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Where is local democracy? In the shadows of global forest policy in Burkina Faso

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Where is local democracy? In the shadows of global forest policy in

Burkina Faso

Mawa Karambiri

Academic dissertation
for the degree of Doctor of Science (Dr. Sc.) in Agriculture and Forestry under the Doctoral
Programme in Sustainable Use of Renewable Natural Resources (AGFOREE)

To be presented, with the permission of the Faculty of Agriculture and Forestry of the University of Helsinki, for public discussion in Raisio Hall (ls B2) at the University of Helsinki, Forest Sciences Building, Latokartanonkaari 7, on Friday 13th December 2019, at 12 o'clock noon.

Helsinki 2019

ABSTRACT

Democracy as the government of the people by the people and for the people, equally represented is one of the most contested claims worldwide yet cherished by many and associated with a universal human right. The word "democracy" did not appear in the global participatory forest policy i.e., the shifting of global forest paradigm toward more participation in the 1970s. However, one of the core ideas of democracy, namely the right of local people to participate in the decision making over the use and management of their forest resources underpinned the policy proposal. Donors and international development agencies such as the United Nations Development Program (UNDP), the Food and Agriculture Organisation (FAO) and other large nongovernmental organizations subscribed to these principles and aimed to translate them into local contexts. Likewise, central government in sub-Sahara Africa, specifically in Burkina Faso undertook political decentralization reforms and participatory forest management programmes to implement these principles of inclusion and self-determination at the local level. It is worth mentioning that beside these discursive aspects of democratisation, the material and political economy of decentralisation and participation in sub-Sahara Africa is argued to be a measure taken to mitigate the negative effects of structural adjustment policies, increase popular legitimacy and public responsibility for growth and social welfare. However, in practice, participatory forest policy and decentralization still await an effective devolution of decision-making authority to local people and the improvement of their livelihoods. In addition, the state and non-state policy translators as above continue to choose processes, plan and implement environmental projects, often in partnerships with other than the democratically elected bodies. In doing so, they risk privatizing common resources, undermine democratization, shrink the public domain and limit citizenship and the spaces available for local people's engagement in forest management. While literature exists on those issues, it remains unclear how these three dimensions of local democracy i.e., representation, citizenship and public domain operate under environmental interventions in the context of Burkina Faso. Therefore, I ask how participatory forest policy is translated at the local level in sub-Sahara Africa, specifically in Burkina Faso. How do the translation processes influence local democracy?

I adopted a policy translation perspective to acknowledge the turbulence of policy processes, the agency of both project implementers and local people and the unpredictability of the policy outcomes. I further used the theoretical lens of the "choice and recognition" framework to assess the democracy effects of forestry interventions namely on local peoples' representation, citizenship and the public domain.

I investigated these three components of local democracy through the four articles included in this dissertation: The politics of representation in forest restoration in Africa (Article II); the dynamics of citizenship in forest conservation politics in Burkina Faso (Article III) and the patterns of the public domain through a gender and institutional bricolage lens (Articles IV and I), using qualitative research methods. I collected data with national and local level actors using participant-observation, semi-structured, in-depth interviews, group and focus group discussions in gendered and ethnically disaggregated groups. The recordings were transcribed and the data coded in Atlas.ti 8. I applied content and discourse analysis to interpret the results and produced basic descriptive statistics in an Excel spreadsheet.

The results showed that in Burkina Faso, global forest policy was translated at the local level through political decentralization reforms and participatory forestry projects. The choices of local institutions made by the project implementers influenced the substantive representation of local people's interests and the effectiveness of forest restoration outcomes (Article II). The forestry interventions unintentionally produced uneven forms of citizenship, turning citizens into denizens i.e., those whose citizenships was revoked (Article III). Lastly, Articles IV and I depicted the multi-layered and

complex dynamics in the public domain, continually contested by both customary and post-colonial state logics.

From the findings, it can be inferred that participatory forestry has the potential to strengthen local democracy through political decentralisation. However, the current policy translation processes based on the multiplication and recognition of parallel and competing local institutions' representatives such as user groups can undermine democratisation, weaken substantive representation, erode the material foundations of political belonging and citizenship and reduce the effectiveness of the public domain for meaningful change.

Local realities and the actors carrying the burden of forestry interventions remain sometimes invisible in the shadows of global forest governance. A more practical approach to participatory and decentralized forest management could help mitigate the emerging issues. Further improving the lenses used to study these such as the choice and recognition framework could be a step forward in shedding light on the local processes and outcomes and advance an understanding of what hampers and enables democracy in and through global forest policy. Thus, I recommend to more systematically pay attention and integrate indicators of local democracy when trying to apply global forest policies in a local context.

Key words: local democracy, community participation, policy translation, institutional choice, citizenship, public domain, institutional bricolage, gender, restoration, forest conservation.

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RESUME EN FRANCAIS

Où est la démocratie locale ? Dans l'ombre de la politique forestière mondiale au Burkina Faso

La démocratie en tant que gouvernement du peuple par et pour le peuple, également représenté, est l'une des revendications les plus contestées, pourtant chérie par beaucoup et associée à un droit humain universel. A sa conception dans les années 1970, la politique forestière participative sur le plan mondial n'a pas utilisé le mot « démocratie ». Cependant, l'une des idées fondamentales de la démocratie, à savoir le droit des populations locales à participer à la prise de décisions concernant l'utilisation et la gestion de leurs ressources forestières, sous-tendait la proposition de politique. Les bailleurs de fonds et agences de développement internationales telles que le Programme des Nations Unies pour le développement (PNUD), l'organisation mondiale pour l'alimentation et l'agriculture (FAO) et d'autres grandes ONG ont adhéré à ces principes en vue de les traduire dans les contextes locaux. De même, en Afrique sub-saharienne, en particulier au Burkina Faso, le gouvernement a entrepris la politique de décentralisation et des programmes de gestion participative des forêts pour mettre en œuvre ces principes d'inclusion et d'autodétermination au niveau local. Il convient de mentionner qu'outre ces aspects discursifs démocratisation, l'économie matérielle et politique de la décentralisation et de la participation en Afrique subsaharienne est également considérée comme une mesure prise pour atténuer les effets négatifs des politiques d'ajustement structurel, accroître la légitimité populaire et la responsabilité publique pour la croissance et le bien-être social.

Cependant, dans la pratique, la politique forestière participative et la décentralisation attendent toujours un transfert effectif du pouvoir décisionnel aux populations locales et l'amélioration de leurs moyens de subsistance. En outre, les organisations (non)gouvernementaux continuent de choisir des processus, de planifier et de mettre en œuvre des projets environnementaux, souvent en partenariat avec des organismes autres que ceux démocratiquement élus. Ce faisant, ils risquent de privatiser les ressources forestières communes, saper la démocratisation, réduire le domaine public et limiter la citoyenneté et les espaces disponibles pour la participation des populations locales à la gestion des forêts. La littérature aborde ces questions dans d'autres contextes, mais dans le cadre des interventions environnementales menées au Burkina Faso, on ignore comment ces trois dimensions de la démocratie locale, à savoir la représentation, la citoyenneté et le domaine public fonctionnent. D'où la question de recherche comment la politique forestière participative est traduite au niveau local en Afrique subsaharienne, en particulier au Burkina Faso. Comment les processus de traduction influencent-ils la démocratie locale ?

J'ai adopté le concept de « traduction de politique » pour reconnaître la turbulence des processus politiques et l'imprévisibilité des résultats. J'ai également utilisé le cadre théorique du « choix et de reconnaissance » pour examiner les effets des interventions forestières sur la démocratie, notamment sur la représentation des populations locales, la citoyenneté et le domaine public.

J'ai analysé ces trois composantes de la démocratie locale à travers les quatre articles inclus dans cette thèse : Les politiques de la représentation des populations locales dans la restauration des forêts en Afrique (article II); la dynamique de la citoyenneté dans les politiques de conservation des forêts au Burkina Faso (article III) et les caractéristiques du domaine public à travers une perspective de genre et de bricolage institutionnel (articles IV et I).

En utilisant des méthodes de recherche qualitative, j'ai collecté les données avec des acteurs nationaux et locaux à l'aide d'observations participantes, d'entretiens approfondis et semi-structurés, ainsi que de discussions de groupe désagrégés selon le genre et l'ethnicité. Les enregistrements ont été transcrits et les données codées dans Atlas.ti 8. J'ai appliqué l'analyse du contenu et du discours pour interpréter les résultats et produire des statistiques descriptives dans Excel.

Les résultats montrent qu'au Burkina Faso, la politique forestière participative a été traduite au niveau local par le biais de réformes de décentralisation et de projets forestiers participatifs. Les choix des institutions locales faits par les projets forestiers ont influencé la représentation concrète des intérêts des populations locales et l'effectivité des résultats de la restauration des forêts (Article II). Les interventions forestières ont involontairement produit des formes de citoyenneté inégales, transformant les citoyens en déni de citoyenneté, c'est-à-dire ceux dont la citoyenneté a été révoquée (article III). Enfin, les articles IV et I ont montrés la complexité et fragmentation du domaine public, continuellement contestée par les logiques coutumières et d'état postcoloniale.

De ces résultats, je peux en déduire que la foresterie participative a le potentiel de renforcer la démocratie locale grâce à la décentralisation politique. Les réalités locales et les acteurs qui supportent le fardeau des interventions forestières restent parfois invisibles dans l'ombre de la gouvernance forestière mondiale. Une approche plus pratique de la gestion forestière participative et décentralisée pourrait aider à atténuer les problèmes émergents. De plus, améliorer les approches utilisées pour étudier la démocratie en action dans le domaine forestier tels que le cadre théorique du « choix et de reconnaissance » pourrait être un pas en avant pour faire progresser la compréhension de ce qui entrave et facilite la démocratie locale. Ainsi, je recommande de plus systématiquement prêter attention et d'intégrer des indicateurs de démocratie locale lorsque l'on tente d'appliquer les politiques forestières mondiales dans un contexte local.

Mots clés : démocratie locale, Participation communautaire, traduction de politique, choix institutionnel, citoyenneté, domaine publique, bricolage institutionnel, genre, restauration de forêts, conservation de forêts.

PREFACE

LIST OF ORIGINAL ARTICLES

This thesis is based on the following original articles:

I. Karambiri, M., Elias, M., Vinceti, B., & Grosse, A. (2017). Exploring local knowledge and preferences for shea *(Vitellaria paradoxa)* ethnovarieties in Southwest Burkina Faso through a gender and ethnic lens. *Forests, Trees and Livelihoods*, *26*(1), 13-28.

II. Walters, G., Baruah, M., Karambiri, M., Adjei, Osei-Wusu P., Samb, C., Barrow, E. (2019). The power of choice: how institutional selection influences restoration success in Africa. *Land Use Policy* (Article in press).

III. Karambiri, M., Brockhaus, M. (2019). Leading rural land conflict as citizens and leaving it as denizens: Inside forest conservation politics in Burkina Faso. *Journal of Rural Studies*, *65*, 22-31.

IV. Karambiri, M., Brockhaus, M., Sehring, J., Degrande, A. Community forest institutions in the making in Burkina Faso: Bricolage as a response from below (Submitted).

Mawa Karambiri endorsed the overall responsibility of the dissertation and studies I, III and IV. In study I, Mawa Karambiri designed the research and conducted the field data collection. She analysed the data together with the co-authors Marlène Elias, Barbara Vinceti and Alessandra Grosse. She initiated the manuscript that was further revised by Marlène Elias, Barbara Vinceti and Alessandra Grosse. In study III, Mawa Karambiri wrote the research plan, collected the data in the field, analysed the data and wrote the manuscript that was revised by the co-author Maria Brockhaus. In study IV, Mawa Karambiri introduced the research, collected the data in the field, analysed the data and wrote the manuscript that was reviewed by the co-authors Maria Brockhaus, Jenniver Shering and Ann Degrande. In Study II, Mawa Karambiri contributed with the case study of Burkina Faso in which she conceived the research, conducted the data collection in the field and prepared the case study manuscript. The co-authors Edmund Barrow, Manali Baruah, Prince Adjei and Coumba Samb provided each with a case study respectively on Tanzania, Ghana and Senegal. Gretchen Walters initiated the manuscript that was revised by all the co-authors.

LIST OF MAIN ACRONYMS AND ABBREVIATIONS

CAF: Chantier d'Aménagement Forestier (community-managed forest)

FAO: Food and Agriculture Organization of the United Nations

GGF: Groupement de Gestion Forestière (forest management group)

REDD+: Reducing Emissions from Deforestation and forest Degradation

UGGF: Union de Groupements de Gestion Forestière (union of the forest management groups)

UNDP: United Nations Development Programme

UICN-PACO: International Union for Conservation of Nature, West and Central Africa program

MECV: Ministère de l'Environnement et du Cadre de Vie (former name of the Ministry of Environment of Burkina Faso

MEDD: Ministère de l'Environnement et du Développement Durable (Ministry of Environment of Burkina Faso)

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1. Introduction

1.1. What is local democracy?

Local democracy and democracy at large refer to the idea of "the government of the whole people by the whole people, equally represented" (Mill 2009:161). The concept is essentially contested worldwide and throughout history (Gallie 1955; Kahan 1998; Doughty 2014) and what democracy is, what it is meant for remains highly controversial. However, democracy is described as a type of political system in which popular control of policymakers is institutionalized as the highest and most important principle (Mayo 1962) in addition to subsequent principles of political equality among the citizens, inclusion, a degree of freedom of expression and transparency in public affairs (Saward 2003). At the core of democracy is the desire to ensure that representatives are responsive to the citizens' needs and accountable to them and that the citizens in turn are able to hold the representatives accountable and accordingly issue sanctions (Pitkin 1967; Plotke 1997).

As such, democracy is believed to enable greater administrative efficiency, accountability, equity and transparency in public decision-making and poverty reduction (Johnson 2001). Likewise, in natural resource management including forestry, democratic institutions are believed to offer a better avenue for meaningful local participation into forest and climate policy frameworks such as community-based forest management (Ribot 2006) or more recently the Reducing Emissions from Deforestation and forest Degradation (REDD+) programme (Nuesiri 2018). However, not all societies may be fit for the liberal democratic system nor is the system itself the only way to realise the core ideals of democracy, warned Mayo (1962). In this regard, Landemore (2017) advocated for a more deliberative decision making system where public power is not concentrated in the hands of elected officials but directly accessible to the ordinary citizens. This echoes in Diaw Chimère's work on natural resources management and local democracy in Africa. The author argued that in post-colonial rural Africa where plural rights systems co-exist, a narrow understanding of representative democracy focusing solely on electoral representation and legal accountability will limit local agency and thereby undermine the very substance of democracy (Diaw 2009).

These observations underline the complexity of the public domain, contested by both state logic based on civil or territory rights and the customary logic derived from what Diaw (2005) referred to as "blood rights". Environmental interventions such as forestry projects also navigate between these two realms (Karambiri et al. submitted). Following this argumentation, "democracy politics" rooted in claim making, struggles and self-determination are critical as they determine the substance of democracy, the political power available for marginalized social groups and the democracy outcomes (Luckham, Kaldor, and Goetz 2000). For the purpose of analysing policy processes and outcomes, Ribot, Chhatre, and Lankina (2008) suggested to observe the working of democracy at the local level along three interconnected political components: representation, citizenship and the public domain. The authors argued that the characteristics of how local peoples, their needs and interests are represented within forestry interventions, influence their incentives and opportunities to engage in forest management and in public decision-making.

1.2. Local democracy and global participatory forest policy

The global participatory forest policy or the shift of a global forest paradigm towards more inclusive participation in the 1970s was an important milestone towards democratizing forest management. Defined as a range of policies, initiatives and processes that aim to enhance the role of local people in forestry development, participatory forest policy assumes that the local people are more suited to lead the sustainable management of the forest resources because of their physical proximity and historical, socio-cultural, political and economic relationships with the forest resources (FAO 1978).

Although the word "democracy" was not used at that time, some of the core premises of democracy, specifically the right of the local people to have a say in the decision making over their own forests has shaped national policies and programmes worldwide (FAO 2016). Local participation and authority over forests is argued as essential for democracy, local development and the sustainability of the world's forests (Monditoka 2011). In addition, within the context of governance, the multi-stakeholder processes lying at the heart of participatory forest policy are increasingly viewed as manifestations of democracy in action (German et al. 2009).

As such, donors, international development agencies and other NGOs claim to promote local democracy directly or indirectly through participatory projects or by inciting governments to undertake democratic reforms such as political decentralization (Agrawal 2001). Political decentralization and democracy are interrelated processes, each contributing to reinforcing the other (Ouedraogo 2006). In addition, "at its most basic, decentralization aims to achieve one of the central aspirations of just political governance: democratization, or the desire that humans should have a say in their own affairs" (Agrawal & Ostrom 2001:488). As a development tool, decentralisation is aimed at increasing efficiency, equity, public participation and democracy (Crook and Manor 1998; Manor 1999; Larson 2012). It also aimed at promoting sustainable forest management by local people while contributing to poverty reduction (Larson et al. 2007). Following decades of implementation, there are reports of participation and decentralisation discourses moving towards "a new emancipatory language of democracy, pluralism and rights" (Ribot 2002) as well as a shift of community-based forest management towards democracy and a right-based approach (Wollenberg, Anderson, and Edmunds 2001).

Beyond the enthusiasm over and discursive claims of participation and democracy as outlined above in the justification of decentralization, scholars pointed to an underlying agenda pertaining to the material and political economy underpinning decentralisation reforms in sub-Sahara Africa. In this regard, Ribot (2002) argued that governments have adopted decentralisation for various political economic, social and ideological reasons, including the pressure of aid and development agencies. From a neo-liberalism perspective, decentralisation is viewed as a response to popular uprisings and a mean to attenuate eventual socio-political tensions following the first phase of the structural adjustment policies (World 2000). Decentralisation reforms are also argued to be a strategy to propel popular legitimacy while placing responsibility for growth and social welfare onto local and non-state actors and the individual in the context of reduced public service provision (Ferguson 1995).

The next section presents how the global participatory forest policy and the underlying path-dependencies and democracy precepts have shaped forest policy and instruments in Burkina Faso.

1.3. Local democracy and participatory forest policy in Burkina Faso

Overview of participatory forest policy in Burkina Faso

Two distinct periods and governance patterns characterise forest policy in Burkina Faso. First, a state centralised forest management system inherited from French colonisation (1919-1960) (Bouda et al. 2011). Therein, forests belonged to the state and local people were viewed as a threat to forest conservation and consequently excluded from the resources' management (Sawadogo 2006). However, successive droughts in the Sahel region in the 1970s coupled with shortages of fuelwood in the capital Ouagadougou showed the limits of centralised forest management and prompted the need for more efficient forest governance solutions (Ouedraogo 2009). Second, attempts to decentralise forest management started in the 1970s with the implementation of large-scale plantations of exotic and fast-growing tree species for fuelwood supply and for fighting against desertification. These policies involved local people as mere labourers and were argued to be costly

and unsuccessful (Bellefontaine, Gaston, and Petrucci 2000). From the 1980s and onwards, a participatory approach *approche participative* has gradually shaped forestry reforms in the country. For example the *les trois luttes* policy or 'the three fights' against livestock wanderings, wild fires and deforestation adopted in 1985, the environmental code (1997, revised in 2013 e.g., Art.8, 9 &12), the forest code (issued in 1997 and revised in 2011 e.g., Art. 3, 7, 34, 38, & 66) have provided the foundation for several community-based forest management programs and projects (for instance the natural forests' management program- PAFN that established the *Chantier d'Aménagement Forestier-CAF*. See chapter 3 below for more details). These programs adopted the participation of local people and local communities and civil society and other development agencies as imperative for meeting the fuelwood needs while promoting local development and sustainable forest management. Moreover, the national forest policy document *politique forestière nationale* adopted in 1998 affirmed the principles of participation and democracy outlined in the Constitution of 1991, the national development strategies and the environmental laws and regulations as the foundation for governing forests in Burkina Faso (for more on the policy frameworks see annexe 1).

In practice however, rarely are those reforms associated with local people' enfranchisement and significant poverty reduction (German et al. 2009). While some positive ecological outcomes were reported (MECV 2004), including the diversification of rural livelihoods and revenues (Ouedraogo 2009; IUCN 2006; Ouedraogo and Ferrari 2015), critics argued that the design and implementation of participation often reflect the preferences and norms of the dominant agency and that the local or supra-national elites usually capture the benefits (Dressler et al. 2010; FAO 2016, 2007; Thieba 2003). In addition, scholars argued that participatory forestry could not provide adequate frameworks for the exercise of the decision making authority devolved to the local level actors (Sawadogo 2006; Thieba 2003). Instead, as Gautier and Compaore (2006), Côte and Gautier (2018) argued, most of the decisions are imposed on the local people either by the technical staff appointed to foresee the implementation of the forest management plan or by powerful market actors such as the wholesale wood patrons

Moreover, local participation and representation based on users' group did not always translate into an economic return for the local communities as a whole (Thieba 2003) nor did the overall benefit sharing scheme improve significantly the sustainability of the forest resources (Tanyi 2015). Rather these induced conflicts, resentment and sometimes disengagement of non-members from the forest management (Karambiri et al. submitted). Furthermore, Ouédraogo (2003) and Coulibaly-Lingani (2011) argued that government's conflicting agricultural and forest policies can lead to large scale land privatization and land grabbing that erode local peoples' land tenure security while compromising their livelihoods and social peace. Political decentralisation was anticipated to mitigate many of these issues (Bouda et al. 2011; Arevalo 2016; MECV 2007; Brockhaus and Kambiré 2009); however, Coulibaly-Lingani (2011) already reported conflicts over the forest benefit-sharing between the state forest services, the users' group and the new elected local governments. The section below presents the political decentralisation process in Burkina Faso, its relation to participatory forest management and democracy and the emerging challenges.

Decentralization as an avenue for local democracy in forest management

While above I introduced decentralisation as a tool employed by the international community to promote democracy (and participation within) at the national level as part of global forest policies, here I focus on how this is mirrored in decentralization processes in Burkina Faso, from the national to the local level. In this context, decentralisation is defined as the transfer of public decision-making powers from the central government to sub-national and local representative authorities (Ribot, Lund, and Treue 2010). Decentralisation harbours various forms depending on the nature of power

transferred and the institutions that receive it. For Ribot (1999), deconcentration occurs when central government transfers power to its branches across different levels of jurisdiction. Privatization takes place when the decision-making power over public resources is devolved to private organisations. Decentralisation is political when meaningful powers are transferred to democratically elected local governments that are responsive to the needs of their constituencies and accountable to them (Ribot, Chhatre, and Lankina 2008). These forms of decentralisation are simultaneously taking place in Burkina Faso. However, this study is concerned with the political decentralisation.

In Burkina Faso, political decentralisation has a constitutional basis (e.g., Art. 31, 145 of the Constitution) and is argued to be an important tool for democratisation (KY 2010) and specifically democratisation of forest management at the local level (Bouda et al. 2011). Furthermore, the decentralisation law *la loi n°055-2004 portant Code Général des Collectivités Territoriales (CGCT)* (first version issued in 1993, revised in 2004 and 2018) reflected local development and democratisation as part of the main goals of decentralisation reforms. It reaffirmed the right of local people to information and participation in public decision-making and the right of local communities (*les collectivités locales)* to plan their territory and land uses including forest management (e.g., Art. 88-90).

However, as Ribot (2009), Larson and Ribot (2004) and Champagne and Ouedraogo (2008) argued, rarely is democratic decentralisation implemented in practice because of numerous obstacles including the reluctance of the state to trust and transfer meaningful competences and resources to local actors. Furthermore, Ribot, Agrawal, and Larson (2006) reported dynamics of the state recentralizing forest management while implementing decentralization reforms. In Burkina Faso, for Sawadogo (2006) the government is using the principles of subsidiarity and progressiveness to delay the full transfer of competences over lucrative and strategic resources such as forests. Consequently, on the ground, two main characteristics of decentralized forest management are practised. The community-managed forests (CAF) created before the decentralisation law of 2004. In those CAF, the forest users' groups are the exclusive spaces for public participation and their members represent the whole community. In contrast, a new participatory forestry model placing the forest users' groups under the control of the local government is being implemented in the country. The case studies in this dissertation cover both models of implementing participatory forest policy. The next section introduces the study objectives and research questions.

1.4. Study objectives and research questions

With the above, I could show that forest policy and instruments support democracy and local peoples' participation in forest management and related decision-making in Burkina Faso. The government and more importantly the development agencies such as large NGOs hold a critical stake in how these principles are translated in practice (Gray 2002). The policy translation procedures may also be done in ways that undermine the very ideas of democracy (Nuesiri 2017). In this sense, the policy implementers as above may transfer power and resources to non-representative institutions, thereby, undermining the ongoing democratic decentralisation reforms (Manor 2004; Ribot, Chhatre, and Lankina 2008). The implementation of participation through forest users' group may also amount to public resources' privatization to those groups, hence narrowing the opportunities for public engagement (Delville 2006; Larson and Ribot 2004). However, far from being passive policy recipients, we know that local actors act and attempt to reshape and adjust the original policy instruments to their interests (Wedel 2005; Cleaver 2002; Cleaver and De Koning 2015; Hall et al. 2014). These grassroots dynamics are often ignored yet they remain critical for a systematic understanding of local democracy: namely i) the public provisions available for people' participation in forestry interventions (public domain), ii) the meaningful representation of their interests

(representation) and iii) their political engagement in public decision-making (citizenship). Hence, the general objective of this dissertation was to investigate how the global participatory forest policy is being translated at the local level and how local democracy premises unfold within the translation processes in sub-Sahara Africa specifically in Burkina Faso.

The specific objectives were to:

I. Investigate the politics of local people' representation in forestry projects and its influence on forest conservation and restoration outcomes in sub-Sahara Africa specifically in Burkina Faso (Article II);

II. Understand the dynamics of citizenship and political belonging (i.e., how citizenship is acquired, exercised and reconfirmed or lost) in forest conservation politics in Burkina Faso (Article III);

III. Analyse the dynamics of public domain through:
   a. Assessing the drivers and outcomes of institutional change in community forest management in Burkina Faso (Article IV);
   b. Exploring the socio political, cultural and customary diversity that shapes the management, knowledge and preferences for forest resources in Burkina Faso (for example, shea ethnovarieties) using a gender and ethnicity lens (Article I).

The specific research questions were:

I. What logics underpin local people's representation in forestry projects and what are the effects on forest conservation and restoration outcomes in sub-Sahara Africa specifically in Burkina Faso?

II. How do forest conservation politics influence the dynamics of citizenship in Burkina Faso?

III. What are the dynamics of the public domain in Burkina Faso?
   a. Within participatory forestry intervention, what drives and determines the outcomes of institutional change in community forest management (CAF)?
   b. Outside of the forestry project, how do gender and ethnicity influence the management, knowledge and preferences for forest resources, for example shea ethnovarieties?

The dissertation includes four articles; each discusses different components of local democracy in various stages of policy translation: without forestry project intervention (Article I), at the beginning (Article II), at the end (Article III) and after project intervention over time (Article IV). While Articles II, III and IV form a thematically cohesive entity, the theoretical framing of Article I belongs to a different body of literature and is based on work done before deciding on the final framework of the dissertation. However, I considered it relevant for the dissertation to shed further light on the diversity in the public domain and the diverse actors and interests at play at the very local level, with or without project interventions. Specifically, Article I allowed me to elaborate on the dynamics surrounding gender and ethnicity, in this particular case concerning the management of shea ethnovarieties. In doing so, Article I connected to the overall framing of the dissertation and offered the opportunity to capture the changing and contested nature of the public domain in a post-colonial state context. Article IV complemented the study of the public domain by showing how such pre-existing traditional diversity could influence forest policy translation processes and institutional outcomes over time. Article II contributed more to the manufacturing of local people's representation in forestry projects

with a focus on the role and practices of policy translators. Article III depicted citizenship dynamics under a forestry project implementation.

Based on a set of qualitative research methods, these articles and the dissertation as a whole provided a more holistic view enabling the reader to see beyond individual cases what hampers and enables efforts to strengthen democracy within and through global forest policy. They also shed light on the local agents that often are considered subject to change and hence remain in the shadows rather than being seen and understood as agents of larger societal change. Furthermore, the dissertation by its focus on local democracy and comparative case studies design advances theoretical and conceptual knowledge on how participatory forest management has been studied in Burkina Faso so far.

Chapter 2 of the dissertation presents the overall theoretical framework followed by the specific concepts (gender, institutional choice, citizenship and institutional bricolage) used in each article. Chapter 3 presents the study materials and methods and Chapter 4 shows the study results per article. In chapter 5 I discuss those results and provide concluding remarks in Chapter 6.

2. Theoretical framework

2.1. General theoretical framework

I adopted the "choice and recognition" framework (Ribot 2006), conscious that analysing policy implementation and outcomes requires a dynamic and open-ended framework to unpack the complex interaction between discourses and practices, conflicting choices and pressures between the political and the technical and various agencies from multiple levels and spaces (Lendvai and Stubbs 2007). To complement this framework, I used the conceptual lens of policy translation to acknowledge the agency of the local people in the policy processes. The section below discusses the premises of the concept of policy translation followed by a detailed account of the choice and recognition framework.

2.1.1. Policy translation and its agents

The concept of translation finds roots in linguistics and translation sciences (Freeman 2009). In sociology and political science, translation of policy refers to the travel of policy ideas from one original state and location to another. The concept acknowledges the changing nature of policy ideas and meanings throughout the implementation process and the influence of diverse political actors at multiple levels. It further highlights the adaptation of the policy's general features to the recipient contexts and circumstances and the complexity of interaction between multilevel actors (Stone 2012). Therefore, the multiple actors, levels and political interests involved in the translation process alter the original policy ideas making it somehow different from the translated version (Freeman 2009).

The policy meanings, discourses and instruments are not only technical but also political. Policy translators such as (non)governmental actors and development agents identify the policy content to be translated and gauge the reception environment; they also make strategic decisions to match the intended policy traits with the recipient actors' worldviews and interests. From this perspective, policy translation assumes a more nuanced distribution of power between policy translators and the local actors; thus, it breaks with the conception of policy makers and translators as unilaterally all-powerful and independent (Herbert-Cheshire 2003). In doing so, the translation perspective recognizes not only the agency and power of the local actors to modify or reject a policy framework but also the complexity and unpredictability of the policy outcomes.

Policy translation retains aspects of previous concepts such as policy transfer. However, policy transfer assumes binary dynamics that convey ready-made policy models and solutions from one location to another. It also focuses on the agency of policy makers in selecting and adapting the policy ideas to their circumstances while ignoring the agency of the people affected by those policies (Lendvai and Stubbs 2007). Therefore, Wedel (2005) among others, advocates for the analysis of policy discourses and practices in relation to the realities of the people affected by its implementation. In this dissertation, a policy translation perspective helps me to unpack first, the prior project institutions and arrangements, second the role and practices of the intervening agents and the agency of the local actors, third the interactions between the project norms and pre-existing systems and lastly, the implications of these for local democracy.

2.1.2. The "Choice and Recognition" framework

Two milestones characterize the choice and recognition framework: first, the politics of the choice of local institutions, also known as institutional choice; second, the effects of the recognition of local institutions on local democracy. Defined by Ribot, Chhatre, and Lankina (2008) as "the choice of the locus of authority", institutional choice refers to the procedures and logics that guide the decision of project implementers to choose and collaborate with specific local institutions and actors in their project. Choosing an institution implies the recognition of that institution. The recognition of an

institution implies the transfer of decision-making powers, skills and resources to that institution, hence increasing its authority and legitimacy in the local arenas. Simultaneously, this choice can also decrease the authority of the institutions that have not been chosen. These potential changes in power relations are argued to influence the ways the local representatives effectively respond to the needs of their citizens and account to them (Wellstead, Stedman, and Parkins 2003). For example, in forestry projects the state and large NGOs, based on diverse beliefs and logics can decide which partners to choose among local institutions, what power and resources to transfer to them and under which conditions. By doing so, they create new mechanisms of responsiveness and accountability between the citizens and their representatives and enable or hinder the effectiveness of the existing mechanisms.

The choice and recognition framework outline the hypothetical conditions under which forestry interventions could strengthen local democracy, specifically its key components: representation, citizenship and the public domain.

Representation

Pitkin (1967) defines representation as the process of making present in some sense something or someone that is not present in the proper sense. To represent is to bring into public decision making the voices of the people who are not physically present in the process. The author characterises three interactive forms of representation: descriptive, symbolic and substantive representation (argued to be more beneficial for democracy than the first two). Representation is descriptive when the representatives are chosen because of their resemblance and shared characteristics with those being represented (for example choosing a woman to represent women in a particular policy domain). As such, the descriptive representative merely stand as a reflection or mirror of those that they represent (Mansbridge 1999; Phillips 1998; Pitkin 1967).

Representation is symbolic when based on symbols dearer to the represented, for example, a flag, a national anthem or charisma. Symbolic representation is primarily not concerned with the actions of the representatives but rather by the feelings their symbolism instils in people. Symbolic representatives can emerge through arbitrary means (i.e., culture, religion and social movements) and persist as long as the group of people they stand to represent believe in them as their symbol. However, symbolic representatives could be responsive to people's needs but they are not bound by the statutory duty of responsiveness and accountability, which are critical elements for democratic representation (Pitkin 1967). Symbolic representation is central to political practices (Stokke and Selboe 2009) specifically in environmental politics where decision makers engage in symbolic politics that make them look responsive to their international and domestic commitments without making the substantive changes that are required to fulfil those commitments (Cass 2009; Blühdorn 2007; Nuesiri 2017).

Substantive representation takes place when the representatives not only speak but also act on behalf of the represented in a responsive manner. Substantive representatives are authorized through elections, thereby; they are expected to be responsive to the needs of their constituencies and accountable to them. Responsiveness entails that the representatives hold discretionary power and resources to know and respond to the constituents' needs. Accountability at its core is the obligation of the representatives to explain and justify a behaviour (Bovens 2006). Upward accountability means that the representatives such as local governments account for their actions to a higher-level authority such as central government, donors or large NGOs. Downwards accountability occurs when the accounting is directed primarily to the local constituencies and the constituencies in turn can hold the representatives accountable through diverse mechanisms of positive and negative sanctions (Przeworski, Stokes, and Manin 1999; Agrawal 1999). In this sense, accountability rises as a counter-

power at the citizens' disposal and a critical element for democratic representation (Ribot 1999, 2003; Oyono and Efoua 2006). By virtue of the dual duties of responsiveness and accountability, substantive representation is argued to be more beneficial for democracy (Pitkin and Hayat 2013; Plotke 1997). In this logic, the choice and recognition framework stipulates that environmental interventions are likely to support local democracy when they practise substantive representation in their interventions by choosing democratically elected officials as compared to the descriptive or symbolic local representatives (Ribot 2006).

Citizenship

Citizenship does not have a consensual definition to date but it is agreed to be a relationship between the individuals and their polity. The communitarian view stresses membership, identity and political belonging to a polity and the ability to act and be seen by others as a full member (Bellamy 2008). From this perspective, citizenship revolves around three interactive components: i) the material foundation of the membership, ii) the individual's sense of political belonging and identity and iii) the actual performance of citizenship or the acts of citizenship (Moro 2016). The practices of citizenship imply the ability of the citizen to influence public decisions and hold the public leaders (representatives) accountable for their mandate independently of individual's identity and interests (Sparke 2004). In this sense, citizenship is a vital democratizing institution because of the amount of power it gives to the citizens through the exercise of accountability (Isin 2008). However, citizenship does not refer exclusively to national citizenship (Lund 2011). The practices of citizenship also constitute a mean to reconfigure citizenship itself beyond the state (Hoffman 2004). The choice and recognition framework assume that the choice of non-responsive and non-accountable local institutions could narrow the spaces available for citizens' engagement in forest management. Here, I conceive citizenship simultaneously as a status, a process, a practice and an outcome, which brings out the dynamics of how citizenship is formed and re-produced.

Public domain

The public domain refers to the material foundations of public authority. Public domain includes various public resources, powers and social structures that are constitutive of public decision making and can also be mobilized by the citizens to influence those decisions (Ribot, Chhatre, and Lankina 2008). This covers material, symbolic and authoritative resources. For Ribot (2004), the more these resources remain under public control the more the public domain can be inclusive. He argues that when decision making over public resources is privatized to resource user groups for instance, the public domain can be fragmented and the incentives for public participation diminished. In forest management in sub-Sahara Africa, the public domain expands beyond the state's legal and judiciary systems to include forestry projects' logics and practices as well as customary norms, rules and regulations. Social characteristics such as gender, ethnicity and status of residence, omnipresent in the public domain, can determine the access and control opportunities over forest resources. Unveiling these complexities and dynamics prior to and after a forestry project's implementation is necessary for a holistic understanding of how the public domain evolves following forest management projects and the overall implications for local democracy. Here, the choice and recognition framework stipulate that the transfer of public resources and forest management rights to private bodies could fragment public authority, reduce citizens' incentives for participation and create negative competition with democratically elected officials.

These dimensions of local democracy are interconnected as the type of representation endorsed in a forestry intervention may have repercussions on the opportunities for citizenship and the attractiveness of the public domain for the citizens to engage in the public decision-making.

With these premises, I investigate the politics of institutional choice and the implications for local peoples' representation and the success of forest restoration in sub-Sahara Africa (Article II). I also analyse the dynamics of citizenship in forest conservation politics in Burkina Faso (Article III). Beside the institutional choices made by policy translators from above, the political, customary and social characteristics omnipresent in the public domain such as gender, ethnicity and status of residence may also influence from below the likelihood of who may be chosen and whose voice matters (Article I). Lastly, I examine the evolution of the public domain through an analysis of the drivers and outcomes of forest institutional change from below in Burkina Faso (Article IV). Each article uses specific concepts and approaches (described in the next section below) and contributes to the three components of local democracy representation, citizenship and public domain (Figure 1).

Figure 1: Theoretical framework including positioning of Articles I-IV
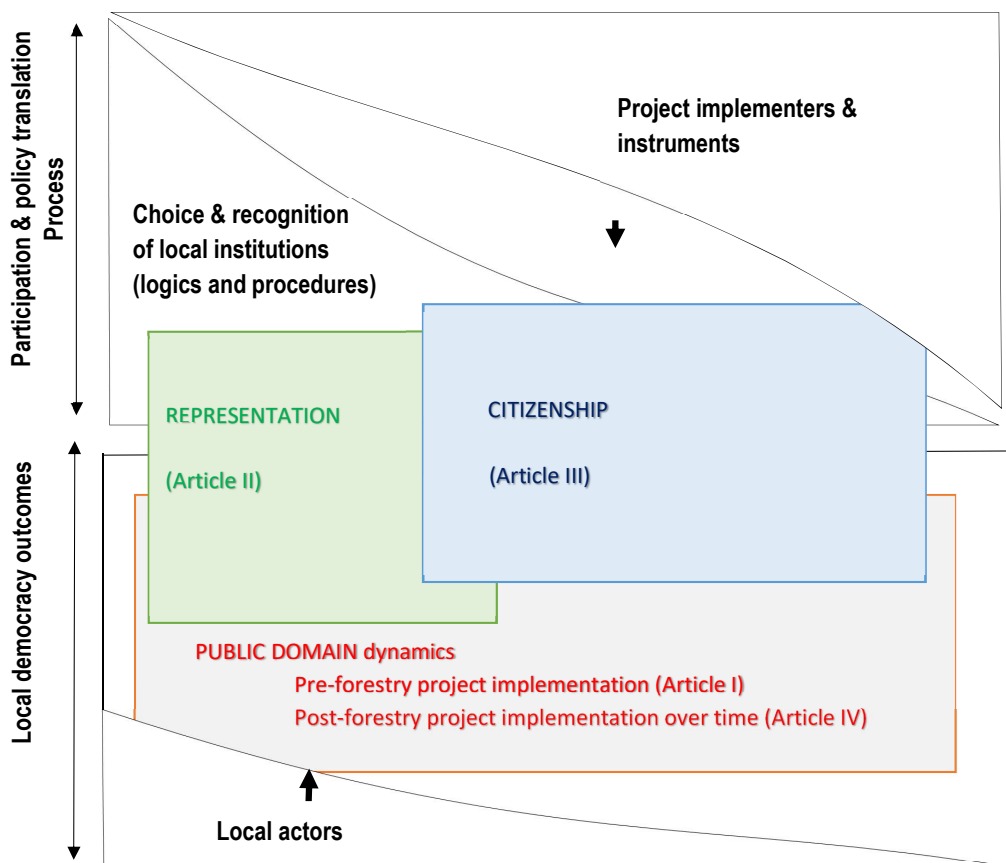
2.2. Concepts and approaches used in specific studies

2.2.1. Gender in local knowledge and preferences for forest resources (Article I)

In sub-Sahara Africa, specifically in Burkina Faso, timber and non-timber forest resources play a vital role in rural livelihoods and ecosystems. One of the valuable, competitive agroforestry resources is the shea tree (*Vitellaria paradoxa*). The shea fruit produces a fat called shea butter that is extracted from the large nuts (Alander 2004); it represents a key source of fat in the local diet (Boffa et al. 1996). Beyond the species' medicinal and cultural values, shea nuts and butter are important export commodities and play a major role in the local economies in impoverished countries (Masters, Yidiana, and Lovett 2004; Pouliot 2012).

However, the species is subject to many socio-economic and environmental threats (Augusseau, Nikiéma, and Torquebiau 2006) that have led to the identification and domestication of superior individuals to ensure the species' conservation (Ræbild et al. 2011). Traditional knowledge and systems of classification are important for the inclusiveness and sustainability of conservation and breeding efforts, as they take into account the farmers' management practices and their selection of preferred shea varieties (Lovett PN 2000; Assogbadjo et al. 2008). For instance, indigenous knowledge of species' traits can help categorize variations in key phenotypic traits (Vodouhè et al. 2011). Based on these traits, farmers recognise different ethnovarieties; or locally defined classifications for a given species, based on intra-specific differences as observed and managed by local farmers (Rivera et al. 2006). However, this folk nomenclature and taxonomies are not without complexities as farmers may recognize several phenotypes as one ethnovariety and several ethnovarieties may refer to a single phenotype (Quiros et al. 1990). The names attributed to ethnovarieties are closely linked to the geography, culture and shared experiences of a given group (Mazzocchi 2006). Thus, folk classification systems often differ across locations (Gwali et al. 2015).

Despite this acknowledgement of the fact that peasants from different gender and ethnic backgrounds and origins could hold distinct and complementary sets of knowledge and preferences with respect to forest resources, the role social attributes play in determining farmer preferences for ethnovarieties has received little attention (Rocheleau et al. 1996; Diarassouba et al. 2008). Hence, the focus here is to better understand the pattern of local knowledge of and preferences for shea ethnovarieties in south-west Burkina Faso and how these vary according to gender and ethnicity. Such social characteristics are important because differentiated access rights and preferences can affect tree management practices and the protection of naturally regenerating shea trees on cultivated lands (Assogbadjo et al. 2008). Moreover, understanding to what extent knowledge and preferences for shea ethnovarieties are shared (or not) across local gender and ethnic groups can improve equity in externally led shea domestication and development programmes. In the overall context of the dissertation, reflections on this article help to understand the importance of making visible the local diversity and overlaps in interests, rights and knowledge among forest-dependant people. Such diversities are critical for uncovering the public domain regarding forest and related resources in sub-Sahara African context.

2.2.2. Institutional choice in forest conservation and restoration (Article II)

Forest conservation and restoration initiatives can emanate from local people but usually these are externally driven projects, funded and translated by agencies such as central governments, large NGOs, donors or conservation organizations (Mansourian 2016); here they are called the intervening agents or policy translators. As per their status, the intervening agents hold resources and control project planning and execution; they have the power to influence restoration outcomes through the choices they make. The choice of local institutions or institutional choice refers to the procedures

through which local institutions are identified and chosen by the intervening agents as project partners. In doing so, the intervening agents recognize the chosen institutions. Such recognition leads to the inclusion of the chosen institutions and the potential exclusion of other actors, including those who participate in the planning and execution of restoration projects; thus, choice recognition and participation are linked.

The reasoning behind institutional choices of intervening agents may relate to existing partnerships that the agencies have with local groups and the bureaucracies of these partnerships, among others (Grindle and Thomas 1989; Jusrut 2015). Poor institutional choices can damage conservation interventions (Ece, Murombedzi, and Ribot 2017) and have recently been explored in the context of carbon forestry in Africa, which showed how in many cases, the recognised institutions can reduce participation by certain sectors of society (Chomba 2017; Mbeche 2017; Nuesiri 2018). However, such dynamics remain poorly explored in the restoration or conservation literature (Larossa 2016). Therefore, Article II investigates the institutional choices made by intervening agents in five forest conservation and restoration projects across sub-Sahara Africa and the impacts of these choices on local peoples' representation and restoration outcomes. The forestry projects analysed in this article took place in different contexts with diverse goals; the main analytical view was to understand if the outcome of increased tree cover occurs in a just social context of sound institutional choices.

2.2.3. Citizenship and political belonging in forest conservation politics (Article III)

The concept of citizenship, despite its contested nature in social sciences, entails a relation between the citizen and his/her polity. I conceptualize citizenship from a communitarian perspective as membership and belonging to a social or political group and the ability to act and be seen as a complete member (Trudeau 2012). Membership and belonging lay out the foundations, the terms of rights, the opportunities of participation and the resources at the citizen's disposal for acting as a citizen and being recognized as such by others. Citizenship is not static; rather it is exercised, inclusive and exclusive; furthermore, it might change over time. Citizenship also entails a plurality of meanings as a status, practice, process and outcome. Here, I analyse citizenship in a context of conflict over forest resources triggered by a forest conservation project. I build my analysis on three interactive elements of citizenship.

First, I considered the material base of an individual being socially and legally recognized by a higher authority as a citizen. Accordingly, this individual is granted social and political rights and is subjected to societal expectations. For example, a village chief can accept migrants as citizens of the village and grant them social and political positions that are usually held only by autochthons. However, in agrarian societies, being recognized as citizens may not necessarily entail direct rights to land although it may legitimize claims over land (Lund 2011). In this case, I illustrate the formation of citizenship through the example of migrants (latecomers) who have been acknowledged by the autochthons as citizens of the village and granted access to lands, political position and a degree of authority over the forest resources.

The second element of citizenship is the sense of identity and belonging to the group as a full citizen. This sense of belonging is formed and reformed over time by the individuals and their experiences and interactions with the group. It implies shared values, rules and norms among the group members and a standard definition of what is required to be—or not to be—a citizen in a given context. This sense of belonging prepares the citizen to take a stance, exercise membership rights in everyday life and shape the destiny of the society. In this case, the latecomer migrants already endowed with the first element put forward their identity and belonging to the village to demonstrate their perceived citizenship and make claims over the forest planning.

The third element is the citizen's ability to act and hold the governing leaders accountable for their decisions. This is critical for demonstrating, shaping or reshaping citizenship because 'what people do with citizenship is of crucial importance to give shape to citizenship itself' (Moro 2016). Acting propels the powerless as actors of power (Foucault 1982) and turns subjects (those passive under an authority) into citizens claiming rights, social justice and social change (Mamdani 1996). These acts of citizenship have two dimensions: on one hand is the citizen taking actions to influence for example the forest processes and eventually sanction (positively or negatively, formally or informally) the decision maker. On the other hand, is the decision maker responding to the citizen's actions (Oyono 2004; Ribot 2004; Schedler 1999). Observing the citizen's acts from such an accountability perspective helps to uncover the interrelationships between the citizens and their polity. Here, I highlight the means, practices and strategies used by the claimants to effectively make their case and hold the local leaders accountable for their decisions in the forest planning.

Furthermore, I paired the key stages of citizenship (i.e., formation, demonstration and outcome) with the three key moments of the conflict (i.e., conflict construction, manifestation and aftermath). Conflict is conceived by Colvin (2015) as an episode of social life made of varying escalation phases that produce the conflict's legacy likely to serve as a basis for future conflicts. In such a conflict situation, I used the social identity theory (Tajfel 1974) to uncover the acts of citizenship through the processes of self-categorization of the in-group, the actors holding the same opinion and the out-group consisting of their opponents (Colvin 2015; Hogg 2016). Within and among these groups, actors might change their positions and thereby determine whether the conflict will yield social change. This helps to categorize the conflict's actors: those primarily favourable to the new forest limits, such as the mayor, those who initially opposed them but eventually accepted (such as the village chief), those who thoroughly conducted the contestation and those who were brought in as mediators. The conduct of the conflict involving these three elements of citizenship resulted in the reformation of citizenship itself and the production of denizens (those who lost their citizenship status).

2.2.4. Institutional bricolage in forest management (Article IV)

I used the concept of institutional bricolage (Cleaver 2012) framed within critical institutionalism (Cleaver and De Koning 2015) to examine the drivers, patterns and outcomes of institutional change in community forest management in Burkina Faso.

Critical institutionalism furthers critical thinking on the commons while endorsing a logic of practice (Bourdieu 1990) where the actors manufacture practices from diverse, contradictory and even messy rationalities. Critical institutionalism objects to the excessive inner capacity of institutions to federate and guide human behaviours in a path-dependent manner or toward a pre-determined goal. Instead, it acknowledges the complexity and uncertainty of institutional dynamics, the diversity in social phenomena, the creativity of individual agency and the influence of social structures in shaping individual behaviour and the outcomes (Cleaver and De Koning 2015). In this sense, the drivers of behavioural change in forest management, such as the CAF in my case, reside within the realm of everyday institutional practices (Arts et al. 2012). The concept of institutional bricolage helps to capture such working and re-invention of institutions by the actors.

Institutional bricolage refers to the ongoing process of the actors, the *bricoleurs* (Cleaver 2002) or the institutional entrepreneurs (Campbell 2007), piecing together existing elements at hand to realise a goal. The practices of institutional bricolage imply reinforcing some institutions, recombining or rejecting others through aggregation, articulation and alteration of new and old, formal and informal institutions (de Koning (2014). Following a few others (de Koning 2014; Funder and Marani 2015; Verzijl and Dominguez 2015), this case sheds critical light on institutional bricolage occurring amid both bureaucratic institutions of the CAF and the pre-existing customary and socially embedded

institutions. The local circumstances, social networks, power relations and the actions of the bricoleurs as they perceive and interpret reality determine the institutional outcomes (Gutu, Wong, and Kinati 2014; Tucker 2010). Scholars such as Cleaver (2002), Cleaver and De Koning (2015) and Arts et al. (2012) highlight different determinants of institutional bricolage, namely networks, agency and power on which I focus my analysis:

First, the networks pertain to the constructs of the relationships between the actors and their socio-ecological structure (Bodin and Prell 2011; Scott and Carrington 2011). From Giddens (1984) I understand networks as the social structures providing the actors with rules (e.g., practices, customs, traditions, ideas and norms) and resources (material and authoritative) enabling them to construct their bricolage repertoires while ensuring its social acceptability and political relevance. The networks structure and convey the bricolage repertoires in space and time.

Second, the exercise of agency or being an agent refers to the capability of individual actors to act purposefully in their society in pursuit of influence or more control over resources. Agency depicts the actors' ongoing labour of producing narratives and meanings to constitute and justify their reactions to everyday challenges. Due to the improvisation associated with the exercise of agency, the bricolage outcomes can be unpredictable and yield unexpected or unintended consequences (Balkin 1994; Cleaver 2007; de Koning 2014). Here I assess how villagers of different ethnicities and residence status (autochthons/migrants) enact their agency and create meanings while they drive and manoeuvre change.

Third, power is inseparable from both networks and agency and its exercise in natural resource management is entwined and embedded in everyday social life (Cleaver 2002). I conceive power as the purposeful and intentional mobilization of structures to enforce one's opinion and reduce others' autonomy (Dowding 2016). Following Giddens (1984), I conceptualize power not as a resource *de facto* but the product of the control that various actors exercise over the allocative (land, forest) and authoritative resources (customs, discourses, symbols, roles, dependencies and policies) to sustain and undermine claims. The working of power relations determines which bricolage strategies are adopted by the most powerful actors and then imposed on others as the position of the overall community.

3. Materials and Methods

3.1. Study sites

I chose three principal study sites in Burkina Faso based on the presence of community-managed forest (CAF) and for logistics and practical reasons: the south-western region for Article I, the centre-east for Articles II and III and the centre-west region for Article IV (Figure 2). Article II has four other case studies from Ghana, Senegal and Tanzania. Nonetheless, I choose here to focus on the description of the study site located in Burkina Faso. Beforehand, I introduce briefly the CAF, a typical example of community-managed forest in Burkina Faso.

An example of community-managed forest (CAF)

The community-managed forests or *Chantier d'Aménagement Forestier* (CAF) in French is a socio-ecological system paired with a multilevel governance architecture. The CAF aims to promote participation and improve local peoples' livelihoods by implementing a forest management plan while organizing fuelwood harvest. The UNDP and FAO championed project on natural forest management for the sustainable provision of the capital Ouagadougou with fuelwood, called the 'BKF, PNUD/FAO/85/011 project' was the first of a series of projects aiming to implement participatory forest management. In partnership with national programs the project BKF created between 1986 and 1998 seven (7) community-managed forests in the southern forested part of the country for a total of 252,118 ha (Sawadogo 2006; IUCN-PACO 2012; MEDD 2015).

The CAF is created in two key steps extensively described by Sawadogo (2006). First, for the constitution of the ecological system the project BKF negotiated forested lands with the autochthons. Those lands were demarcated and divided into forest management units. Each forest unit comprised several forest plots where the fuelwood harvest takes place. Several villages harvest fuelwood on the same forest unit. Depending on the total number of forest units, a CAF has a rotating cycle of 15 years or more. Based on Karambiri et al. (submitted) several challenges emerge at this stage: the project BKF merged lands belonging to several villages together to form the forest units; thus, they set precedents for conflict over customary territory between those villages. Moreover, the project did not document the land concession terms with the autochthons accurately, nor did they register the new CAFs lands as state- or municipality-owned lands. Therefore, the CAF remains community-owned land however without clear legal status.

Second, the socio-economic scheme of the CAF concerned the institutional crafting and the benefit-sharing scheme. A binary management structure was formed to implement the forest management plan: i) the community-based organizations and their supporting ii) technical team. The former is composed of the villagers organised into forest users' groups called the forest management groups or the *Groupement de Gestion Forestière (GGF)* in French. The forest management group (GGF) is a voluntary socio-professional organization regulated by the current law 014/99 of 15 April 1999 regulating cooperative societies in Burkina Faso. Each GGF has an executive board tasked with organising the fuelwood harvest, forest management activities and managing the village development funds (Delnooz 2003). The GGF merged into a union called the Union of the GGF (UGGF) at the municipal level and into a Federation (called FN-UGGF) at the national level. The BKF project ended in 1994 and transferred to the state the management rights over the newly created CAF. In turn, the state conceded the exclusive forest management rights to the union of the forest management groups (UGGF) chosen as local peoples' representatives. The UGGF is set to hire a technical director, a forest engineer and his team for the implementation of the forest management plan. In principle, the state agents at subnational levels should evaluate the overall management of the CAF; however, in

practice they have little involvement in the CAF's affairs. Key decision-making remains among the actors at the local level.

The financial benefits of the CAF are based on the volume of fuelwood sold through the legal channel of the CAF. The national fuelwood price of four USD/m^3 in 1998 was adopted by the state and the BKF project. For every metre cube of fuelwood sold, the logger or GGF member earns 50%; 27% is set as forest management fund, 14% goes to the state treasury and the remaining 9% is returned to each village as village development fund (IUCN 2006). This benefit sharing scheme and its management excluded the customary authorities, other community-based-organizations and local government; hence, the seeds were sown for contestations and sabotage of the CAF by those who were excluded (Karambiri et al. submitted).

The community-managed forest, CAF of Cassou, August 2017, photo from fieldwork.

Study site overview for Article I

For Article I, I conducted field work in two villages: Bana Bobo in the municipality of Bobo-Dioulasso and Bana Lamogoya in the municipality of Karangasso-Sambla. The two neighbouring villages are separated by a river and are about 30 km away from Bobo-Dioulasso, the country's second largest city. The area has important reserves of forest resources and a rich agroforestry system thanks to its geographic location, physical and climate characteristics. The average annual rainfall reaches 900 to 1200 mm, the temperatures fluctuate between 19.5 °C and 36.5 °C and the dry season runs from October to May and the rainy season from June to September. The landscape is

characterized by shrubby savannah and gallery forests. Among the dominant tree species is *Vitellaria paradoxa,* on which the local population is highly reliant for their subsistence and for sale (MATD 2007). Agriculture is a primary livelihood activity with some livestock rearing and small trade.

The autochthons are respectively the Bobo in the first village and the Sambla ethnic group in the second village. In both villages, the Mosse farmers and the Fulani semi-nomadic herders are the migrants. These groups, disaggregated into gender and ethnicity, have differentiated interests, reliance and interactions with the shea products. For example, the shea related work is usually associated with female gender roles. Likewise, the Fulani traditionally did not collect shea fruits or process the nuts but are currently invested in these activities following the species' increasing economic value and as part of the diversification of their livelihoods. This melting pot of various ethnic groups, their differentiated cultural backgrounds, distribution of gender roles and status of residence offered an interesting opportunity to examine the dynamics of the public domain regarding the variation of management knowledge and preferences for shea ethnovarieties.

Study site overview for Articles II and III

Research for Articles II and III took place primarily in the municipality of Lalgaye and the village of Tensobtenga. The study area has similar landscape characteristics to that of the previous research site, making it an attractive destination for migrant population in search of fertile agricultural lands and grazing.

The human and political contexts, critical for the studies here are dominated by a categorization of people based on their ethnicity, status of residence, the duration of residency for the migrants and their political belonging to the village. These determine the access and control over material commodities such as land, forest and decision-making authority.

The Yana ethnic group are the autochthons land and forest owners, whereas the Moose and Fulani are the regular migrant land borrowers. Upon completion of customary rituals, the migrants receive from the autochthons a piece of land to settle and farm. This land mentoring establishes dyadic social, economic and political relations between the migrants and the autochthons.
Lentz (2013) categorizes the autochthons as the first comers. Here the migrants can be categorized into two groups: the latecomers composed of the Yana migrants and certain Moose that settled in the area before 1984 and the Democratic and Popular Revolution in Burkina Faso (1984–1987). The latest comers are essentially Moose and Fulani that settled after that period. This timeframe is defined by the villagers themselves as critical for the construction of the identity of who is or is not a member or citizen of the village.

The turbulent history of the Sablogo forest conservation is also worth mentioning here as it helps to better understand the frustrations of the population (see Article II) and the sense of entitlement (discussed in Article III). First, the state's Rural Development Project (RDP), implemented in the region from 1996 to 2005 was the first attempt to conserve the forest. Faced with extensive agricultural practices, population settlement inside the forest and overgrazing, the RDP ended without concretely drawing the final limits of the consensual forest conservation area or deciding whether the population settlements inside the forest would be displaced or how and under what conditions. From 2005 to 2007, the forest conversion continued and the autochthons who did not have fields inside the forest began to farm there so that they would also be eligible for eventual compensation when the forest settlers would be displaced. In this context, in 2007 one year after their election, the mayor invited an International Non-Governmental Organization (INGO) to continue with the RDP activities. It is under this INGO forest conservation project that the events at the core of Article III took place.

Study site overview for Article IV

Research for Article IV was primarily conducted in three neighbouring villages (Cassou, Vrassan and Lue) of the community-managed forest called *Chantier d'Aménagement Forestier,*CAF in French located in the municipality of Cassou. Aligned on a dirt road, Vrassan and Lué are respectively 14 and 23 km from Cassou. As in the other study sites, the physical characteristics suitable for agriculture attracted internal in-migrant populations and specifically the returnees from Ivory Coast who fled the political crisis there.

The Nuni ethnic group are the autochthons forest and landowners. Led by the customary chief, they control the access and usage of forests and land, lend land to newcomer migrants namely the Moose and Fulani and guard the traditional rituals and fetishes of the village. Thereby, they earn monetary benefits and establish for themselves symbolic and political authority in the area. The establishment of the community-managed forest (CAF) by the UNDP-funded and FAO and government led project introduced new forest benefit sharing schemes and shifted away from the traditional Nuni the decision-making authority to new bureaucratic institutions created by the project.

The forest area identified for the CAF in late 1989 was partly under cultivation. Therefore, the project used ecological and socio-economic objectives to convince the autochthons to release those lands to the CAF. The affected farmers were given food as incentives and moved to other locations. No apparent opposition took place at that time because agricultural land was argued to be abundant. Then, the project gathered for the CAF 29,515 ha of forest from a total of 25 villages and prohibited agriculture within these. This forest area was divided into 15 plots, corresponding to 15 years of rotating fuelwood harvest. A key element here is that the project merged lands belonging to several villages, while ignoring customary land borders. This will create land conflicts among the villages over time. In addition, legal and legitimate actors such as the customary chief, the mayor, the local forester and the non-members of the forest management groups, were excluded from the bureaucracy and will therefore challenge the CAF system in pursuit of more inclusive institutions. Furthermore, the local perception of the benefit sharing scheme is essential here as the actors will use it to justify their narratives and actions for or against the CAF.

In 2017 more than two decades after the establishment of the CAF (in 1989) contestations are growing within villages regarding the efficiency, transparency and legitimacy of the bureaucratic institutions as well as the benefit-sharing scheme perceived to be unfair to the autochthons, landowners who accepted to give the lands constitutive of the current CAF. Different villages use different means of contestation by either removing unilaterally their land from the CAF area, convert it to agriculture and other land uses or sell it (i.e., in Lué village) or use formal means to reclaim those lands (i.e., Cassou village). Others still attempt to comply with the CAF regulations (i.e., Vrassan). In such a plural context, the bureaucratic institutions are in force. However, the differentiated ethnicities, status of residence and genders still dictate entitlements, access to forest resources and decision-making. This offers a fruitful terrain to observe the drivers of institutional change and uncover why these different change trajectories occur in villages with similar structure and conditions.

Figure 2: Map of the primary study sites in Burkina Faso
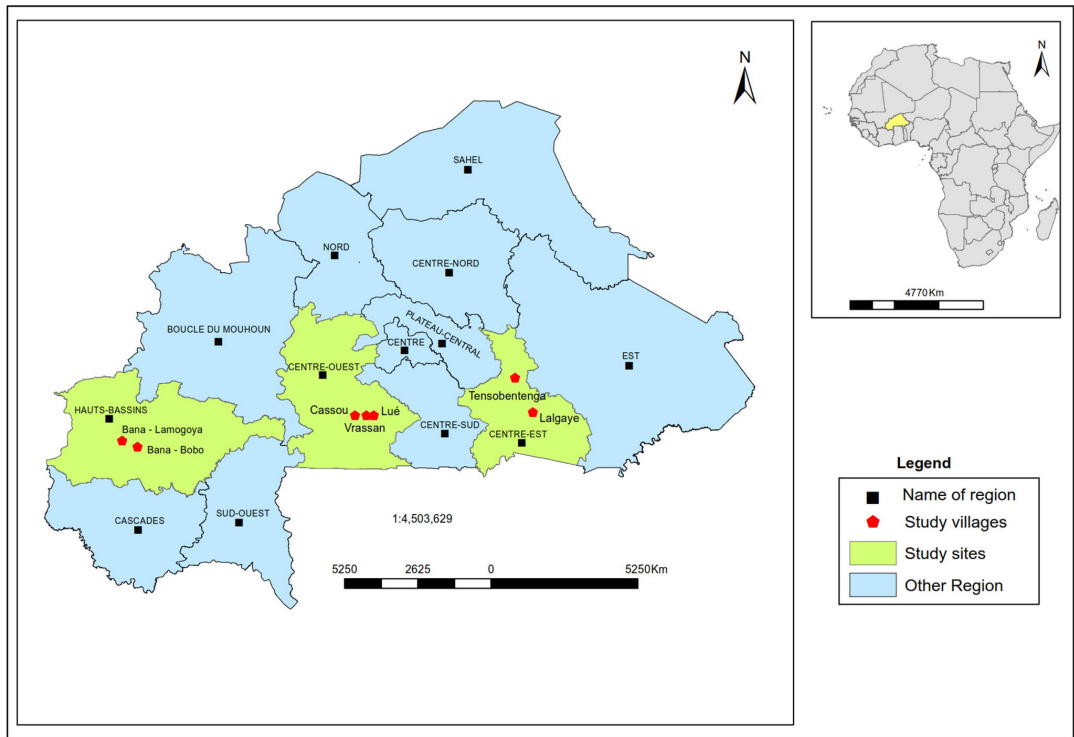
Source/BNDT 2014   May 2019   Author: Rabdo A.

3.2. Data collection and analysis

Article I: Participatory and gender-sensitive research methods in assessing local knowledge and preferences for forest resources in Burkina Faso

Data for the Article I were collected between October 2013 and February 2014 in Bana-Bobo and Bana-Lamogoya. First, exploratory interviews were conducted with five key local female and male resource persons to help facilitators gain a basic understanding of local classification systems and improve their ability to facilitate group discussions on folk classification system. Afterward, ten group sessions were conducted with men and women from the Bobo, Sambla, Mosse and Fulani ethnic groups. Groups were segregated by gender and ethnicity to promote the fuller participation of women and migrants who may not otherwise feel comfortable speaking in mixed groups and to allow for an analysis of gendered and inter-ethnic differences in knowledge of and preferences for ethnovarieties. Each group comprised participants of a mix of ages between 19 and 65 years old but the influence of age on knowledge of and preferences for ethnovarieties was not specifically studied. Participants were selected randomly from a list of all identified households stratified according to ethnicity. Each group was then composed of approximately 10 active participants, with the exception of the Mosse and Fulani men's groups in Bana-Bobo and the Sambla men's group in Bana-Lamogoya, which counted only four to seven participants as most adult men were working in Bobo-Dioulasso during the day, when the data collection activities took place. Dioula, which was common to all participants across the two villages, was used as working language. However, the names and characteristics of the

shea ethnovarieties were also discussed in each group's primary language. In each village, after working in separate groups, participants from the different gender came together to present their work and discuss the topics again

Two participatory tools were used sequentially. First, an identification and characterization matrix were used to identify the names and acquire a general description of locally recognized shea ethnovarieties. For each ethnovariety, information was gathered on five key traits identified during the exploratory interviews with the key informants: morphological characteristics of the fruit, nut, and leaves, pulp taste and presence or absence of butter during nut processing. Although only women processed shea nuts into butter, men also commented on their perceptions of butter content for different ethnovarieties. Participants then ranked the ethnovarieties, from their most to least preferred, in a second matrix. Large sheets of paper and markers were used to keep each group's responses visible to its participants throughout the activity.

Based on the ethnovariety names and characteristics provided by participants using the identification and characterization matrix, the total number of ethnovarieties recognized in the two villages was assessed. Local names in Dioula and other languages used during the field work were translated verbatim into English and matches among the ethnovarieties named in the different languages. The main traits (criteria) structuring the local classification system were identified.

Overall preference rankings across groups were determined according to the number of times an ethnovariety was cited in the top five in relation to the total number of times it was cited and to the highest rank it received. The median preference rank was calculated from the rankings that a given ethnovariety received from all participant groups. Thus, trends in preferences were identified according to gender and ethnicity. The type of data collected (ranking values generated through free listing by groups) did not lend itself to the application of standard statistical tests but allowed a descriptive summary of the main patterns. Comparisons were made among ethnovarieties identified by men and women within and across ethnic groups.

Shea ethnovarities (fruits) of different characteristics, July 2013, photo from fieldwork

Article II: Studying-up and down the institutional choices and their effects on representation and restoration outcomes in sub-Sahara Africa

This article provides insights from multiple cases led by different authors. The case study from Burkina Faso was conducted in the municipality of Lalgaye between 2012 and 2013. Data were collected through semi-structured interviews using the study up method (Nader 1974), that focuses on interviewing powerful actors (a dozen national level actors) and then sixty local level actors. With the national level actors including officials of the Ministry of Environment and relevant project and programme representatives, I discussed their conception and implementation of participation and representation in their interventions. With the restoration project representatives, I explored the reasons and motivations behind their institutional choices of local actors, their understanding of representation and the practical ways in which they implemented those choices. I also interviewed actors from Lalgaye municipality including local elected officials, migrants and autochthons and state technical officers. I complemented the interviews with participant observation during project meetings in Lalgaye as well as social events in the municipality. I used content analysis to analyse the data. The other case studies presented in this article (except for the Tanzanian case) used a similar research methodology as part of a pan-African research program, the Responsive Forest Governance Initiative (RFGI). Projects are diverse including those that are part of governmental programmes (e.g., the Ghanaian and Senegalese cases) to those which are part of NGO projects implemented with local government or customary authorities (e.g., Tanzanian and Burkina Faso cases).

Article III: Using interviews and participant observation to study citizenship and political belonging in forest conservation politics in Burkina Faso

The data collection for Article III began with an introduction to the village of Tensobtenga in June 2012 through the local government of Lalgaye with the objective of investigating the forest conservation process. Naturally, my discussion began with the village chief. Since he realized my interest in the forest conservation events and specifically the conflict, he recommended a list of people I must interview. He also implicitly advised me on the neighbourhoods I might avoid because they opposed him on the matter of the forest limits. The village atmosphere was still volatile, as the violent events had happened barely two years earlier. Therefore, I complied with his advice and interviewed the people he recommended. Understanding the field context and building a relationship of trust with the villagers is an essential step in qualitative analysis (Elo et al. 2014). Thus, I travelled to and stayed in the village four times between May 2012 and April 2013 and September 2017 for a total duration of four months to ensure that I could build a relationship of trust with the villagers. After I exhausted the village chief's list of recommended people, I expressed the need to interview more people as a requirement of my study and I then informed him of my intention to extend the interviews to the 'rebellious' neighbourhoods. There, they were waiting for me already as they saw me in the village discussing with some people and they wanted to tell their version of recent events. Notwithstanding the circumstances, to ensure the viability and validity of the data, I applied a snowball technique to recruit the final interviewees who were directly or indirectly involved in the forest conservation process, the conflict and witnessed the events during the project implementation period.

I conducted in-depth and semi-structured interviews with a total of fifty-eight actors composed of forty actors from Tensobtenga village (twenty-four autochthons and sixteen latecomers) and eighteen actors from municipal and national levels: local government leaders from Lalgaye municipality, the project staff and actors from the ministries of environment and decentralization. With the villagers, I explored the core issues raised in forest conservation planning, the events that contributed to the conflict, the claim-making means and strategies and the conduct and responses of the forest decision makers. I also explored the conflict procedures and litigation, the resulting changes in the local decision makers' legitimacy/authority and the changes in identity and belonging of the claimants. With the municipal and national actors, I discussed their involvement in the forest conservation

process, the actions and strategies used by the claimants to hold them accountable and the changes in their legitimacy/authority as a result. On this specific issue, I asked both the villagers and leaders to weight the changes using numbers (minus one=decrease, zero=no change and plus one=increase).

I used participant observation throughout the data collection period: I participated in Tensobtenga markets and social events during my stays in the village, two project meetings with forest management groups in Lalgaye in June 2012, two municipal council sessions in Tenkodogo in June 2012 and in Lalgaye in May 2013. In addition, I attended one workshop with the mayors involved in the forest conservation in Tenkodogo in April 2013. However, three requested interviews were refused: the member of parliament and the former village development council president (CVD) who were both accused by the interviewees of supporting the migrants' protests and the delegate of the village, who was accused of being the instigator of the changes in the forest limits.

The data corpus consisted of the transcribed interviews, as well as the field notes and observations. I used content analysis because of its feature of enabling both qualitative and quantitative analysis. Content analysis guides the research process systematically and helps organize the data into meaning units, categories and conclusions that derive from it (Elo et al. 2014). The qualitative content analysis presents the results in the form of text and topics (Krippendorff 2004) while the quantitative feature uses numbers and frequencies to show the significance of a given fact. Maxwell (2010) did argue that the use of numbers is a legitimate and valuable strategy for qualitative researchers when it is used as a complement to an overall process orientation of the research. Here, I narrate the forest conservation's events using the informants' contributions and I present the changes in the leaders' authority using number and frequency as processed in an Excel spreadsheet. Beforehand I anonymized the informants' identity and the project's name as "the project".

Interviewing a forest user's group member on his farm in Vrassan, July 2017, photo from fieldwork

Article IV: Assessing the drivers and outcomes of institutional change in Burkina Faso: interviewing, coding and analysing the data in Atlas.ti 8

From June to September 2017, using in-depth, semi-structured interviews I collected data from a total of 116 interviewees, of which 54 in Cassou, 24 in Vrassan and 33 in Lué as well as five national level actors. Fifty-nine percent of the interviewees were autochthons, 41% migrants; there were considerably more men (70%) than women (30%). I recruited the interviewees based on their awareness of forest management, direct or indirect involvement in the system, status of residence and gender to ensure more holistic data coverage. With the interviewees, I discussed the CAF's institutional arrangements, its evolution over time and the drivers of change. I also carried out a total of 15 Focus Group Discussions (FGD) segregated by men, women and youth groups in the three villages and in Diao, another neighbouring village. During the FGD, I ran a timeline exercise to track and discuss the critical events of the CAF, their specific interpretation and usages within the villages. The autochthon men, because of their direct involvement in the CAF management, were more knowledgeable than the migrants and the women, who were not significantly involved in the system.

I transcribed the interviews, anonymized the respondents' names and processed the data in Atlas.ti 8 software. Through open coding, I obtained 24 families of drivers of change that I further clustered by meaning into seven categories and two groups. Based on their frequency of mention in the interviews, the drivers were visualized in an Excel spreadsheet and the discourses and narratives around them were analysed.

Finally, it should be noted that the data collection for all cases involved human subjects. Therefore, strict ethical considerations were followed, including free prior informed consent and permission to leave the study if so desired.

4. Results

4.1. Local knowledge and preferences for shea ethnovarieties in Burkina Faso (Article I)

Article I focused on local dynamics, local agency, differentiated local knowledge and expertise.

Local knowledge schemes of shea ethnovarieties

Regarding local knowledge, farmers identified 25 shea ethnovarieties based on 11 primary fruit and nut variants. The number of shea ethnovarieties reported varied only slightly between gender groups. Women and men identified respectively 24 and 19 ethnovarieties, 18 of which they named in common. There were also similarities in the number of ethnovarieties cited across the two villages. Nearly all (21) ethnovarieties were recognized in both villages. The description of the pulp taste, the fruit, the nut and the leaf characteristics were associated with specific ethnovarieties. There was consistency across the gender and ethnic groups. However, the five women's groups provided similar appraisals of butter yields, whereas only two of the five men's groups could comment on this aspect. Similarly, 'white nut shea', 'permanently rotten shea fruit' as well as the four least frequently named ethnovarieties were named by only women's groups. Although participants reported that tree morphology, shape and size of the leaves as well as butter quantity differ among the ethnovarieties, these were not used as primary criteria for identifying ethnovarieties.

Preferences for shea ethnovarieties

The assessment of the preferences for shea ethnovarieties showed that two of the 25 ethnovarieties—'small shea fruit' and 'big shea fruit'—stand out as being preferred by nearly all the groups (nine and eight out of ten groups, respectively). In total, 14 ethnovarieties were cited among the top five by at least one participant group. During the group discussions, women from all ethnic groups explained that their preferences hinged on an ethnovariety's usefulness for butter production, with ethnovarieties perceived to be rich in quality butter being the most desirable. Ethnovarieties that were perceived to have a low or no butter content, such as 'small nut shea', 'male shea tree', 'broken nut shea' and 'small soft shea nut' were among the least desired. There was general agreement between men and women that desirable traits also relate to shea fruit. Men from four of five groups stated in the group sessions that their preferences were most tightly linked to fruit yield and taste. Overall, there was a great deal of variation in preferences both within gender and across ethnic groups.

From a conservation perspective, by drawing attention to the range of local preferences, this study can support local people, researchers and shea propagation interventions in promoting ethnovarieties that will yield benefits to different segments of the population, including women and Mosse migrants. Future research could examine how consistent traits are within the same ethnovariety. It would also be useful to explore if some ethnovarieties carry additional desirable traits such as drought tolerance or pest resistance associated to those used to define the ethnovariety; consequently, if some of the traits observed actually result from environmental factors or even diseases (e.g., in the case of 'permanently rotten shea fruit') rather than genetics this could be taken into consideration in future conservation and production decisions.

From a local democracy perspective, reflecting on these diversities constructed around customary and socially embedded systems could help to better understand the everyday access right and control opportunity over forest resources for diverse groups of people. These persistent traditional rules operate at the margin of the post-colonial state that also has its own logics, hence denoting the dynamic and complexity of the public domain vis-à-vis the forest resources. In such contexts, forestry

projects would face a wide range of institutions and logics that can also influence the course and content of their intervention. In this regard, it becomes important to examine how forestry projects design and justify their choices of specific local institutional partners. The next section investigates those aspects.

4.2. Institutional choice, representation and forest conservation/restoration outcomes in sub-Sahara Africa (Article II)

Article II focused on the reasoning behind the institutional choices in forest restoration across sub-Sahara Africa and the influences of those choices on local people's representation and restoration outcomes.

The logics and procedures of the institutional choices

The results showed that in all the five interventions analysed, the choice and recognition of local institutions followed a set of politico-economic and context-specific beliefs. In Burkina Faso, the project Livelihoods and Landscape Strategy (LLS) executed by an INGO chose to work with the local government amid other local institutions. They justified this choice by their desire to support and implement political decentralization and the need to do justice to the local government by empowering and equipping them in decentralized forest management. They also intended to turn the restored forest into municipal forest with management rights transferred to the local government. In doing so, they want to prove to the state the capacity of the local government to carry out forest management. The Community Resource Management Areas (CREMA) project in Ghana funded internationally and executed by a national NGO justified their choice of local people as partners by their commitment to international policy, their institutional mandates and technical and managerial goals. They also pointed out the role of history and forestland tenure as well as their engagement to promote participation and a community-based approach. Still in Ghana, the Modified Taungya System (MTS) project led by the Forestry Commission (FC), a governmental agency, also argued to have selected local authorities and community members as their local collaborators based on their commitment to implement a participatory approach. In the fourth case examined, Senegal's National Park Direction (DPNS), a governmental body chose and recognized women's groups as their privileged partners in the restoration and conservation of a community mangrove. This choice was guided by national decentralization policy, the intent to replicate success stories of restoration achieved elsewhere and the conviction of women being the "degraders" of nature and therefore fit to lead restoration efforts. In the long-standing Tanzanian case, the governmental project Soil Conservation and Afforestation Shinyanga faced poor results because of a rigid top-down approach. Therefore, they invested in a bottom-up approach that involved more local authorities and community-based organizations operating in the area and focused on indigenous tree species instead of exotic ones.

Representation and accountability results

Following these choices, the chosen institutions in the overall cases lacked effective representation of the interests of the local people they were meant to represent. For example, in the Senegal case, the authorized women's group was not able to represent the voices of all social categories. This resulted in contestations and fragmentations of gender identities in the local arenas. In addition, the chosen institutions demonstrated poor downward accountability to their constituencies while reiterating strong upward accountability to the projects that chose them and granted them funding. In this regard, the Burkina Faso case illustrated how the local government chosen by the project emerged not as the people's representative as intended but as the project's "co-administrator"; hence, accountability to the local people was neglected. This has led to a local elite capture that frustrated

local people. However, in the Tanzanian case project implementers were able to correct their choices, hence supported stronger representation of local people and accountability to them.

Conservation and restoration outcomes

In all the case studies, except in the Tanzanian case, the results showed that there were negative consequences of the institutional choices for both restoration and social outcomes. Although the restoration and conservation actions took place as planned, the results in these four cases did not meet the expectation of promoting participation or empowerment of local people through restoration of degraded ecosystems. In the Senegal case as well, the institutional choice resulted in the resignation of the non-chosen institutions from the restoration endeavour altogether. Likewise, in Burkina Faso, the local people were frustrated and unhappy with the project and the process; hence, the sustainability of the current achievement and the implementation of potential future restoration projects in the area may be at risk. Lastly, in the Tanzanian case contrasting with the previous, the project collaborated closely with the traditional institutions already effective in the area and used native species as recommended by the local people; thus, result showed increased ownership in the programme and a more successful restoration.

4.3. From citizens to denizens in forest conservation politics in Burkina Faso (Article III)

Article III focused on the dynamics of citizenship (formation, demonstration and eventual loss) in a context of conflict over forestland triggered by the implementation of a forest conservation project in Burkina Faso. I argued that forest conservation politics transcend the fold of natural resources, shape, reform and unintentionally produce uneven forms of citizenship by creating *les déguerpis* (those evicted from the forest) and turning citizens into denizens (those denied citizenship).

Formation of citizenship

First, concerning the formation of citizenship and the construction of the conflict, two simultaneous storylines need to be considered. On the one hand, the actors traditionally called migrants, the latecomer migrants in this case, i.e., those who settled in the village before 1984, the democratic and popular revolution in Burkina Faso, were so well accepted in the village that they came to be acknowledged by the autochthons and seen as citizens of the village. Thus, they were given lands nearby the village and inside the current forest area. They were also appointed by the village chief to important political duties that had previously only been exercised by the autochthons such as the presidency of the village development council (CVD) and the forest management group (GGF). This appointment to a major political role and traditional land allocation or land mentoring (Zougouri 2006; Léonard 2012) was the material foundation of the acknowledgment of these migrants as members or citizens of the village.

On the other hand, the conflict over forestland began when the conservation project negotiated with the autochthons the lands to be dedicated to the forest apart from agricultural land and grazing. Following the project schedule, a bulldozer was sent to demarcate on the ground the final forest limits under the guidance of the local forester and two village representatives. However, after the bulldozing, protests exploded as the villagers claimed that the bulldozer had taken more lands than what they had agreed to release for the forest. The contested lands added to the forest area was farmed by the latecomer migrants described above, those who had acquired a new status of citizenship. Therefore, they acted upon their new citizenship status to claim the reduction of the forest limits so that they could regain their farmlands. Another category of migrants in the area, the latest comer migrants, those who settled in the village and inside the forest after 1984 were also concerned by the new forest limits. However, they simply complied with the project order to leave the forest and did not pose any resistance, as they were not recognized as members or citizens of the village.

Demonstration of citizenship

Second, these new citizens demonstrated their citizenship in the conflict manifestation phase. They sought the support of local leaders such as the village chief and the mayor of the municipality. The village chief listened to them and agreed to endorse their requests by taking them to the Mayor. Since the Mayor declined to support the protesters, the village chief also withdrew his support and so did many other villagers. This created division and escalated tension among villagers and with their local authorities. Nonetheless, the claimants from the latecomers continued the struggle; they resorted to higher-level authorities such as a member of parliament who resides in the capital and is from the claimants' original village. Among other means used to hold the leaders accountable and demonstrate citizenship were rumours, criticism, insults, attempts to damage their reputation and physical threats. The protesters also used magic in attempts to curb the effects of project's decision regarding the forest boundaries. More importantly, they also took the case to the court of the higher commissioner in Ouargaye. The high commissioner received them and registered their complaints. After hearing from the other parties—the mayor, the village chief, the project leaders— he gave his verdict that the new forest limits were irrevocable and that those within these boundaries must leave the forest as ordered.

Reformation of citizenship

Third, the reformation of citizenship in the conflict's aftermath depicts the influence of the claim making on the legitimacy and authority of local leaders who were held accountable by the claimants. They observed gains and losses of authority in the eyes of their constituencies, their capacity to engage with them in forest-related activity and in the community in general. Specifically, the Tensobtenga village chief and the delegate, the mayor and his municipal councillor and the Member of Parliament underwent different changes. For example, the village chief who failed to help his citizens recover their lands acknowledged a decrease in legitimacy, influence and authority in the village, while the Mayor and the municipal councillor who stepped in to help solve the conflict and mitigate its effects, gained in authority and were re-elected to their respective offices. Other leaders, namely the state representatives, experienced no changes in their authority.

Likewise, the citizens who engaged in the claim-making observed a reinforcement or weakening of their belonging as citizens of the village. Those citizens who thoroughly conducted the protests and lost the case, in the end, were subjected to exclusion and denial of their identity as full citizens thereby becoming denizens. They were ostracized in the village and labelled as *les déguerpis*, those evicted from the forest. They are no longer informed of the forest-related activities nor do they participate in the annual reforestation activities. They also did not get new farmland as opposed to those who stopped the protestations halfway and joined the village chief camp. In addition, some of them self-revoked their belonging to the village and therefore stopped participating in the market and the village social life altogether.

These results demonstrated that citizenship is fragile, processual and embedded in ongoing struggles over forest resources. it also illustrated how citizenship is formed, shaped and reformed over shared residency, forest conservation and rural politics and how those who lost their claims underwent exclusion and denial of their ultimate citizenship and thereby became denizens. Hence, I contribute to the overall rural and agrarian studies and shed critical light on how mainstream environmental politics is approached and analysed. I suggest that peasants' struggles over natural resources are not always only about mere access to resources and benefits but also often about political belonging. I also suggest that those struggles beyond the scope of resistance entail a history which itself finds root within inclusive (and exclusive) struggles for citizenship. Furthering the understanding of how political belonging and citizenship is formed and reshaped over time within those struggles provides crucial information on how the access to natural resources is claimed, maintained or undermined.

4.4. Drivers and outcomes of institutional change in community forest management (Article IV)

Article IV focused on the drivers of institutional change and the reasons why differentiated change trajectories occur simultaneously within three neighbouring villages of similar structure and conditions. I argued that the perceived ineffective forest management institutions led the actors to exercise their agency, use social networks and mobilize power dynamics and structures including policy instruments, institutions and discourses/narratives/practices to control the forest management.

The drivers of institutional change

The interviewees reported two main categories of drivers of institutional change: ineffective forest management institutions and increase in land pressure. The former explained how internal factors to the CAF such as weak forest management and enforcement, contested accountability of forest managers, unclear forestland tenure coupled with unattractive wood market and unfair benefit sharing decreased the CAF attractiveness and the villagers' incentives to keep the forest standing. The latter illustrated how external factors to the CAF, namely emerging attractive land deals and population growth, incited the villagers to seek lucrative alternatives to the CAF by removing their forestlands from the CAF and converting it or selling to agribusiness.

However, these drivers have different weight within the villages. The top three drivers in Cassou were unfair benefit sharing, contested accountability and weak forest management and enforcement. In Vrassan and Lue, the top three drivers were identical: weak forest management and enforcement, attractive land market and unclear forestland tenure. Furthermore, these drivers played out differently in the villages to determine three different institutional bricolage pathways and outcomes. On one extreme of the spectrum, is Lué where the actors, translating their frustrations over ineffective forest management welcomed agribusiness, converted and sold their forest as an alternative and in retaliation against the CAF system. On the other extreme, in Vrassan, the actors denounced ineffective forest management but engaged in internal struggles for or against the continuation of the CAF. Eventually, they reconciled their differences and joined efforts to reconfirm the CAF and reunify their forest. Operating between those extremes, the actors in Cassou turned their failure to overthrow the CAF bureaucracy into land claims. They built coalitions, assembled discourses, strategies and arguments from multiple socio-cultural and political spheres to claim that if the forest management had been transparent and the benefit sharing equitable, the people would not have protested the CAF or reclaimed their forestland.

Mediating change: The workings of social networks, agency and power

The networks, agency and power arbitrated the institutional bricolage actions. The networks produced and conveyed varied bricolage repertoires for the actors to contemplate. The networks also legitimized diverse bricolage options such as the forest conversion that gradually trickled down across villages as a solution to current forest management problems or land sale that was customarily forbidden. Based on ethnicity, interests or status of residence, coalitions emerged and examined these incoming practices, re-interpreted them and validated or negated their efficiency and social acceptability.

The exercise of agency enabled the actors to attribute specific meanings to the selected bricolage practices and use these meanings to construct preferred narratives that justified their actions. The social characteristics and local leadership tailored the opportunity for the exercise of agency and determined whose agency had more weight. In all the villages, the traditional actors entitled to land resources displayed strong agency and enforced their preferred bricolage strategies; hence, the future of the forest was determined although the CAF was officially governed by the bureaucratic institutions.

Power was exercised through the control over allocative and authoritative resources. Power explained how and why one village institutionalized one bricolage rather than another. The workings of power sieved the bricolage repertoires and meanings to make some stick to the local conditions and curb the institutional change trajectory. In this sense, those controlling more resources like the autochthons versus the migrants in all the villages dictated the direction of the changes.

By eliciting the dialectic between the drivers of change and the institutional responses from below amid bureaucratic and socially embedded institutions, these results contribute to the discussion on how institutional bricolage and critical institutionalism research could be relevant for policy makers. It also challenge a narrow understanding of institutional change path dependencies.

5. Discussion

In this section, I discuss the case studies' results considering the three components of local democracy: representation from Article II, citizenship from Article III and public domain from Articles IV and I.

5.1. Understanding representation and the influence of institutional choices

In Article II, the institutional choices made by the intervening agents influenced local peoples' representation in forestry projects and the forest conservation and restoration outcomes in sub-Sahara Africa. The power of institutional choices held by the intervening agents can lead them to dominate restoration and conservation endeavours; hence, they may not act as facilitators but "interest groups" with the power to control activities and outcomes (Sayer and Wells 2004; Kassibo 2002). In the Senegal, Ghana and Burkina Faso case studies, the project leaders used international and context-specific arguments to identify and choose specific local collaborators as the representatives of the entire local population. The recognized representatives could not respond sufficiently to the needs of the people they represented, nor could they account downwardly to them. This created frustrations and mistrust between the representatives and the local people; thus, restoration outreach was limited. For instance, in Senegal, the women's association chosen by the restoration project leaders lacked responsiveness and accountability to its own members and to their wider society; as a result, people abandoned restoration itself.

The choice of the women's association can be viewed as descriptive and symbolic representation as it is rooted in the belief that women mirror the "degraders" of the environment and at the same time are the symbol of nature's caretakers. Likewise, in Burkina Faso the local government recognized by the project privileged upward accountability to the project as this was well planned and budgeted in the project but downwards accountability to the local people who elected them was neglected. Although the local government has the potential for substantive representation, their choice in the intervention can be viewed as symbolic as they could not respond to people's substantive needs and account to them. It can also be argued that the project chose them as a sign that they respect the decentralisation policy; however, in practice the local government acted as local project managers and not as local people's democratic representative.

One can argue that it is not the duty of a "women's association" to be responsive to the entire society nor to account to it. However, engagement to manage public resources on behalf of the public comes with some forms of social accountability duties. Nonetheless, although the immediate ecological objectives were achieved, the resulting social tensions and discontent can jeopardize the implementation of future restoration projects in those sites as the trust between the community and the intervening agency is reduced (Stern and Coleman 2015). Therefore, it is critical for the intervening agents to be aware of the dynamics that they can create through their choices and the effect they have on people at the time and in the future (Ece, Murombedzi, and Ribot 2017).

However, when restoration projects operate over a long time period, the political, social and economic contexts can shift, requiring restoration interventions to adapt (Mansourian 2016; Mansourian et al. 2016). In this sense, the Tanzanian case illustrated how local people strived to oppose the project's top-down approach dictating how restoration efforts and actors should be organized. It also illustrated how negative effects of the institutional choices can be mitigated when the relevant social structure, actors and norms are properly acknowledged and effectively considered. The empowerment of local institutions to take on the management of the restored areas in a durable way is also important, as the CREMA case in Ghana showed (Baruah et al. 2016).

Finally, intervening agents could learn from cultural restoration knowledge and practices, to adopt elements that are congruent with project objectives. Despite local knowledge being considered as a principle for guiding restoration (McDonald et al. 2016), the utilisation of such knowledge to inform restoration interventions is low (Wehi and Lord 2017). The local contexts often help to identify how to engage with traditional authorities and value traditional knowledge (Baker, Katarina, and Anna 2014). Recognising a diversity of knowledge bases (as in Article I) opens the decision-making context to be more inclusive of all who are part of the ecosystem to be restored (Gorddard et al. 2016; Colloff et al. 2017). Where and when such transformative interventions occur should be recognised, respected and implemented.

5.2. Understanding the dynamics of citizenship and political belonging

The recognition of democratically elected representatives may enable inclusive belonging, residency-based citizenship and greater opportunity for citizens' engagement and claim making according to Ribot, Chhatre, and Lankina (2008). However, in this case study, a local government democratically-elected body was recognized but residency-based citizenship was not strengthened as a result. Instead, the local actors acknowledged and enforced customs as the primary source of belonging and citizenship. Such customary-based belonging potentially excluded certain category of people such as the migrants. Nonetheless, the latecomer migrants who exceptionally attained citizenship through shared history and residency with the autochthons actioned their new status to make claims over the forest decision-making.

Throughout the claim making processes, this local citizenship (Lund 2011) was reconfirmed and expanded beyond what was granted locally, as the 'new citizens' claim-making was taken seriously and considered across levels of hierarchy. These findings are in strong contrast to the well-established literature focusing on autochthony as a political and claim-making strategy over resources in exclusion of migrants declared as non-autochthons or 'strangers' (Ceuppens and Geschiere 2005). While Hochet (2011) acknowledges a plurality or spectrum of peasants' citizenship, he maintains this dichotomy of autochthon versus migrant where he refers to the autochthons as 'maximal' and the non-autochthons as 'minimal' citizens. Hence, I argue that overlooking the nuances of citizenship and maintaining a dichotomous perspective, as still found in agrarian studies and environmental politics literature, may risk undermining the agency expressed by those who are already in a socially or culturally disadvantaged position (e.g., migrants) but have successfully claimed citizenship.

Citizenship including rural citizenship empowers people (Woods 2006). It opens space for protests and gives the rights to shape citizenship itself. The expressions of citizenship take multiple forms, ranging from being an activist citizen referring to those who create new spaces to make their claims like the claimants in Tensobtenga, to being active citizens, like those who execute citizenship within existing spaces (Isin 2008). Beyond what Oyono (2004) pointed out in a case from southern Cameroon, the means used to make claims and express citizenship in this case included threats, magic, physical violence and attempts to damage leaders' reputation. However, authorities rejected the claims and decided in favour of the forest conservation project. What strengthened the position of the project over those that expressed their citizenship and claimed the forestland as theirs? The findings indicate that over time the project was successful in gaining legitimacy and support from authorities across all levels for the protection of the forest as a 'noble' cause and a necessary choice for sustainable livelihoods beyond individual interests. Moreover, what began as resistance against the underlying structural problems with top-level decision making over forestland and a questioning of the legitimacy of an international environmental NGO within these processes, had turned into a localized conflict between citizens and local authorities. Thus, people addressed their complaints

about the project not to the project leaders seemingly far from them but to the local government viewed as the project's representative and "co-administrator".

Those citizens that resisted but lost the case and therefore were evicted from the forest are now called *les déguerpis* and have become denizens (Turner 2016). What was claimed, acted upon and lost is first the material foundation of the membership to the village such as access to land resources. Second, it is the sense of identity and political belonging and third, the entitlement to be political, act and curb the forest planning in the service of one's own interests. This finding confirms Isin and Turner (2007) and Moro (2016) who argued that demonstrating citizenship implies *de facto* forms of confrontation that might put citizenship at risk. This also confirms the well-known fragile and continuously under construction nature of citizenship (Bellamy 2008). The future will determine how the denizens will cope with their new status and whether they will renew their claims for citizenship. It also remains to be seen how the local leaders who were held accountable by the people and further lost in legitimacy and authority will renegotiate their fate.

Furthermore, the findings have broader theoretical and conceptual implications on how environmental politics are analysed and how the concept of citizenship helps to uncover environmental conflict as struggles over political belonging, much beyond the natural resources' boundaries. These struggles, taking place in the public sphere amid project-related, decentralized and customary based institutions, also shape the dynamics of the public domain.

5.3. Understanding the dynamics of the public domain

This section discusses the patterns of the public domain prior forestry project intervention (Article I) and after forestry project intervention (Article IV).

5.3.1. Diversities of local dynamics, knowledge and preferences for forest resources

Diversity of local knowledge systems

The local knowledge scheme of the shea ethnovarieties is fundamentally based on local people's experiences and interactions with the species. For example, the essentials of the ethnovarieties were identified primarily according to the visible characteristics of the fruit, such as its colour, size and shape; this process confirmed Mazzocchi's (2006) observation that plants' visible physical features are generally the primary criteria used by farmers in folk classification systems. In contrast, despite its value, shea butter was not considered a criterion for identifying ethnovarieties. This corresponds with previous findings that farmers in Uganda have a general sense of the quantity and quality of butter provided by different shea ethnovarieties but they do not name or identify an ethnovarieties based on these characteristics (Gwali et al. 2011).

Diversity through the lens of gender and ethnicity

Contrary to what has been reported in Uganda (Gwali et al. 2011), this study has shown some consistency in the folk classification systems for shea across ethnic groups in southwest Burkina Faso. There was agreement across groups about key variables defining the classification system and different ethnic groups within a given village and gender group cited 50 per cent or more of the same ethnovarieties. This may be because the spatial integration of activities across ethnic groups through years of co-habitation has favoured an exchange of knowledge about their landscape and the trees it harbours (Howorth and O'Keefe 1999). Nonetheless, within a given gender, each ethnic group also named some ethnovarieties that were not named by other groups.

What is more, during discussions women and men displayed different depths of knowledge about aspects of the species that fall within their domains of expertise. For instance, women come to intimately know the shea tree through shea nut collection and processing, which fall within the female sphere of activities. These differences illustrate the importance of engaging both gender groups in ethnobotanical research. The key role the species plays in the lives of both women and men who use the tree for multiple purposes and consume its fruit, as well as knowledge sharing within the household have also allowed women and men to acquire some shared knowledge of the species (Elias 2015).

Diversity of preferences for shea ethnovarieties

Two ethnovarieties stood out as they were prioritized by nearly all (9 and 8 of 10) groups: 'small shea fruit' and 'big shea fruit'. These shared preferences across groups point to priorities to investigate from a domestication perspective. In this pursuit, it will be required to determine to what extent phenotypic traits of interest result from long-term adaptation processes and whether they can be selected for domestication (Simons & Leakey 2004).

Although butter traits were not named as variables used to characterize ethnovarieties, women from the different ethnic groups expressed that their preferences for shea ethnovarieties were linked primarily to the ethnovariety's butter characteristics. In contrast, Bobo men stated that their preferences were related first to the fruit's flavour characteristics because men consume the fruit but do not process its nuts. This finding is consistent with Maranz et al. (2004) and Sanou et al. (2006) who also found that men prioritized ethnovarieties with large, juicy fruit and high yields.

Moreover, other characteristics such as tree health, growth and resistance to diseases, are known to guide the selective protection of shea trees in cultivated fields at the time of land clearance (Elias 2015). In this study, Bobo men and women further observed and appreciated that the 'small shea fruit' ethnovariety is the most resistant to environmental changes particularly rainfall, and possibly therefore also the most abundant in their landscape. This perceived abundance contributed to preferences for this ethnovariety.

The top-preferred ethnovariety among Mosse women in both villages was 'precocious shea fruit', which yields fruits earlier in the season than other ethnovarieties. This has a strategic importance for these migrant women as this ethnovariety matures before the actual start of farming activities, a period of open access to the otherwise restricted spaces such as the autochthons' fields and fallows and forest as well. Tenure regimes that limit the access migrants have to certain types of lands and the valuable trees that thrive there, explain their preferences for this ethnovariety. In addition, although Mosse women reported that the butter yield of this 'precocious shea fruit' is less compared to other ethnovarieties, they explain that its ability to provide butter for consumption and income earlier than other ethnovarieties, at a critical time during the lean season, makes it particularly valuable. From a food security perspective, this is another critical factor to consider in future domestication initiatives.

The use of participatory methods can provide researchers with a deep understanding of folk classification systems (Jinxiu et al. 2004; Olango et al. 2014; Sieber et al. 2014). When associated with gender-sensitive approaches such as in this case, they can also shed light on local motivations for plant management, potential conflicts of interest in local priorities and the contributions of this process to in situ conservation of genetic resources (Vodouhè et al. 2011). Working with groups divided by gender and ethnicity and being inclusive of participants of different ages, helped reveal the range of knowledge and preferences held within the villages. The approach further illuminated

the unique ethnobotanical knowledge diverse groups hold and how preferences may be socially differentiated by sex and ethnic group.

Reflecting on these local diversities, from a local democracy perspective, I can infer that there is a public domain with indigenous logics of operation that are quite distinct from the state legal frame inherited from colonisation. Environmental projects with their own logics and procedures add another layer of complexity and contestation of the public domain. The section below discusses those interactions.

5.3.2. Drivers and outcomes of institutional change in forest management over time

Triggers of institutional bricolage

At the establishment of the community-managed forest or *Chantier d'Aménagement Forestier (CAF)* in French*,* the pre-existing institutional actors (i.e.,the customary authorities and other leaders) "switched hats" (Côte and Korf 2018) and enabled the implementation of the new bureaucracies of the CAF. Over time, the actors' discontent with the forest management coupled with land pressure prompted processes of institutional bricolage. Coalitions with divergent agendas emerged in attempts to sustain or undermine the new bureaucracies. Weiland and Dedeurwaerdere (2010) and Carstensen (2011) also found that when facing inefficient institutional outcomes, the actors will likely challenge and delegitimize the current arrangements and weave new institutions to replace them and solve emerging issues. In the process, the political actors, the *bricoleurs*, selected and employed diverse arguments to win their case. Their success in getting back portions of their CAF's land in Cassou reinforces Cleaver's (2002) argument that the bureaucratic institutions, such as those of the CAF in this case, need the pressure from the pre-existing institutions to gauge their efficiency and make them adapt to people' interests. Consequently, in Cassou the pre-existing institutions and actors rolled back in the forest management, resulting in a mixed bureaucracy and customary institutions. However, in Lué, a new type of institutional setting emerged that is not fully customary nor bureaucratic but rather a sort of "fine mess" (Ingram, Ros-Tonen, and Dietz 2015) of varied governance poles.

The role of networks in the bricolage process

Acting upon the triggers namely the ineffective forest management and land pressure, the actors used social networks to exchange repertoires of bricolage within and across sites. In this regard, the forest conversion began in one network and trickled down gradually across the other villages. Likewise, land sale that was customarily forbidden travelled across neighbouring structures and was legitimized by practice. In all the villages, support or rejection of a given bricolage strategy depended on structural elements such as ethnicity, status of residence and the corresponding interests. These findings align to Giddens (1984) who argued that the social structure is not static but shapes people's worldview by circulating ideas and norms and is in turn shaped by the people's selection and interpretation. The findings also depict the occurrence within the same CAF structure of the three institutional bricolage practices: alteration in Lue, aggregation in Cassou and articulation in Vrassan; these were also found by de Koning (2014) in different countries' cases studies. Likewise, Faggin and Behagel (2018) found similar bricolage practices in Brazil. These also challenge the argument of exposure to new elements as the main determinant of the magnitude of institutional change (Campbell 2005; Carstensen 2011) as well as the systematic path dependencies (Heinmiller 2009).

The role of agency in the bricolage process

The exercise of agency enabled the actors to attribute specific meanings to selected bricolage practices and use these meanings to construct preferred narratives that justified their actions. Confirming Long (2001) and Cleaver (2002), emotions of revolt, anger, frustration, disappointment, as well as stigma (like the autochthons' aversion to herders in Lué and development hope in the agribusiness men) influenced the framing and legitimization of the different narratives in the public eye. Social characteristics and local leadership tailored the opportunity for the exercise of agency and determined whose agency was legitimate and worthy of being enforced. In all the villages, despite the CAF being officially governed by the bureaucratic institutions, the autochthons land rights owners displayed stronger agency and imposed their preferred bricolage strategies (i.e., leaving the CAF in Lue, challenging it in Cassou and reconfirming it in Vrassan); hence, they determined the future of the forest. Others (Agrawal and Chhatre 2006; Gutu, Wong, and Kinati 2014) also found that the exercise and outcomes of agency, even within a consensual institutional arrangement can be captured by local elites and hijacked by discriminatory uses of social characteristics such as ethnicity and caste. However, this study further demonstrated that the local elites, including the autochthons, are not a homogenous group nor do they exercise the same agency or pursue the same interests.

The role of power in the bricolage process

In all the villages, the actors exercised power through control over the forest, land and social structures. The exercise of power determined how and why one village institutionalized one form of bricolage rather than another. Those controlling more resources like the autochthons versus the migrants in all the villages, dictated the direction of the changes; this confirmed the observations of Gutu, Wong, and Kinati (2014) in their Ethiopian case where the more authoritative actors curbed the bricolage outcomes. Conversely, those among the women, the autochthons and migrants who failed to make their position dominant confirmed what Funder and Marani (2015) described as the constraints limiting the bricoleurs' actions. These findings also align with Balkin (1994), Cleaver (2007) and de Koning (2014) who showed that the bricolage as a political process could yield unpredicted results for which various actors were unprepared. This was the case in Lué where even the autochthonous land dealers are facing scarcity of farmland and forest products because of their own forest conversion strategies. However, the examples of Cassou and Vrassan showed that the bricolage could also reach the desirable outcomes.

Together the results from Articles IV and reflections on Article I showed that public domain is diverse, includes formalized regulations derived from the state and environmental projects as well as traditional rules and practices inspired by customs. Furthermore, the public domain is not static but dynamic with the actors engaging continuously in struggles over public resources to exercise power and induce change. In the process, they constantly modify the public provisions by producing new or altering the existing norms, twisting meanings around their preferences and current circumstances. The allocation of the exclusive forest management rights to private bodies as the forest users' groups (the GGFs) had limited non-members' participation in the formal forest decision making, although their family lands were also included in the CAF. However, the excluded actors stretched out the public domain beyond the established bureaucracies and used alternative arenas such as the customary systems where they still had influence.

5.4. Contributing to the choice and recognition framework

Originally conceived to confront forestry projects implementers with their responsibility vis-à-vis local democracy, the choice and recognition framework helped me to highlight the role and influences of the intervening agents in policy translation processes and outcomes. However, overall, the framework carries an assumption of "victimization" of the local level actors while portraying project implementers or the policy translators as all-powerful. The policy translation perspective adopted in this study challenged this *de facto* imbalance of power relations between the policy translators and the local actors by acknowledging the potential powers of both level actors within their respective capacities. Hence, with the following, this dissertation contributes to the key areas of the choice and recognition framework.

On institutional choice and representation

The choice and recognition framework assumed that choosing elected authorities is more likely to strengthen local democracy because of the responsiveness and accountability duties binding these elected authorities to the local people. Indeed, the statutory duties can be more secure than the voluntary or non-binding commitments of other types of institutions. However, the empirics showed that the elected bodies may not be the only venue for strengthening local democracy as Larson (2008) also argued. In this regard, Article III showed that the customary chief, who is an unelected authority, acknowledged people's complaints regarding the forest limits, tried to defend their interests, though unsuccessfully because of a lack of authority and support from the local government, particularly the Mayor. Przeworski, Stokes, and Manin (1999) referred to this phenomenon of unelected authorities attempting to respond to people needs as benign dictatorship as under this customary system the people are viewed as subject and not citizens holding the right to claim responsiveness and accountability from their leaders (Mamdani 1996; Nuesiri 2014). If the claimants could be viewed as potential subjects, in this case however they were able to hold their local leaders accountable including the customary chief.

However, these claimants suffered inconveniences as a result. Consequently, they are afraid of renewing any claim regarding the forest as their protests were seen as treason and rebellion against the chief's authority. Would they have faced the same fate if these protests had taken place within a purely political decentralisation frame? A priori no, as claim making without suffering personal prejudices is the essence of citizenship and lies at the heart of political decentralisation and local democracy. In this sense, Ouedraogo (2006) asked "can decentralization be built without citizens?" Alternatively, is the whole construct of a largely Western style of decentralization and democracy inappropriate for the complex rural African context? In which case, Diaw (2009) suggests a more deliberative approach to natural resources management that recognizes decentralization (based on civil rights) and customs (based on "blood rights") as equal domain of authority. The question then arises, what statutory means do people have to force a customary authority to be responsive to their needs or to account to them? Or does one assume a natural beneficence of the traditional authority towards the people? If those responses are negative, therefore, it can be inferred that the existence of the duties of responsiveness and accountability and the citizens' rights to claim these within decentralization would make this form of governance more preferable to others. In Mayo's words (1962:556), it is not only that "decision-makers are responsive to the public. Any clever autocrat makes concessions to public sentiment, but the point is that a democracy provides the institutional machinery of popular control".

However, it is worth mentioning that in everyday life, the frontiers separating decentralization and customs are little to non-existent in Burkina Faso. For instance, in the context of article III, the Mayor who did not respond to his citizens' demand regarding the forest boundaries was also an influential

customary chief in the region. Was he acting with a customary chief's mindset or in the capacity of an elected representative? How do the elected authority and the constituencies understand and differentiate between these multiple "hats"? These can serve as future research inquiries about representation in Burkina Faso.

Nonetheless, Article II also illustrated the frustration and mistrust that resulted from the local government not accounting to the local people regarding the project activities and instead upholding consistent upward accountability to the project. These questions then arise: is it the mandate of an environmental project to make elected authorities accountable to their people? Would this not be a form of domination? How far can a project then contribute to downward accountability and thereby contribute to local democracy? A step forward would be to clearly aim for local democracy as one of the project expectations and set downward accountability as an indicator to be monitored like upward accountability and other indicators.

The choice and recognition framework considered asymmetrical power relations in favour of the intervening agents. The dependencies of the institutional choices, participation, accountability and representation depicted in Article II do not negate local people's agency. It showed that they attempted to challenge or mitigate the negative effects of the institutional choices. The Tanzanian case from Article II illustrated how the expressions of the local people' preferences can successfully change the project implementation planning and outcomes. On the other hand, Article III demonstrated that those claims could also fail to reach the intended changes. On a moderate note, the empirics provided in Article IV illustrated how these seemingly unequal power relations can evolve in the long term and how the local people's norms prior to project intervention can roll back to mix with or even replace the institutions created by the intervening agents. Therefore, the framework would benefit from emphasizing more the agency of the local and their ability to also influence the project choices.

On public domain

In the choice and recognition framework, the public domain focuses on the state statutory frameworks, powers and resources such as local government, decentralization law and voting. However, in practice these intermingle with the traditional systems that preceded the modern state. In sub-Sahara Africa, particularly in Burkina Faso, the public domain is fragmented because of longstanding competition between state logic and customary logic as described in Article IV. The everyday decision-making over natural resources such as forests and lands is guided by customary practices operating for the most part within local arenas and beyond the state. In this regard, Article III illustrated how the identity politics that shape political belonging and citizenship took place outside of the state's legal framework and amid actors that are national citizens of Burkina Faso. The state and the project framed spaces and the instruments of political decentralization were merely used by the actors to mediate the conflict. Likewise, in Article IV, when the forest bureaucracies constrained people's actions, they switched to customary logic simultaneously to solve their problems.

It can be derived that the local people using diverse public resources can also shape patterns of institutional choice from below. The choice and recognition framework underestimated the local people's ability to influence the institutional choices of, for example, who would likely be able to participate in the project. As per the diversities and underlying logics learnt from Article I, forestry project implementation does not occur in a virgin space; rather, it occurs in intermingled islands of complex social constructs that govern the relationships between people and the forests. Since a smooth project implementation is their utmost priority, environmental projects are compelled to adapt to the local standards of whose choice is politically correct and socially acceptable to gain popular

support for the project activities. In this sense, the institutional choice would likely reproduce the existing social and political power structures. For instance, in Article IV the autochthons as land right owners imposed themselves as the first default collaborators of the forestry project.

On citizenship

Expanding the public domain beyond the state legal frameworks is necessary to uncover and analyse the dynamics of citizenship in forest management. In Article III, the national citizenship did not dictate political belonging but the customary norms and social characteristics such as ethnicity and status of residence. These traditional norms determined who among the autochthons and migrants are considered citizens or not, what claim making spaces are available for them, whose claims are worthy of consideration and whose voices are legitimate or not. These criteria defy the underlying assumption of all citizenry holding local citizenship, at the core of the choice and recognition framework. The framework, in advocating for residence-based citizenship has a point; however, there are more political elements in force at the local level. If confined to the relationships between the national or legal citizens and their elected representatives, the analysis of citizenship would miss a great deal of socio-political dynamics occurring at the margin of these domains.

In addition, the findings from Article III challenged the assumption from the choice and recognition framework that citizenship expression is more guaranteed when elected local government members are chosen instead of non-elected bodies. Sure, the local government was recognized in our case but the customary non-elected authorities were more responsive and better enablers of the local people's expression than the local government that instead tried to suppress them. Therefore, it seems that citizenship processes are strengthened where citizens have enticement and claim making space rather than the types of authorities in presence.

6. Conclusions and recommendations

The global participatory forest policy materialized in the 1970s by the shift of global forest paradigm towards more participation has influenced national forest policies worldwide. Focusing originally on community-based forestry for livelihoods, discourses around participatory forest policy have moved gradually towards right-based and democracy premises that are associated with the trends of political decentralisation. In sub-Sahara Africa governments adopted decentralisation in diverse ways (either voluntarily or under domestic and international pressures from aid agencies) and for various reasons among which are the promotion of participation and democracy. Decentralisation in Burkina Faso has a constitutional basis and is presented to promote simultaneously local democracy and implement participatory forest policy. This dissertation investigated how participatory forest policy has been translated into the local level in Burkina Faso and how local democracy unfolds within the policy processes.

I adopted a policy translation perspective to acknowledge the agency of policy translators such as state and non-state bodies and local level actors to re-shape the policy instruments and outcomes in their respective capacities. I applied the "choice and recognition" framework to assess how policy implementers' choices of partnership with local institutions (or institutional choices) in their intervention influenced local democracy operationalized as the interactions of representation, citizenship and public domain. I conceived representation as the procedures through which local peoples' interests are made present within forestry projects and the ways in which the local representatives respond to those needs and account to their constituencies. Article II examined these dynamics of representation through the case of five forestry projects across sub-Sahara Africa. I referred to citizenship as identity, political belonging and local peoples' ability to stand and influence the governing leaders and institutions. Article III analysed the patterns and evolution of citizenship in forest conservation politics in Burkina Faso. Public domain entailed the material foundation of public authority including power resources at the disposal of both leaders and citizens for their claim making. Articles IV and I examined different dimensions of the public domain in forest management in Burkina Faso, fragmented between post-colonial state and customary logics. Article I used a different body of literature than the other articles. However, elaborating on the gender and ethnic lens used in that article was helpful in exploring the socio-political, cultural and customary diversities that shape the management, knowledge and preferences for forest resources. Article IV used the concept of institutional bricolage to analyse the drivers and outcomes of institutional change in forest management.

The thesis is based on three research sites in south-west, centre-east and centre-west Burkina Faso. Having taken a case study approach, one limitation of the findings is that the results obtained may not be generalizable to other contexts. However, by applying a comparative design in the selection of the sites, this risk was mitigated to some extent.

The results show how participatory forest policy was translated at the local level in Burkina Faso through participatory projects and political decentralization reforms. In these interventions, the project implementers' choices of local institutions influenced the substantive representation of local peoples' interests and the effectiveness of forest restoration outcomes as shown in Article II. As per Article III, these interventions can unintentionally produce uneven forms of citizenship and affect citizens' status so that they become denizens as in the case of *les déguerpis*, who were evicted from the forest and whose citizenship has been revoked. In addition, the results showed that the environmental struggles were not only claims for material benefits but were often about political belonging and citizenship and that citizenship is fragile and may be at risk when claims are rejected. Lastly, Articles IV and I depicted the multi layers, contested and complex dynamics of the public domain. While not focussing explicitly on forestry project interventions (as the other articles do), discussions around Article I showed that customary systems based on gender, ethnicity and status of

residence dominated the public domain regarding daily access and control over forest resources. Otherwise, the public domain as in Article IV was shown to be fragmented between intermingling, fluid and competing customary and state logics, where the working of social networks, agency and power mediated the everyday forest decision making and institutional changes.

Following local democracy premises, it can be said that participatory forestry has the potential to strengthen local democracy through political decentralisation frameworks. However, its current implementation is still based on the multiplication and recognition of local institutions representatives such as the forest user groups that do not represent *de facto* the interests of the whole people. Moreover, by choosing the resource user groups, they could undermine the authority of democratically elected representatives. This is also confirmed by Faye (2017), Côte (2015), Manor (2004) and Ribot (1999). These proceedings can also contribute to a fragmentation of the public domain and diffuse the decision-making authority resources among various parallel and competing local institutions, instead of channelling it towards reforms that promote democracy as also stressed by Ribot (2004). Where elected officials do get to represent their constituencies, they are not given discretionary power. They uphold upward accountability as project conditionality while downward accountability is often ignored in the projects' agendas (Karambiri 2015). However, a definitive conclusion about whether the forest user groups, the customary authorities or the local government is best fit for democratic forest management would be too simplistic.

The findings of this thesis do not allow for the identification of a silver bullet or gold standard for achieving democracy in the forests in Burkina Faso or elsewhere. Nonetheless, daily usages and management of the forest resources is based on both customary and state legal frameworks, and it seems imperative for decentralised forest management to adopt a more practical approach. This thesis urges those implementing projects to pay attention to the many nuances in the shadows of global forest policy. As a way forward, participatory schemes could incorporate local democracy objectives into their planning efforts, with realistic goals, procedures and clear indicators. Meanwhile, the benefits of working with democratically elected bodies seem to provide more avenues for accountability and responsiveness as part of democratisation than the creation of new institutions. Hence, where possible, this could be explored as a first choice for project implementers, where possible. Furthermore, responsiveness and downwards accountability should be explicitly integrated in the planning and the allocation of budgets. So far, project planning favours mainly upward accountability.

Forest resources constitute the material foundation of public authority, citizenship and political belonging. Therefore, encompassing the physical resources' boundaries and uncovering the political spheres that govern those resources from behind the scene will require further advances in theory and methods. Such research might be useful to agents of democracy at all levels, especially those that are often left in the shadows of global forest policy. In this sense, this work by analysing forest policy through a local democracy lens adds a new perspective on how forest policy was analysed so far in Burkina Faso. In addition, the theoretical lenses used, and the comparative case study design enable this dissertation to make a theoretical and conceptual contribution on how environmental policies are analysed and how agency from multilevel actors drive change. The choice and recognition framework enabled the analysis of these policy processes and local democracy in the making. However, the framework would need further elaboration to emphasize the crucial role of local people as actor of change. Future enquiries could investigate further the extent to which the socially embedded and customary institutions effectively influence from below the procedures of institutional choices and local democracy processes and outcomes.

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Annexes

In this section, I present four annexes: A table summarizing the policy documents and regulations consulted in the dissertation followed by three annexes summarizing the data collection tools in this dissertation: annex 1 for Article I, annex 2 for Article II and III and annexe 3 for Article IV.

Annexe 1: Policy documents and regulations consulted and key points for participation and democracy

Forest management pattern	Laws/ regulations/frameworks	Key points for participatory forest policy
Centralised forest management from the independences 1960s to late 1970s	Upholding of the French west Africa decree of 1935s	Creating forest reserves for timber production and biodiversity conservation, Establishing state exclusive ownership over land and resources Policy of large-scale plantations of exotic species for timber (source: Bellefontaine et al. 2000).
	Decentralisation law (1993 and latest revision in 2004 and 2018	First decentralisation law : (Textes d'orientation de la Décentralisation-TOD) ; Current version : la loi n°055-2004 portant Code Général des Collectivités Territoriales (CGCT) Local communities' right to plan their natural resources management for local development (e.g., Art. 79, 88-90)
	The constitution of Burkina Faso (version of 1991 revised in 2012)	Affirms: Political pluralism and the democratic nature of the state (Art.31) Political decentralisation as a mean for a democratic participation of the people in the free administration of their affairs (Art.145) The protection of the environment as an absolute necessity and everyone's duty, the wealth and natural resources belong to the people and are used to improve their livelihoods (e.g., Art.14, 29, 101).
Decentralised forest management from 1980s to date	Forest Code (of 1997 and revised in 2011)	*Code Forestier* of 1997 and 2011 (loi n°003-2011/AN portant code forestier au Burkina Faso Participatory approach as basis for forestry interventions and local people' *participation* at every phase of forest development as pre-requisite for forest sustainable forest management (see Art. 3; 7, 34) Roles and mandates of decentralized local communities (*collectivités locales)* in making decisions over the operation and management of their forest resources (see Art. 38, 66)
	Environmental Code (adaopted in 1994, latest version in 2013)	*(loi n°006 - 2013/AN du 2 avril 2013, portant Code de l'environnement au Burkina Faso)* Local people' right to information and participation to public decision making over their environment (art. 9) Local communities' right to decision making over the management of the environment (see Art. 12) Local people, NGOs, associations and private sector the right to participate in the decision making over the management of their environment (art. 8)

	Land Tenure Law (1984 latest revision in 2012) and the Rural Land law (of 2009)	Reorganisation Agraire et Foncière (RAF) issued in as well as the Rural Land Law of 2009 *loi n° 034-2012/an portant réorganisation agraire et foncière au Burkina Faso* Principle of good governance: democracy, participation and sustainable development (e.g., Art.4) Principle of information and participation of local people in land use planning and management (e.g., Art.32).
	The « three fights » policy « les trois luttes » in 1985:	Creation of new national parks (*forêts classées)* for fuelwood production; deconcentration of forest management and creation of village based logger groups
	Natural forest management program (PNAF) in1986-2002	Through project (BKF, PNUD/FAO/85/011): Creation of experimental community-managed forests (CAF) in Southern Burkina Faso and its governance instruments (Forest management fund, village development funds). Three more phases of the BKF project: creation of seven new community-managed forests (CAF)
	National forest policy document adopted in 1998	Settles the foundations for forest governance based on the participatory principles outlined in i) the constitutions, ii) the national action plan for the environment, iii) the environmental code, iv) the national development plan and, v) the country's international commitments regarding the environment.

Annex 2: Resource persons' interview and group discussion guide for Article I

The annex 2 presents two data collection tools used for Article I: individual interview with resource persons and two matrix for the identification and ranking of shea ethnovarieties. Before the administration of each tool, I sought and obtained free prior and informed consent.

1. Individual interviews guide with village resource persons
Characteristics of population and agroforestry resources

- History of the village and settlements, infrastructures, access to market
- Characteristics of population, ethnicities, migration patterns, states of the relationships between the different groups, gate keepers, conflict management
- Types and abundance of forest and agroforestry resources, general patterns of identification of shea resources, relative importance of shea in livelihoods and the village economy
- Forest and agroforestry resources' management systems and practices, rules of access and control, decisions making, interrelations ethnicities, gender and status of residence, etc.

2. Discussion guide with gender and ethnic desegregated groups
Matrix of identification, characterization and preferences' ranking of shea ethnovarieties

Target: men and women from Bobo, Sambla, Moose and Fulani ethnic group

Timing: 1 -3 hours

In groups desegregated by gender and ethnicity (including the corresponding status of residence), on large brown paper sheet, ask participants to:

- cite and enumerate the shea-ethnovarieties that they know from their experience with the resource
- identify and characterize each ethnovariety according to important features for them such as the characteristics of the fruit, the taste, the nut, the leaves and the butter
- rank those ethnovarieties from the most to the least preferred according to specific traits attributed to each ethnovarieties; and discuss the reasons of these rankings
- bring back the two groups together to share and discuss their respective results

Example of shea-ethnovarieties' identification and characterization matrix

Shea ethnovarieties order	Local name in Dioula language	Local name in other specific local language	Descriptive characteristic				
			Taste	Fruit	Nuts	Leaves	Butter
1.							
2.							
3.							
4. Etc…							

Example of preference ranking matrix

	Participatory ranking of the Shea varieties relative to their importance for the participants					
		Perceived importance				
Ranking order	Shea ethnovarieties	Fruit 1--5	Nut 1--5	Butter 1-5	Shade 1--5	Wood 1--5	Leaves 1-5
1.						
2.						
3.						
4. Etc…						

Annex 3: Data collection tools for Article II and III

The annex 3 introduces five tools used with national and local level actors to gather data for the Articles II and III: In-depth and semi-structured interview guides for national and local leaders and villagers, institutional mapping of local actors and powers, village and resources mapping. Before the administration of each tool, I sought and obtained free prior and informed consent.

1. Individual in-depth and semi-structured interview guide for national leaders

Target: project leaders, policy makers

Average timing: 1-2 hours

Interviewee's profile

- Name, professional affiliation, position, missions and relations to forest governance in Burkina Faso and decentralization

National actors' understanding of decentralization and local democracy

- Definitions, principles and motivations of decentralization, expected results, practical implementation, challenges
- Perceptions of the roles, skills and challenges of local authorities in the process
- Perception of local democracy (definition, descriptions, necessary conditions, enablers, contributions to local livelihoods) and its relations to forest governance
- Contributions, roles and proceedings of the interviewee's organization in this sense
- Suggestions for improvement

National actors' understanding of citizenship in forest governance

- Perceptions of citizenship (definitions, principles, conditions, importance, etc.)
- Relations between citizenship, participation and representation (necessary actions, expected results, challenges, etc.)
- Concrete way the interviewee operationalizes those concepts in their interventions
- Discussion of citizenship in forest management

For IUCN specifically

- Objectives of the forest conservation project, the main actors involved, alignment with national forest policies, and frameworks
- Perceptions and implementation of participation, decentralization policy in the intervention
- Expectations (and actual results) for the success and durability of the project achievement, for the local authorities and for the improvement of local people's livelihoods
- Logics and proceedings of the choices of local institutions partners, participation and patterns of local people's representation in the forest planning, implementation processes
- Tools for accountability and reporting of the project activities on the ground
- Perceptions of conflicting interests' conservation and other land uses, discussion of population relocation from the forest, reasons of emerging conflict, mechanisms of conflict resolution
- Suggestions on what the project could have done differently, lessons learnt and perspectives for the future

2. Individual in-depth and semi-structured interview guide for local leaders

Target: local level state officials, local government authorities, village leaders

Average timing: 1-2 hours

Interviewee's profile
- Name, profession, position, ethnicity, age, roles in the community, schooling, belonging to associations, experience with decentralization and forest management

Roles in forest management and decision-making
- Prerogatives (legal, customary, traditional, etc.) in forest and land management
- Perceptions of decentralization in the forest sector: goals, expected results, practical implementation

Forest planning and representation of local people
- Forest planning: processes, land negotiations, local participation, actors and challenges
- Discussion on the issue of forest boundaries negotiations and the relocation of people from the forest
- Formation and roles of the forest management groups and relationships with the other actors
- The roles of customary authorities, the village development councillors (CVD), the village delegate, the municipal councillors, the women organizations, etc.
- Roles of the local state agencies (the foresters, the agents of agriculture and livestock) in the forest planning process

Local government in forest management
- Local government's participation, roles and prerogatives in the project and forest planning
- Patterns of forest management before and after the project implementation
- Information schemes between local government, project leaders, villagers and the accountability mechanisms practiced
- Benefits and challenges of the roles played by the local government, suggestions for improvement

Local government and conflict management
- Perception regarding the forest planning and the conflict (the parties and actors involved, the arguments in presence, the motivations and claims), the emerging coalitions namely around the local government, the village chief, etc.
- Conflict construction and resolutions: processes, mediators, mechanisms, means, strategies
- Conflict aftermath: the emerging of those relocated from the forest, changes in identity and belonging, ethnicities, social peace, and future participation to forest management, fragmentation of public spaces, etc.
- Lessons learnt, suggestions

Patterns of responsiveness and accountability (including that of the chosen institutions)
- Identification of influential local institutions and actors invited and involved in the intervention
- Discussion of local people's interactions with those influential authorities, how they responded, integrated or rejected the interviewees' preferences or suggestions, the interviewees' level of satisfaction regarding the raised issues, how far the interviewee's suggestions changed the course or the implementation of the project
- Exploration of whether other people' view were taken into account in the project implementation and the reasons why,
- Exploration of the reasons why the authority responded or not to the interviewee's demands (keep in mind reasons related to insufficient resources, laws, project resources, etc.)
- Discussion of concrete example of actions and decisions taken by the influential authorities and how the interviewee (and the people reacted in general) reacted and whether the interviewee (and the people in general) have let the leaders know when he/she was happy or unhappy with the leader's actions and the means used to that end.

Accountability mechanisms applied to local authorities

- Exploration of general ways in which the people communicated with and influenced different local leaders mentioned so far or how the people rewarded of punished the leaders for their actions (keep in mind and ask about potential leaders particularly the elected local government, customary leaders, village delegate, member of parliament, municipal councillor)
- Discussion of examples of important decisions or actions taken by the local leaders (specific leaders) regarding the forest and description of specific means used by the people to respond and hold those leaders accountable. State whether those means were used against the interviewee. Keep in mind the following generic means: election/voting, public protests, talking to the media, sabotage, publicly shaming, insulting / or mocking the leader, confronting the leader in public meetings, taking the leader to court, magic, rumours about the leader to discredit her/him, threatening violence against the leader, bringing in other authorities or professionals as mediators, etc.

Changes in local power relations following the forestry project's events
- Explore the changes (if any) in the leaders' legitimacy in the eyes of the people and their capacity to engage with them in the forest-related activity and in the community in general
- Record the interviewee's ranking of these changes for himself and the other leaders' authority regarding the forest decision making and in the community in general (keep in mind strengthen, weakened or status quo)

3. Individual in-depth and semi-structured interview guide for local people

Target: general local people desegregated per gender, status of residence, membership or not to the forest management group, direct involvement or witness of the forestry project's implementation

Average timing: 1-2 hours

Free and informed consent prior to the project intervention
- Basic identification and information regarding the project intervention and key actors
- Discussion of whether or not, how, and with whom the free prior and informed consent was sought by the project on the behalf of the people, explore whether certain group of people were not involved and why
- Exploration of whether or not there were resistance to the intervention, from whom, and the implications of such actions for the project implementation and outcomes

Consultation during project design and implementation
- Exploration of whether or not, and the ways in which the project leaders conducted local actors' consultations throughout the project intervention, the extent to which these consultations changed the course and project agenda or not

Knowledge of the project and information provision
- Exploration of the ways in which the project leaders informed local people about the intervention and its goals (keep in mind distribution and availability of the project documents, seminars or meeting or other means of information), the accessibility and the extent to which the local people understood those documents or information shared by the project leaders
- Exploration of the interviewee's perception and understanding of the main goals of the project, the project's relevance to address the issues that they sought to solve, the local people' expectations, the perceived beneficiaries (and losers) of the project, the contributions requires from the local people to the project
- Exploration of the anticipated and concrete effects of the intervention on the forest related problems at stake now and in the future

Local authorities' involvement in intervention, responsiveness and accountability

- Enumeration of important institutions and organizations that decide or influence the access, use, benefit sharing or management of the forest, and the specific decisions these authorities make
- Exploration of the roles, importance and rankings of the local representatives and authorities involved in the forestry project: discuss examples of actions that are important to the interviewee regarding the forest management and that the above-mentioned authorities have taken. Discuss how satisfactory or not those actions were, whether those actions responded to the interviewee's needs, expectations or concerns. Describe the actual reactions or responses to these authorities

Patterns of responsiveness and accountability of the chosen institution
- Identification of influential local institutions and actors invited and involved in the intervention
- The interviewees' chances to interact, discuss or express their own preferences to the influential authorities, the ways in which those authorities responded, integrated or rejected the interviewees' preferences or suggestions, the interviewees' level of satisfaction regarding the raised issues, how far the interviewee's suggestions changed (or not) the course or the implementation of the project
- Exploration of whether other people' view were taken into account in the project implementation and the reasons why
- Exploration of the reasons why the authorities responded or not to the interviewee's demands (keep in mind reasons related to insufficient resources, laws, project resources, etc.)
- Discuss concrete example of actions and decisions taken by the influential authorities and how the interviewee (and the people reacted in general) reacted, whether the interviewee (and the people in general) have let the leaders know when he/she was happy or not with the leader's actions

Accountability mechanisms applied to local authorities
- Exploration of general ways in which the people communicated with and influenced different local leaders mentioned so far or how the people rewarded of punished the leaders for their actions (keep in mind and ask about potential leaders that the interviewee may have forgotten to mention particularly the elected local government, customary leaders, village delegate, member of parliament, municipal councillor)
- Examples of important decisions or actions taken by the local leaders (specific leaders) regarding the forest and describe the specific means used by the people to respond to hold those leaders accountable. State whether the interviewee personally used those means. Keep in mind the following generic means: election/voting, public protests, talking to the media, sabotage, publicly shaming, insulting / or mocking the leader, confronting the leader in public meetings, taking the leader to court, magic, rumours about the leader to discredit her/him, threatening violence against the leader, bringing in other authorities or professionals as mediators, etc.

Potential sensitive questions regarding the conflict
To discuss when appropriate:
- The premises, development and protagonists of the conflict, their arguments and the interests at stake
- The accountability means used throughout the conflict and the resolution processes
- The resulting changes in local livelihoods, the forest and people relationships
- The changes if any in identity, membership and belonging to the village

Changes in local power relations following the forestry project's events
- The changes (if any) in the leaders' authority in the eyes of the people and their capacity to engage with them in the forest-related activities and in the community in general

- The interviewee's ranking of these changes in the leaders' authority regarding the forest decision making and in the community in general (keep in mind strengthen, weakened or status quo)

Interviewee's profile

- Name (not compulsory because of certain sensitive questions in a post-conflict context), age, gender, schooling, ethnic group, status of residence, dweller (or former) of the forest, duration of residence on the area, dependencies on forests resources for subsistence, relations with the village chief's lineage, profession within and outside the village, cash income (by interviewee or family members), self-evaluation of income category (poor, average or rich)

4. Local institutional mapping of actors and powers

Goal: To locate authority and decision making in the local area

Method: Explore the institutions and organizations governing the forest resources and decision-making and the relations of accountability based on legal and project document analysis, literature review and grounded observations

Sample table of institutions for institutional mapping

Institution	How constituted (elected, appointed, self-selected)	Powers & Roles in forestry & other areas	Legal and social basis of those powers	Basis of member-ship or belonging	Relations of account-ability (to whom & how)	Size & number of members, geographic extent, number of institutions in area
Elected Local Government						
Appointed Local Admin. (prefect or district officer)						
Local forestry office						
Customary Authorities						
Cooperatives						
NGOs						
Private corporations						
Private individuals						
User groups						
Project implementation units						
Project committees						

Rotating credit associations					
Women's groups					
Secret societies					
Religious groups					
Ethnic associations					
Etc.					

5. Village and resources mapping exercise

Goal: To comprehend the village landscape, temporal and spatial distribution of population and resources within the village territory, the forest life history and the socio-political relationships of peace and land conflict with neighbouring villages

Target: A group of village leaders and elders (up to 10 participants)

Method: on large brown paper, provide information on the village landscape, population and resources (keep in mind: the location and boundaries of the forest prior to the project and the current boundaries, the agricultural and grazing lands, the inhabitation areas, the neighbourhoods in the village and the identity of the occupants, the water supplies, the schools, the main roads, etc.).

Special attention to the history of the forest of Sablogo, the key moments and events related to the forest conservation planning, the population migration to the area and settlement in what is the current forest, history of forestry projects interventions in the area to date, the forest conservation planning in relation to other land uses for livelihoods, etc.

Timing: 1- 3 hours

Annex 4: Semi-structured interview's guides and focus group discussion for Article IV

The annex 4 presents below the two tools used in the data collection for Article IV. Prior to the administration of each tool, I sought and obtained free and informed consent.

1. Semi structured interview guide with local actors
Target: local leaders and people formally or not involved in the forest management

Interviewee's profile
- Name, ethnicity, age, marital status, schooling, religion, status of residence, profession, relations and experience with the CAF, lands ownership in the area, other social position in the village

Uncovering the CAF objectives, people's expectations and the CAF's achievements
- Exploration of the objectives of the CAF, the expectations of the interviewee and the people in general, the (un) fulfilled expectations, the individual and collective satisfactory achievements and suggestions for improvement
- The challenges pertaining to different stages of the creation of the CAF: keep in mind land tenure and negotiations issues, participation, etc.

Perception of benefit sharing system: equity, fairness, efficiency for forest and people
- Perception of the overall organization and functioning of the benefit sharing system among the actors: The Village investment fund, the loggers' pay, the forest management fund, the funds from the forest offenses reporting, the fund for the municipality, the state funds, etc. Suggestions for improving the overall benefit sharing
- Appreciation of the interviewee's personal benefits from the CAF system, fairness, suggestions for improvement

Dynamics and motivations for engagement with and or disengagement from the CAF
- Perceptions regarding local people's engagement with and or disengagement from the CAF: current trends as compared to the past, the reasons and factors guiding the change of attitudes, the mechanisms and actions used to express these shifts
- The interviewee's own stand regarding those shifts and the ways in which the interviewee expressed those feelings and own positions
- The top motivations of the interviewee and the people for converting the CAF's forest units into agriculture, livestock or other land uses. Keep in mind motivations such as the issues of transparency in the forest management, the benefit sharing, and the CAF's relationships with the customary chiefs, the autochthons, the forest management groups and the population at large, etc.
- The introduction of land sale practices in the area, and perceptions of the CAF's forestland sale, suggestions for re-establishing trust and strengthen people's engagement in the forest management

Perception of and interactions with the forest management actors
- Exploration of influential actors of the CAF, examples of concrete actions taken by those actors and the way the local people responded to those actions
- Self-assessment of the interviewee's own position and interactions with the influential actors, participation to CAF's meetings and to the CAF's activities in general
- Exploration of local authorities' roles and actions in the forest management and forest conversion specifically the customary leaders, forest management group leaders, the Mayor, etc.

Perceptions of and expectations for the CAF's future

- The top challenges facing by the CAF in the last 5 years, suggestions to overcome those challenges, the roles of customary authorities, local government, forest management groups, etc. in implementing those suggestions
- Through concrete examples discuss conflict resolution
- The extent to which maintaining the CAF is part of the interviewee's priority in the future, the expected and necessary changes and adjustments to be made
- The interviewee's dreams regarding the CAF, the suggestions of the do and don't if the CAF experience was to be reproduced elsewhere,

Specific to leaders in charge of the forest management
- Mandate in general and in relation to forest management and the CAF, resources available for the exercise of the mandate, concrete activities undertaken, accountability mechanisms and practices
- Establishment and distribution of the forest benefits, the logics and proceedings, actors' involvement in the process, perception of the fairness and contribution of the CAF to local livelihoods and the durability of the forest.

2. Focus group discussion's guide

Target: local people desegregated by gender, ethnicity, status of residence and youth groups

Method: Structure the discussion around a timeline exercise of the CAF, on a sheet of paper indicate the big dates, the events and changes occurred from the CAF's inception in 1989 to date in 2017; discuss the implications of those events for the current situation of mainstream forest conversion and people' dis(engagement) with the forest management

Timing: 1 to 3 hours

History and establishment of the CAF
- Process of the creation of the CAF, the main objectives, the land tenure and other arrangements concluded, appreciation of the transparency, inclusiveness of the process
- Expectations of different social categories men, women, youth of the CAF, the achieved individual and collective expectations and the challenges
- Actors, institutions and organizations involved in the forest management at village level, their roles, hierarchies

Perceptions of the relationships of the people with the forest managers
- The influential actors regarding the forest management and decision making, their roles in practice, their relationships with the people and the other actors involved in the forest management, the satisfactory achievements, the challenges and suggestions for improvement

Perceptions of forest benefit sharing
- Individual and collective benefits of the CAF, the management and distributions of those benefits, the perception of the fairness and effectiveness of the benefit sharing system for people and for the durability of the forest resources, suggestions of changes (if any)

Uncovering the motivations to engage or disengage with the forest management
- Participants' perceptions of what motivates people to convert the CAF forest to other land uses, relate those reasons to the issues previously discussed regarding the history of the creation of the CAF, the people' relationships with the forest managers, the benefit sharing, etc.
- Discussion of what can in turn motivate people to remain or to bring back their support to the forest management, the do and do not regarding the creation and management of the CAF if the experience had to be implemented elsewhere.

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No. 16   El Fadl, M. A. 1997. Management of *Prosopis juliflora* for use in agroforestry systems in the Sudan. Doctoral thesis.

No. 17   Kaarakka, V. & Holmberg, G. 1999. Environmental conflicts and development cooperation with special reference to conservation and sustainable management of tropical forests.

No. 18   Li, C. 1999. Drought adaptation and genetic diversity in *Eucalyptus microtheca*. Doctoral thesis (limited distribution).

No. 19   Suoheimo, J. 1999. Natural regeneration of sal (*Shorea robusta*) in the Terai region, Nepal. Doctoral thesis.

No. 20   Koskela, J. 2000. Growth of grass-stage *Pinus merkusii* seedlings as affected by interaction between structure and function. Doctoral thesis (limited distribution).

No. 21   Otsamo, R. 2000. Integration of indigenous tree species into fast-growing forest plantations on Imperata grasslands in Indonesia - Silvicultural solutions and their ecological and practical implications. Doctoral thesis (limited distribution).

No. 22   Koskela, J., Nygren, P., Berninger, F. & Luukkanen, O. 2000. Implications of the Kyoto Protocol for tropical forest management and land use: prospects and pitfalls.

No. 23   Otsamo, A. 2001. Forest plantations on Imperata grassland in Indonesia – Establishment, silviculture and utilization potential. Doctoral thesis (limited distribution).

No. 24   Eshetu Yirdaw 2002. Restoration of the native woody-species diversity, using plantation species as foster trees, in the degraded highlands of Ethiopia. Doctoral thesis.

No. 25   Appiah, M. 2003. Domestication of an indigenous tropical forest tree: Silvicultural and socio-economic studies on Iroko (*Milicia excelsa*) in Ghana. Doctoral thesis.

No. 26   Gaafar Mohamed, A. 2005. Improvement of traditional *Acacia senegal* agroforestry: Ecophysiological characteristics as indicators for tree-crop interaction in western Sudan. Doctoral thesis.

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No. 28   Hares, M. 2006. Community forestry and environmental literacy in northern Thailand: Towards collaborative natural resource management and conservation. Doctoral thesis.

No. 29   Eskonheimo A. 2006. Women, environmental changes and forestry-related development: Gender-affected roles of rural people in land degradation and environmental rehabilitation in a dry region of Sudan. Doctoral thesis.

No. 30   Raddad, E.Y.A. 2006. Tropical dryland agroforestry on clay soils: Analysis of systems based on *Acacia senegal* in the Blue Nile region, Sudan. Doctoral thesis (limited distribution).

No. 31   Luukkanen, O., Katila, P., Elsiddig, E., Glover, E. K., Sharawi, H. and Elfadl, M. 2006. Partnership between public and private actors in forest-sector development: Options for dryland Africa based on experiences from Sudan, with case studies on Laos, Nepal, Vietnam, Kenya, Mozambique and Tanzania.

No. 32   Laxén, J. 2007. Is prosopis a curse or a blessing? – An ecological-economic analysis of an invasive alien tree species in Sudan. Doctoral thesis.

No. 33   Katila, P. 2008. Devolution of forest-related rights: Comparative analyses of six developing countries. Doctoral thesis.

No. 34   Reyes, T. 2008. Agroforestry systems for sustainable livelihoods and improved land management in the East Usambara Mountains, Tanzania. Doctoral thesis.

No. 35   Zhou, P. 2008. Landscape-scale soil erosion modelling and ecological restoration for a mountainous watershed in Sichuan, China. Doctoral thesis.

No. 36   Hares, M. & Luukkanen, O. 2008. Research Collaboration on Responsible Natural Resource Management, The 1st UniPID Workshop.

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No. 37   Husgafvel, R. 2010. Global and EU governance for sustainable forest management with special reference to capacity building in Ethiopia and Southern Sudan. Doctoral thesis.

No. 38   Walter, K. 2011. Prosopis, an alien among the sacred trees of South India. Doctoral thesis.

No. 39   Kalame, F.B. 2011. Forest governance and climate change adaptation: Case studies of four African countries. Doctoral thesis.

No. 40   Paavola, M. 2012. The impact of village development funds on community welfare in the Lao People's Democratic Republic. Doctoral thesis.

No. 41   Omoro, Loice M.A. 2012. Impacts of indigenous and exotic tree species on ecosystem services: Case study on the mountain cloud forests of Taita Hills, Kenya. Doctoral thesis.

No. 42   Alam, S.A. 2013. Carbon stocks, greenhouse gas emissions and water balance of Sudanese savannah woodlands in relation to climate change. Doctoral thesis.

No. 43   Rantala, S. 2013. The winding road from exclusion to ownership: Governance and social outcomes in contemporary forest conservation in northeastern Tanzania. Doctoral thesis.

No. 44   Negash, M. 2013. The indigenous agroforestry systems of the south-eastern Rift Valley escarpment, Ethiopia: Their biodiversity, carbon stocks, and litterfall. Doctoral thesis.

No. 45   Kallio, M.H. 2013. Factors influencing farmers' tree planting and management activity in four case studies in Indonesia. Doctoral thesis.

No. 46   Etongo, B.D. 2016. Deforestation and forest degradation in southern Burkina Faso: Understanding the drivers of change and options for revegetation. Doctoral thesis.

No. 47   Tekle Tegegne, Y. 2016. FLEGT and REDD+ synergies and impacts in the Congo Basin: lessons for global forest governance. Doctoral thesis.

No. 48   Fahmi, M.K.M. 2017. Climate, trees and agricultural practices: Implications for food security in the semi-arid zone of Sudan. Doctoral thesis.

No. 49   Abaker, W. 2018. Linkages between carbon sequestration, soil fertility and hydrology in dryland Acacia senegal plantations in Sudan: a chronosequence study. Doctoral thesis.

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No. 51   Karambiri, M. 2019. Where is local democracy? In the shadows of global forest policy in Burkina Faso. Doctoral thesis (limited distribution).