des Affaires Etrangères / GRET.
- Thulani, Dube, and Keith Phiri. 2013. "Rural Livelihoods under Stress: The Impact of Climate Change on Livelihoods in South Western Zimbabwe." *American International Journal of Contemporary Research* 3 (5).
- Tincani, Lucrezia Stella. 2012. "Resilient Livelihoods: Adaptation, Food Security and Wild Foods in Rural Burkina Faso." London: School of Oriental and African Studies.
- Toulmin, Camilla. 1994. "Combating Desertification: Encouraging Local Action Within a Global Framework." In *Green Globe Yearbook of International Co-Operation on Environment and Development*, Oxford University Press, 79–88. Oxford.
- . 2009. "Securing Land and Property Rights in Sub-Saharan Africa: The Role of Local Institutions." *Land Use Policy* 26 (1):10–19. <https://doi.org/10.1016/j.landusepol.2008.07.006>.

- Toulmin, Camilla, and Julian Quan, eds. 2002. "Evolving Land Rights, Policy and Tenure in Africa." *African Affairs* 101 (403):264–66.
- Toulmin, Camille, and Samba Traoré. 2000. *Gérer Le Foncier Rural En Afrique de l'Ouest : Dynamiques Foncières et Interventions Publiques*. Edited by Philippe Lavigne Delville. Paris Dakar: Karthala.
- Townson, I.M. 1995. "Forest Products and Household Incomes: A Review and Annotated Bibliography." OFI Tropical Forestry Papers 31. Overseas Development Institute London UK.
- Udry, Christopher R. 1996. "Gender, Agricultural Production and the Theory of the Household." *Journal of Political Economy* 104 (5):1010–46.
- UN. 1980. "Principles and Recommendations for Population and Housing Censuses." UN Statistical Papers M-67.
- UNDP. 2007. "Human Development Report 2007/8. Fighting Climate Change: Human Solidarity in a Divided World." New York, USA: United Nations Development Programme.
- . , ed. 2015. *Work for Human Development*. Human Development Report 2015. New York, NY: United Nations Development Programme.
- UNGA - Sustainable Development Goals Fund. 2015. "MDGs and SDGs." 2015. <http://www.sdgfund.org/mdgs-sdgs>.
- USAid. 2005. "Land and Conflict. A Toolkit for Intervention." USAID Editions.
- Van de Walle, Etienne, ed. 2006. *African Households: Censuses and Surveys*. A General Demography of Africa. Armonk, N.Y: M.E. Sharpe, Inc.
- Vandemoortele, Jan. 2011. "The MDG Story: Intention Denied: *The MDG Story: Intention Denied*." *Development and Change* 42 (1):1–21. <https://doi.org/10.1111/j.1467-7660.2010.01678.x>.
- Varley, Ann. 2007. "Gender and Property Formalization: Conventional and Alternative Approaches." *World Development* 35 (10):1739–53. <https://doi.org/10.1016/j.worlddev.2007.06.005>.
- Vira, Bhaskar, Bina Agarwal, Ramni Jamnadass, Daniela Kleinschmit, Stepha McMullin, Stephanie Mansourian, Henry Neufeldt, John A. Parrotta, Terry Sunderland, and Christoph Wildburger. 2015. "1. Forests, Trees and Landscapes for Food Security and Nutrition." In *Forests and Food: Addressing Hunger and Nutrition Across Sustainable Landscapes*, edited by Bhaskar Vira, Christoph Wildburger, and Stephanie Mansourian, 9–26. Open Book Publishers. <http://www.openbookpublishers.com/product/399>.
- Waage, Jeff, Christopher Yap, Sarah Bell, Caren Levy, Georgina Mace, Tom Pegram, Elaine Unterhalter, et al. 2015. "Governing the UN Sustainable Development Goals: Interactions, Infrastructures, and Institutions." *The Lancet Global Health* 3 (5):e251–52. [https://doi.org/10.1016/S2214-109X\(15\)70112-9](https://doi.org/10.1016/S2214-109X(15)70112-9).
- Warren, A. 2002. "Land Degradation Is Contextual." *Land Degradation Development* 13:449–59.
- Webb, P., and J. von Braun. 1994. *Famine and Food Security in Ethiopia*. John Wiley. Chichester.
- Wickens, Gerald E. 1982. "The Baobab: Africa's Upside-down Tree." *Kew Bulletin*, 173–209.
- Widman, Marit. 2014. "Land Tenure Insecurity and Formalizing Land Rights in Madagascar: A Gender Perspective on the Certification Program." *Feminist Economics* 20 (1):130–54. <https://doi.org/10.1080/13545701.2013.873136>.
- Wiggins, S., J.F. Kirsten, and L. Llambi. 2010. "The Future of Small Farms." *World Development* 38 (10):1341–48.

- Wilson, Alice. 2011. *Anthropological Studies of Land Tenure in Muslim Settings*. Cambridge: Cambridge University Press.
- Wiseman, John. 1986. "Urban Riots in West Africa, 1977-85." *The Journal of Modern African Studies* 24 (3):509–18.
- World Bank. 2002. *World Development Report 2003: Sustainable Development in a Dynamic World: Transforming Institutions, Growth, and Quality of Life*. The World Bank. <http://elibrary.worldbank.org/doi/book/10.1596/0-8213-5150-8>.
- . 2007. "World Development Report 2008: Agriculture for Development." Washington, DC: World Bank.
- Yin, Robert K. 2014. *Case Study Research: Design and Methods*. Fifth edition. Los Angeles: SAGE.
- Yngstrom, Ingrid. 2002. "Women, Wives and Land Rights in Africa: Situating Gender Beyond the Household in the Debate Over Land Policy and Changing Tenure Systems." *Oxford Development Studies* 30 (1):21–40. <https://doi.org/10.1080/136008101200114886>.
- Zida, D. 1990. "Utilisation et Commercialisation des ligneux et des essences forestières locales dans le département de Yako, Province du Passoré." Ouagadougou: Université de Ouagadougou.

Appendix 1 – Households of the Passoré province (primary field site)

Household T1 – Tinkoaglega		
Total members	11	
Men	1	Coding
		TM1
Women	3	TW1, TW2, TW3
Unmarried 15+ children	3 (1 m, 2 f)	TS1, TD2, TD3
Young children	4	(not interviewed)

Main characteristics

Household definition from the head of household: everyone he is responsible for, everyone he feeds, who lives in the same compound, who work the land together, who go to him for issues and advice as well as health and food security. Easy access to the main road, a well and a mill.

Land owner lineage.

One French-speaking member (a son) helping with translation and being interviewed in English directly.

Household G1 – Gomponsom		
Total members	15	
Men	2	Coding
		GM1, GM2
Women	3	GW1, GW2, GW3
Unmarried 15+ children	6 (3 m, 3 f)	GS1, GS2, GS3, GD1, GD2, GD3
Young children	2	(not interviewed)

Main characteristics

Household definition from the head of household: everyone he is responsible for, everyone he feeds, who lives in the same compound, who work the land together, who go to him for issues and advice as well as health and food security. Easy access to the main road, a well and a mill. Chef-lieu of the province, bigger village.

Land owner lineage.

The head of household's brother was interviewed although he did not work the land due to a lifetime leg injury. He was presented as a cripple and provided a lot of contextual and background information as he sat most of the time in front of the compound and helped the women take care of the younger children.

Household K1 – Kounkane		
Total members	3	
Men	0	Coding
Women	1	Kou1
Unmarried 15+ children	0	0
Young children	3 (f)	(not interviewed)

Main characteristics

Female-headed very small household. Widow with two young girls who go to school and sometimes help with the land.

Depends on her father in law's lineage. He owns the land she works on.

Household Z1 – Zambele		
Total members	14	
Men	3	Coding
		ZM1, ZM2, ZM3
Women	3	ZW1, ZW2, ZW3
Unmarried 15+ children	3 (f)	ZD1, ZD2, ZD3
Young children	5	(not interviewed)

Main characteristics

Household definition from the head of household: everyone he is responsible for, everyone he feeds, who lives in the same compound, who work the land together, who go to him for issues and advice as well as health and food security. Easy access to the main road, a well and a mill.

Land owner lineage but they are also working on other lineages' land as theirs is not enough.

One French-speaking member (a daughter) helping with translation and being interviewed in English directly.

It wasn't possible to interview the head of household as he worked for the local government and was never home. He was travelling when we went to seek him at work.

Both the head of household and wife (monogamous) work jobs other than working on their land.

Household L1 - Lablango		
Total members	7	
Men	2	Coding
		LaM1, LaM2
Women	2	LaW1, LaW2
Unmarried 15+ children	3 (2 m, 1 f)	LaS1, LaS2, LaS3
Young children	/	(not interviewed)

Main characteristics

Household definition from the head of household: everyone who works in the big family field, eat together, leave in the compound and has their own field but takes turn sharing the products.

Easy access to the main road, a well and a mill.

Land owner lineage.

One French-speaking member (head of household) helping with translation and being interviewed in English directly. The wife (monogamous) also spoke French but rarely directly to me.

Household L2 – Lablango		
Total members	16	
Men	2	Coding
		L1, L2
Women	4	LW1, LW2, LW3, LW4
Unmarried 15+ children	5 (2 m 3 f)	LD1, LD2, LD3, LS1, LS2
Young children	5 (4f 1 m)	(not interviewed)

Main characteristics

Peculiar household as the head of household and his two wives also take care of his brother's wife and children while the brother is working in Ivory Coast. Not a widow but a complicated situation in a big household formed by several smaller family units.

Easy access to the main road, a well and a mill.

Same land for generations but not land owners. Because everyone can testify that several generations have been working the land, nobody ever questioned it.

Questions about data quality as the relationships between family units within the household seem to be complex to grasp. Interesting though heterogeneous data.

Household Ko1 - Kouni		
Total members	54	
Men	1	Coding
		KN1
Women	13	Ko1, Ko2, Ko3, Ko4, Ko5, Ko6, Ko7, Ko8, Ko9, Ko10, Ko11, Ko12, Ko13
Unmarried 15+ children & young children	40 (21 m, 19 f)	(not interviewed)

Main characteristics

Village chief and land owner with 11 wives.

Far from the market compared to other villages but close to the dam / more water / more garden vegetable cultures

The head of household owns a car.

Due to the number of members of the household, the children were not interviewed but were present most of the times during the interviews and were invited to take part in the conversations. Some of the wives were interviewed together as they felt more comfortable sharing the feelings and characteristics of their little groups.

Appendix 2 - Households of the Boulkiemdé and Sanguié provinces (secondary site)

Household S1 – Koukouldy (Tenado, Sanguié)		
Total members	14	
Men	2	Coding SM1, SM2 (not interviewed)
Women	2	SW1
Unmarried 15+ children	/	
Young children	10	(not interviewed)

Main characteristics

Household definition from the head of household: everyone he is responsible for, everyone he feeds, who lives in the same compound, who work the land together, who go to him for issues and advice as well as health and food security. Easy access to the main road, a well and a mill.

Land owner lineage, land was divided for several generations. They also work on loaned land (there are conditions).

The children were all young and did not actively contribute to the household livelihoods except by gathering some NTFPs. They were said to be all in school. Atypical household because two brothers live together along with their wives (monogamous) and children. The mechanisms seem different from the relationship between two wives of the same man.

Households of the Boulkiemdé and Sanguié provinces (secondary site)

Household GR1 – Goundy (Réo, Sanguié)		
Total members	8	
Men	1	Coding
		GRM1
Women	2	Not interviewed but present while interviewing their husband
Unmarried 15+ children	/	
Young children	5	(not interviewed)

Main characteristics

Household definition from the head of household: everyone he is responsible for, everyone he feeds, who go to him for issues and advice as well as health and food security. There are about 20 households living in the same compound; everyone has their own fields and eats separately.

Easy access to the main road, a well and a mill. The fields are relatively close to the compound.

Land owner lineage, land was divided for several generations. They also work on loaned land (there are conditions). Ancestors started dividing land to avoid conflict.

The children were all young and did not actively contribute to the household and were said to be all in school. It is a polygamous households and each wife has her own plot, and everybody is to work in the family field. They negotiate other plots in dry season.

Household Koudougou – Koudougou (Boulkiemdé)		
Total members	8	
Men	2	Coding
		B1
Women	5	Not interviewed
Unmarried 15+ children	5	Not interviewed
Young children	3	(not interviewed)

Main characteristics

Household definition from the head of household: everyone who lives with me and eats with me. This is more of a peri-urban than a rural household. It was identified as interesting because of its link with traditional land. Husband and wife (monogamous) live with their respective mothers, one married son and their daughter-in-law, other unmarried children and young grandchildren. They live in a house in a bit town but all work in the family field outside town. Head of household is investing in the land with different techniques and mentions having started processes for land titling.

Easy access to the main road. Motorbikes and bikes to access the field outside town. Drip irrigation systems in several fields with different degrees of success. Agroforestry as the main activity.

Land owner lineage, land was divided for several generations. Even if the head of household left the village he kept land negotiated with the land and village chiefs.

The children were all young and did not actively contribute to the household and were said to be all in school. It is a monogamous complex household in a peri-urban area.

Appendix 3 – Surveys and Semi-structured interviews guides

a. Survey to key informant interviews on land tenure

- Do you know what the most recent land law for rural lands is?
- Do you know the Loi 0034?
- Have you worked in the Loi 0034 framework?
- Has it been implemented?
- If so where?
- If not why do you think that is?

b. Interview guides by topic.

These are the main questions asked. Further to these questions, more popped up and the contents followed. These are only guides and do not constitute entire questionnaires.

c. Guide d'entretien pour les chefs de village

- rôle au sein du village?
- quelles sont toutes vos responsabilités? Pourquoi vient-on vous voir?
- fait-on appel à vous fréquemment au sujet de conflits fonciers?
- quelles en sont les causes les plus fréquentes?
- agriculteurs éleveurs
- rapport à l'autorité communale?
- connaissez-vous la Loi 0034-2009? a-t-elle eu un impact sur le village?
- comment considérez-vous l'état de sécurisation foncière du village?
- statut du chef de village par rapport aux générations précédentes?
- rituels de sécurisation?
- méthodes de prévention des conflits fonciers?
- méthodes de résolution non violente des conflits fonciers?
- conflits avec personnalité externe au village voulant les terres à des finalités non agricoles?
- peur que l'état exproprie?
- problèmes d'héritage?

- accès des femmes à la terre: au sommet à Fada on dit gros problème. À votre avis où est le souci? Sécurisation foncière des femmes est-elle envisageable? Par quels moyens?

- déjà réglé des conflits par rapport à l'accès des femmes à la terre? par elles-mêmes? par leurs maris?

d. Guide d'entretien chef de terre

- pouvez-vous me décrire quel est votre rôle? comment êtes-vous devenu chef de terre? est-ce un héritage? toujours dans votre lignage?

- est-ce que les nouveaux immigrants viennent vous demander ou est-ce que la terre est gérée par lignage?

- quel est le type de conflit que vous vous êtes trouvé à arbitrer le plus souvent?

- quelle est la procédure coutumière en cas de conflit foncier?

- on m'a parlé de repères coutumiers: quels sont ces repères?

- y-a-t-il des rituels pour l'assignation de lots et parcelles? Les avez-vous performés?

- quelle est votre responsabilité en tant que chef de terre?

- connaissez-vous la Loi 0034-2009?

- comment définiriez-vous l'état de sécurisation foncière du village?

- impact de nouveaux arrivants? de non-résidents?

- quelqu'un est-il déjà venu vous demander la terre pour des propos non liés à l'agriculture?

- existe-t-il à votre avis un souci d'expropriation de la part de l'État?

- problèmes entre agriculteurs et éleveurs: si mentionnés, approfondir

- problèmes d'accès à l'eau

- statut du chef de terre par rapport aux générations précédentes?

- méthodes de prévention des conflits fonciers?

- méthodes de résolution non violente des conflits fonciers?

- problèmes d'héritage?

- accès des femmes à la terre: au sommet à Fada on dit gros problème. À votre avis où est le souci? Sécurisation foncière des femmes est-elle envisageable? Par quels moyens?

- déjà réglé des conflits par rapport à l'accès des femmes à la terre? par elles-mêmes? par leurs maris?

e. Guide d'entretien d'historique foncier et informations démographiques

- âge ou date de naissance
- alphabétisation?
- Composition du ménage
- Composition de la concession
- Quand t'es-tu installé ici?
- Combien de lopins as-tu?
- Et ton ménage? Tes coépouses, enfants?
- As-tu déjà change de lopin? Volontairement?
- Que cultives-tu?
- Comment as-tu obtenu ton lopin?
- Quel était le processus de négociation?
- Peux-tu me montrer ou me décrire ton champ?
- Que cultiveras-tu cette année?
- As-tu décidé seul(e)?
- Comment as-tu obtenu ce champ, depuis quand?
- As-tu déjà change ou agrandi ton champ?
- Peux-tu cultiver tout ce que tu veux?

f. Guide d'entretien sur les routines alimentaires

- depuis la dernière fois que je suis venue, combine de repas as-tu cuisine pour ta famille?
- as-tu cuisine tous les repas?
- qui a décidé ce qui allait se manger?
- qui a cuisine les autres repas?
- avez-vous mange ensemble?
- de quel grenier venaient les céréales?
- y a-t-il eu des occasions spéciales ou des fêtes?
- et la sauce?

- qui se réunit pour manger?
- est-ce que c'est toujours les mêmes quantités?
- as-tu utilisé des PFNLs?
- des produits de tes périmètres maraichers?
- des produits achetés?

g. Guide d'entretien sur les routines

- peux-tu me décrire tes activités en saison sèche?
- et en saison pluvieuse?
- de quoi tu es responsable principalement?
- que s'attend-t-on de ta famille tous les jours? Et régulièrement?
- est-ce que tu en parles avec ton époux, se, coépouses?
- est-ce que c'est négociable?
- est-ce que ça a changé? Quand et comment?

b. Zambélé

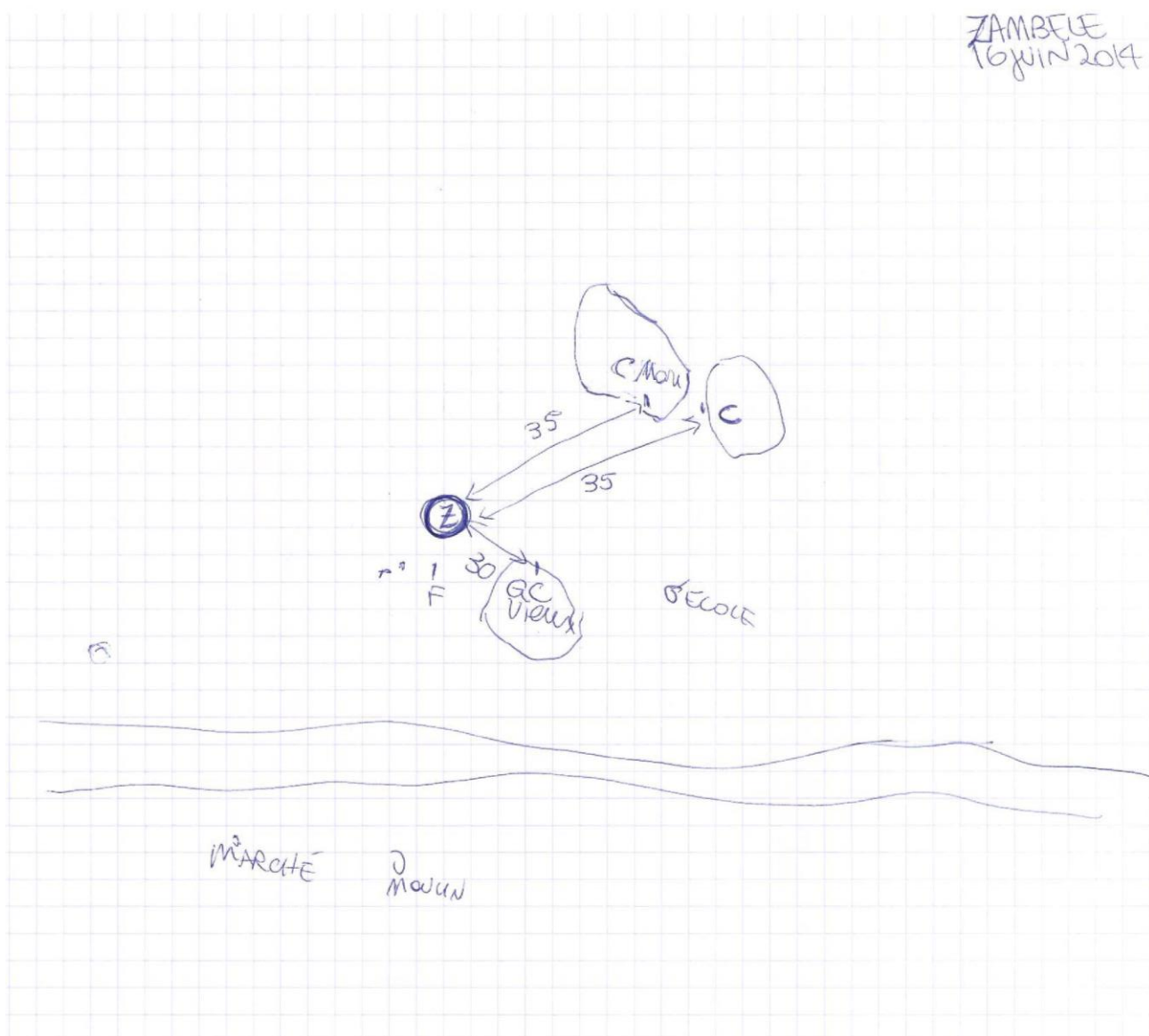


Figure 12 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields

Key:

- GC: household's communal field
- C mari: husband's personal field
- C: wife's field
- ECOLE: school
- MARCHE: market
- MOULIN: mill

C. Gomponsom

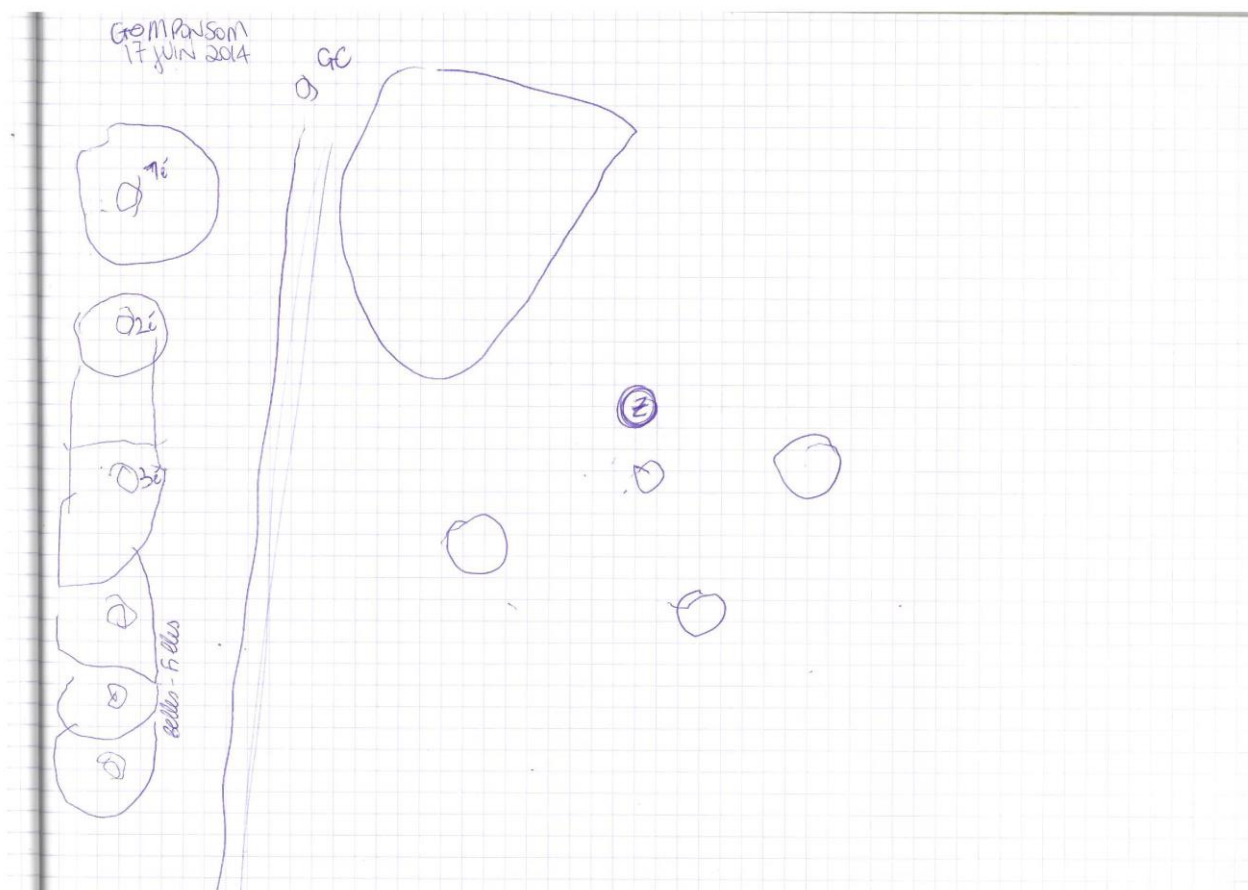


Figure 13 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields.

Key:

Z: zaka – compound

GC: household's communal field

Belles Filles: daughters-in-law's fields

d. Gomponsom 2

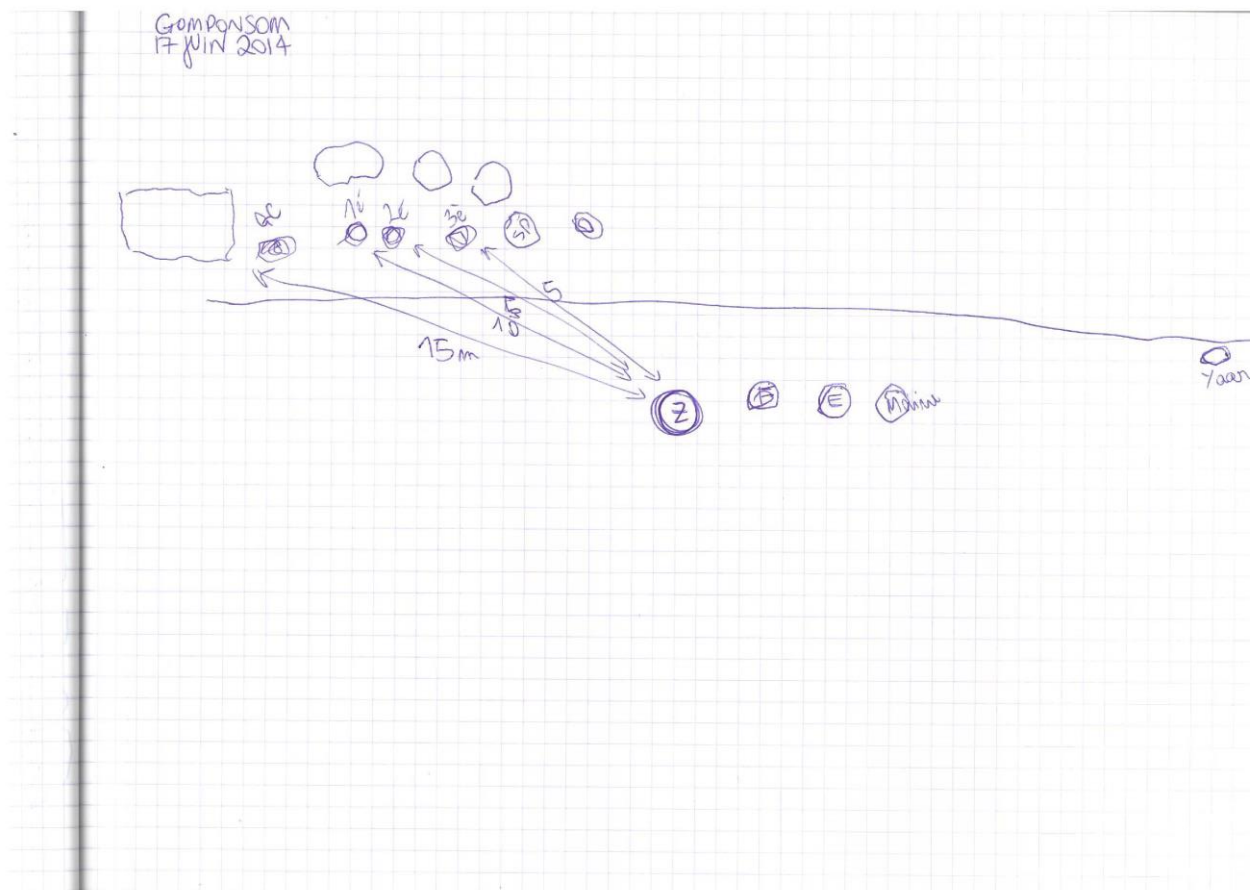


Figure 14 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields.

Key:

Z: zaka, compound

M: mill

E: school

Mairie: Mayor's office

Yaar: market

GC: household's communal field

1e, 2e, 3e, 4e, 5e: each wife's individual field

e. Kounkané

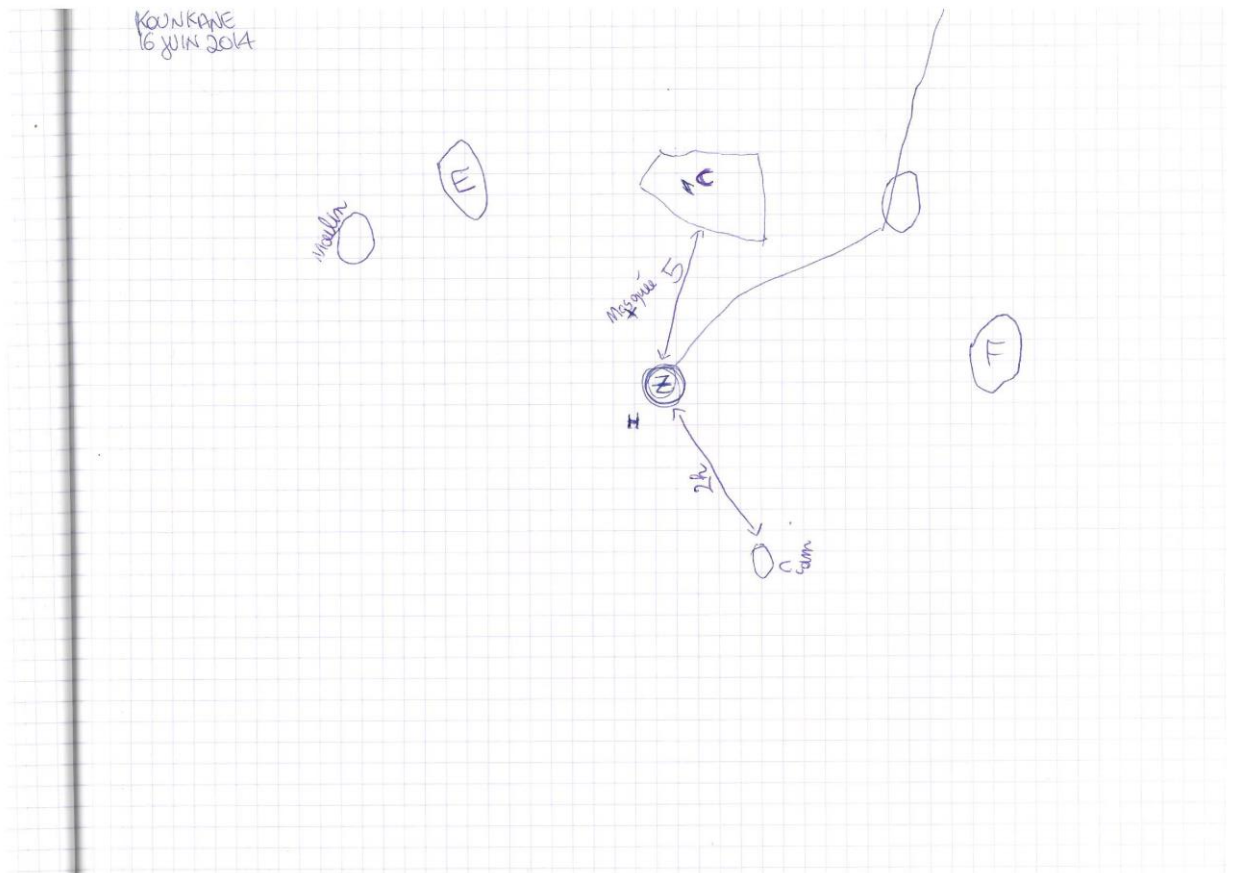


Figure 15 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields.

Key:

- Z: zaka, compound
- Mosquée: mosque
- C mari : husband's field
- F : medical centre
- E: school
- moulin: mill
- C1: wife's field

f.

Lablango 1

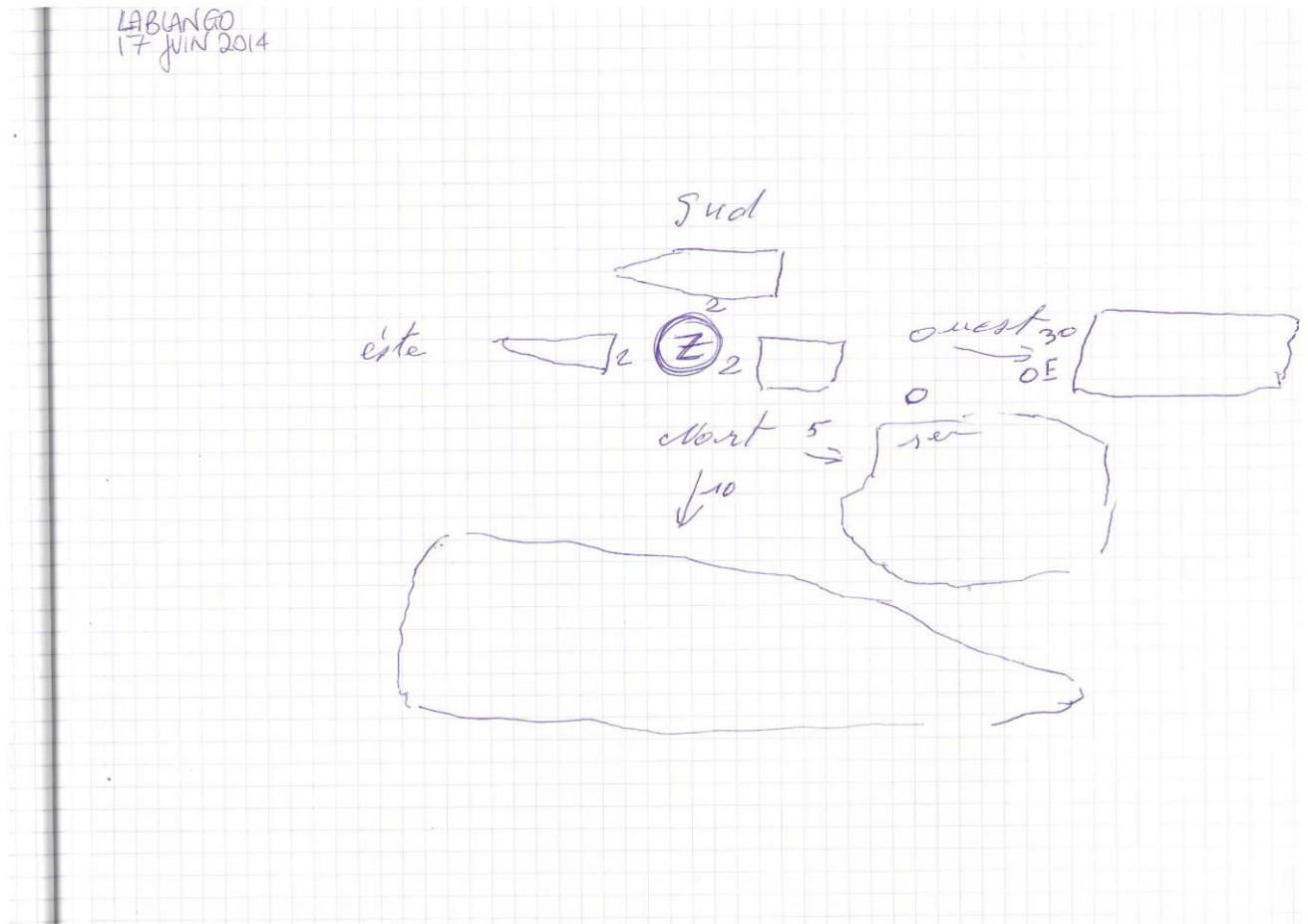


Figure 16 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields.

Key:

Sud: South

Nort: North

Este: East

Ouest: West

Z: zaka compound

1er: household's communal field

g. Lablango 2

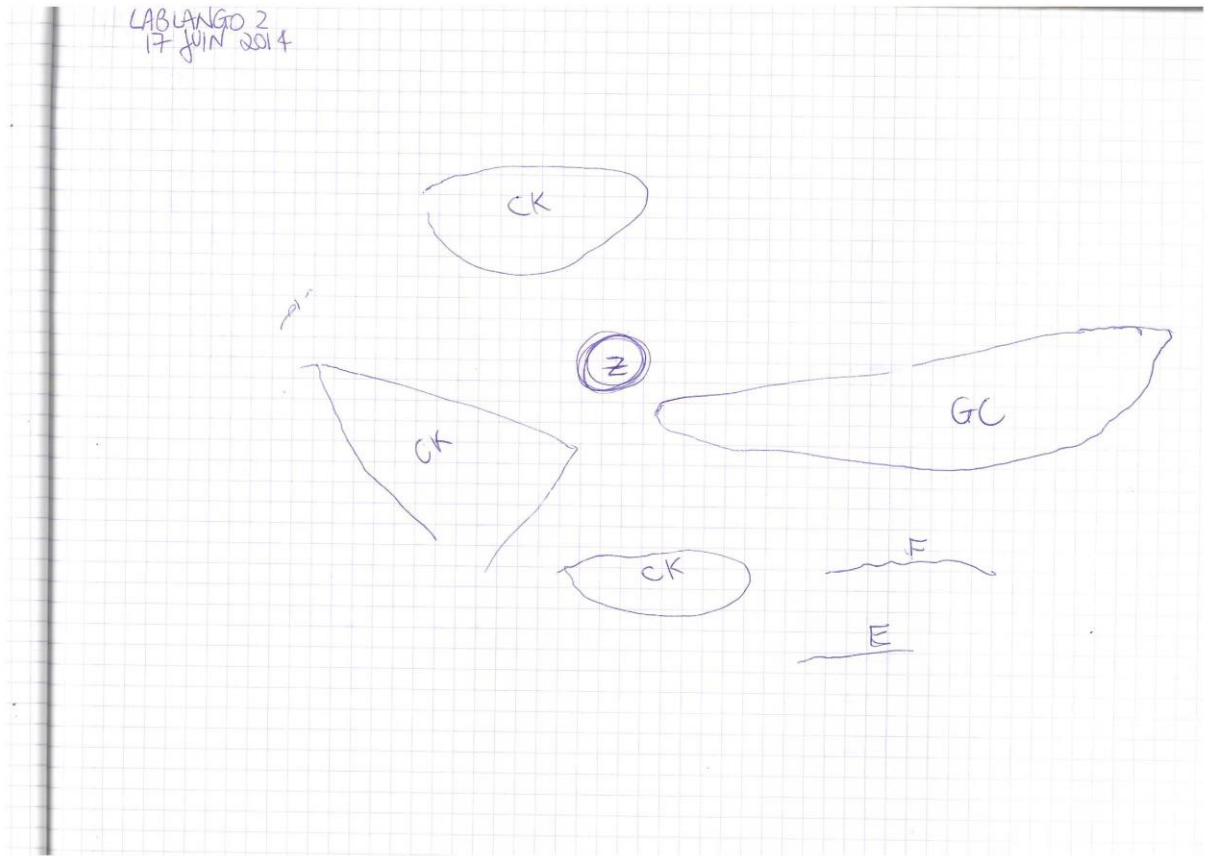


Figure 17 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields.

Key:

Z: zaka, compound

CK: wives' fields

GC: household's communal field

F: medical centre

E: school

h. Kouni

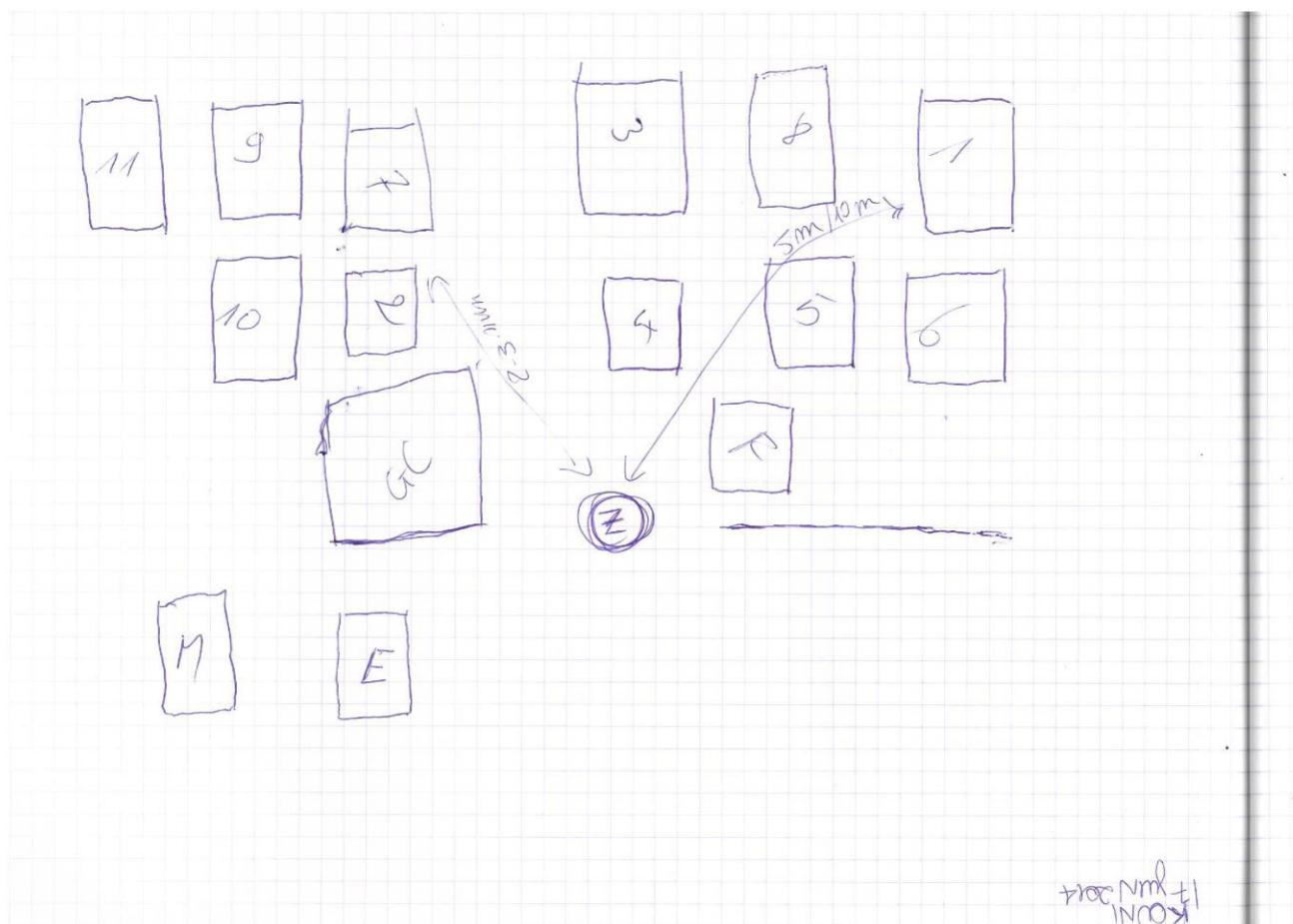


Figure 18 Community map exercise to identify the household and its surroundings (main road, market, mill, school) as well as the distances to the farmed fields.

Key:

Z: zaka, compound

M: market

E: school

F: manure

Numbers: wives' individual fields

GC: household's communal field

Appendix 5 – Maps

a. Passoré province

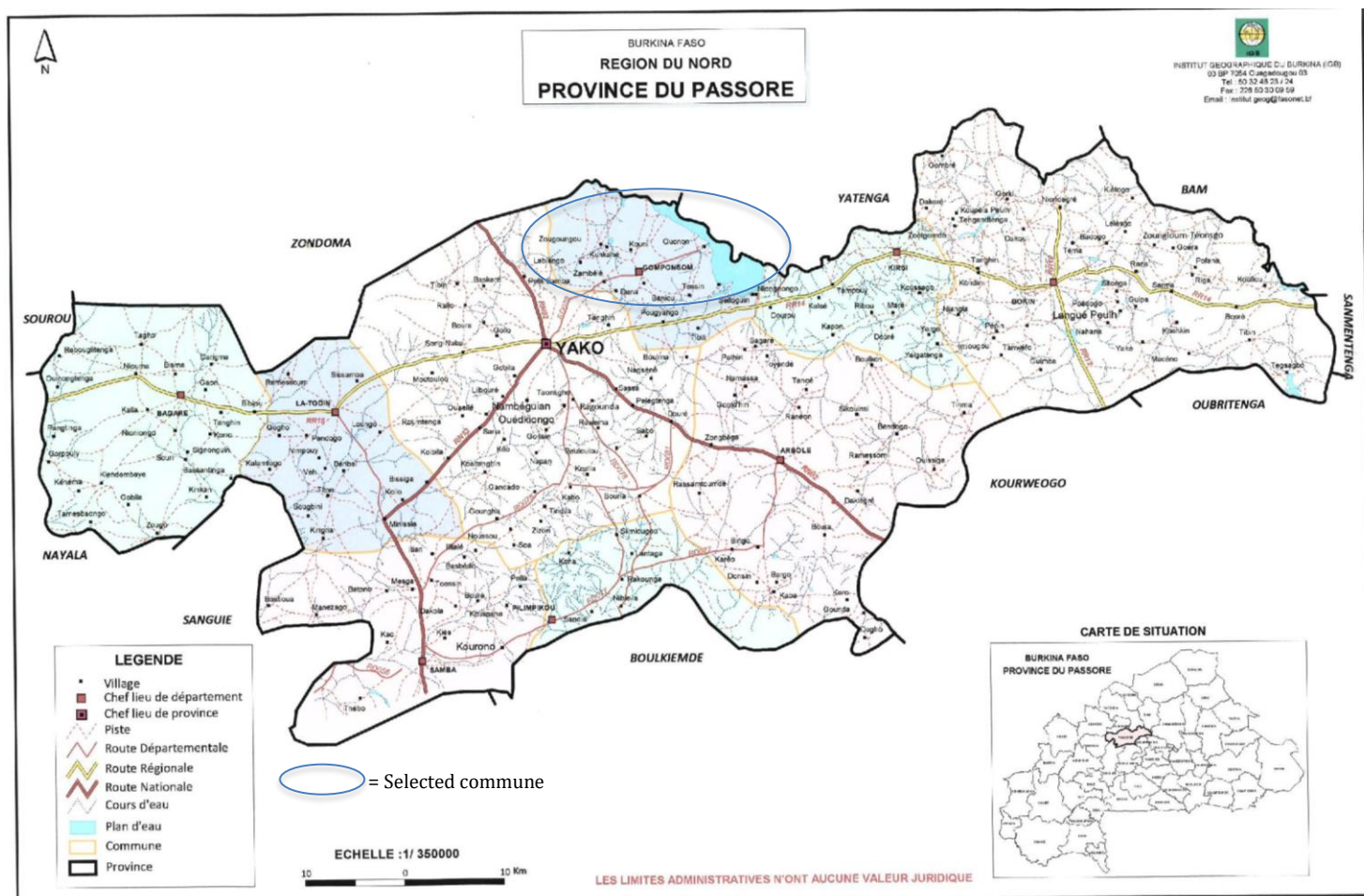


Figure 19 Map of the Passoré Province (Burkina Faso Geographical Institute, 2013)

b. Gomponsom Commune

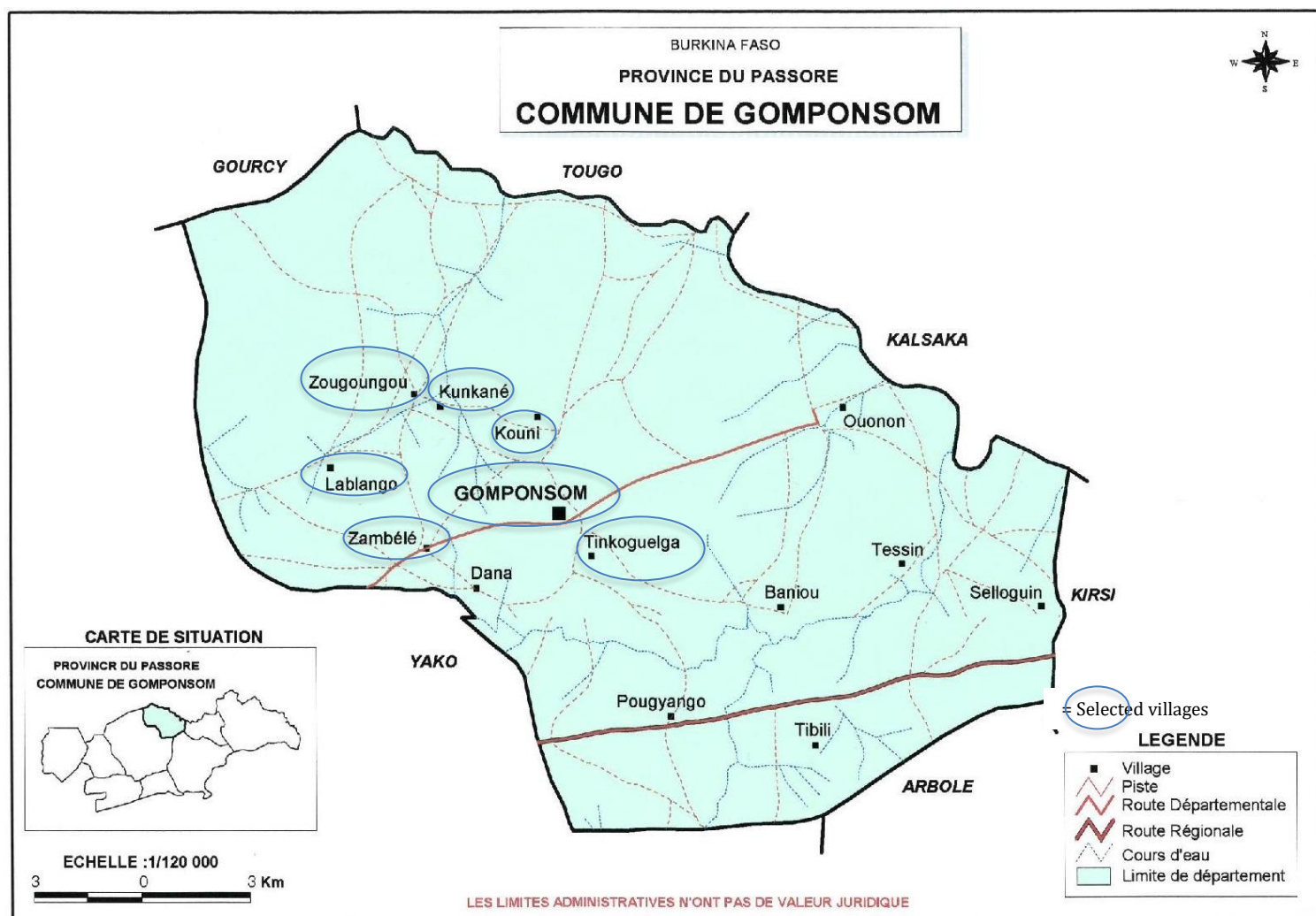


Figure 20 Map of the Gomponsom Commune. Burkina Faso Geographical Institute, 2013.

c. *Boulkiemdé province*

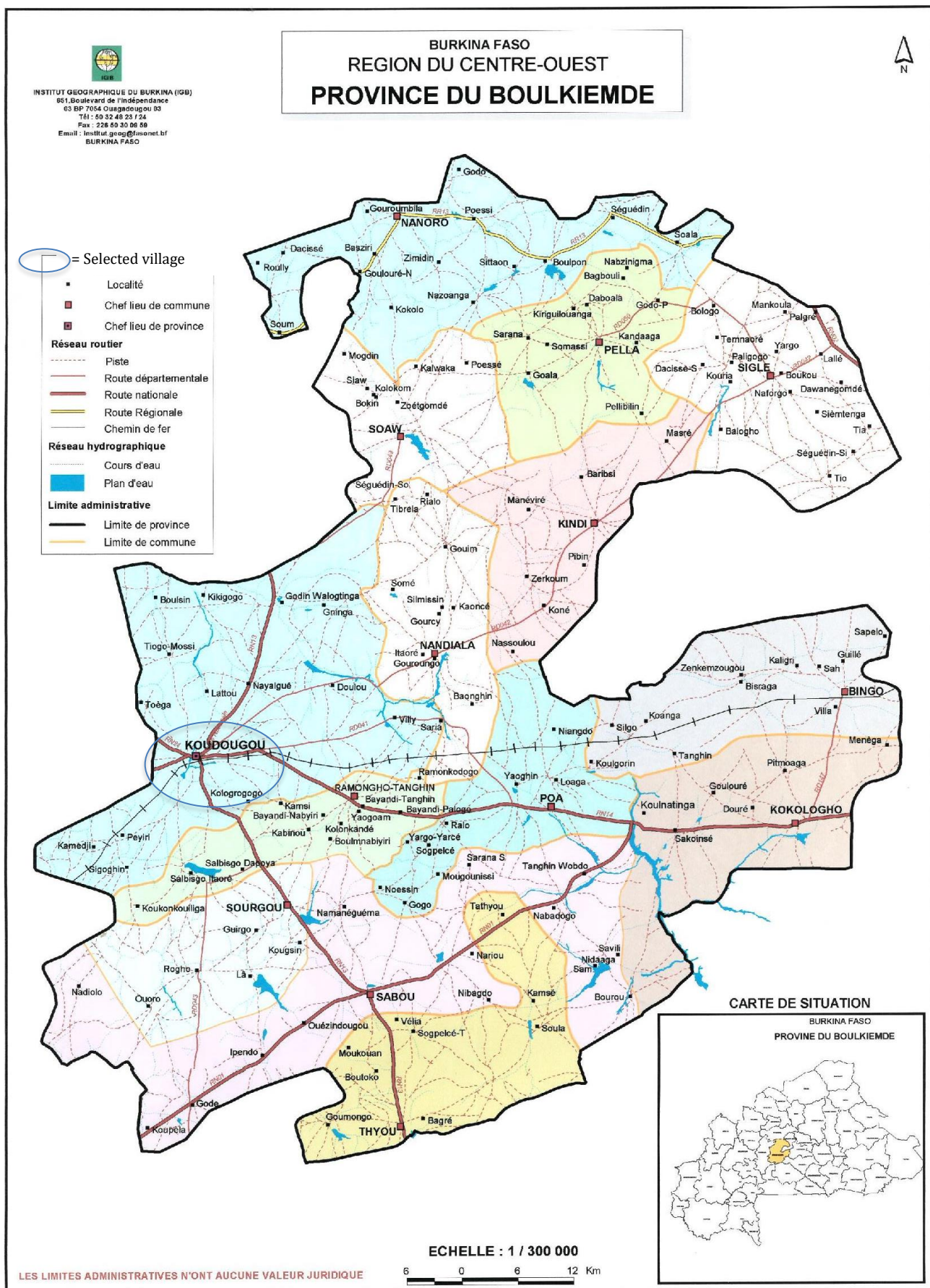


Figure 21 Map of the Boulkiemdé province. Burkina Faso Geographical Institute, 2013.

d. Koudougou Commune

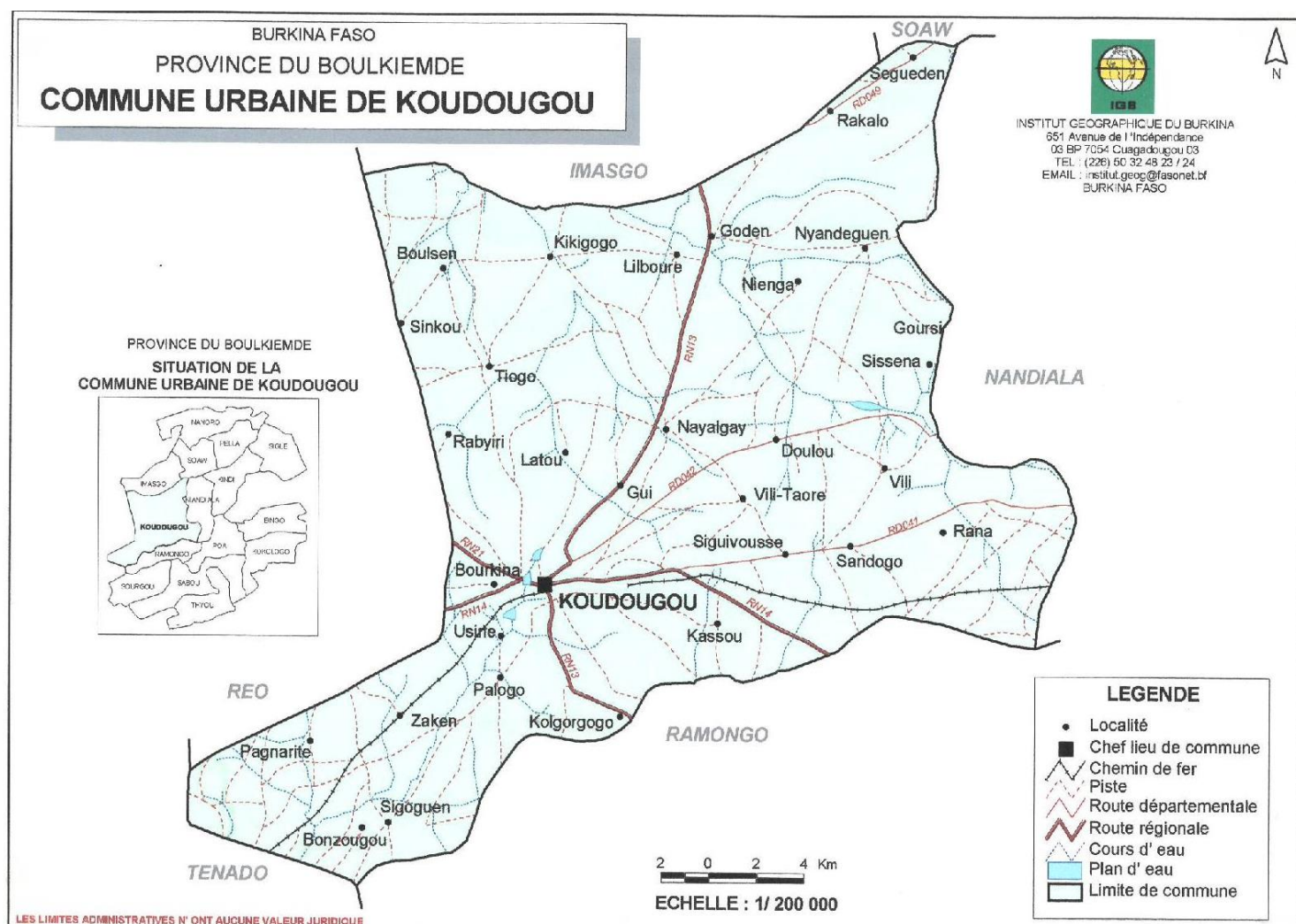


Figure 22 Map of Koudougou Commune. Burkina Faso Geographical Institute, 2013.

e. Sanguié province

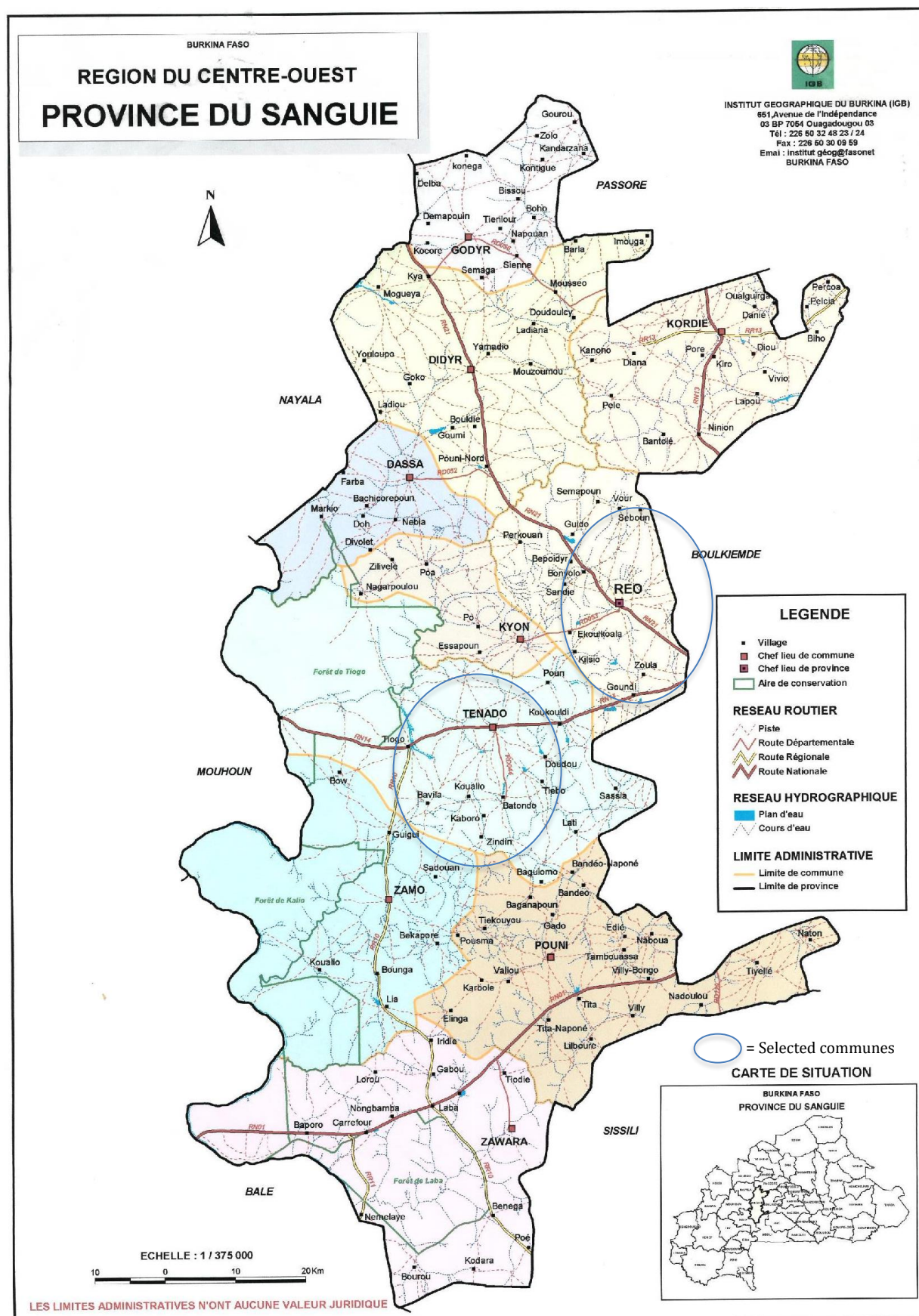


Figure 23 Map of the Sanguié Province. Burkina Faso Geographical Institute, 2013.

f. Réo Commune

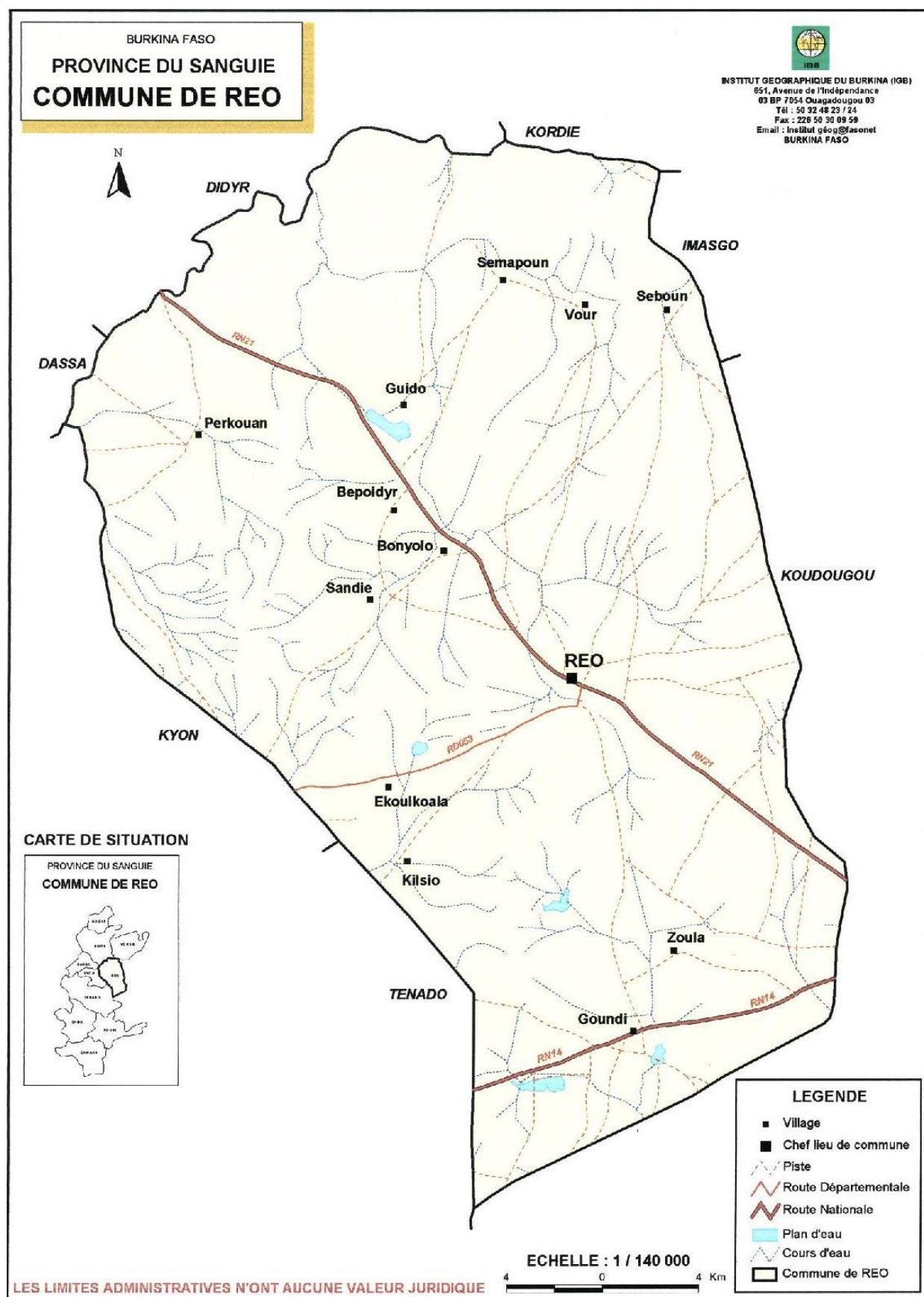


Figure 24 Map of the Réo Commune. Burkina Faso Geographical Institute, 2013.

g. Tenado Commune

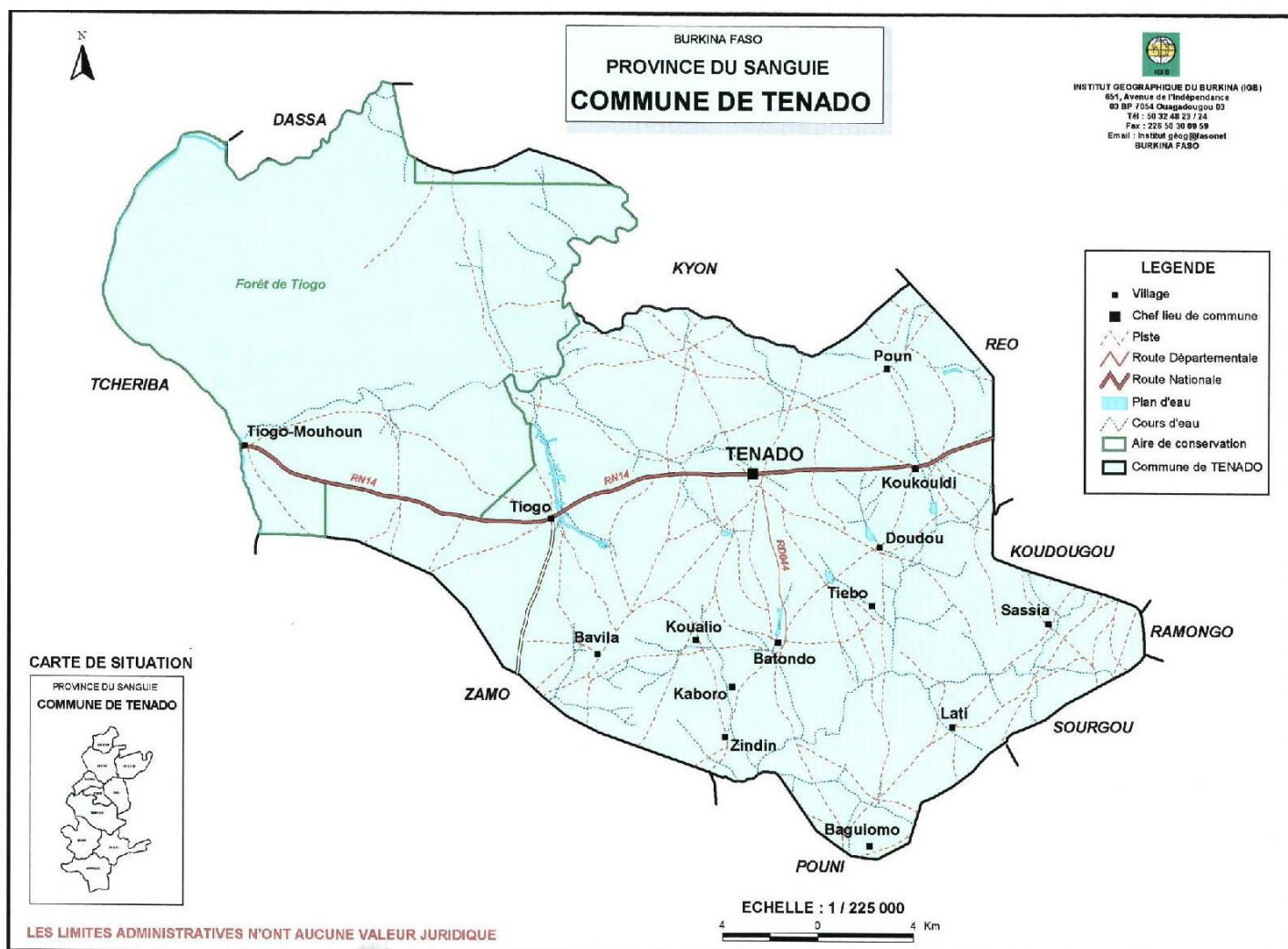


Figure 25 Map of the Tenado Commune. Burkina Faso Geographical Institute, 2013.

Appendix 6 – Loi 0034 full text

a. Loi 0034 / original text of the 2009 National Land Law

LOI N° 034-2009 / AN PORTANT REGIME FONCIER RURAL
vendredi 24 juillet 2009.

L'ASSEMBLEE NATIONALE

Vu la Constitution ;

Vu la résolution n° 001-2007/AN du 04 juin 2007, portant validation du mandat des députés ; a délibéré en sa séance du 16 juin 2009 et adopté la loi dont la teneur suit :

TITRE I : DES DISPOSITIONS GENERALES

CHAPITRE I : DE L'OBJET, DU CHAMP D'APPLICATION ET DES DEFINITIONS

Section 1 : De l'objet et du champ d'application

Article 1 :

La présente loi détermine le régime domanial et foncier applicable aux terres rurales ainsi que les principes de sécurisation foncière de l'ensemble des acteurs du foncier rural.

Elle vise à :

- ▶ assurer un accès équitable aux terres rurales pour l'ensemble des acteurs ruraux, personnes physiques et morales de droit public et de droit privé ;
- ▶ promouvoir les investissements, accroître la productivité dans le secteur agro-sylvo-pastoral et favoriser la réduction de la pauvreté en milieu rural ;
- ▶ favoriser la gestion rationnelle et durable des ressources naturelles ;
- ▶ contribuer à la préservation et à la consolidation de la paix sociale.

Article 2 :

La présente loi s'applique aux terres rurales, entendues comme celles situées à l'intérieur des limites administratives des communes rurales et destinées aux activités de production et de conservation.

Sont également soumises à la présente loi, les terres des villages rattachés aux communes urbaines.

Article 3 :

La présente loi ne s'applique pas aux terres destinées à l'habitation, au commerce et

aux activités connexes telles que déterminées par le schéma directeur d'aménagement et d'urbanisme et par les plans d'occupation des sols.

Nonobstant les dispositions de l'article 2 ci-dessus, les forêts protégées et classées, les aires fauniques, les espaces pastoraux, les ressources minières et en eaux demeurent soumis aux dispositions des législations spéciales y relatives, notamment le code forestier, le code minier, le code de l'environnement, la loi d'orientation relative au pastoralisme et la loi d'orientation relative à la gestion de l'eau.

Article 4 :

La terre rurale constitue un patrimoine de la Nation. A ce titre, l'Etat en tant que garant de l'intérêt général :

- ▶ assure la gestion rationnelle et durable des terres rurales ;
- ▶ lutte contre la spéculation foncière en milieu rural et favorise la mise en valeur effective des terres rurales pour le bien-être des populations ;
- ▶ veille à l'exploitation durable des terres rurales dans le respect des intérêts des générations futures ;
- ▶ organise la reconnaissance juridique effective des droits fonciers locaux légitimes des populations rurales ;
- ▶ assure la garantie des droits de propriété et de jouissance régulièrement établis sur les terres rurales ;
- ▶ veille de manière générale à la protection des intérêts nationaux et à la préservation du patrimoine foncier national en milieu rural.

Article 5 :

Les terres rurales sont réparties dans les catégories ci-après :

- ▶ le domaine foncier rural de l'Etat ;
- ▶ le domaine foncier rural des collectivités territoriales ;
- ▶ le patrimoine foncier rural des particuliers.

Section 2 : Des définitions

Article 6 :

Au sens de la présente loi, on entend par :

- ▶ sécurisation foncière : l'ensemble des processus, mesures et actions de toutes natures visant à protéger les propriétaires, les possesseurs et utilisateurs de terres rurales contre toute contestation, trouble de jouissance de leur droit ou contre tout risque d'éviction ;
- ▶ acteurs du foncier rural : l'ensemble des personnes ou groupes de personnes physiques ou morales, de droit privé ou de droit public, titulaires de droits sur les terres rurales, soit à titre de propriétaires, de titulaires de droit de jouissance, de possesseurs fonciers, soit encore à titre de simples usagers de la terre rurale ;
- ▶ chartes foncières locales : des conventions foncières locales inspirées des coutumes, usages ou pratiques fonciers locaux, élaborés au niveau local et visant dans le cadre de l'application de la présente loi, à prendre en considération la diversité des contextes écologiques, économiques, sociaux et culturels en milieu rural ;

- ▶ espaces locaux de ressources naturelles d'utilisation commune : des espaces ruraux tels que les forêts villageoises, les bois sacrés, les mares, les espaces de terroir affectés à la pâture, les pistes à bétail, qui, selon les usages fonciers locaux, n'appartiennent pas en propre à des personnes ou familles déterminées et, dont l'utilisation est, conformément aux us et coutumes locaux, ouverte à l'ensemble des acteurs ruraux locaux ;
- ▶ possession foncière rurale : le pouvoir de fait légitimement exercé sur une terre rurale en référence aux us et coutumes foncières locaux ;
- ▶ droits d'usages fonciers ruraux : les droits d'exploitation des terres rurales, consentis à temps et à titre personnel par un possesseur foncier rural à une autre personne ou groupe de personnes ;
- ▶ prêt de terre rurale : l'accord par lequel une personne autorise une autre à occuper et exploiter une terre rurale dont il est possesseur ou propriétaire, à des fins domestiques et à titre personnel pendant une durée déterminée ou non, à charge pour l'emprunteur de libérer les lieux lorsque le prêteur manifestera l'intention de reprendre sa terre ;
- ▶ location de terre rurale ou bail à ferme : la convention par laquelle le possesseur ou propriétaire foncier accorde la jouissance de sa terre au preneur en vue de la réalisation d'activités agro-sylvo-pastorales, pour une durée déterminée et, moyennant le paiement d'un loyer périodique ;
- ▶ terres en déshérence : les terres appartenant à une personne décédée sans laisser d'héritier.

CHAPITRE II : DE LA POLITIQUE NATIONALE DE SECURISATION FONCIERE EN MILIEU RURAL

Section 1 : Du contenu et de la mise en œuvre de la politique nationale de sécurisation foncière en milieu rural

Article 7 :

La politique nationale de sécurisation foncière en milieu rural doit notamment :

- ▶ favoriser la reconnaissance et la protection des droits de propriété, de jouissance, des possessions foncières et des droits d'usages de l'ensemble des acteurs sur les terres rurales ;
- ▶ favoriser l'accès équitable de l'ensemble des acteurs ruraux aux terres rurales, sans distinction d'origine ethnique, de sexe, de religion, de nationalité et d'appartenance politique ;
- ▶ promouvoir une mise en valeur durable des ressources foncières rurales et contribuer à la sécurité alimentaire, au développement économique et à la lutte contre la pauvreté ;
- ▶ contribuer à la prévention et à la gestion des conflits fonciers ainsi qu'à la consolidation de la paix sociale ;
- ▶ orienter la définition d'un cadre institutionnel efficace de sécurisation des terres rurales.

Article 8 :

La mise en œuvre, le suivi et l'évaluation de la politique nationale de sécurisation

foncière en milieu rural sont assurés à travers un programme national de sécurisation foncière en milieu rural, élaboré par le gouvernement, assurant la concertation de l'ensemble des ministères et institutions publiques concernées et, avec la participation effective des autres acteurs du foncier rural, notamment les collectivités territoriales, les autorités coutumières et traditionnelles, le secteur privé et la société civile.

Le programme national de sécurisation foncière en milieu rural détermine notamment :

- ▶ les principales mesures opérationnelles à prendre à court, moyen et long termes, pour assurer la sécurisation effective des droits fonciers des acteurs ruraux et la gestion rationnelle et durable des terres rurales ;
- ▶ les moyens institutionnels, humains, techniques et financiers à mobiliser ainsi que les capacités techniques à renforcer à tous les niveaux territoriaux, en vue d'assurer la mise en œuvre effective de la politique et de la législation foncières rurales ;
- ▶ les mécanismes et outils de suivi et d'évaluation de la mise en œuvre de la politique et de la législation relatives à la sécurisation foncière en milieu rural.

Section 2 : De l'élaboration et de l'actualisation de la politique nationale de sécurisation foncière en milieu rural

Article 9 :

Le gouvernement élabore, met en œuvre, évalue et actualise la politique nationale de sécurisation foncière en milieu rural.

Article 10 :

L'élaboration et l'actualisation de la politique nationale de sécurisation foncière en milieu rural se font de manière participative et reposent sur la recherche du consensus le plus large possible entre toutes les catégories d'acteurs ruraux concernés, notamment ceux représentant l'Etat, les collectivités territoriales, les autorités coutumières et traditionnelles, le secteur privé et la société civile.

La politique nationale de sécurisation foncière en milieu rural est adoptée par décret pris en Conseil des ministres.

TITRE II : DES CHARTES FONCIERES LOCALES

CHAPITRE I : DE L'OBJET ET DU CONTENU DES CHARTES FONCIERES LOCALES

Section 1 : De l'objet des chartes foncières locales

Article 11 :

Dans les conditions ci-dessous définies, les dispositions de la présente loi peuvent être précisées et/ou adaptées aux particularités du milieu rural et à la spécificité des besoins locaux, à travers l'élaboration de chartes foncières locales.

Article 12 :

Les chartes foncières locales doivent contribuer à l'application effective de la présente loi, en favorisant la responsabilisation des populations locales dans la gestion des ressources naturelles de leurs terroirs.

Section 2 : Du contenu des chartes foncières locales

Article 13 :

Les chartes foncières locales déterminent au niveau local, les règles particulières relatives :

- ▶ au respect des usages locaux positifs liés à l'accès et à l'utilisation de la terre rurale ;
- ▶ au respect et à la préservation d'espèces végétales, animales, fauniques et halieutiques particulières sur des espaces déterminés ;
- ▶ à l'identification et à la préservation des espaces locaux de ressources naturelles d'utilisation commune ainsi qu'aux modalités de leur accès équitable et gestion participative ;
- ▶ aux prêts de terres rurales, notamment la durée du prêt, les contreparties éventuelles y relatives, les conditions de son renouvellement, la durée de la cessation d'exploitation de terres rurales pouvant entraîner la cessation du prêt, les motifs de résiliation du prêt de terre par le prêteur et les conditions de reprise par lui de sa terre ainsi que la durée du préavis à observer par le prêteur dans l'exercice de son droit de reprise ; les conditions dans lesquelles des héritiers peuvent poursuivre le prêt de terre contracté par leur auteur conformément au code des personnes et de la famille ;
- ▶ aux types d'actions positives à initier au niveau local en faveur des groupes vulnérables, notamment les femmes, les pasteurs et les jeunes ;
- ▶ aux instances locales chargées de la prévention et de la gestion alternative des conflits fonciers ruraux et à la procédure applicable devant elles.

Article 14 :

Les chartes foncières locales ne peuvent déroger aux prescriptions de la présente loi et des autres textes en vigueur. Elles doivent être élaborées dans le respect des droits humains, de l'ordre public et des bonnes mœurs.

CHAPITRE II : DE L'ELABORATION, DE L'ADOPTION ET DE LA VALIDITE DES CHARTES FONCIERES LOCALES**Section 1 : De l'élaboration et de l'adoption des chartes foncières locales****Article 15 :**

Les chartes foncières locales peuvent être initiées au niveau villageois ou inter villageois. Elles peuvent également être initiées à l'échelle d'une ou de plusieurs communes, en considération notamment du type de ressource concernée ou des besoins d'harmonisation de la gestion foncière au niveau local.

Article 16 :

L'élaboration des chartes foncières locales se fait de manière participative à travers l'implication de l'ensemble des catégories socioprofessionnelles locales concernées par l'utilisation et la gestion de la ressource concernée.

Sont de plein droit impliqués dans le processus d'élaboration des chartes foncières locales :

- ▶ les représentants des autorités coutumières et traditionnelles ;
- ▶ les représentants des organisations de producteurs ruraux y compris celles d'agriculteurs, de pasteurs, d'exploitants forestiers, de femmes et de jeunes ;

- les représentants locaux des chambres régionales d'agriculture.

Des personnes ressources locales peuvent être associées à l'élaboration des chartes foncières locales en considération de leur connaissance du milieu local ou de leur expérience et engagement en matière de développement local.

Article 17 :

L'élaboration des chartes foncières locales se fait de manière progressive en fonction des besoins locaux de gestion foncière concertée, identifiés au niveau local.

Article 18 :

Les services techniques déconcentrés de l'Etat fournissent une assistance aux processus d'élaboration des chartes foncières locales et veillent à leur cohérence avec les textes en vigueur.

L'Etat assiste les communes rurales dans l'élaboration des chartes foncières locales en mettant à leur disposition un modèle type de charte foncière locale et tout support méthodologique adapté.

Article 19 :

Les chartes foncières locales élaborées au niveau villageois ou inter villageois sont adoptées en assemblée villageoise ou inter villageoise.

Section 2 : De la validité des chartes foncières locales

Article 20 :

Les chartes foncières locales sont validées par délibération du conseil municipal. Cette délibération précise pour chaque charte, l'objet et le champ territorial d'application.

Article 21 :

La charte foncière locale est applicable après transmission de la délibération de validation à l'autorité de tutelle, sous réserve du respect des conditions d'entrée en vigueur des actes des autorités territoriales.

Article 22 :

Les chartes foncières locales approuvées sont inscrites dans le registre des chartes foncières locales de la commune concernée.

Toute personne intéressée bénéficie à titre gratuit du droit de communication du registre des chartes foncières locales sur simple requête adressée au Maire de la commune concernée. La délivrance des copies d'extraits de registres de chartes foncières locales est soumise au droit de timbre communal.

Article 23 :

Les conseils municipaux, les conseils villageois de développement et les chambres régionales d'agriculture assurent la diffusion et la vulgarisation des chartes foncières locales ainsi que l'information et la sensibilisation des populations locales. Elles œuvrent dans ce sens, en collaboration avec les services techniques de l'Etat, les autorités coutumières et traditionnelles et la société civile.

Article 24 :

Les modalités d'élaboration et de validation des chartes foncières locales sont précisées par décret pris en Conseil des ministres.

TITRE III : DE LA RECONNAISSANCE ET DE LA PROTECTION DES DROITS FONCIERS RURAUX

CHAPITRE I : DES DROITS DOMANIAUX DE L'ETAT ET DES COLLECTIVITES TERRITORIALES

Section 1 : Du domaine foncier rural de l'Etat

Article 25 :

Le domaine foncier rural de L'Etat comprend :

- ▶ de plein droit, l'ensemble des terres rurales aménagées par l'Etat sur fonds publics ;
- ▶ les terres réservées par les schémas d'aménagement du territoire à des fins d'aménagements ;
- ▶ les terres rurales acquises par l'Etat auprès des particuliers selon les procédés de droit commun ;
- ▶ les terres acquises par exercice du droit de préemption ou par application de la procédure d'expropriation pour cause d'utilité publique.

Article 26 :

Toutes les terres constituant le domaine foncier rural de l'Etat doivent faire l'objet de recensement, de délimitation et d'immatriculation au nom de l'Etat. Elles font l'objet d'une gestion rationnelle et durable par les services compétents de l'Etat ou par tout organisme public spécialisé créé à cet effet.

Section 2 : Du domaine foncier rural des collectivités territoriales

Article 27 :

Le domaine foncier rural des collectivités territoriales est constitué :

- ▶ des terres rurales qui leur sont cédées par l'Etat ;
- ▶ des terres rurales acquises par ces collectivités territoriales selon les procédés de droit commun ;
- ▶ des terres acquises par exercice du droit de préemption ou par application de la procédure d'expropriation pour cause d'utilité publique.

Article 28 :

L'exercice du droit de préemption et l'application de la procédure d'expropriation pour cause d'utilité publique par les collectivités territoriales sont soumis à autorisation préalable de l'autorité de tutelle.

Article 29 :

Outre la gestion de leur domaine foncier rural, les collectivités territoriales peuvent recevoir de l'Etat, le transfert de la gestion de portions du domaine foncier rural étatique, conformément aux textes en vigueur.

Article 30 :

Toutes les terres constituant le domaine foncier rural des collectivités territoriales doivent faire l'objet de recensement, de délimitation et d'immatriculation au nom de la collectivité territoriale concernée. Elles font l'objet d'une gestion rationnelle et durable par les services compétents de la collectivité territoriale avec l'appui des services techniques de l'Etat.

Article 31 :

Les collectivités territoriales sont tenues, en collaboration avec les services techniques compétents et en concertation avec les conseils villageois de développement, les chambres régionales d'agriculture et les organisations de producteurs, de recenser, délimiter, sécuriser spécifiquement les espaces locaux de ressources naturelles d'utilisation commune relevant de leurs territoires.

Article 32 :

Sous réserve de l'application des dispositions spécifiques du code forestier, du code de l'environnement, de la loi d'orientation relative à la gestion de l'eau et de la loi d'orientation relative au pastoralisme, les espaces locaux de ressources naturelles d'utilisation commune sont immatriculés au nom de la collectivité territoriale concernée ; ils font cependant l'objet d'un classement spécial, les soumettant à un régime juridique protecteur assimilé à celui de la domanialité publique et sont de ce fait inaliénables, imprescriptibles et insaisissables, sauf déclassement préalable.

Les espaces locaux de ressources naturelles d'utilisation commune peuvent faire l'objet d'une délégation de gestion au profit des utilisateurs locaux spécialement organisés à cet effet. Les modalités d'utilisation et de gestion des espaces locaux de ressources naturelles d'utilisation commune sont précisées par les chartes foncières locales.

Article 33 :

Les modalités d'indemnisation en cas d'expropriation pour cause d'utilité publique sont précisées par décret pris en Conseil des ministres.

CHAPITRE II : DU PATRIMOINE FONCIER RURAL DES PARTICULIERS***Section 1 : Des possessions foncières rurales*****Article 34 :**

La possession foncière rurale peut être exercée à titre individuel ou collectif. La possession foncière rurale est exercée à titre individuel lorsque la terre qui en fait l'objet relève du patrimoine d'une seule personne. Elle est exercée à titre collectif lorsque la terre concernée relève du patrimoine commun de plusieurs personnes, notamment d'une famille.

Article 35 :

Les possessions foncières rurales régulièrement établies sont reconnues par la présente loi.

La possession foncière rurale est établie lorsque d'une part, la preuve des faits constitutifs est rapportée et lorsque d'autre part, aucune contestation n'est révélée à l'occasion de la procédure contradictoire de constatation prévue par la présente loi.

Article 36 :

Sous réserve de l'identification des espaces locaux de ressources naturelles d'utilisation communes identifiées et intégrées au domaine de la commune concernée, constituent notamment des faits de possession foncière :

- la reconnaissance unanime de la qualité de propriétaire de fait d'une personne ou d'une famille sur une terre rurale par la population locale, notamment les possesseurs voisins et les autorités coutumières locales ;
- la mise en valeur continue, publique, paisible et non équivoque et à titre de propriétaire de fait pendant trente ans au moins, de terres rurales aux fins de production rurale.

Les prêts et locations reconnus ou prouvés de terres rurales ne peuvent en aucun cas être constitutifs de faits de possession foncière rurale.

Article 37 :

Les faits de possession foncière peuvent être prouvés par tous moyens légaux. Cependant, pour être opposables aux tiers, les faits de possession foncière invoqués doivent être accomplis par le possesseur foncier lui-même ou par une ou plusieurs personnes agissant en son nom et pour son compte.

Article 38 :

En cas de contestation de sa possession, le possesseur de terre rurale peut mettre en œuvre une action possessoire devant les juridictions compétentes. Le juge saisi d'une action possessoire peut se transporter sur les lieux afin de vérifier la réalité de la situation foncière et, recueillir les renseignements complémentaires nécessaires. Il peut demander l'assistance d'un expert en la matière inscrit près les cours et tribunaux du Burkina Faso.

Article 39 :

Tout possesseur foncier rural peut à titre individuel ou collectif, demander la reconnaissance de sa possession. A cet effet, il adresse à la commune territorialement compétente, une demande de constatation de possession foncière rurale.

La demande de constatation de possession foncière rurale est faite sur formulaire fourni par la commune ; elle est soumise au droit de timbre communal.

Les pièces constitutives du dossier de demande de constatation de possession foncière rurale ainsi que le détail de la procédure de constatation de possession foncière rurale sont précisés par décret pris en Conseil des ministres.

Article 40 :

La mise en œuvre de la procédure de constatation de possession foncière rurale est assurée par le service foncier rural de la commune concernée. Elle comporte au minimum les mesures et actions ci-après :

- ▶ une information par tous moyens appropriés de la population concernée sur l'existence d'une demande de constatation de possession foncière rurale ;
- ▶ les informations sur l'emplacement du terrain ;
- ▶ une enquête foncière locale, publique et contradictoire, destinée à renseigner le service foncier rural sur la réalité et la qualité de la possession foncière rurale ;
- ▶ une période de publicité destinée à révéler l'existence ou non d'oppositions ;
- ▶ la délimitation du fonds de terre par tous moyens appropriés.

Article 41 :

Toute commune peut de sa propre initiative, entreprendre une ou plusieurs opérations de constatation de possessions foncières rurales sur tout ou partie de son territoire.

Article 42 :

Outre les éléments prévus à l'article 40 ci-dessus, le détail de la procédure de réalisation des opérations de constatation de possession foncière initié par les communes est précisé par décret pris en Conseil des ministres.

Article 43 :

Le financement des opérations de constatation de possessions foncières rurales est assuré par :

- ▶ les fonds propres de la commune ;
- ▶ les subventions de l'Etat ;
- ▶ les donations des personnes physiques ou morales de droit privé ;
- ▶ les ressources du fonds national de sécurisation foncière en milieu rural ;
- ▶ les contributions des partenaires au développement ;
- ▶ toutes autres ressources autorisées par les textes en vigueur.

L'Etat peut initier toutes mesures incitatives appropriées destinées à favoriser la contribution du secteur privé au financement des opérations de constatations de possessions foncières rurales.

Article 44 :

Tout possesseur foncier rural dont la preuve de la possession a été établie conformément aux dispositions de la présente loi bénéficie de la délivrance d'une attestation de possession foncière rurale par le maire de la commune concernée.

L'attestation de possession foncière rurale est un acte administratif ayant la même valeur juridique qu'un titre de jouissance tel que prévu par les textes portant réorganisation agraire et foncière au Burkina Faso.

Article 45 :

L'attestation de possession foncière rurale est établie par le service foncier rural de la commune après contrôle formel et vérification du paiement des droits et/ou taxes y afférents. Les taux ou montants des droits et/ou taxes dus sont déterminés par voie réglementaire.

Article 46 :

L'attestation de possession foncière rurale est signée par le maire et fait l'objet d'un enregistrement dans le registre local des possessions foncières rurales créé à cet effet.

Les modalités d'organisation et de tenue du registre des possessions foncières rurales sont fixées par décret pris en Conseil des ministres.

Article 47 :

L'attestation de possession foncière rurale est transmissible par succession. Elle peut également être cédée entre vifs, à titre gratuit ou onéreux, dans les conditions prévues par les textes portant réorganisation agraire et foncière au Burkina Faso.

Article 48 :

L'acte de cession d'une possession foncière rurale est établi sur un formulaire type fourni par la commune. Pour être opposable aux tiers, la cession doit être inscrite dans le registre des transactions foncières rurales, à la diligence du cessionnaire.

La formalité d'inscription de la cession au registre des transactions foncières rurales donne lieu au paiement de droits et/ou taxes dont les montants sont précisés par voie réglementaire.

Les modalités d'organisation et de tenue du registre des transactions foncières locales sont précisées par décret pris en Conseil des ministres.

Article 49 :

Le cessionnaire d'une attestation de possession foncière rurale bénéficie de la

délivrance d'un titre de jouissance établi en son nom, dans les conditions prévues par les textes en vigueur portant réorganisation agraire et foncière au Burkina Faso.

Article 50 :

Les cessions valables de possessions foncières rurales sont soumises à des conditions particulières relatives, notamment, à la vérification de l'accord effectif des possesseurs fonciers ruraux et de leurs ayants droit.

En outre, des mesures relatives aux superficies concernées et aux conditions de mise en valeur des terres peuvent être imposées aux cessionnaires.

Les conditions particulières applicables aux cessions de terres rurales prévues à l'alinéa précédent du présent article sont précisées par décret pris en Conseil des ministres.

Section 2 : Des droits d'usages fonciers ruraux

Article 51 :

Constituent des droits d'usages fonciers ruraux :

- ▶ les prêts de terres rurales accordés pour une période déterminée ou non ;
- ▶ les locations simples de terres rurales ou baux à ferme de terres rurales ;
- ▶ les autorisations temporaires de mise en valeur accordées en application des dispositions de l'article 61 ci-dessous de la présente loi.

Les droits d'usages fonciers ruraux font l'objet d'une inscription dans le registre des transactions foncières rurales.

Article 52 :

Le prêt de terre rurale peut être verbal ou écrit. L'accord écrit de prêt de terre rurale peut être constaté par acte sous seing privé. Le prêt verbal de terre doit faire l'objet d'une déclaration orale auprès de la commission foncière villageoise. La déclaration de prêt de terre est consignée sur le champ par la commission foncière villageoise sur un formulaire fourni par la commune. Le prêt de terre rurale est inscrit dans le registre des transactions foncières rurales.

Le bénéficiaire d'un prêt de terre rurale ne peut à son tour prêter la terre objet du prêt à une tierce personne sans autorisation préalable expresse du prêteur initial. Le prêt non autorisé à un tiers est inopposable au propriétaire ou possesseur foncier.

Article 53 :

Les parties à un prêt de terre peuvent en déterminer librement la durée. Lorsque la durée d'un prêt de terre rurale n'est pas déterminée par les parties, il est fait application de la durée de prêt prévue par la charte foncière locale du lieu de situation du fonds de terre.

Dans le silence des parties et à défaut de détermination par une charte foncière locale, la durée du prêt est en cas de contestation, déterminée par l'instance locale de gestion des conflits ou par le tribunal, en référence aux us et coutumes fonciers locaux.

Article 54 :

Le prêt de terre rurale peut être consenti à titre onéreux ou à titre gratuit. A défaut de détermination par écrit par les parties, les contreparties dues à l'occasion du prêt à titre onéreux, sont celles déterminées par la charte foncière locale du lieu de situation de la terre prêtée. Ces contreparties peuvent être déterminées en numéraires ou en nature.

Dans le silence des parties et à défaut de détermination par une charte foncière locale, la contrepartie due est en cas de contestation, celle déterminée par l'instance locale de gestion des conflits ou par le tribunal, en référence aux us et coutumes fonciers locaux.

Article 55 :

Le prêt de terre rurale prend fin lorsque le prêteur manifeste son intention de reprendre sa terre ou s'il y a lieu, à l'expiration du terme convenu entre les parties. Le prêt peut également prendre fin de manière anticipée, pour non observation des clauses spécifiques du prêt.

En cas de décès de l'emprunteur de terre rurale, ses héritiers peuvent poursuivre le prêt dans les mêmes conditions que le de cujus.

Article 56 :

A l'expiration du terme convenu pour un prêt de terre, les parties peuvent décider du renouvellement du prêt. Dans le silence des parties, le prêt est présumé renouvelé par tacite reconduction.

Article 57 :

Sous réserve du terme spécifique fixé pour le prêt de terre, le prêteur peut reprendre la terre prêtée pour la remettre en exploitation lui-même ou, par un membre de sa famille ou encore pour toute autre raison légitime. Il est dans ce cas tenu d'en informer l'emprunteur en respectant un délai de préavis.

La durée du préavis de reprise de la terre prêtée est celle prévue par la charte foncière locale du lieu de situation de la terre prêtée. Dans le silence des parties et en l'absence d'un délai de reprise prévu par une charte foncière locale, le prêteur doit informer l'emprunteur de sa volonté de reprise au moins un an à l'avance, de manière à ne pas compromettre ses activités productives en cours.

En cas de non-respect du préavis de reprise de la terre par le prêteur, l'emprunteur de terre rurale peut obtenir du président du tribunal de grande instance territorialement compétent une ordonnance de maintien sur les lieux jusqu'à la récolte et à l'enlèvement complet de sa production.

Article 58 :

Sauf accord express entre les parties, la cessation de l'exploitation effective de la terre prêtée, pendant une durée déterminée par la charte foncière locale du lieu de situation de l'immeuble, met fin au prêt de terre et autorise la reprise de plein droit de la terre par le possesseur foncier rural.

A défaut de détermination par une charte foncière locale, la durée de cessation de l'exploitation effective de la terre prêtée dont il est question à l'alinéa précédent du présent article est en cas de contestation, déterminée par l'instance locale de gestion des conflits ou par le tribunal, en référence aux us et coutumes fonciers locaux.

Article 59 :

Le bail à ferme est obligatoirement consenti par écrit. L'écrit peut être un acte sous seing privé dressé sur un formulaire fourni par la commune. Il peut également être établi par officier ministériel.

L'écrit précise obligatoirement :

- l'identité des parties au contrat ;

- ▶ la description sommaire du fonds de terre et les références de l'attestation de possession foncière rurale ;
- ▶ la durée de la location et les conditions de renouvellement ;
- ▶ le montant du loyer et les modalités de paiement ;
- ▶ la nature des activités, investissements ou améliorations autorisés.

Article 60 :

Tout bail à ferme est d'une durée de cinq années au minimum. Le bail à ferme est inscrit dans le registre des transactions foncières rurales.

Article 61 :

Toute personne physique ou morale de droit privé peut demander à une commune, l'autorisation de mettre temporairement en valeur des terres rurales non mises en valeur situées dans le ressort territorial de la commune.

Les espaces ruraux ci-après cités ne sont pas considérés comme des terres non mises en valeur au sens de la présente loi :

- ▶ les terres laissées en jachère ;
- ▶ les pâturages et emprises de pistes à bétail ;
- ▶ les espaces locaux de ressources naturelles d'utilisation commune ;
- ▶ les forêts classées de l'Etat et des collectivités territoriales.

Article 62 :

Lorsque la demande de mise en valeur temporaire concerne une terre rurale qui n'est représentée par aucun titre, le maire de la commune concernée, préalablement à toute autorisation, ordonne au service foncier rural l'établissement d'une attestation de possession foncière rurale au profit du possesseur foncier rural, conformément à la procédure prévue à l'article 39 ci-dessus. Dans ce cas, l'attestation de possession foncière rurale est établie aux frais du requérant.

Article 63 :

L'autorisation de mise en valeur temporaire ne peut être accordée pour une durée supérieure à cinq ans.

A la fin de la période d'autorisation de mise en valeur temporaire, le possesseur ou propriétaire foncier rural retrouve la plénitude de ses droits sur la terre. Le bénéficiaire de l'autorisation d'exploitation temporaire est tenu de libérer les terres concernées, sans pouvoir réclamer aucune indemnisation du fait des investissements et améliorations qu'il a réalisés sur le fonds.

Article 64 :

Un décret pris en Conseil des ministres précise les modalités de délivrance de l'autorisation de mise en valeur temporaire des terres rurales ainsi que les conditions de restitution de sa terre au possesseur ou propriétaire foncier rural.

Section 3 : Des baux emphytéotiques et des cessions sur les terres rurales aménagées de l'Etat et des collectivités territoriales

Article 65 :

L'Etat ou les collectivités territoriales consentiront prioritairement sur les terres rurales aménagées ou à aménager de leur domaine foncier propre en milieu rural, des baux emphytéotiques au profit des particuliers, personnes physiques ou morales de

droit privé, souhaitant réaliser des investissements productifs à but lucratif en milieu rural.

En fonction des contextes, la priorité sera accordée aux opérateurs ruraux, physiques ou moraux, notamment les organisations locales de producteurs dans la délivrance des baux.

Article 66 :

Le bail emphytéotique de terres rurales est un bail conclu entre d'une part, l'emphytéote ou bailleur de terres et d'autre part, le preneur ou locataire de terres, pour une durée comprise entre dix-huit ans au minimum et quatre vingt dix neuf ans au maximum et donnant lieu au paiement d'un loyer périodique.

Le bail emphytéotique ne peut porter que sur une terre immatriculée. Il constitue un droit réel immobilier et est susceptible d'hypothèque. Le bail emphytéotique doit faire l'objet de publication sur les livres fonciers conformément aux textes en vigueur.

Article 67 :

Le contrat de bail emphytéotique précise l'objet du contrat, la superficie du fonds, la durée du bail ainsi que le montant et les modalités de paiement du loyer.

Le cahier des charges spécifique au périmètre aménagé est annexé au bail emphytéotique. Ce cahier des charges définit les obligations de mise en valeur des terres et fixe le montant et les modalités de paiement des redevances annuelles afférentes à l'utilisation des équipements collectifs du périmètre. Il précise par ailleurs les dispositions relatives à l'interdiction de sous-location des terres sous bail.

Article 68 :

L'Etat ou la collectivité territoriale partie au contrat d'emphytéose s'engage à garantir au preneur la jouissance libre, sécurisée et paisible des terres pendant toute la durée du bail emphytéotique.

Le preneur s'engage à réaliser effectivement et à temps, les investissements et améliorations prévus par le cahier des charges et à exploiter les terres de manière durable.

Article 69 :

Le bail emphytéotique prend fin à l'expiration de son terme. En fin de bail, la terre revient à l'Etat ou à la collectivité territoriale avec l'ensemble des investissements et améliorations réalisés. Le preneur ne peut réclamer aucune indemnisation en raison des investissements ou améliorations réalisés.

Le bail emphytéotique peut également prendre fin dans les cas ci-après :

- ▶ décès du preneur sans héritier ou dissolution de la personne morale ;
- ▶ résiliation à l'amiable ;
- ▶ résiliation pour non respect par l'une des parties des clauses contractuelles.

Article 70 :

En cas de décès du preneur avant le terme du contrat, ses ayants droit peuvent continuer le bail emphytéotique pour la période restant à courir.

A son échéance, le bail emphytéotique peut être renouvelé à la demande du preneur ou de ses ayants droit.

Section 4 : De la propriété foncière en milieu rural

Article 71 :

Outre les baux emphytéotiques, les personnes physiques ou morales de droit privé désirant réaliser des investissements productifs à but lucratif en milieu rural peuvent accéder aux terres agricoles et pastorales aménagées par l'Etat ou par les collectivités territoriales par voie de cession.

Article 72 :

Tout détenteur d'une attestation de possession foncière rurale peut demander la délivrance d'un titre de propriété de sa terre rurale s'il remplit les conditions prévues par les textes en vigueur.

La demande de délivrance d'un titre de propriété est déposée à la recette des domaines et de la publicité foncière territorialement compétente ou au guichet unique du foncier territorialement compétent s'il en existe, sous couvert du service foncier rural de la commune concernée.

Article 73 :

Les cessions de terres rurales aménagées à des fins d'exploitation à but lucratif se font uniquement par voie d'adjudication. L'acte de cession est accompagné d'un cahier des charges fixant les conditions et les modalités de mise en valeur ainsi que les sanctions de non respect des clauses dudit cahier des charges.

Le cessionnaire bénéficie de la délivrance d'un titre de propriété après paiement complet du prix de la cession et des taxes et redevances y afférentes. Il est tenu de mettre en exploitation lui-même les terres pendant au moins dix années consécutives et n'est pas autorisé à changer la destination de la terre, sauf autorisation préalable.

Article 74 :

Le défaut de mise en valeur des terres rurales acquises à des fins d'exploitation à but lucratif est sanctionné par la perception d'une taxe de non mise en valeur au profit du budget de l'Etat et/ou des collectivités territoriales. Il peut aller jusqu'au retrait de la parcelle.

Un décret pris en Conseil des ministres précise les conditions de constatation de la non mise en valeur ainsi que les taux et modalités de perception de cette taxe.

Article 75 :

L'Etat et les collectivités territoriales peuvent organiser des programmes spéciaux d'attribution à titre individuel ou collectif de terres rurales aménagées de leurs domaines fonciers ruraux respectifs au profit des groupes de producteurs ruraux défavorisés tels que les petits producteurs agricoles, les femmes, les jeunes et les éleveurs.

Le pourcentage de terres à réserver par l'Etat pour les programmes spéciaux d'attribution prévus au présent article est déterminé par voie réglementaire pour chaque aménagement.

Article 76 :

Les bénéficiaires des programmes spéciaux d'attribution cités à l'article 75 ci-dessus reçoivent un acte d'attribution leur conférant de plein droit le bénéfice de demander la délivrance d'un permis d'exploiter conformément aux textes en vigueur.

Les cahiers de charges annexés aux actes d'attribution définissent les conditions et modalités d'occupation et de jouissance pouvant donner lieu à cession définitive des terres et délivrance de titres fonciers au nom des bénéficiaires. La cession définitive est constatée par arrêté du ministre chargé des finances.

TITRE IV : DES INSTITUTIONS DE SECURISATION FONCIERE EN MILIEU RURAL

CHAPITRE I : DES STRUCTURES LOCALES DE GESTION FONCIERE

Section 1 : Du service foncier rural

Article 77 :

Il est créé au niveau de chaque commune rurale un service foncier rural.

Le service foncier rural est chargé, d'une part, de l'ensemble des activités de gestion et de sécurisation du domaine foncier de la commune y compris les espaces locaux de ressources naturelles d'utilisation commune et d'autre part, des activités de sécurisation foncière du patrimoine foncier rural des particuliers sur le territoire communal.

Le service foncier rural concourt également à la préservation, à la sécurisation et à la gestion du domaine foncier de la région et de l'Etat, situé sur le ressort territorial de la commune concernée.

Article 78 :

Dans le cadre de ses missions générales définies à l'article précédent de la présente loi, le service foncier rural, en collaboration avec la commission foncière villageoise assure la tenue régulière des registres fonciers ruraux, notamment :

- ▶ le registre des possessions foncières rurales ;
- ▶ le registre des transactions foncières rurales ;
- ▶ le registre des chartes foncières locales ;
- ▶ le registre des conciliations foncières rurales.

Article 79 :

Les attributions, l'organisation et le fonctionnement du service foncier rural ainsi que les modalités de tenue des registres fonciers ruraux sont précisés par décret pris en Conseil des ministres.

Article 80 :

Dans les communes urbaines auxquelles sont rattachés des villages, les missions et attributions des services fonciers ruraux sont assurées par les bureaux domaniaux desdites communes en collaboration avec les commissions foncières villageoises créées au sein des conseils villageois de développement.

Section 2 : De la commission foncière villageoise

Article 81 :

Il est créé dans chaque village, sous l'égide du conseil villageois de développement, une sous-commission spécialisée chargée des questions foncières, dénommée commission foncière villageoise. Elle comprend de plein droit les autorités coutumières et traditionnelles villageoises chargées du foncier ou leurs représentants. Elle peut s'adjoindre toute personne ressource dont la participation est jugée utile.

Article 82 :

La commission foncière villageoise est chargée de faciliter la mise en œuvre effective des missions du service foncier rural en contribuant d'une part à la sécurisation et la gestion du domaine foncier de la commune et en participant d'autre part, à la sécurisation foncière de l'ensemble des acteurs ruraux de la commune. En particulier la commission foncière villageoise assure l'information et la sensibilisation de la

population en matière foncière, est responsable de l'identification des espaces locaux de ressources naturelles d'utilisation commune, participe à la constatation des droits fonciers locaux et en général, œuvre à la prévention des conflits fonciers ruraux.

La composition, les attributions et le fonctionnement des commissions foncières villageoises sont précisés par décret pris en Conseil des ministres.

Section 3 : Des instances locales de concertation foncière

Article 83 :

Les communes rurales peuvent créer des instances locales de concertation foncière. Ces instances sont chargées à la demande de la commune, d'examiner toutes questions relatives à la sécurisation foncière des acteurs locaux, à la gestion et à la gouvernance foncières locales, aux questions d'équité foncière et d'utilisation durable des terres rurales et de faire toutes propositions qu'elles jugent appropriées.

En fonction des besoins spécifiques de gestion d'une ressource, des instances locales de concertation foncière peuvent également être créées au niveau intercommunal.

Article 84 :

Les instances locales de concertation foncière ont un rôle simplement consultatif. Elles peuvent cependant de leur propre initiative, faire des propositions au conseil municipal ou au conseil régional, notamment en matière d'élaboration de chartes foncières locales, de prévention des conflits fonciers ruraux ou d'aménagement de l'espace.

Article 85 :

Les instances locales de concertation foncière doivent comprendre des représentants des conseils villageois de développement, des services techniques déconcentrés de l'Etat, de la société civile, des organisations féminines ainsi que des représentants des autorités coutumières et traditionnelles.

Des personnes ressources locales reconnues pour leur expérience, leur intégrité et leur autorité morale peuvent être désignées membres des instances locales de concertation pour une durée déterminée, renouvelable.

CHAPITRE II : DES INSTITUTIONS ET SERVICES CENTRAUX ET INTERMEDIAIRES DE SECURISATION FONCIERE

Section 1 : Des services et institutions déconcentrés de l'Etat

Article 86 :

Les services techniques déconcentrés compétents de l'Etat sont chargés d'apporter leur appui aux services fonciers ruraux en matière de gestion du domaine foncier des collectivités territoriales et de sécurisation du patrimoine foncier rural des particuliers. Cet appui porte également sur le renforcement des capacités.

Les services techniques compétents de l'Etat sont également chargés d'assister les régions dans la mise en place de leurs bureaux domaniaux régionaux, la gestion de leur domaine foncier propre ainsi que dans l'élaboration et la mise en œuvre concertée et participative de leur schéma régional d'aménagement du territoire.

Article 87 :

Les organes de tutelle et de contrôle aux niveaux central et déconcentré veillent à la régularité des actes accomplis par les services fonciers ruraux et d'une manière générale, à la gouvernance foncière locale.

Section 2 : De l'organisme public spécialisé chargé de la constitution, de l'aménagement et de la gestion des terres du domaine foncier rural de l'Etat

Article 88 :

Il est créé un organisme public spécialisé, chargé d'assurer la constitution et la préservation du domaine foncier rural de l'Etat, d'œuvrer à la sécurisation des terres rurales relevant du domaine de l'Etat et de promouvoir l'aménagement, la mise en valeur et la gestion rationnelle des terres rurales aménagées ou à aménager par l'Etat. Il veille au respect des cahiers des charges généraux et spécifiques relatifs aux terres rurales aménagées.

L'organisme public prévu au présent article œuvre également en faveur d'une gestion durable des terres rurales au niveau des communes rurales et des régions. Il peut à la demande de ces collectivités territoriales, intervenir à leur profit dans des conditions prévues par décret pris en Conseil des ministres.

Article 89 :

L'organisme public spécialisé est doté de la personnalité morale et de l'autonomie de gestion.

La dénomination, les attributions, le fonctionnement et les modalités d'intervention de cet organisme public spécialisé sont précisés par décret pris en Conseil des ministres.

Section 3 : Du fonds national de sécurisation foncière en milieu rural

Article 90 :

Il est institué un fonds national de sécurisation foncière en milieu rural. Ce fonds est exclusivement affecté à la promotion et à la subvention des opérations de sécurisation foncière en milieu rural ainsi qu'au financement d'opérations de gestion foncière en milieu rural.

L'organisation, les modalités de fonctionnement, l'alimentation ainsi que les conditions d'utilisation des ressources du fonds sont déterminés par décret pris en Conseil des ministres.

Section 4 : De l'instance nationale de concertation, de suivi et d'évaluation de la politique et de la législation foncières rurales

Article 91 :

L'Etat met en place et assure le fonctionnement régulier d'une instance nationale de concertation, de suivi et d'évaluation de la politique et de la législation nationale de sécurisation foncière en milieu rural.

Article 92 :

L'instance nationale de concertation de suivi et d'évaluation de la politique et de la législation foncières rurales doit réunir l'ensemble des acteurs publics, privés et de la société civile concernés par la gestion rationnelle, équitable, paisible et durable du foncier en milieu rural, y compris les représentants des autorités coutumières, des collectivités territoriales, des institutions de recherche et de centres d'excellence.

L'instance nationale de concertation prévue à l'alinéa précédent du présent article peut être déconcentrée au niveau régional.

Article 93 :

La composition, l'organisation et le fonctionnement de l'instance nationale de concertation, de suivi et d'évaluation de la politique et de la législation foncières

rurales et de ses démembrements sont précisés par décret pris en Conseil des ministres.

TITRE V : DU CONTENTIEUX FONCIER EN MILIEU RURAL

CHAPITRE I : DE LA PREVENTION ET DE LA CONCILIATION PREALABLE OBLIGATOIRE

Section 1 : Des mesures préventives

Article 94 :

L'Etat prend et met en œuvre toutes les mesures nécessaires en vue de prévenir et réduire efficacement les conflits fonciers en milieu rural.

Dans le cadre de la prévention des conflits fonciers ruraux, l'Etat élabore et met en œuvre, en concertation avec l'ensemble des acteurs concernés, notamment les collectivités territoriales et les chambres régionales d'agriculture, les mesures appropriées d'aménagement et de gestion rationnelle de l'espace rural.

Article 95 :

L'Etat et les collectivités territoriales prennent toutes mesures appropriées pour assurer l'implication des autorités coutumières et traditionnelles, de la société civile et des personnes ressources dans la prévention des conflits fonciers ruraux.

Section 2 : De la conciliation

Article 96 :

Les conflits fonciers ruraux doivent faire l'objet d'une tentative de conciliation avant toute action contentieuse. La tentative de conciliation en matière de conflits fonciers ruraux est assurée par les instances locales habituellement chargées de la gestion des conflits fonciers. Les chartes foncières locales déterminent la procédure applicable devant les instances locales de conciliation.

En considération des circonstances locales, les chartes foncières locales peuvent prévoir la mise en place d'instances locales ad hoc chargées de la gestion des conflits fonciers ruraux.

L'instance locale chargée de la gestion alternative des conflits dispose d'un délai de quarante cinq jours à compter de sa saisine pour mettre en œuvre la conciliation entre les parties. Ce délai peut être prolongé une seule fois.

Article 97 :

Toute procédure de conciliation doit faire l'objet d'un procès-verbal de conciliation ou de non conciliation.

En cas de conciliation, le procès-verbal de conciliation doit être soumis à homologation du président du tribunal de grande instance territorialement compétent. En cas de non conciliation, la partie la plus diligente peut saisir le tribunal compétent, en joignant à l'acte de saisine le procès-verbal de non conciliation.

Les procès-verbaux de conciliation ou de non conciliation sont enregistrés dans les registres des conciliations foncières rurales tenus par les communes rurales. Une copie du procès-verbal est délivrée à chacune des parties. Les copies de procès-verbaux de conciliation ou de non conciliation sont soumises au droit de timbre communal.

CHAPITRE II : DE LA COMPETENCE JURIDICTIONNELLE, DES INFRACTIONS ET DES SANCTIONS

Section 1 : De la compétence des juridictions

Article 98 :

Le tribunal de grande instance a compétence exclusive pour connaître des litiges fonciers opposant des individus, groupes d'individus ou personnes morales de droit privé en ce qui concerne l'existence, la nature ou la consistance des droits fonciers en milieu rural.

Article 99 :

Dans le cadre de l'instruction d'un litige foncier, le tribunal de grande instance peut à titre de renseignement, consulter les commissions foncières villageoises, les services fonciers ruraux, les autorités coutumières ainsi que les représentants des chambres régionales d'agriculture. Il peut également se faire communiquer sans se déplacer les registres fonciers locaux.

Article 100 :

Les juridictions administratives sont compétentes pour connaître des litiges fonciers opposant l'administration et les personnes ou groupes de personnes de droit privé, en ce qui concerne les attributions, les adjudications et les cessions de terres rurales faites par l'administration, l'établissement et la délivrance des actes administratifs y afférents. Les juridictions administratives sont également compétentes pour juger de la validité des chartes foncières locales.

Article 101 :

Tout jugement concernant une terre rurale non immatriculée, emporte obligation pour la partie qui a gagné le procès, de faire procéder à l'immatriculation de la terre concernée, conformément à la décision.

Section 2 : Des infractions et des sanctions

Article 102 :

Constituent des faux et usage de faux en écriture publique, l'altération frauduleuse des registres fonciers ruraux et attestations de possession foncière rurale ainsi que l'utilisation intentionnelle desdits documents.

Article 103 :

Constituent une destruction totale ou partielle de registres fonciers ruraux, les altérations physiques causées intentionnellement dans le but de rendre impossible leur utilisation ou exploitation. Ces faits sont punis d'une peine d'emprisonnement de cinq à dix ans et d'une amende de cent mille (100 000) francs CFA à un million (1 000 000) de francs CFA ou de l'une de ces deux peines seulement.

Article 104 :

Constituent des déclarations mensongères dans le cadre de la procédure contradictoire de constatation de possession foncière rurale, toute prétention abusive de droit et tout témoignage malicieux, faits intentionnellement dans le but de se faire reconnaître des droits fonciers ou de faire reconnaître de tels droits à une tierce personne. Ils sont punis d'une peine d'emprisonnement de trois mois à trois ans et d'une amende de cinquante mille (50 000) francs CFA à cinq cent mille (500 000) francs CFA ou de l'une de ces deux peines seulement.

Article 105 :

Les violations aux dispositions des chartes foncières ayant un caractère pénal sont définies et sanctionnées par décret pris en Conseil des ministres.

TITRE VI : DES DISPOSITIONS TRANSITOIRES ET FINALES

CHAPITRE I : DES DISPOSITIONS TRANSITOIRES

Article 106 :

Les procès-verbaux de constatation de possession foncière établis avant l'entrée en vigueur de la présente loi, dans le cadre d'opérations pilotes de sécurisation foncière ont valeur d'attestations de possessions foncières rurales. Sous réserve du statut éventuel de domanialité des terres concernées, ils ouvrent à leurs détenteurs le bénéfice de l'ensemble des droits et avantages prévus par la présente loi aux détenteurs d'attestations de possession foncière rurale.

Les opérations de sécurisation foncière concernées par la présente disposition sont précisées par décret pris en Conseil des ministres.

Article 107 :

A défaut de charte foncière locale, les matières relevant de celles-ci sont réglées conformément aux us et coutumes fonciers locaux, pour autant que ceux-ci ne soient pas contraires aux textes en vigueur, aux droits humains et aux bonnes mœurs.

Article 108 :

A compter de l'entrée en vigueur de la présente loi, le procès-verbal de palabre est remplacé par l'acte de cession de possession foncière rurale prévu à l'article 48 ci-dessus.

Les procès-verbaux de palabre établis antérieurement à l'entrée en vigueur de la présente loi restent valables.

Article 109 :

L'Etat met en œuvre une campagne de communication et d'information foncière, comprenant la large diffusion de la présente loi auprès des services concernés, sa vulgarisation auprès des populations et des actions de sensibilisation par tous moyens appropriés, sur la sécurisation foncière rurale.

Article 110 :

L'Etat élabore un programme national de sécurisation foncière en milieu rural visant à assurer la mise en œuvre effective de la présente loi. Le programme national doit définir le chronogramme de mise en place de l'ensemble des institutions centrales et locales de gestion foncière prévues par la présente loi, les actions de renforcement des capacités des administrations chargées de la mise en œuvre des dispositions de la présente loi.

Article 111 :

La mise en œuvre de la présente loi fait l'objet d'un suivi permanent et d'une évaluation participative après une période de cinq ans à compter de son entrée en vigueur.

CHAPITRE 2 : DES DISPOSITIONS FINALES

Article 112 :

La présente loi qui abroge toutes dispositions antérieures contraires sera exécutée comme loi de l'Etat.

**Ainsi fait et délibéré en séance publique
à Ouagadougou, le 16 juin 2009.**

Le Président : Roch Marc Christian KABORE

Le Secrétaire de séance : Kadiatou KORSAGA/KEITA

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