Disentangling the social net: 
Examining the links between social capital, empowerment and social difference in two ecotourism villages in Ghana 

by 

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Abstract

Reconciling conservation of natural resources with rural community empowerment is a much-needed goal, and a global challenge. Community-based natural resource management (CBNRM) is one attempt to reconcile such endeavours. Attracted by its promises, social capital has become a focus for policy and research in CBNRM and community development in recent years. However, social capital has been approached as a catchall and a decontextualized concept, rendering the term close to unusable for effective management. Furthermore, the tendency to treat communities as homogenous units has created further confusion when examining the role of social capital and devising appropriate actions. In this context, the goal of this doctoral dissertation was to critically investigate social capital as it relates to empowerment and equity impacts to offer new insights for effective and contextually-driven practices, in particular within the context of community-based ecotourism (CBE).

As such, this research borrows from the fields of sociology, feminist political ecology and community development, to investigate if and how social capital plays a role in community empowerment in two CBE projects in rural villages in the Volta Region of Ghana by employing a multimethod and multilevel approach. To avoid confounding terms and to navigate the complexity, I separately analyze different social capital and empowerment components. Employing both qualitative and quantitative data sources and analyses (including social network analysis) and incorporating a feminist perspective, I provide a novel, re-politicized and structured approach for the exploration, in the Ghanaian CBE context, of well-established social capital hypotheses that to date, have been primarily applied in Western societies. Overall, research findings show that social capital, social exclusions and empowerment opportunities are all interdependent phenomena occurring concurrently at different ecological scales and in different participatory spaces. I argue that a comprehensive understanding of the merits of social capital in the context of CBE requires a multilevel and multidimensional analytical approach and an interdisciplinary
perspective to develop successful community projects that do not further social inequities but rather, enable collective action in, and shared benefits from, natural resource management.
Lay summary

Reconciling natural resource conservation with rural community empowerment is a much-needed goal but remains a global challenge. Social capital is recognized for its potential to benefit both individuals and communities and for facilitating sustainable natural resource management. Yet caution against erasing conceptual complexities and homogenizing communities has been emphasized to avoid simplistic CBNRM initiatives. The goal of this dissertation is to investigate if and how social capital contributes towards the empowerment of individuals and collectives, in equitable and sustainable ways, in communities engaged with natural resource management. The research takes place in two ecotourism projects in the Volta Region of Ghana and employs an interdisciplinary, multimethod and multilevel approach. While results indicate that social capital enables individual and community empowerment in the study communities, context matters a great deal to clarify the conditions under which this can occur. Without understanding of this context, initiatives to promote social capital will likely be ineffective, and inequitable.
Preface

This dissertation was supported by a SSHRC Insight Development (430-2012-0158), various grants from the University of British Columbia and the UBC Public Scholar Initiative. The research was done in collaboration with Drs. Robert Kozak, Howard Harshaw, Leila Harris and David Tindall. Under their supervision, I carried out the research design, data collection, data analyses and writing of this dissertation. I am the main contributor in the identification and design of this research program. In addition, I designed and carried out all data collection protocols and the knowledge mobilization plan with the support of local field assistants. Data collection in Ghana was aided by Opoku Otto, Etse Peace, Vordzorgbe Wisdom, Halivor Noble, Nyakoli Josua and Amey Leticia and by research assistants in the two communities of study. Their names remain undisclosed to protect their identities. In addition, fieldwork was undertaken with the support of the Nature Conservation Research Centre, which provided on-the-ground support by facilitating collaboration agreements with the communities under study, providing contextualization of ecotourism in Ghana and access to office space in the capital. UBC undergraduate students Alistaire Huggins and Gabrielle Diner helped with data entry. Finally, I alone performed all analyses of the research data. Throughout the research process, all committee members offered important guidance in the design, analyses, interpretation of results and knowledge mobilization.

The University of British Columbia Behavioural Research Ethics Board approved this research. The certificate of approval for data collection methods carried out in Chapters 2, 3 and 4 is UBC BREB # H10-02499.

Three publications resulted from this dissertation. Relative contributions of all collaborators and co-authors are indicated below.
A version of Chapter 2 has been accepted for publication in *Society and Natural Resource Management* with the title: Ramón-Hidalgo, A. E., Kozak, R. Harshaw, H. and D. Tindall (accepted). The differential effects of cognitive and structural social capital on empowerment in two community ecotourism projects in Ghana. Society & Natural Resources: An International Journal. Impact Factor 2009: 1.016 (USNR-2016-0253) [Ramon-Hidalgo 70% contributor]. I conducted all the analyses and wrote the manuscript. The other co-authors suggested revisions, offered advice on the analytical approach and interpretation of results.

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List of abbreviations

CBE Community-Based Ecotourism
CBNRM Community-Based Natural Resource Management
NRM Natural Resource Management
SNA Social Network Analysis
PCA Principal Component Analysis
NCRC Nature Conservation Research Centre
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Dedication

A Elia y a Ana
Chapter 1:
Disentangling the social net: an introduction

Community approaches to natural resource management (NRM) and conservation, such as community-based ecotourism (CBE), have the potential to promote conservation while also improving rural livelihoods and empowering communities. While these community models are rarely easy to implement (Buckley, 2009; Sandker et al., 2009; Watkin, 2003; Zeppel, 2007), they place local institutions and communities as the central agents for collective action\(^1\) when managing agricultural lands, forests, wildlife, or water (Cleaver, 2004; Dasgupta & Beard, 2007; Ostrom, 1990; Pretty & Ward, 2001). Social capital – the investment in social relationships with expected returns – has been proposed as the 'missing link' in development to ensure the social cohesion, cooperation, and coordination that are instrumental for ensuring successful community initiatives. Attracted by the promises of social capital, development practitioners have promoted it within community-based natural resource management (CBNRM) contexts, and it has become a focus for policy, practice and research in recent years (Grootaert & Van Bastelaer, 2001, 2002; Pretty & Ward, 2001). Unfortunately, many have employed social capital as a decontextualized term and catchall for any sociological phenomena that improves life (Fine, 2001).

\(^1\) While 'collective action' is a term employed in many different contexts, throughout the thesis I employ this term to simply mean people working together (Oliver, 1993). Generally, collective action is understood as an emergent property from the co-ordinated actions by two or more people that are motivated by a desire to change of some aspect of social life (or to resist changes from others) (McAdam, 2011). I employ the term 'collective action' mostly when referring to the empowerment outcomes of social capital at the community level. For example in Chapter 4, I consider collective action to be the coordinated effort to petition the local government for community improvement (i.e., road access, electrification, etc.). I understand that an individual actor’s access to social capital might not only result in individual outcomes but also can contribute to collective outcomes through coordinated efforts. In Chapters 2 and 3 however, I focus on the examination of social capital as it relates to individual outcomes.
from context, the employment of social capital in research and practice has resulted in much confusion, at times rendering the term unusable for effective management (Cleaver, 2005; Das, 2006; Harriss, 2001; Molyneux, 2002). A central premise of many of the social capital critiques is that communities are not homogeneous entities: failure to recognize the differing impacts of CBNRM among social categories in a community (e.g., gender, class, ethnicity) risks missing opportunities for accessing social capital and empowerment, or worse, furthering inequities. Although paying attention to such structural social differences as they relate to social capital and empowerment seems highly relevant, this matter has not received serious attention from CBE or CBNRM scholarship to date.

This research borrows from the fields of sociology, feminist political ecology, and community development to investigate if and how social capital plays a role in community empowerment in the context of CBE. By separately examining a variety of social capital and empowerment components and by incorporating a feminist perspective into the analyses, I provide a novel structured approach for the exploration, in the Ghanaian CBE context, of well-established hypotheses in Western societies concerning social capital functions. The overall goal of this dissertation is to problematize simplistic approaches to the study of social capital in CBNRM with the aim of informing appropriate policies for effective and contextually-driven social capital initiatives that empower communities without furthering social inequities. A better understanding of how to develop successful CBE will represent a step towards achieving sustainable natural resources management, while reducing deforestation and promoting social equity and well-being.

This introductory chapter is organized in five sections. First, I present the state of knowledge and research gaps concerning CBNRM and CBE as it relates to social capital and empowerment inequities. Second, I present research objectives. Third, I introduce the theoretical frameworks concerning social capital, empowerment and social difference that I draw from to achieve research objectives. Fourth, I present the study context and methodology. Finally, I outline the structure of the thesis.
1.1 Background

Although not a new phenomenon, CBNRM has been promoted over the past two decades as a response to the failure of top-down conservation approaches. The assumption of CBRNM is that it can create a more sustainable natural resource governance regime, which may enhance local benefits while conserving the environment. Two key premises that inform CBRNM approaches are that 1) institutional reform and decentralization grants authority to, and empowers, local actors through involvement in the management of surrounding natural resources; and 2) when local users benefit from, and are actively engaged in, decisions that affect them sustainable NRM is more likely to succeed (Gibson, McKeen, & Ostrom, 2000). In other words, local empowerment through participatory decision making and community benefits may bring about changes in attitudes and behaviours that address long-term conservation goals (Pretty & Ward, 2001). As such, active citizenship and collective action are considered crucial to the success of CBNRM efforts. CBNRM is a widespread model in many regions of Africa today (Nelson & Agrawal, 2008) employed, among other things, to manage ecotourism projects, bee-keeping initiatives or firewood enterprises (Roe, Nelson, & Sandbrook, 2009).

Ecotourism in particular, although still a debated endeavour (Cobbinah, 2015; Das & Chatterjee, 2015), has been promoted for the last four decades as a way to diversify local economies in communities around the world by increasing capacity-building opportunities and empowering communities (Higham, 2007; Scheyvens, 2002; Zeppel, 2006). Ecotourism has been defined as an activity that involves travel to natural destinations, seeking to minimize ecological impacts, build environmental awareness, provide direct financial benefits for conservation, empower local people, respect local culture, and support human rights and democratic movements (Honey, 2008). A large number of ecotourism case studies are based on forest-dependent communities (c.f., Zeppel, 2006) and in this context, ecotourism provides an opportunity to prevent intensive agricultural or forest overexploitation practices by providing a supplementary income for rural economies (Gurung & Seeland, 2009; Zeppel, 2006). Ecotourism opportunities provided by forest-dependent communities include forest and forest canopy walks, wildlife viewing, canoe
tours, ethnobotanical walks, ecological restoration tours, voluntourism, interpretive trails, hikes, accommodation, selling handicrafts to visitors, selling food, and providing catering services (Zeppel, 2006). Yet, while forests provide a wide range of ecotourism opportunities, project scale and economic dependency are important considerations. In a comparative case study of ecotourism in Costa Rica, Stem et al. (2003) found that the scale of these ventures influenced both tourism benefits and negative impacts; these authors warn that when communities depend solely on ecotourism revenue, they can become economically vulnerable while the forest may be degraded from overuse. The implication is that when ecotourism is the sole source of income in a local economy, it risks turning into mass tourism that results in ecosystem degradation.

CBE projects in particular arise from the same principles as CBNRM and are often small-scale projects where local empowerment is a central goal. Empowerment is a process that entails more than consulting communities or providing employment. As stated in Kabeer (2005), benefits in a community project may not lead to empowerment if such benefits do not increase people’s awareness of choices and their ability to make them. In CBE the community has a considerable amount of decision-making power in the design, development and management of the tourism ventures, as well as the ability to exert control over the distribution of benefits that remain mostly within the community (Denman, 2001; Wood, 2002). While empowerment is at the core of many CBE initiatives, few of the scholarly papers reviewed have incorporated an evaluative empowerment framework within the study of community ecotourism that evaluates how these impacts have enabled (or disabled) peoples’ ability to make choices that improve their well-being (Ramos & Prideaux, 2014). Employing an empowerment framework could allow for a much deeper understanding of how CBE activities have enabled or disabled different individuals or entire communities from improving their lives and their relationship with their natural environment.

Despite extensive research and practice of CBNRM, and the documentation of some achievements (Roe et al., 2009), the conditions that lead to the strength of community-based institutions are complex, multifaceted, and are embedded in cultural and political
contexts that are poorly understood (Jones, 2005; Mansuri & Rao, 2004). On-the-ground experiences provide ample evidence that such projects, including CBE, often result in conflicting interests (Buckley, 2000; Fletcher, 2012; Sandker et al., 2009; Watkin, 2003; Zeppel, 2007). As such, they have at least partly failed to deliver on their promises (Coria & Calfucura, 2012; Kiss, 2004; West, Igoe, & Brockington, 2006). For instance, a review of more than 30 case studies of community-based conservation in Africa, Asia, and Latin America concluded that financial benefits to communities are limited, the cost to conservation is high, and the institutions created to manage revenue are often fragile and open to conflict (Roe et al., 2000). Fabricius (2000) in response, suggests that these shortcomings, rather than discrediting community conservation altogether, are temporary inadequacies to be overcome through adaptive management.\(^2\) While collaboration and collective action are seen as key processes for adaptive management (Bodin, Crona, & Ernstson, 2006; Olsson, Folke, & Berkes, 2004), inequities (Watkin, 2003; West & Carrier, 2004) and the lack of community cohesion and leadership (Stronza & Gordillo, 2008) are recurrently identified as two important barriers to the success of such community approaches to NRM. These two key barriers are now described in more detail.

The idea that communities are not homogeneous units (Jones, 2005) and that the power exerted by particular subgroups according to class, ethnicity, age, and gender may shape the distribution of community benefits (Agarwal, 2000; Jones, 2005) is fundamental to understanding CBNRM challenges and outcomes. For example, when examining empowerment in tourism destination communities, Timothy (2007) found that power struggles continue to affect the most disadvantaged groups, such as ethnic and racial minorities, women and the poor. Pre-existing and reproduced power dynamics within CBNRM have been shown to preclude effective participation of minorities in rural communities (Agarwal, 2000, 2001; Agrawal & Gibson, 1999). Furthermore, the unequal

\(^2\) Adaptive management is based on different forms of participation and co-management with the aim of building resilience and adaptive capacity for environmental change (Bodin et al., 2006; Olsson et al., 2004)
distribution of ecotourism benefits often leads to elite capture\(^3\) – mainly by males from the dominant ethnic groups – leaving women, young people and poorer clans even more marginalized within their communities (Cousins & Kepe, 2004; Ogutu, 2002). If ecotourism is to be socially sustainable, resilient, and adaptable to change, a deeper appreciation of the heterogeneity within communities should be explicit in CBE research and practice to specifically address efforts to strengthen community institutions and avoid furthering exclusionary practices (Duffy, 2006; Scheyvens, 2007; Southgate, 2006). Therefore, we must ask, ‘Who benefits?’ ‘And how?’ to assess the success of CBE.

Feminist literatures have repeatedly shown that gender dimensions of NRM are important in shaping access to, and the use of, natural resources (Agarwal, 2000; Resurrection & Elmhirst, 2008). Some have argued that successful environmental collective action may partly depend on the degree of women’s participation in forest management groups (Agarwal, 2000; Mwangi, Meinzen-Dick, & Sun, 2011; Westermann, Ashby, & Pretty, 2005). Likewise, ethnic exclusions have hindered the success of CBNRM (McDermott, 2001). Feminist political ecology further argues that those gender or ethnic dimensions cannot be understood in isolation from one another or from other socio-demographics. Rather these characteristics are interdependent with caste, class, and age. While Honey (2008) and other scholars have noted that the investigation of power-relations in ecotourism is a critical topic of study (see also Hutchins, 2007; Jones, 2005; Wearing & McDonald, 2002), gender analyses, along with other social categories of difference, have not received serious attention from ecotourism scholars to date (Scheyvens, 2007). Given the importance of empowerment in CBE, and the potential disempowering effects of such community projects through the increased marginalization of minorities as reported in many CBNRM studies (Das & Chatterjee, 2015; Jones, 2005; Lenao & Basupi, 2016; Sofield, 2003), the study of the role of power-relations on CBE inequities is particularly apposite.

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\(^3\) Elite capture here refers to the process by which a small group of individuals in a community holding a position of privilege (for example relating to economic, political, ethnic power) accrue for themselves resources or decision-making power that is meant to accrue to or benefit the larger population.
Growing evidence of the importance of community cohesion and leadership in CBNRM shows that when people are well-connected in social networks, and when their views and knowledge are incorporated in the planning and implementation processes of conservation projects, they are more likely to sustain stewardship and protection activities over the long-term (Pretty & Smith, 2004). To this end, social capital has been studied in the community development and environmental literature for its potential contributions to the capacity of individuals to work collectively towards environmental conservation and local empowerment (Dale & Sparkes, 2008; Mayoux, 2001; Nath, Inoue, & Pretty, 2010; Uphoff, 2000). Social capital analyses, employed in sociology to understand how social elements may advance individual as well as collective goals (Bourdieu, 1986; Coleman, 1986; Lin, 1999; Portes, 1998), are now common in a variety of fields. For instance, the role of social capital has been empirically examined in domains including operations management, human resource management, public health, economic development, and environmental sustainability (Liu et al., 2014). Communities with higher degrees of social capital are seen to be in a better position to provide more efficient solutions to collective management problems resulting in community empowerment (Ashley, 2000; Mayoux, 2001) than are governments or markets (Samal, 2007) because the costs of working together are lowered. The rationale is that social capital – understood as the resources inherent in social relations – facilitates information flow and increases cooperation and voluntary compliance with rules (Ostrom, 2003), which in turn can improve positive outcomes for individuals and collectives. At the community level, increased levels of social capital enable strong local institutions (Agrawal, 2001; Ostrom, 1990; Stronza & Gordillo, 2008) – essential to overcoming a ‘tragedy of the commons’ (Hardin, 1968) – and contributes to socioeconomic and environmental outcomes (Falk & Kilpatrick, 2000). It is understood that in the context of high social capital, people are less likely to engage in unfettered activities or actions that cause resource degradation. As a consequence, people may be more confident about engaging in collective activities knowing that others will also do so (Ostrom, 2003; Pretty & Smith, 2004). Altogether, studies have shown that social capital may improve environmental outcomes, reduce land resources degradation and depletion, increase investment in common lands and water systems, and improve monitoring and enforcement
(Ballet, Sirven, & Requiers-Desjardins, 2007; Daniere, Takahashi, & Naranong, 2002). In this light, social capital has been proposed as the “missing link” in development and has become a focus for policy, practice, and research in recent years. In addition, studies at the community level have shown important ways in which community leaders act as agents of change through the mobilization of social capital (Crona, Gelcich, & Bodin, 2017; Prell, Hubacek, & Reed, 2009). This provides evidence for the merits of examining agency along with social capital.

Despite its appeal, social capital is not an easy concept to grasp, in part because social capital theories have been developed concurrently in distinct disciplinary traditions (i.e., sociology, economics, and political science) and at differing scales (Lin, 2001; Son & Lin, 2008). This has led to seemingly contradictory theoretical models and definitions of what constitutes social capital. Critiques of the concept are notable (see Arneil, 2006; Cleaver, 2005; Das, 2006; Mohan & Mohan, 2002; Portes, 1998). They discredit social capital studies for often being depoliticized [e.g., gender blind (Mayoux, 2001; Molyneux, 2002)] or poorly theorized and measured, which has resulted in its conflation or replacement with other related terms (e.g., trust) (Harriss, 2001). Several authors have argued that social capital can be counterproductive and intensify power imbalances between actors who benefit from it versus those excluded from it. Thus, social capital is neither good nor bad, but depends on its use, and who benefits. As stated by Samal (2007), the social capital of “one group may constitute the social exclusion of others” (p.229). This has given greater voice to those who criticize the concept for systematically obscuring class relations and power dynamics (Samal, 2007). Das (2006) argues that rather than scrapping the concept altogether, it is crucial to instead employ it as a an investigative category by taking account how it changes when other contextual variables such as structural inequalities are considered. Among notable contributors, sociologist Nan Lin has spent two decades developing and testing a social capital theory contingent on structural inequalities and rooted in network and neo-capital theory (see Lin, 1999, 2001; Lin, Cook, & Burt, 2001; Lin & Erickson, 2010a). A core premise in Lin’s (2001) theory of social capital is that investment in social relationships results in outcomes for both, individuals and collectives.
Lin’s (2001) work brings considerable clarity (including measurement approaches) and structure to the idea of social capital without conflating it with other concepts (Storberg, 2002) (this is discussed further in the Theoretical Framework Section).

Critiques aside, social capital is seen today as a necessary component of adaptive management, conservation efforts, resource management, commons management, and community-based enterprises (Berkes & Davidson-Hunt, 2010; Dale & Newman, 2008; Ostrom, 1990) because it facilitates coordination and access to resources that benefit both individuals and collectives. Social capital interventions investigated or suggested include the establishment of face-to-face meetings with diverse stakeholders (García-Amado, Pérez, Iniesta-Arandia, Dahringer, & Reyes, 2012) and the promotion of equitable access to decision-making spaces (Agarwal, 2000). Actions to improve social capital also include the promotion of network diversity to access new information and resources, the promotion of cohesive networks for trust-building and cooperation, and the mobilization of individuals to act as bridges of information between different groups or interests (Crona, 2006; Dale & Sparkes, 2008; Isaac, Anglaaere, Akoto, & Dawoe, 2014). While both, theory and evidence, on the effects of social capital exist and it is understood that investment in social capital yields both tangible returns for market (e.g. income, wages) and non-market outcomes (e.g. health, environmental conservation, social status) (Godoy et al., 2007), the identification of the underlying mechanisms that create and maintain social capital in the first place are complex and still unclear (Glaeser, Laibson, & Sacerdote, 2012).

A growing body of scholars concerned with CBNRM (Barnes-Mauthe, Gray, Arita, Lynham, & Leung, 2014; Bodin et al., 2006; Crona et al., 2017; Ling & Dale, 2013; Pretty & Ward, 2001) have called for the critical examination of the roles that social capital and agency\(^4\) play in the effective development and maintenance of CBNRM. To this end, researchers in

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\(^4\) In this thesis, agency is investigated in the form of capable agents (Krishna, 2002) - which is described further in Chapter 4. Broadly defined, capable agents are individuals or institutions who/that are well connected, resourceful, with a clear vision and engaged in a particular issue to mobilize social capital for community change.
CBNRM have begun to approach the study of social capital from a social network analysis (SNA) perspective. Those studies have mainly investigated community level impacts of social capital (e.g., Bodin & Crona, 2008; Chang, Allen, Dawson, & Madsen, 2012; Folke, Hahn, Olsson, & Norberg, 2005), and to a lesser extent individual level impacts (e.g., Isaac, Erickson, Quashie-Sam, & Timmer, 2007; Lyon, 2000; Nath et al., 2010). Such an approach shares many of the theoretical understandings of Lin’s (2001) social capital theory and demonstrates how SNA can be employed to uncover differing flows of information within communities that affects CBNRM outcomes for individuals and communities.

In CBE, enterprises are often small and located in rural areas (Wood, 2002); as a consequence they are highly dependent on the interpersonal dynamics of the individuals involved (Molnar et al., 2007; Perera, 2008). Thus, they employ processes and networks that are more informal than those found in the often-larger mainstream tourism industry. This provides further justification for the need to understand the local networks, mechanisms and processes that may enable effective collaboration for collective action in community ecotourism. Despite calls for the study of social capital mechanisms in CBE, only a few authors have done so (Jones, 2005; Liu et al., 2014; Stronza & Gordillo, 2008). Thus, important questions remain about the interplay between social capital (from a network perspective) and empowerment in the presence of structural inequalities. The questions that this dissertation seeks to address are ‘How does social capital, when understood as being rooted in networks, empower communities and individuals engaged in CBNRM?’ If communities are not homogeneous, ‘How is social capital different among various community social categories? And, how may that impact the empowering potential of social capital at the individual and at the community level?’ What specific strategies can be used to promote social capital in CBE, given structural inequalities?

To sum up, social capital has the potential to empower communities engaged in CBE. However, due to unclear conceptualization and measurement of social capital and the lack of critical engagement with how access to social capital and associated outcomes are shaped by inequalities, there is a need to critically investigate these links (social capital, empowerment and inequalities) within the context of CBNRM for the development of
effective policy mechanisms. In what follows, I present this dissertation’s objectives, considering the above-mentioned gaps and overarching questions, and provide a theoretical framework for several notable approaches that, when combined, may overcome key shortcomings in the work done so far on social capital, particularly as applied to key concerns in CBNRM.

1.2 Research objectives

The overarching goal of this dissertation is to explore, in the CBNRM context, the links between social capital, inequality and empowerment at the individual and community level to offer new insights to the complexity inherent in such constructs. Through this exploration, I aim to offer recommendations to develop effective local practices in CBE in accordance with such complexities. Specific chapter objectives follow.

The first objective (addressed in Chapter 2) is to examine the different roles that social capital plays in empowering individuals in two CBE projects in Ghana, while accounting for different levels of involvement and demographics. Through the disaggregated measurement of social capital and empowerment, the analytical framework employed illustrates how the oversimplification of development practices may be avoided.

Drawing on the results in Chapter 2 concerning gendered and ethnic inequalities, and given the often-marginalized roles that women and ethnic minorities play in decision making in CBNRM, the objective of Chapter 3 is to closely examine the links between social capital access and political empowerment. Drawing on well-substantiated feminist literature concerning political ecologies, I highlight social capital and political empowerment inequities in ecotourism and examine the merits of Lin’s social capital approach in that context. To do so, I describe sociocultural norms that might shape unequal social capital and political empowerment in the context of ecotourism, and examine whether (and how) social capital access through CBE might still play a role in empowering marginalized communities despite structural inequalities.
The role of capable agents as mobilizers of social capital for collective action has been argued and demonstrated in studies outside of the ecotourism literature (Bodin & Crona, 2008; Krishna, 2002). SNA in particular, has advanced considerably our understanding of the roles of leaders and agents of change in collective action. Nevertheless, the employment of rich qualitative data to complement quantitative network findings is not the norm. As such, the third objective of this dissertation (addressed in Chapter 4) is to examine the role of agents of change as mobilizers of community social capital for empowerment in the context of CBE. I do so by analysing both agents’ discussion networks and their views and visions concerning CBE.

1.3 Theoretical framework

In the above sections, key concepts, research gaps, and dissertation objectives, have been introduced. In this section, I expand on the theoretical underpinnings of the three main concepts employed in this dissertation: social capital, empowerment and feminist political ecology. This includes a brief description of the theoretical roots of each concept, and a description of how they are employed throughout the dissertation. Research goals one and three draw primarily from the theories of social capital and empowerment presented here while research goal two also draws from feminist political ecology literature. While I do not propose a unifying theory of these three constructs in the dissertation, I do suggest that an improved understanding of social capital merits vis-a-vis empowerment in CBE requires the employment of a multilevel, structured approach to the study of social capital combined with a feminist political ecology perspective. When combined, these approaches to social capital, social difference, and empowerment may more effectively overcome key

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5 Multilevel approach (disambiguation): I do not engage in multilevel statistical modeling which is a specific quantitative analytical technique. By a ‘multilevel approach’, I mean an approach to the study of social capital that considers and integrates multiple scales of analyses. In this case, I examine individual-level social capital and community-level social capital.
shortcomings in previous work on social capital, particularly as applied to key concerns in CBNRM.

1.3.1 A theoretical model of social capital

Broadly defined, social capital refers to valued networked resources that generate returns to individuals and groups. Different disciplines have studied social capital outcomes at different scales ranging from individuals to whole nations (Portes, 2000), yet it is generally agreed among sociologists that social capital is a resource that is inherent in relationships (Lin & Erickson, 2010b). As such, the importance of social networks to social capital has been postulated within social capital research traditions. A stable theoretical principle is that investments in social relations will enhance the access and mobilization of valued resources (e.g., information, influence, social credentials) that generate returns to individuals or communities.

While a variety of research traditions have emerged in the study of social capital the most popular among political scientists and economists is Putnam’s (1995) theoretical approach. In my view however, Lin (2001) proposes an illuminating and robust (Storberg, 2002) theoretical social capital framework rooted in social network theory, neo-capital theory, and rational choice (Lin, 2001). While Putnam’s (1995) theory of social capital merges together concepts such as trust, norms and networks, Lin (2001) specifically defined social capital as resources embedded in a social structure that are accessed and/or mobilized in

6 A controversy exists among scholars as to whether social capital is an individual or a collective good. Such tension has been generated from the different social capital perspectives that emerged in the literature (i.e., macro- versus micro-level perspectives). I agree with Lin (1999) that social capital is both, collective and individual goods since “institutionalized social relations with embedded resources are expected to benefit both the collective and the individuals in the collective” (p. 33)

7 Also, social capital can arise as an unintended by-product of other forces (e.g., interaction in organizations – not motivated by the goal of building social capital) (Tindall et al., 2012).

8 Putnam (1995) defines social capital as features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.
purposive actions. Lin’s theory brings clarity and structure to the notion of social capital, in that he clearly divides social capital into three areas of research inquiry (see Figure 1.1), accounts for structural inequalities (e.g., gender, ethnicity, class etc...) and contextual factors such as collective goods, and avoids the common conflation of terms (i.e., trust is social capital). The general hypothesis is that, the better the accessible embedded social resources, the more those resources can and will be mobilized in purposive actions.

Understood this way, social capital is any social resource flowing within a social network that is thought to be valuable to achieve a goal. Examples of such social resources include status, power and wealth, knowledge, information (S. W. Baron & Tindall, 1993; Harpham, Grant, & Thomas, 2002; Lin, 2001; Westermann et al., 2005).

A key aspect of Lin's (2001) social capital theory is that it is rooted in network theory. As such, the use of network analysis is particularly helpful for highlighting the interconnectedness among different social positions, their occupants, and how such interconnections largely determine the access to – and use of – social resources embedded within a given network. While Lin (2001) theorized social capital mainly at the individual level, he does not exclude the possibility of using his theoretical model to explain social capital at other levels (Son & Lin, 2008). In the following subsections, I describe broadly each of the building blocks of the individual social capital theoretical framework developed by Lin, and include within each step of the model a description of community-level aspects identified by other authors, which I also employ in this dissertation.

The first area of inquiry in Lin's theoretical model concerns the preconditions that determine the differential distribution of social capital among individuals (Figure 1.1).
These preconditions are classified as: (a) *contextual factors* and (b) *structural and positional embeddedness*. Contextual factors, among other things, refer to collective assets such as norms of trust, reciprocity, and sanctions that facilitate or constrain the investment of social capital. According to Lin (2001), historical and sociocultural conditions of cooperation, trust, reciprocity, and common norms and sanctions in a given community may predispose communities and individuals towards mutually beneficial collective action. Structural and positional embeddedness in a network refers to the structural conditions of the society and the individual’s position within it. This model assumes that individuals in a given cultural context are embedded in pyramidal hierarchical social structures. The positions individuals take within that hierarchy are rank-ordered according to certain normatively valued resources such as class, authority, and status. Depending on where one is placed within this pyramidal structure, one might be in a more or less advantageous
position to access social capital. Lin (2001) proposed that knowing about these preconditions of social capital may help in understanding the opportunities to access and maintain social capital, (the second field of inquiry).

Against this backdrop, this dissertation accounts for Lin’s (2001) preconditions as follows: collective assets such as norms of trust, reciprocity and collaboration are considered throughout the analyses (what I call cognitive social capital aspects). With regard to structural and positional embeddedness, I account for inequalities along gender and ethnic lines. Particularly, I employ feminist political ecology principles to explore the effects of gender and ethnicity on the ability of individuals to become empowered from their participation in CBE.

The second area of inquiry suggested by Lin’s (2001) theoretical model relates to the processes that actors undergo when accessing and mobilizing social capital. Several network characteristics can be distinguished that determine the potential access of social capital both for individual and community-level social capital studies through an examination of social ties. At the individual level, the number, diversity and strength of ties are common measurements of the potential for social capital access. The assumption is that access to many different socio-political positions such as jobs or groups in a community facilitates and determines ‘how much’ social capital is available to the individual (Harshaw & Tindall, 2005). At the community level, bridging and bonding ties are commonly studied measures of group (or community) accessibility to social capital.

With regard to social capital mobilization, I introduce the idea of capable agency to more fully understand social capital at the community level. After reviewing several hypothetical social capital models in relation to community development, Krishna (2002) asserts that

9 Social ties refer to the type of relationship between two or more people. Social network data may be gathered for all ties linking elements of a closed population (complete or whole network data) or for the sets of ties surrounding sampled individual units (‘egocentric’ network data or ego-network data) (Marsden, 1990).

10 These terms are explained further in Chapter 4.
although community social capital is a necessary component of the achievement of collective action, it is not sufficient in itself; capable agency is also necessary. Krishna (2002) argues that potentially latent stocks of social capital require capable agency to be activated for collective action. Thus, it is not community ecotourism per se that leads to positive collective actions (in this case community empowerment); rather it is individual actors within communities who may trigger such actions (i.e., agents of change). I understand Lin’s (2001) social capitalization component to be closely related to what Krishna calls ‘capable agency’ (Krishna, 2002). In this part of the model, Lin (2001) acknowledges the possible choice of actions in mobilizing social capital. Thus, influential actors or leaders will play a key role in the mobilization of social capital towards a set objective. Based on individuals’ organizing potential for collective action, Oliver and Marwell (1988) suggest that capable agents are expected to be a group of especially interested and resourceful individuals who are socially connected to one another. In Chapter 4, this dissertation assesses the existence of capable leaders according to their organizing potential in the communities researched, without ignoring the potential existence of corruption and elite capture.

The third area of inquiry in Lin’s (2001) theoretical model is related to the effects or outcomes that arise from social capital investment and mobilization. Two major types of outcomes are proposed in Lin’s (2001) theoretical model: returns on expressive action and returns on instrumental action. Although related, the first refers to outcomes that preserve and/or protect existing resources (e.g., mental and physical health, pride, life satisfaction); the latter aims to attain new resources (e.g., economic, political and social statuses). In the context of CBE, and CBNRM more generally, social capital outcomes could be both expressive and instrumental. For example, investment in social capital may result in both tangible returns for market (e.g. income, wages) and non-market (e.g. health, social status) outcomes (Godoy et al., 2007).

Although, Lin’s (2001) social capital model has not been applied to empowerment outcomes per se, it seems a logical extension of the model, given that Lin’s theory has yielded consistent and verifiable results with both instrumental and expressive outcomes
such as finding a good job, improving political participation or solidarity (Lin, 2001; Lin & Erickson, 2010a). Thus, in this dissertation, I offer a preliminary extension of Lin’s social capital propositions to assess and discuss a variety of empowering returns as they related to CBE.

To conclude this review of social capital, it is important to make a note on nomenclature. Authors in diverse academic fields (e.g., Gotschi, Njuki, & Delve, 2008; Grootaert, Narayan, Jones, & Woolcock, 2004; Harpham et al., 2002; Jones, 2005; Krishna & Shrader, 2000; Paletto, Ferretti, & De Meo, 2012) have employed Uphoff’s (2000) terminology (i.e., cognitive and structural social capital) when referring to some of the above mentioned elements of social capital. To maintain comparability with other studies, I use these terms as follows. Descriptions of structural social capital in the social capital literature seem closely related to the network aspects described in Lin’s (2001) theoretical model. Therefore I use the concept of structural social capital to refer more broadly to the network components associated with social capital access and mobilization described in Lin’s (2001) theoretical model (Figure 1.1). Similarly, since descriptions of cognitive social capital aspects seem to be conceptually close to Lin’s (2001) contextual factors in the model (i.e., collective assets such as trust, reciprocity and cooperation; Figure 1.1), I use in this dissertation the term cognitive social capital to refer to those contextual factors. It has been suggested that such a distinction may help to open the social capital ‘black box’ and clarify underlying social mechanisms in the creation, maintenance and mobilization of social capital (Ballet et al., 2007). Finally, while different claims have been tested concerning the potential self-reinforcing relationship between these two components (e.g., Lin & Erickson, 2010a), this dissertation examines the unique influences of cognitive social capital and structural social capital on empowerment. Hence, I do not focus on testing the interrelations between cognitive and structural social capital components.
1.3.2 A theoretical model of empowerment

Empowerment is a multilevel construct in which each level of analysis is interdependent. It has multiple meanings relating to power, participation, capability, autonomy, choice and freedom, and has been widely employed, mostly colloquially, as a goal in the development and CBNRM grey literature (Christens, 2012). Empowerment has been investigated theoretically in diverse disciplines including human geography, health studies, education and women’s studies, management, gender and development, community development and community psychology (Christens, 2012; Kabeer, 2005; Mansuri & Rao, 2004; Ramos & Prideaux, 2014). This broad application of empowerment has resulted in diverse theoretical frameworks (e.g., Alsop et al., 2006; Ginige & Richards, 2012; Islam, Ahmed, Chew, & Netto, 2012; Kabeer, 2002; Peterson & Zimmerman, 2004) and measurement approaches (see Perkins & Zimmerman, 1995). Although a variety of empowerment definitions exist, Rappaport (1987) seminally defined empowerment as “the mechanism by which people, organizations, and communities gain mastery over their lives” (p. 122). Perkins & Zimmerman (1995) expanded the definition to include the process through which people or groups gain control over their lives, participate democratically in the life of a community, and gain a critical understanding of their environment. Similarly, within the context of development and natural resource management, empowerment has been defined as a process of capacity and confidence building for taking decisions about one’s own life, and gaining control over productive resources (Resurrection & Elmhirst, 2008). Despite definitional differences, participation, control, and critical awareness are recurrent themes in the empowerment theory literature (Zimmerman, 2000). Below, I outline some key elements in the study of empowerment and describe my approach.

Empowerment is seen both in relative and absolute terms. As a relative measure, empowerment suggests that giving power to those who do not have any (or have less) implies a redistribution of power from other actors (i.e., a zero-sum game). When understood as an absolute measure, building capacity among disempowered people may contribute to their empowerment without implying a zero-sum game (Angelsen & Wunder, 2003). Relatedly, studies have critically distinguished empowerment that comes from having
‘power over’, ‘power from’, and ‘power to’ (Resurrection & Elmhirst, 2008; Riger, 1993; Scheyvens, 2009). This outlines the distinction between feelings of empowerment and having actual control over resources (Riger, 1993). According to Lachapelle et al. (2004), genuine empowerment requires both the capacity to be competent (i.e., skills) and the confidence necessary to exercise power. While I recognize the dangers of prescriptively establishing the meaning of empowerment in the context of CBE, given the hierarchical nature of most societies (including Ghanaian societies) and the power struggles often reported in CBNRM and CBE, I employ empowerment as a relative measure that involves having actual control over resources.

In addition, empowerment theory distinguishes empowerment as a processes and as an outcome, both occurring at multiple scales and dimensions (Christens, 2012; Constantino et al., 2012). Actions, activities or structures may be empowering (processes) and people, organizations or communities become empowered (outcomes) as a result. In this sense, different approaches to the study of empowerment have emerged. Some studies have examined empowerment through a comparison of sites over time, while others measured the impacts of specific programs on people’s empowerment and the repercussions of this empowerment on policy objectives (Kabeer, 2002). Regardless, the development of universal measures of empowerment outcomes/achievements has been deemed an appropriate aim, as measures need to be situated in context in order to characterize their meaning and boundaries (Kabeer, 2002; Zimmerman, 2000). In other words, empowerment outcomes may not mean the same thing for every person, organization, or community. (Zimmerman, 1995). Therefore, it is important to study empowerment in tandem with axes of social differentiation, such as gender or ethnicity, and employ qualitative data to contextualize the meaning of empowerment in any given context.

Theories of empowerment in community psychology have been extensively studied and deemed compatible with community development goals (Christens, 2012). I draw upon this literature to examine individual and community-level empowerment outcomes while recognizing the existence of broader socio-political structures at play that may limit, or facilitate, empowerment in a given context. Empowerment theory in community psychology
describes three pathways towards empowerment (Zimmerman, 2000). The first is related to self-conceptions of competence, perceived control related to personal, inter-personal or socio-political life domains, and self-efficacy (i.e., intrapersonal component). A second pathway relates to people’s awareness and understanding of their socio-political environment, such as norms and values of a particular context (i.e., interactional component). This second pathway also refers to how people use their analytical skills to influence their environment and includes decision making, problem solving, and leadership skills. A third pathway relates to a person’s active engagement in their community, such as actions taken to directly influence outcomes (i.e., behavioural components). Such awareness refers to the understanding of options in order to act appropriately to achieve certain goals. Then according to community psychology, an empowered individual would exhibit a sense of personal control, a critical awareness of their environment, and the behaviours necessary to exert control.

Taken together, individual empowerment can be seen as the increasing cognitive, emotional, behavioural, and relational capacities that individuals obtain when participating in community settings (Christens, 2012). Within the context of CBE this could mean gaining critical insights into social and political systems around ecotourism and to achieving competence and control in that domain. To note is that these pathways might be more relevant in certain settings than others, since context plays a central role in the conceptualization and measurement of psychological empowerment (Christens, 2012).

At the community level, empowerment follows similar pathways to those mentioned above. Control, resource mobilization, critical awareness of socio-political context, and participation would be expected to be part of the definition in some form at each level. Yet it

\[11\] This perspective situates human development within nested levels of analysis (i.e. psychological, organizational, community). The term psychological empowerment is used in the community psychology literature to refer to empowerment at the individual level of analysis and it is intended to reflect a broader interpretation of the construct than simply intrapersonal characteristics (i.e. what goes on in the mind) (Christens, 2012; Zimmerman, 1995). Thus, individual-level empowerment refers not only to self-perceptions of control but also to behavioural and interactional aspects.
is important to recognize that although all levels of analyses are interconnected, aggregated measures of individual empowerment do not equate to community empowerment (Zimmerman, 2000). At the community level of analysis, empowerment refers to individuals collaborating to improve their collective lives and linkages among internal and external community organizations and agencies that help maintain the quality of life (Zimmerman, 1995). Thus, an empowered community is one that initiates efforts and mobilizes resources to improve the quality of the community, to improve citizen participation, and to respond to threats. Empowering processes and outcomes at the community level might include accessible government, political leverage, evidence of pluralism, the existence of organizational coalitions, and accessible community resources and infrastructures. In this context, the role of leadership networks have been noted as key facilitators of community-level empowerment. (Zimmerman, 2000), further justifying the important need to investigate the role of social capital on empowerment.

1.3.3 Feminist political ecology

Studies on gender and development from a variety of geographical and socio-ecological contexts have shown that power imbalances often preclude marginalized individuals from participating equally in community projects (Agarwal, 2001; Coleman & Mwangi, 2013; Rocheleau, Ross, & Morrobel, 1996). For example, in the context of ecotourism and rural development, women might extend their household chores, often with tokenistic remuneration, to incorporate tourism maintenance activities in their daily routines. This might include fetching water for the tourism centre, or cleaning or cooking for ecotourism functions and governance operations. At the same time, women contribute to ecotourism decision-making processes infrequently (Scheyvens, 2007). These power dynamics in development practices pose a myriad of challenges with the potential to exacerbate gender inequalities, contribute towards community disengagement, elite capture and resource degradation (Agarwal, 2000; Mayoux, 2001; Molyneux, 2002; Scheyvens, 2000). Ethnic and gender discrimination have also been shown to undermine the success of community approaches to NRM (Cleaver, 2002; McDermott, 2001).
If the goal is community inclusion to facilitate effective community-based resource governance, then it is clear that there is a need to attend to the specific labour practices, environmental dynamics, and cultural narratives that shape unequal involvement in, or benefits from, CBNRM and ecotourism projects (Elmhirst, 2011; Truelove, 2011). Yet, even with the recognition of the impact of inequalities identified above, the inclusion of women and other commonly marginalized members of the community in CBNRM decision making is not a simple task. Inclusion is not solely an issue for marginalized groups; rather it is a relational process dependent on broader community power dynamics (Morales & Harris, 2014). Inequitable access to, and control over, natural resources are rooted in sociocultural norms – precisely the type of analysis that many feminist political ecologists have aimed to uncover (Goebel, 2003). Feminist political ecology is a feminist (and increasingly intersectional) perspective on political ecology that draws on theories from post-structuralism, feminist geography, and cultural ecology. This perspective considers the differentiated experiences and knowledge of, responsibilities for, and interests in, nature and the environment, by women and men (or other social categories). These differences are not rooted in biology, but are socially constructed and reproduced in daily routines, including labour relations (Rocheleau, Thomas-Slayter, & Wangari, 1996). The aim of feminist political ecology research is to analyse “gendered experiences of, and responses to, environmental and political-economic change that brings with it changing livelihoods, landscapes, property regimes, and social relations” (Hovorka, 2006, p. 209). Furthermore, theorists working in this tradition acknowledge that these relationships vary by culture, class, race, and geographical location. Researchers in feminist political ecology argue that it is not sufficient to simply include gender, class, ethnicity, race and other social differences when investigating the politics of resource control and access and environmental change. Instead, we are to understand these traits as mutually constitutive—or intersectional (Nightingale, 2011). As noted earlier, Lin’s (2001) social capital theory acknowledges the importance of structural inequalities for social capital access and mobilization. Feminist political ecology provides a promising perspective from which to explore these structural inequalities (Resurrection & Elmhirst, 2008; Silvey & Elmhirst, 2003), particularly in ways that also include qualitative analysis and understanding. As such, Chapter 3 engages
feminist political ecology literature to interrogate the links between social inequality and difference, as they relate to social capital access and political empowerment.

1.4 Methodological approach

Growing recognition that our understanding of social-ecological systems is limited and uncertain has caused researchers to embrace a wider set of knowledge bases (Carpenter & Gunderson, 2001) and methodological approaches (Creswell, 2003). Accordingly, this investigation is informed by CBNRM, ecotourism, sociology, community psychology, and development literatures, as well as by feminist scholarship, in particular feminist political ecology. I also approached the research as a multilevel, multimethod and multiple case-study endeavour. Specifically, this study takes an embedded multiple case study design to examine two similar ecotourism villages in the Volta region of Ghana by employing a mixed methods approach at multiple levels of analyses. A broader contextualization of the cases and the data collection process follows as well as a description of my approach to mixed methods and multilevel analyses.

1.4.1 Geographical scope

The tourism sector is among the top earners of foreign exchange in Ghana after oil, gold, cocoa, and foreign remittances. Tourism is also one of the highest growth sectors, averaging approximately 15% per year in recent years and contributing 4.5% of gross domestic product in 2013 (Ghana Ministry of Tourism, 2013; Nature Research Centre Conservation, 2008). Ghana is ranked among the top 25 percent of African countries with the greatest diversity of wildlife and is also home to many endangered species. (Eshun, 2010). In Ghana, biodiversity loss is linked to deforestation, bush fires, hunting, and weak

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12 After careful consideration and consultation with the communities, I decided not to cite the names of the villages as an exercise of respect and to maintain the trusted relationships built over the past years.
legislation, institutional weaknesses and fragmented environmental legislation (Domfeh, 2004). Deforestation in particular has been associated with population growth, economic development, agriculture, fuelwood and settlement (Eshun, 2010). These anthropological influences at the core of the escalating rate of biodiversity loss, which are also the means for rural development, have led to the promotion of alternative income generating activities such as ecotourism.

CBE initiatives in Ghana have emerged since the 1990s with a strong emphasis on community control over decisions around NRM and project benefit distribution. USAID, in collaboration with the Nature Conservation Research Center (NCRC) and the Ghanaian government started a multi-year project in the 1990s, offering advice, funding and training in order for the communities to develop CBE projects. The aim of CBE was to diversify local economies and provide nature experiences to visitors while promoting community empowerment and resource conservation (Eshun & Tagoe-Darko, 2015). In many of the communities, at least one US Peace Corps volunteer was placed in the community for two years. In some communities, up to four Peace Corps volunteers were placed (two years each). Workshops for the executive committees, and management team were organized, as well as visits to other sites. Ecotourism sites were organized through a constitution, a board, and an operational management team. Board elections were established every four years when the community elects or accepts members onto the board. Board members would then internally decide their roles according to their strengths. The management teams usually consist of a manager, a secretary or accountant (or financial assistant) and tour guides (who also take care of the guest houses, and clean the facilities)(Nature Conservation Research Centre, 2004).

The Government of Ghana identified NCRC’s ‘Community-Based Tourism’ model as its preferred approach for the development of rural ecotourism (Ghana Rural Eco-tourism & Travel, 2007). This well-established ecotourism model – for which Ghana has been recognized as a pioneer in Africa-(United Nations Development Programme, 2008) – has, since 1996, supported the development of over 30 community owned and operated ecotourism attractions that offer an array of natural, cultural, and historical rural tourism
attractions including wildlife viewing, historic caves and sacred natural sites, wetlands, rainforests, and other Ghanaian ecology. CBE projects have allowed the display of vibrant local culture, arts and traditions rooted in a rich history of natural resource use. Several CBE projects are already well established (about 12 years old) and startup challenges have been overcome. The cases under study in this thesis are part of that group and are located in the Volta Region – an area that hosts the largest concentration of CBE sites in Ghana (Ghana Ministry of Tourism, 2012).

However, tourism in Ghana faces several important challenges that may limit its potential. A lack of clear strategy, inadequate investment in the tourism sector and access to credit, poor infrastructure and tourism support services, the high cost of getting to Ghana, and a lack of professionalism and poor quality service in the tourism industry are among the main macro-level limitations (Ackuayi, Godsway, & Bonsu-Owu, 2014; Frimpong-Bonsu, 2015). Community ecotourism in Ghana also faces financial challenges due to the appearance of new conservation frameworks such as REDD+,13 which are drawing the attention of donors to carbon-based projects away from CBE developments. At the local level, community exclusion in decision making related to the tourism sector, and a lack of cooperation between stakeholders are also some of the sector’s performance barriers (Ackuayi et al., 2014).

Prior studies have suggested and elaborated on the historical processes that often produce social hierarchies and contested inequalities within Ghanaian communities along ethnic and gender lines (Carr, 2008a, 2008b; Grischow, 2007; Oberhauser, 2010; Oberhauser & Yeboah, 2011). Ghanaian sociologists have characterized gender dynamics as being subjected to norms that tend to discriminate or oppress women. While steps have been taken towards the liberation of women from those oppressive norms – pioneered by Ghanaian feminist scholars (see Fiedler & Hofmeyr, 2011; Maponda, 2016; Oluwatomisin

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13 REDD+ refers to an internationally negotiated agreement under the United Nations Framework Convention on Climate Change (UNFCCC) for reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.
Oredein, 2016; Townsend, Porter, & Mawdsley, 2004; Tsikata, 2009) – there is a clear segregation of gender roles, especially in rural Ghana, that often subjugates women when it comes to their ability to make decisions that improve their lives. These differences in socio-cultural and political roles are most evident with regards to household division of labour, traditional leadership roles and rites, types of trades and craftsmanship associated with men and women, land tenure arrangements, or in the different ways in which men and women engage with the natural environment in farming communities (e.g., who fetches firewood and water, who does what kinds of farming activities, etc) (Nukunya, 2003).

Similarly, norms that discriminate against non-kin (such as, for example, migrant farmers) are prevalent in rural Ghana today. In Ghana, kinship systems determine the status and social roles as well as the duties and obligations of individuals and groups in all aspects of life. In some instances, non-kin are referred to as ‘strangers’ (Nukunya, 2003).

Thus, the study of CBE in Ghana requires careful of internal community differences and social stratification. In this case, gender and ethnicity differences seem to be highly relevant in the rural context of Ghana. While these are not the only axes of differentiation that may shape knowledges or and experiences in the CBE, I consider them among the most relevant ones given how much these categories of differences are intimately related with land relations and power in rural Ghana. Other categories such as economic class and age are considered more generally through the analyses. In the case of economic class, the level of education was employed as a proxy because it has been argued to be a very highly correlated category in the context of rural Ghana (Nukunya, 2003).

Given the emphasis on community control and local decision making of CBE in Ghana and the lack of current financial support for CBE by external agencies, these projects are very interesting settings in which to study the role of social capital in such projects functioning well as relates to empowerment outcomes and differences. Current challenges that are affecting CBE in Ghana call for creative approaches to overcome financial and infrastructural limitations. Studying the role of social capital and social difference in such empowerment seems critical when greater cooperation and community cohesion may be needed in light of shortages. Given that the cases under study have overcome initial startup
challenges, such projects now face challenges on how to proceed in the future. Intuitively it seems that the study of social networks as well as trust and norms of cooperation could play a critical role in the resilience of those CBEs. In the next chapters, I describe the cases in more detail.

1.4.2 Data collection process and case selection

I first visited the communities in August of 2012 after establishing a collaboration agreement with NCRC who agreed to support me with community introductions and to share background information about the development of the CBE projects in Ghana. Initially accompanied by a trusted NCRC member, I visited four communities in the Volta Region (the area in Ghana with the highest concentration of CBE projects), spending less than a week in each with the aims of introducing myself and my initial research goals as well as seeking permission and learn about the proper etiquette and research protocols. I emphasized during my visits to the communities that I was not doing research on behalf of NCRC, nor that I would share any raw data with them. During that first visit, I spoke with local leaders and members of the communities to informally discuss how the CBE functioned and what benefits or challenges the CBE and the community as a whole were facing.

This first visit was sufficient to establish the comparability of the communities and to preliminarily assess what were the most prominent issues in each community. Of the four communities initially visited, two seemed similar, both with regards to the CBE projects, population size and road accessibility. Both communities own and manage a CBE project that was developed in collaboration during the same time frame with NCRC, and with both had similar funding schemes, revenue and visitation statistics, visitor profiles, types of natural attractions, institutional arrangements and system of governance.\textsuperscript{14} Besides their similarities (which made them potentially comparable), the key characteristic which made these two communities particularly interesting to examine in the context of social capital

\textsuperscript{14} More community details are in Chapters 2, 3 and 4.
and empowerment, was that they had been financially and institutionally independent for over a decade and the projects were among the most visited sites in the Volta Region. All of this made for these two communities, interesting study cases for an examination of how their networks had been employed over the years to benefit individuals and mobilize resources for community empowerment (see Chapters 2, 3 and 4).

Six months later, in 2013, and after frequent communications with local community leaders, I visited the communities for the second time for the purpose of data collection. My arrival and purpose was announced to community members and I also visited each household to personally introduce myself and share the purpose of my visit. Data collection took place over five months and was supported by local assistants and Ewe-speaking university students from the Volta Region Ho Poytehnique University. During this time, I lived in the communities and was actively engaged in the life of the communities. For example I participated in communal labour activities, and attended community meetings, festivities and funerals. Prior to my departure, a community meeting was set up to share reflections about the tourism project and the data collection process.

In 2016, after analyses were concluded, a knowledge mobilization plan was designed to share the results of this dissertation with the communities in each village through participatory group discussions over the course of a week. That process was very much welcomed and proved to be a very helpful platform for community members’ to voice reflections and concerns related to the ecotourism project, and other issues more broadly.

1.4.3 Analytical approach

A mixed methods approach was used to address some of the weaknesses inherent in any single approach through the triangulation of data sources as a means to seek convergence or complementarity between methods (Creswell, 2003). A mixed methods approach is one in which the researcher’s base knowledge claims on pragmatic grounds (e.g., problem-centered) (Johnson & Onwuegbuzie, 2004). Defined as “the class of research where the
researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study.” (Johnson & Onwuegbuzie, 2004, p. 17), this approach is a practical alternative to the strengths and weaknesses of qualitative and quantitative methods of research in the social sciences. Thus, my strategy of inquiry involved the collection of both quantitative and qualitative data simultaneously for the assessment of patterns as well as for accounting for complexities within, in order to better understand the connections between empowerment, social difference and social capital. Convergent triangulation was used to validate quantitative results with the results of qualitative interviews and complementary triangulation which aimed to produce a more complete picture by combining information from different data sources and analyses (Nightingale, 2009).

Concerning the scales of analyses, most scholars agree that social capital is expected to benefit both individuals and collectives. Yet to avoid falling into the trap of assuming that many empowered individuals make up an empowered community, I investigate social capital as it relates to empowerment and social difference in CBE by separately analyzing those links at the individual and community levels. While no universal measures of social capital have been established, there are certain traits that characterize individual social capital outcomes from community ones (as reviewed above). So, the scale of analysis in Chapter 2 and 3 differs from that of Chapter 4. Thus, cognitive and structural social capital measurements in Chapter 4 differ considerably from those employed in Chapter 2 and 3.

In Chapter 2, data from both communities are pooled and a variable that controlled for community differences was included in the analyses. Chapter 3 focuses in one of the communities and in Chapter 4, where social capital and empowerment is analysed in both CBE projects at the community level, a comparison of the communities is possible, given the contextual similarities explained above. Here, internal community dynamics are analyzed to provide valuable insights into the unique situations that have occurred in each community since the initiation of the CBE projects – which could partly inform differing community empowerment opportunities and barriers. In this same chapter, I identify
differences in community empowerment outcomes and analyze structural and cognitive components of social capital comparatively.

Concerning my approach to the measurement of empowerment, I take a multidimensional and multilevel approach to avoid overly simplistic empowerment measures. Given the cross-sectional nature of this study (and since the CBE cases under study have been functioning for at least 15 years), empowerment measures in this dissertation aim at capturing outcomes – as in achievements that have enabled communities and individuals to exert more control over their lives. Scheyvens (2002) suggests several dimensions of empowerment (i.e., social, economic, psychological, environmental and political) that are relevant in the context of ecotourism as a proxy for community ecotourism success. While I accounted for all of these dimensions in the bibliographic search for empowerment measurements previously employed, I subscribe to the idea that empowerment measures need to be adapted to the particular local contexts of interest. Nevertheless, the criteria employed to develop empowerment measures in this dissertation was that they had to measure genuine empowerment (not just feelings of empowerment) and had to relate to at least one of the pathways described above, [i.e., either being related to a feeling of control, a critical awareness of one's environment, or an active engagement in it (Zimmerman, 2000)]. As such, empowerment measures were established by first identifying past individual and community empowerment measures that fit the criteria established, and second by pretesting and adapting accordingly such measures during the pre-fieldwork visit, based on the established aims of the CBE projects. Furthermore, in Chapters 2 and 3, rather than establishing empowerment dimensions a priori, I employed principal component analyses (PCA) to uncover underlying dimensions in light of community responses.15 Measures at the individual level differ from those at the community level to reflect the different units of analyses.

15 Small sample size from the surveys in Chapter 4 did not allow for PCA analyses.
Finally, while I am concerned with both particular experiences and general theory, I mostly use social capital for ideographical purposes: to understand the meaning of contingent and subjective phenomena (Robinson, 2011). I examine general theoretical relationships, in Chapters 2, 3, and 4, and adapt theoretical social capital principles to the CBE context while employing empowerment as the dependent variable. While that could be seen as expanding the theoretical scope of Lin’s (2001) and Krishna’s (2002) social capital theory to include CBE settings and empowerment outcomes, I mainly employ social capital, empowerment and feminist political ecology theory as a tool to learn what they might tell us within the context of CBE in Ghana, rather than to find generalities. For instance, in Chapter 2, while I set out to test several hypotheses, these are taken as guiding hypotheses to give a structure to the analyses of the diversity of roles that social capital may play when a variety of empowerment dimensions are analyzed under the context of CBE. My objective is more centrally found in the problematization of the social capital and empowerment links and the need for specification and critical contextualization of these terms to avoid simplistic generalizations and ‘across-the-board’ practices. As described in the background and research objectives section above, the dissertation focusses on the whys and hows of the differences in social capital access and empowerment at different scales and for different subpopulations. As such, the case study approach I take seems particularly appropriate and offers the necessary in-depth examination and multiple data sources from which to discuss and draw conclusions for improved local practices (Yin, 2003).
1.5 Thesis structure

The dissertation consists of five chapters (Figure 1.2). An introduction (This chapter, Chapter 1) provides the context for this investigation and describes research objectives, methodological approach and geographical scope. Chapter 2 illustrates an approach to avoid oversimplification of development practices by taking varying social capital and empowerment dimensions into account within different subpopulations. Building on the results of Chapter 2 concerning empowerment inequalities, Chapter 3 focuses on an in-depth exploration of social capital and political empowerment differences by gender and
ethnicity in one of the communities. Chapter 4 focuses on the role or agency in community-level empowerment. In particular, in order to explain some of the reasons for the different community empowerment outcomes, I study agents’ ecotourism discussion networks along with their views and visions for the CBE project. Finally, in Chapter 5, I synthesize main findings and discuss broader academic and practical implications. Limitations, implications and pathways for future research are also presented.
Chapter 2:
A close-up look at the tangles

The differential effects of cognitive and structural social capital on empowerment in two community ecotourism projects in Ghana

2.1 Introduction

Social capital – “resources embedded in social relations” (Lin & Erickson, 2010b, p. 4) – has been recognized for its potential role in enabling empowerment in CBNRM (Nath et al., 2010) because it can lower the costs of working together, facilitates knowledge transmission, increases social mobility, and enables cooperation through shared norms (Hunt, Durham, & Menke, 2015; Isaac et al., 2007; Pretty, 2003; Tian & Lin, 2016). A growing body of research in CBNRM explores social capital’s impacts, primarily at the community or institutional level (Ballet et al., 2007; Bodin & Crona, 2008; Crona et al., 2017; Jones, 2005). However, given the multifaceted nature of the concept and the fact that the distribution of social resources in communities varies across demographic characteristics (Lin & Erickson, 2010a; Molyneux, 2002), researchers have cautioned against discounting conceptual complexities and homogenizing residents’ interests within communities (Agrawal & Gibson, 2001). Therefore, differential access to social capital and associated empowering outcomes at the individual level (Lin 2000; Cleaver 2005; Mayoux 2001) deserve greater research attention.

Drawing from Lin's (2001) social capital theory, this chapter examines the different roles that social capital plays in empowering individuals in two CBE projects in Ghana, when accounting for demographic differences. Through the disaggregated measurement and analyses of social capital and empowerment, the analytical framework employed illustrates
how oversimplified development practices may be avoided. The study asks, ‘Do residents with higher access to social capital show higher levels of perceived empowerment than individuals with less access to social capital? If so, does this hold true across different empowerment dimensions? Does it also hold true after controlling for the effects of one’s gender, ethnicity, or degree of involvement in ecotourism?’

2.1.1 Empowerment, a central goal of community ecotourism

In the 1990s, a pro-poor tourism agenda associated with economic development initiatives fostered the expansion of ecotourism initiatives in the global south (Scheyvens, 2002; Spenceley & Meyer, 2012). Oftentimes, these were criticized for being underpinned by neoliberal development and conservation agendas upon which donors and external actors rely (Büscher & Davidov, 2014; Duffy, 2006; Fletcher, 2012). However, CBE, borne out of the principles of CBNRM, emerged as one approach where communities have a considerable amount of input into decision-making processes, including the design, development and management of ventures, as well as the ability to exert control over the distribution of benefits (Denman, 2001). Such an approach received substantial theoretical support and established local empowerment as a central goal of CBE alongside conservation (Murphree, 2009; Scheyvens, 2002; Weaver & Lawton, 2007). Despite local empowerment efforts, CBE studies often report mixed-results (Ahebwa & Van del Duim, 2013; Hunt & Stronza, 2014; Kiss, 2004; Manyara & Jones, 2007; Mbaiwa, 2015; Weaver & Lawton, 2007) and the idea that these community projects are divorced from internal and external politics has been challenged (Duffy, 2006). Critics have thus cautioned against decontextualizing and depoliticizing empowerment (Butcher, 2010; Kabeer, 2005; Rowlands, 1995). Existing power dynamics along the axes of ethnicity, age, and gender have been shown to shape empower in CBNRM (Agarwal, 2001) potentially exacerbating social inequities (Grischow, 2007; Silvey & Elmhirst, 2003) and reducing community cohesion and capacity for collective action (Scheyvens, 2002). For instance, at the local level ecotourism development tends to be dominated by elites (Cater, 2006; Scheyvens,
Hence, the importance of examining the impacts those socio-demographics may have on the relationship between social capital and empowerment.

Critics have also identified challenges in the measurement and comparability of empowerment across disciplines and scales, and emphasized the need for contextualized and multidimensional measures (Alsop et al., 2006; Kabeer, 2002; Zimmerman, 2000). With these complexities in mind, and with a specific focus on individual empowerment, I draw from Zimmerman (2000) who conceptualized empowerment both as a process and an outcome related to self-conceptions of competence, perceived control, and self-efficacy (i.e., intrapersonal principle), one’s active engagement in the community (i.e., behavioural principle), and awareness and understanding of one’s socio-political environment (i.e., interactional principle). I draw upon individual empowerment measures consistent with this multifaceted definition and adapt them to the local context.

2.1.2 Social capital, mainly a relational asset

In CBNRM, social capital is important for resource access, knowledge transmission, social mobility, and to enable cooperation for collective solutions (Prell et al., 2009; Pretty & Smith, 2004). Interventions to promote social capital in CBNRM can take different institutional arrangements. For example, the establishment of regular face-to-face meetings (see an example from the Ejido Sierra Morena (Mexico) in García-Amado et al., 2012), common goals and enforceable norms, conflict resolution skills, or accountability and transparency strategies, (Krishna, 2000; Ostrom, 1994; Westermann et al., 2005). These approaches are seen to facilitate communication and foster trust among community members, thus enhancing cooperation. Also, policy reform has been adapted to promote social capital in the form of group-based approaches in NRM in India, Indonesia, Sri Lanka, Kenya, Australia (Pretty, 2003) and microfinance institutions have helped groups to learn how to collaborate to receive credit (Anderson, Locker, & Nugent, 2002). Social learning, a process that increases collaboration, trust building, and network diversity, is thus a way of
building social capital for individual and collective gains (Crona, Ernsston, Prell, Reed, & Hubacek, 2011).

The study of social capital across disciplines and at different scales (individual, institutional, collective) has led to multiple and contested definitions, measurements and applications (Ballet et al., 2007; Bebbington, 2009; Das, 2006; Floress, Prokopy, & Allred, 2011). In an attempt to bring clarity to investigations of social capital analyses, researchers have increasingly explored the critical roles that social networks play in the success of resource management, and have begun to clarify when and how the diversity and strength of social connections may impact a community’s or individual’s ability to manage their resources (Bodin & Crona, 2008; Prell et al., 2009). At the individual level, a theory of social capital centered on social networks (Lin, 2001) has aided these research developments. Under Lin’s (2001) model, social capital are social resources embedded in social networks that can be employed by individuals to achieve specific outcomes. Such resources include status, power, and wealth, which facilitate the dissemination of knowledge and information, enable influence, render social credentials, and affirm self-identity. The underlying assumption of the network approach to social capital is that the better the accessible embedded social resources are, the more they can be mobilized for expected returns.

Lin (2001) emphasizes that social capital, as a relational asset, must be distinguished from collective goods (e.g., norms of trust, reciprocity, and collaboration). To maintain this distinction, researchers and practitioners have termed those collective goods ‘cognitive social capital’ (Krishna & Shrader, 2000; Uphoff, 2000). Unlike cognitive social capital, structural social capital refers to the qualities and characteristics of social networks among individuals or groups. While cognitive elements of social capital may predispose individuals toward mutually beneficial collective action, structural elements may facilitate such action by mobilizing social resources through social networks (Krishna & Shrader, 2000). We propose the following hypotheses related to cognitive social capital in the context of CBE projects in Ghana:
H1 The more trusting individuals are of others, the more empowered they perceive themselves to be.

H2 The more individuals engage in reciprocal behaviour, the more empowered they perceive themselves to be.

H3 The more collaborative behaviour individuals show, the more empowered they perceive themselves to be.

In the context of structural social capital, network theory distinguishes weak ties (i.e., relationships with low emotional intensity) from strong ties (i.e., relationships that have high emotional intensity). Weak ties serve as bridges, and are important for the flow of novel information (Granovetter, 1973; Lin, 2001). They may facilitate instrumental actions such as getting a job, becoming more active and/or influential in civic life. Conversely, strong ties reinforce patterns of trust and reciprocity and lead to expressive outcomes, such as public recognition, or the maintenance of physical and mental health and life satisfaction (Lin, 2001).

It is important to note that tie-strength functions are context dependent: cultures distribute and share social resources differently (Lin & Erickson, 2010a). In CBNRM, only a few case studies have explicitly articulated empowerment as it relates to social capital (e.g., Mayoux, 2001; Okazaki, 2008; Tran & Walter, 2014); thus, it is reasonable to assume a positive correlation between strong and weak ties and empowerment. We propose the following hypotheses:

H4 The higher the number of weak ties that individuals have to other individuals with whom they discuss ecotourism matters, the more empowered they will perceive themselves to be.

H5 The higher the number of strong ties that individuals have to other individuals with whom they discuss ecotourism matters, the more empowered they will perceive themselves to be.
The above hypotheses examine different aspects of social capital and are stated relative to general empowerment and generic individuals. However, given the important critiques that discredit social capital and empowerment analyses for ignoring relationships of power and difference (Cleaver, 2005; O’Neill & Gidengil, 2006), these hypotheses were examined in light of multiple empowerment dimensions emerging from the cases while also accounting for socio-demographics differences.

2.2 Methods

2.2.1 Study context

This study takes place in two CBE villages located in the Volta Region of Ghana (Community A and Community B). The colonial roots of ecotourism development in Ghana has resulted in frequent marginalization of rural communities (Eshun, 2010). Partly to counter this marginalization, between 1996 and 2004 NCRC, in partnership with international agencies and the Ghanaian Government, supported the development of over a dozen CBE projects that generated revenues of US$1 million in 2006 from 139,000 visitors (Eshun & Tagoe-Darko, 2015). Two of those CBE projects in the Volta Region, which have been financially independent since 2004, are examined here. Under NCRC’s CBE model, communities retain full control in decision making and revenue distribution while operating through a locally enacted constitution led by an elected board. Both CBE projects under study share characteristics such as a similar tourism development history, accessibility by road, financial investment, similar management frameworks, revenue and visitation (around 20,000GHS from approximately 10,000 visitors in 2011). Both villages attract domestic and foreign visitors for day hikes in the surrounding forests. Domestic visitors are often school groups while foreign visitors are often young backpackers from Europe and North America, some of whom stay overnight. The projects employ a management team and several tour guides, and offer indirect employment to food vendors, stores, transportation providers, and music groups, among others. Entrance and lodge fees are distributed among
landowners, chiefs, project reinvestment and a community fund for infrastructure improvements and other community projects.

Migration to the communities dates back to at least the 19th century according to local elders. Community A has an estimated 3,500 inhabitants while Community B has 2,000. Population estimates include members of local clans (hereon local residents) and migrant farm labourers living in surrounding smaller settlements, many from northern Togo (hereon non-local residents). Surrounded by semi-deciduous forest and farmland, both communities derive their livelihoods from multicrop subsistence farming of (primarily) maize, cassava, plantain, banana, cocoyam, yam, pineapple, and palm as well as coffee or cacao trees. Many residents have home gardens and rear chicken or goats and sell surplus farm products.

Residents and the NCRC agree that CBE has allowed the communities to conserve the forests. Local by-laws (e.g., banning bush fires for meat hunting and agriculture or the creation and maintenance of fire belts) along with the environmental awareness training by NCRC have significantly reduced deforestation in areas frequented by tourists since the beginning of the projects. In addition, reforestation projects have taken place and some standing trees in the area have been purchased to compensate landowners for lost opportunities. A former chair of the Ghana Tourism Board stated “If it wasn’t for these projects the whole forest would have been cleared by now” (personal communication).

### 2.2.2 Data collection

This study draws upon survey data collected from village residents through face-to-face conversations between February and July of 2013 by six Ghanaian field assistants and by me. Conversations were conducted in English or Ewe. When respondents would prefer to communicate in Ewe, field assistants recorded answers verbatim in English. This study also draws from ethnographic and secondary data (i.e., participant observation, informal
conversations, NCRC reports and open-ended questions in surveys) for triangulation, validation and interpretation of results.

Two samples were collected in each village: a random sample of the general residents (S1) and a random sample of residents involved in ecotourism (S2). S1 comprised residents from both villages (n_{Community A}=132 and n_{Community B}=127) regardless of their involvement in ecotourism. This sample was collected using random walks within each clan area of the villages, selecting every third house, and starting from a different location each day. S2 comprised residents of both villages (n_{Community A}=53 and n_{Community B}=37) who were involved in ecotourism activities (i.e., ecotourism board members, traditional leaders, tour guides/staff, food vendors, motorcyclists, taxi drivers, owners of land in the ecotourism project, souvenir vendors). The selection of these activities was determined and informed a priori by key informants affiliated with the project. Proportional allocation sampling was employed for S2, which sought to represent at least 50% of the population involved (directly or indirectly) in ecotourism; survey respondents were randomly selected within each identified group.

Aggregated Likert-scale questions grounded in previous research (see Dohmen, Falk, Huffman, & Sunde, 2008; Glaeser, Laibson, Scheinkam, & Soutter, 2000; Westermann et al., 2005) were pretested and adapted locally to assess cognitive social capital. Three questions measured trust (in the board, in tourism staff, and in traditional leaders); two questions measured reciprocity by querying respondents’ willingness to help others in return for past reciprocal help (even if at a cost); and two questions assessed collaboration by querying respondents’ general involvement in communal works and festivities preparation.

To measure structural social capital, a *name generator* network question (Lin & Erickson, 2010a) was used to assess the number of strong and weak ties of each respondent: ‘Who have you discussed ecotourism matters with over the past year?’ After respondents identified individuals, they were asked whether that person was a close friend and/or shared any of the following characteristics: lived in the same community as the respondent;
were family; or belonged to the same church, clan, or political party. Being a close friend along with each shared characteristic contributed one point towards tie strength. Since the study takes place in a small community setting where most people know each other well, a stringent threshold (a cumulative score of two or less) was used to determine if a tie qualified as weak. This is consistent with the use of multiplex network ties and thresholds to operationalize tie strength (Leifeld, 2013).

Empowerment in this study was measured using 17 statements describing potential empowering processes that respondents may have experienced related to the CBE projects (Table 2.1). Statements were informed by previous studies on empowerment (see Kabeer, 2005; Narayan, 2005; Scheyvens, 2002; The World Bank Institute, 2007) and reflected Zimmerman’s (2000) empowerment principles. Statements were piloted with local people, and adapted and framed as discrete visual analog scales ranging from ‘strongly agree’ to ‘strongly disagree’. Demographic information was also collected and a control variable for community was incorporated into the analyses.

2.2.3 Analysis

PCA was conducted on the 17 empowerment statements in each sample to uncover latent constructs and to develop empowerment subscales (Table 2.1). The empowerment subscales were constructed by averaging responses from the empowerment questions that loaded most highly on each PCA component. An overall empowerment scale was also created by averaging all of the scores from the statements that loaded highly on the final PCA components in both samples. Chronbach’s alpha was employed to assess the internal consistency of the empowerment scales.

We used sequential (hierarchical) multiple regression using three forced entry blocks to test the relative contribution of each of the three main explanatory sets of independent variables for each sample. Demographic control variables were entered first, followed by cognitive social capital variables and structural social capital variables (Table 2.2).
<table>
<thead>
<tr>
<th>Empowerment statements</th>
<th>S1: Community sample components</th>
<th>S2: Ecotourism sample components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because of tourism I have (more/less) opportunities to participate in community decisions</td>
<td>0.778</td>
<td>0.584</td>
</tr>
<tr>
<td>I (don’t) care to attend community meetings about the tourism project</td>
<td>0.673</td>
<td>0.830</td>
</tr>
<tr>
<td>It is (easy/difficult) for me to get information about tourism matters</td>
<td>0.629</td>
<td>0.874</td>
</tr>
<tr>
<td>I am (not) aware of community meetings where tourism matters are discussed</td>
<td>0.455</td>
<td>0.809</td>
</tr>
<tr>
<td>*Since the tourism project came, I have (more/less) employment opportunities</td>
<td>0.63</td>
<td>0.736</td>
</tr>
<tr>
<td>Since the tourism project came, I make (more/less) money</td>
<td>0.798</td>
<td>0.636</td>
</tr>
<tr>
<td>Because of tourism I have (more/less) possibilities to do what I want to do in my life</td>
<td>0.717</td>
<td>0.520</td>
</tr>
<tr>
<td>Since the tourism project came, I have (better/worse) services</td>
<td>0.587</td>
<td>0.401</td>
</tr>
<tr>
<td>Because of tourism I am (more/less) hopeful about my future</td>
<td>0.523</td>
<td>0.681</td>
</tr>
<tr>
<td>I (don’t) think that it is important to protect the forests around the village for the future of the community</td>
<td>0.841</td>
<td>0.968</td>
</tr>
<tr>
<td>I (don’t) like seeing tourists</td>
<td>0.716</td>
<td>0.968</td>
</tr>
<tr>
<td>*I think tourism has (helped protect/damage) our forests</td>
<td>0.675</td>
<td>0.701</td>
</tr>
<tr>
<td>I am (not) afraid to provide my views and suggestions about tourism to the board</td>
<td>0.671</td>
<td>0.891</td>
</tr>
<tr>
<td>I (often/never) bring suggestions about tourism matters to community meetings</td>
<td>0.406</td>
<td>0.639</td>
</tr>
<tr>
<td>*I (have learned many things/haven’t learned anything) about our forests as a result of tourism development</td>
<td>0.423</td>
<td>0.592</td>
</tr>
<tr>
<td>Because of my relationship with tourism, I now get along (better/worse) with my neighbors</td>
<td>0.905</td>
<td>0.854</td>
</tr>
<tr>
<td>Because of my relationship with tourism, people respect me (more/less) now</td>
<td>0.885</td>
<td>0.875</td>
</tr>
</tbody>
</table>

NOTE – Varimax rotation. Only factor loading above 0.4 reported. PCA explained 61.1% of variance on S1 (community sample) and 71.9% on S2 (ecotourism sample). Only common components between samples were further analyzed to allow for comparative discussion between samples. Thus, statements with an (*) were excluded from further analyses and from the overall empowerment scales. They were not used in the regressions of Table 2.2. Cronbach’s Alpha: component 1: 0.79, component 2: 0.68, component 3: 0.68, component 4: 0.59 and component 5: 0.82.
Table 2.2 Hierarchical multiple regression using three forced entry blocks.

<table>
<thead>
<tr>
<th>Dependent variables from empowerment components that emerged in the PCA</th>
<th>Decision-making access</th>
<th>Socioeconomics</th>
<th>Forest protection and tourism satisfaction</th>
<th>Having a say</th>
<th>Social credentials</th>
<th>Overall empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: Community sample</td>
<td>CM 1</td>
<td>CM 2</td>
<td>CM 3*</td>
<td>CM 4</td>
<td>CM 5†</td>
<td>CM 6</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.189**</td>
<td>0.202***</td>
<td>0.148**</td>
<td>0.089</td>
<td>0.094</td>
<td>0.027</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.411***</td>
<td>0.341***</td>
<td>0.3***</td>
<td>0.356**</td>
<td>0.298**</td>
<td>0.249***</td>
</tr>
<tr>
<td>Community</td>
<td>0.134</td>
<td>-0.012</td>
<td>-0.01</td>
<td>0.217***</td>
<td>0.084</td>
<td>0.09</td>
</tr>
<tr>
<td>Education</td>
<td>-0.029</td>
<td>0.013</td>
<td>-0.015</td>
<td>-0.011</td>
<td>0.018</td>
<td>-0.021</td>
</tr>
<tr>
<td>Age</td>
<td>0.042</td>
<td>0.008</td>
<td>0.061</td>
<td>-0.035</td>
<td>-0.053</td>
<td>-0.066</td>
</tr>
<tr>
<td>CSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.298***</td>
<td>0.293***</td>
<td>0.304**</td>
<td>0.29***</td>
<td>0.11(*)</td>
<td>0.097</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>0.145**</td>
<td>0.136**</td>
<td>0.094(*)</td>
<td>0.082</td>
<td>0.404***</td>
<td>0.405***</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.201***</td>
<td>0.185***</td>
<td>0.066</td>
<td>0.047</td>
<td>0.056</td>
<td>0.052</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2: Ecotourism sample</td>
<td>EM 1</td>
<td>EM 2</td>
<td>EM 3*</td>
<td>EM 4</td>
<td>EM 5†</td>
<td>EM 6</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.352**</td>
<td>0.293**</td>
<td>0.265**</td>
<td>0.198(*)</td>
<td>0.115</td>
<td>0.108</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.222*</td>
<td>0.244**</td>
<td>0.205*</td>
<td>0.103</td>
<td>0.123</td>
<td>0.127</td>
</tr>
<tr>
<td>Community</td>
<td>-0.01</td>
<td>-0.008</td>
<td>-0.038</td>
<td>-0.004</td>
<td>-0.005</td>
<td>-0.002</td>
</tr>
<tr>
<td>Education</td>
<td>0.117</td>
<td>0.078</td>
<td>0.049</td>
<td>0.01</td>
<td>-0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>Age</td>
<td>0.26*</td>
<td>0.185</td>
<td>0.217*</td>
<td>-0.166</td>
<td>-0.261*</td>
<td>-0.26*</td>
</tr>
<tr>
<td>CSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.253*</td>
<td>0.241*</td>
<td>0.311**</td>
<td>0.307**</td>
<td>0.017</td>
<td>0.008</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>0.11</td>
<td>0.068</td>
<td>0.191(*)</td>
<td>0.17</td>
<td>-0.061</td>
<td>-0.085</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.225*</td>
<td>0.221*</td>
<td>0.113</td>
<td>0.105</td>
<td>0.198*</td>
<td>0.203*</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE – Standardized betas shown. CSC: Cognitive social capital variables. SSC: Structural social capital variables. (*) p<0.1, * p < 0.05; ** p < 0.01; *** p<0.001; Community (A=0); Gender (f=0); Ethnicity (non-local ethnicity=0); Cronbach’s alpha of the trust scale 0.791, reciprocity scale 0.532, collaboration scale 0.614, overall empowerment scale 0.814. † Model in violation of the assumption of normality of residuals. q: Models run with the ecotourism sample show moderate heteroscedasticity. N/A: Responses from the dependent variable in model EM4 did not vary enough to run the regressions – thus it will not be discussed.
2.3 Results and discussion

In S1, 46.7% of respondents were men and 57.6% were local residents as compared to 73% men and 86.5% local residents in S2. Few respondents in S1 (11.3%) and in S2 (17.9%) had completed secondary education or higher; those with less formal education were predominantly women. One in twenty respondents in S1 (4.8%) reported having high personal incomes while in S2 that number was 10.4%. While 16% of respondents in S1 indicated that ecotourism had a very positive impact in their lives, 49.4% of respondents in S2 indicated that.

2.3.1 Overall empowerment models

Community model 6 (CM 6 in Table 2.2) uses overall empowerment as the dependent variable and shows that each social capital measure makes a significant contribution, even after controlling for demographic characteristics. Considering that the overall empowerment scale includes both instrumental and expressive outcomes, it is not surprising to see that access to strong and weak ties is associated with higher levels of overall empowerment. The more cognitive and structural social capital villagers have access to, the more empowered they are. These results are consistent with the hypotheses. To infer causality, I draw from prior studies (Constantino et al., 2012; Floress et al., 2011; Nath et al., 2010) suggesting that trust, reciprocity, collaboration, and discussion networks enable individual empowerment. However, it is important to note that the cross-sectional nature of this study precludes any definitive conclusion about the direction of the social capital-empowerment relationship. Given the evidence of the likely reinforcing nature of these relationships (Moye, Henkin, & Egley, 2005; Tindall, Cormier, & Diani, 2012; Wagner & Fernandez-Gimenez, 2008), I assume that those reinforcements are also taking place in the present context.

The sequential regression models permit the identification of the relative importance of tie strength for individuals, even after controlling for cognitive elements: structural social
capital significantly contributes to overall empowerment after controlling for cognitive aspects – or collective goods – which supports Lin’s (2001) perspective of social capital in that these are separate but related constructs. Likewise, these results support Lin’s contention that, it is within a context of trust, reciprocity and collaboration that mobilized social resources (e.g., status, power, and wealth) can be accessed through social networks to empower individuals.

2.3.2 Empowerment disaggregated

An overall empowerment measure may obscure important relationships between social capital and specific empowerment dimensions. PCA revealed five components common to both samples accounting for 14 of the 17 empowerment variables. The first component relates to decision-making access and involvement, including access to knowledge and information (Table 2.1), and seems closely related to political empowerment (Scheyvens, 2002). The second component relates to socioeconomic opportunities (i.e., individuals’ ability to gain control over their life and future). Component three is strongly associated with increasing respondents’ satisfaction with tourism in their villages and with the protection of their forest, which relates to individuals’ critical awareness of their environment (Zimmerman, 2000). The fourth component relates to active political engagement and efficacy in decision making, such as speaking at meetings. Although conceptually close to component one, component four relates to the behavioural aspect of political empowerment. The fifth component is highly correlated with higher scores of social credentials in the community which relates to interactional dimensions of empowerment (Zimmerman, 2000).

In Table 2.2, the sequential regression models for each empowerment subscale (models 1 to 5) indicate that different social capital measures have different effects on empowerment outcomes. Discussing the effects of each of the significant variables in all models is beyond the scope of this chapter, but some key significant differences are discussed below which highlight the importance of disaggregated examinations of structural social capital and
cognitive social capital vis-à-vis empowerment dimensions. While cognitive social capital and structural social capital variables have significant effects on empowerment subscales, the configurations differ depending on the empowerment subscale analyzed. This is particularly evident in S1 models (CM 1-5). For instance, reciprocity and collaboration measures do not seem to contribute to higher levels of empowerment as consistently as trust does across these models. Model CM3 is the exception, where the higher the reciprocal predisposition of respondents is the higher is their satisfaction with tourism and interest in forest protection. A similar correlation has been reported by Matous (2015) where a lack of reciprocal relationships in Sumatran communities has been associated with a lack of soil conservation efforts supporting the idea that positive environmental outcomes in CBNRM are influenced by reciprocal altruism and long term obligations (Plummer & Fennell, 2007). With regard to trust, results in the disaggregated empowerment models from S1 seem to support prior claims of its particular importance for political empowerment and socioeconomic outcomes (Constantino et al., 2012).

As for structural social capital, the number of strong ties seems to have a more consistent effect across models. Empowerment scales arising from the PCA are made up of a combination of instrumental and expressive empowering outcomes. Yet, one could argue that the empowering outcomes of ‘increased access to decision making’ and ‘increased socioeconomic opportunities’ are clearly instrumental outcomes. If this is true, then weak ties ought to have been significant predictors of these two empowerment outcomes (CM 1 and 2) as per Granovetter’s (1973) theoretical propositions. Given the cultural context of Ghana and the relatively isolated location of these rural communities, I posit that access to social capital through strong ties may provide sufficient access to resources that result in instrumental empowerment outcomes – especially if individuals trust the ecotourism project and management. Much has been written about significant kinship ties among Ghanaians; given that definitions of kinship extend beyond the immediate nuclear family to include multiple clans and marital linkages (Nukunya, 2003; Woode, 1999), strong ties seem to be critical for the mobilization of resources. Similar claims have been made elsewhere in this regard, such as job attainment in China, which tend to be mediated
through strong ties (Lin & Erickson, 2010a). Weak ties instead were positively associated with higher social credentials and a stronger say in tourism matters (CM4 and 5) and correlated in unpredicted ways with one’s ‘satisfaction with tourist visits and forest conservation’. The different significant correlations found between social capital components vis-à-vis the specific empowerment models of Table 2.2, reinforces the importance of unpacking these concepts in CBE in order to understand the possible different social capital contributions (Speer, Jackson, & Peterson, 2001) and elucidate interventions accordingly.

2.3.3 General community sample versus the ecotourism sample

Echoing results in Hunt and Stronza (2014), the respondents most involved in CBE (i.e., S2) offered the harshest and most detailed critiques regarding the functioning of the ecotourism project – likely due to their familiarity with it. At the same time, they reported the highest levels of empowerment and social capital. However, in S2, social capital seems to be less useful compared to S1 for overall empowerment and for the disaggregated empowerment components. While all social capital predictors are significant in CM6, trust, collaboration and the number of strong ties are the only variables associated with higher levels of overall empowerment in EM6. In models EM1 to 5, this relationship is less clear – particularly with regard to structural social capital. Although S2 respondents reported having more strong and weak ties than regular community members did, these ties do not seem to be as useful for empowering residents who provide direct services to tourists. This reinforces the idea that the kinds of social assets that enable empowerment are context dependent (Ballet et al., 2007; Lin & Erickson, 2010a); in this case, they seem to be dependent upon the villager’s involvement in ecotourism. For instance, other network

16 Preliminary t-tests examining differences between samples regarding empowerment and social capital variables show that people involved in ecotourism (S2) score higher than the community at-large (S1) by nearly all measures of social capital and empowerment. Exceptions to this include the trust, reciprocity and collaboration measures, where no significant differences between S1 and S2 were observed. See Appendix B.
measures not captured in this study such as diversity of advice networks, ties to elite community members or ties to outsiders – often referred to as ‘bridging’ and ‘linking’ (Hunt et al., 2015; Pretty, 2003) – may play a stronger role at empowering those involved in ecotourism than the discussion networks measured (Isaac et al., 2007; Wagner & Fernandez-Gimenez, 2008). As Lin and Erickson (2010b) have noted, individuals connected to respondents in alternative and unstudied ways may be potential sources of useful resources but their potential contributions remain unknown. Arguably, those most involved in ecotourism occupy higher-status positions within the ecotourism social structure than non-involved residents, and likely access empowerment through other networks. This seems to support the idea that the existence of resources embedded in social networks is not necessarily useful in all instances (Lin & Erickson, 2010a).

Overall, the relationship between social capital and empowerment seems less apparent among residents who are more involved in ecotourism. Even if their structural social capital assets are significantly greater than those of the general community (in S1), this might not be as useful for achieving higher levels of empowerment as they seem to be for the non-involved. These results do not negate the important role of social capital in ecotourism, which plays an empowering role in the general community but rather emphasizes the importance of the context.

2.3.4 Inequities revealed

No village effects were found except for model CM3 where the satisfaction with tourism and interest in forest protection in Community B is significantly higher after accounting for social capital variables (Table 2.2). Regarding social inequities, Table 2.2 shows that women, non-local residents, and younger villagers tend to be significantly less empowered than their counterparts are, particularly when it comes to decision making in tourism matters (see models 1 and 4). This is consistent with research that claims that socio-demographic characteristics make clear axes of differentiation when it comes to understanding empowerment inequities in CBNRM and CBE (Agarwal, 2001; Agrawal &
Gibson, 2001; Duffy, 2006; Silvey & Elmhirst, 2003). Bitterness arising from ecotourism outcome inequalities along ethnic lines was reported in the villages by some respondents. Given that non-local residents have not been involved in ecotourism decision making since the initiation of the project, chances are that tensions may increase. Similar participatory exclusions have brought tensions and divisions in other contexts (Agarwal, 2001; Ballet et al., 2007; Blaikie, 2006; Key & Pillai, 2006). In S2, age emerged as a significant predictor of empowerment, especially with regard to speaking in meetings (EM5 Table 2.2). Given that most respondents from S2 were local males, this suggests that overall, older local males are the most empowered group, reproducing the patriarchal structures and local elites scenarios noted elsewhere (Belsky, 1999; Kabeer, 2005; Platteau & Gaspart, 2003). Unequal access to social capital is seen to begin at birth with culturally constructed structures of status relations (Lin & Erickson, 2010a) which, when understudied in development practices, may reinforce a hierarchy of privilege vis-à-vis empowerment along gender, ethnicity or other lines of privilege (Ballet et al., 2007; Molyneux, 2002; Wagner & Fernandez-Gimenez, 2008). As gender and ethnic roles in rural Ghana are rooted in cultural beliefs and traditions, results in this study call for further ethnographic investigation of the political ecologies of these categories as they relate to networks, social capital and empowerment in CBE in Ghana (see Chapter 3).

2.4 Conclusion and implications

Despite the mostly quantitative focus of the analyses and the limited generalizability of these results for communities other than the ones studied, results suggest that investigating the relationships between disaggregated structural social capital and cognitive social capital components and a diverse set of empowering outcomes while considering different demographics, enhances previous understanding of the complexities in the study of social capital in CBNRM. Although results generally support previous research, as individuals with higher access to social capital generally show higher levels of empowerment than individuals with less social capital, results also indicate that
empowerment and social capital are multifaceted constructs and that cognitive social capital and structural social capital may play different roles vis-à-vis empowerment dimensions according to the subpopulations under study. The analytical approach presented provides a wealth of information that can be employed to design – along with further ethnographic data – social capital interventions to further CBNRM and CBE goals (e.g., discerning during an intervention whether to focus on increasing trust through transparency or increasing networking opportunities among community members).

Previous research has proposed interventions to increase social capital access through the promotion of trust, reciprocity, collaboration and network exchanges to increase community benefits from CBNRM (Crona et al., 2011; Pretty & Smith, 2004). However, results here suggest that generalized measures may fail to describe important differences and local realities, and result in the deployment of ill-advised initiatives that further disempower minorities.

While our goal in this research chapter is not to discern how interventions should take place in these two communities, I suggest that an important starting point might be to identify key interest groups and well-connected and trusted individuals within them, drawing on ethnographic and historical data, to discuss current decision-making spaces as well as empowerment opportunities and challenges from ecotourism. For those more involved in ecotourism, further exploration of the alternative networks (e.g., advice networks, elite networks) that allow them to access social resources (e.g., status, power, and wealth) is needed prior to an intervention.

Given the noted participatory exclusions, it is advisable to identify the existing meeting spaces of marginalized groups. Specific social capital interventions should then be devised for each group according to the kinds of empowerment they seek. At this juncture, it is important to consider the idea of purposeful versus accidental social capital. That is, some people purposely invest in social capital and actively try to create ties for instrumental reasons; but social ties can be a by-product of other processes. The production of social ties is patterned, and some people have more than others, yet this ‘accidental’ social capital can
still be an important resource for individual and collective aims (Feld, 1981). Thus, social capital interventions ought to be rooted in an understanding of the existing local networks and planned towards the mobilization of social ties that reduce rather than increase empowerment inequalities. We posit that drawing on already established meeting spaces in the community (e.g., churches, microfinancing groups, youth cultural groups, communal labour groups) (Cornwall, 2004) to discuss ecotourism benefits and challenges may build trust and expand discussion networks to be employed for individual and collective gains. Here it is important to note that many community subpopulations overlap in some of the above-mentioned groups (e.g., microfinancing groups often bring together local and non-local women). Those intersections may bridge new information and collaboration ideas around the CBE project.
Chapter 3:
Social difference in the social net, what about it?

A mixed-methods study of the links between social capital, political empowerment and social difference in a community ecotourism project in Ghana

3.1 Introduction

CBNRM has gained currency over several decades as a model that marries the goals of rural development and conservation, with explicit focus on local empowerment (Berkes & Davidson-Hunt, 2010; Murphree, 2009). In parallel, social capital has been emphasized as key for the initiation, maintenance, and success of CBNRM as well as essential for adaptive governance and equitable and sustainable solutions to local development problems (Folke et al., 2005; Pellini, 2012; Pretty & Ward, 2001). Social capital – understood as the resources inherent in social relations – can lower the costs of working together, facilitate knowledge transmission, enable cooperation and empower individuals (Nath et al., 2010; Pretty, 2003). Specific studies have suggested that social capital is meaningful for ecotourism (Jones, 2005), watershed management (Floress et al., 2011), climate change adaptation (Adger, 2003) and forest management (Pretty, 2003).

Critics however have raised concerns, maintaining the concept is over-versatile, depoliticized, and lacking analytical rigour (Bebbington, 2002; Lin & Erickson, 2010b). As well, the community is at times viewed as being uniform, leading to insufficient analysis of the socio-political or cultural context (Belsky, 1999; Hickey & Mohan, 2004; Silvey & Elmhirst, 2003). These weaknesses risk obscuring existing social inequalities (e.g., gender, racial, and ethnic) and may result in exclusions of certain people from project participation.
and benefits (Agrawal & Gibson, 2001; Cleaver, 2005). Meanwhile, the importance of addressing participatory exclusions to reduce conflict, increase community capacities for collective action and for effective NRM has been widely recognized (see Agarwal, 2001; Kull, 2002; Lachapelle et al., 2004; Westermann et al., 2005). In addition, researchers have cautioned against decontextualizing social capital, arguing that it is ill-advised to universalize characterizations of the term (Mansuri & Rao, 2004; Thompson, 2016). Research has therefore sought to explore the different functions of social capital in place and time, and across key demographics (Lin & Erickson, 2010b; Silvey & Elmhirst, 2003). Most relevant to CBNRM, researchers in development (Cleaver, 2005; Harriss, 2001), in common pool resources (Ishihara & Pascual, 2008) or in ecotourism (for an exception see Jones, 2005; Stronza & Gordillo, 2008) have called for conceptual and methodological refinement in this direction. Indeed, there is a growing social capital literature that highlights power relations and differentiated endowments and outcomes for distinct social groups (Lin & Erickson, 2010b; Radcliffe, 2004; Silvey & Elmhirst, 2003). Results have shown that women and ethnic minorities tend to have less access to social capital or face added challenges in mobilizing social capital resources. The question remains whether or not, and how, despite these differences and sociocultural norms, social capital access through CBNRM might still play a role in empowering marginalized community members.

Our approach responds to this question by employing a mixed-methods approach to analyze unequal access to social capital and political empowerment in the context of ecotourism. While other attempts have been made to explore inequalities of social capital connected to the role and impact of social networks (Bodin et al., 2006; Isaac et al., 2007; Prell, Reed, & Hubacek, 2011; Westermann et al., 2005), mixed-methods approaches that include feminist analyses remain all too infrequent, including for the context of ecotourism (Jones, 2005; Stronza & Gordillo, 2008). For my purposes here, I draw heavily on Lin’s (2001) perspective of social capital as a product of social networks and combine that with insights from feminist political ecology to examine the relationship between social capital, political empowerment and social difference in a CBE project in rural Ghana. Drawing on both qualitative and quantitative data sources permit to better identify demographically
differentiated and uneven social capital access as well as political empowerment outcomes from CBE while also addressing some of the why and how of the results. The focus is on gender and ethnicity to understand how social capital access through CBE might vary for different community members, and in turn, whether social capital access mediates benefits from the ecotourism project.

After reviewing the relevant literature and describing methods and results, I turn to a discussion of gender and ethnic differences in social capital access and political empowerment at the study site. Then, quantitative results are discussed in order to highlight the mediating role of social capital in the relationship between social difference and political empowerment. Finally, I turn to the qualitative data to enrich the discussion by providing an appreciation of local realities and other considerations that inform the analysis of the quantitative results. Learning across these fields and approaches (quantitative social capital, qualitative work in feminist political ecology, and CBE) brings new insights in ways that are able to usefully inform context-driven and evidence-based policy practices.

3.1.1 Political empowerment in CBNRM

Community well-being and decentralized governance are central to CBNRM efforts (Berkes & Davidson-Hunt, 2010). Given the importance of active citizenship for decentralized governance, political empowerment is an implicit and explicit requirement and outcome of CBNRM (Kull, 2002; Murphree, 2009). Empowerment refers to a process through which people, organizations, and communities gain mastery over their lives (Zimmerman, 2000). While several dimensions and recurrent pathways towards empowerment have been described (for a review see Zimmerman, 2000), at the individual level of analysis political empowerment includes experiences to exert control by participation in decision making in matters of concern. Drawing on the Angelique et al. (2002) review of political empowerment, I define political empowerment as a process though which individuals committed to a social cause gain access to community involvement and political efficacy.
Similarly and within the ecotourism context, Scheyvens (2000) refers to political empowerment as the ability of community members to exert control over ecotourism activities. Political empowerment then overlaps closely with political participation (Tindall & Cormier, 2010), involvement (Pinkleton, 2008), participatory citizenship (Hickey & Mohan, 2004), political efficacy (Arzheimer, 2008) and decision-making access/power (Agrawal & Gibson, 2001). Together, all of these terms refer to some aspect of one’s ability to effectively participate in and influence decisions that affect one’s life—taken here to be the crux of political empowerment. In response to those who have cautioned against decontextualized understandings of ‘empowerment’ (Kabeer, 2005) research participants were included in the conceptualization of what measures would be useful for empowerment. These community consultations are further described in the methods section, and for a summary of the variables used to operationalize empowerment for the analysis see Table 3.1.

CBNRM outcomes occur within particular political and historical contexts that shape gender and ethnic experiences concerning social capital access and empowerment. Speaking more specifically to social capital and gender, O’Neill & Gidengil (2006) provide extensive evidence of gender differentiated social networks, trust and reciprocity. Westermann et al. (2005) illustrate how women tend to join different kinds of organizations than men, play different roles within them, derive distinct benefits, and use social capital for different purposes. Given this, another key literature that has informed this study’s approach is the extensive literature on feminist theories that focus on voice and engagement of marginalized community members, often showing that certain community members are unable to participate fully or meaningfully in community projects (Agarwal, 2001; Resurrection & Elmhirst, 2008; Scheyvens, 2007). For example, women might extend their household chores, often with tokenistic remuneration, to incorporate tourism sector activities in their daily routines. As such, while often engaged in the day to day operations of ecotourism (e.g., partaking in activities attuned to their traditional roles such as selling food or as caretakers), women’s involvement in decision making remains infrequent despite that their experiences and knowledge have been highlighted as being particularly
meaningful for effective decision making (Scheyvens, 2007). This has the potential to both exacerbate gender inequities and contribute to elite capture (Mayoux, 2001; Molyneux, 2002; Scheyvens, 2000), and also undermine the success of CBNRM (Mansuri & Rao, 2004).

To capture such experiences, here I examine demographically differentiated empowerment outcomes while discussing the potential mediating role of social capital in that relationship.

Research on these themes has increasingly shown that there are complex and interacting operations of difference based on ethnicity, gender, class and so forth (Veenstra, 2011). In response, feminist political ecology literature has highlighted the need to incorporate an intersectionality lens to better evaluate sustainability, equity and efficiency claims (Nightingale, 2011). The feminist political ecology body of work highlights the differentiated experiences and knowledges of, responsibilities for, and interests in, environment or natural resources with the aim of uncovering relational processes of inclusion/exclusion, community dynamics, and sociocultural norms and institutions that might entrench key inequalities (Morales & Harris, 2014). Engaging this approach, notably through qualitative analysis, helps address the specific labour practices, environmental dynamics, and cultural narratives that shape unequal involvement in, or benefits from, CBNRM and ecotourism projects in the study site (Resurrection & Elmhirst, 2008) [cf. Carr (2008b) for an example of feminist analysis of projects in rural Ghanaian communities].

Inspired by the possibility of insights that could be derived from marrying this approach with other works interested in political empowerment in relation to CBNRM, the goal here is to examine the role of social capital on individual political empowerment while also accounting for social difference. Doing so facilitates ways to rethink CBE and development efforts, specifically to rethink approaches to increase social capital access and empowerment.

_____________________

17 Scholars from both quantitative and qualitative analysis backgrounds employ intersectional theory to justify the need for understanding the complexities of the social experience (Thompson, 2016; Veenstra, 2011).
3.1.2 Social capital, a complex concept

Social capital theories and methods have been increasingly taken up in work on CBNRM to analyze differing flows of resources (e.g., information, influence, support) within communities which brings individual and group outcomes (e.g., Bodin et al., 2006; Folke et al., 2005; Isaac et al., 2007; Nath et al., 2010). Despite the lack of consensus in defining social capital, a stable principle is that investment in social relations enhances the access and mobilization of valued resources (e.g., information, influence, social credentials)\(^{18}\) that generate returns to individuals or communities (Lin, 2001).

Besides criticisms on the basis of its depoliticization [e.g., gender blindness (Mayoux, 2001; Molyneux, 2002)], social capital has also been criticized for its poor theorization, measurement or conflation of related terms (Cleaver, 2005; Das, 2006; Harriss, 2001). Among notable contributors, sociologist Nan Lin spent two decades developing and testing a social capital theory focussed on networks and individual outcomes without equating them with collective good such as norms of trust and reciprocity (Lin, 1999; Lin & Erickson, 2010b). His work brings considerable clarity and structure to the idea of social capital while avoiding some of the critiques noted above (Storberg, 2002). In following Lin’s (2001), I separately examine network measures of social capital (i.e., structural social capital) from collective goods such as trust, reciprocity and collaboration (i.e., cognitive social capital). This way, I avoid the conflation of terms (i.e., trust is social capital) – a common critique in the social capital literature. In addition, I re-politicize the concept through the incorporation of a feminist political ecology perspective. A generally accepted premise concerning the relationship between cognitive and structural social capital is that the more pro-social behaviour an individual exhibits and lives within (i.e., cognitive social capital), the more chances there are to achieve personal goals through social networks (i.e., structural social capital) (Grootaert et al., 2004). Structural social capital specifically refers to the qualities and characteristics of the networks themselves. Being socially connected

\(^{18}\) Social capital can also arise as an unintended by-product of other forces (e.g., interaction in organizations not motivated by the goal of building social capital) (Tindall et al., 2012).
may greatly improve rural livelihoods. Growing frequent and diverse communication ties by forming groups or cooperatives fosters trust and collaboration to reach a wider set of resources. This in turn may help to achieve political advantages for the individuals and groups (Lin & Erickson, 2010b; Nath et al., 2010). Weak ties (i.e., relationships that have low emotional intensity) serve as bridges that are important for the flow of novel and diverse information (Granovetter, 1973; Lin, 2001) and may facilitate instrumental actions such as becoming more active and influential in civic life. Conversely, strong ties (i.e., relationships with high emotional intensity) reinforce patterns of trust and enable social support, security, mental health and life satisfaction (Lin, 2001). While previous studies in CBNRM have investigated the role of social networks and social capital on individual benefits in a diversity of contexts, no prior studies known to the authors have explored the role of strong and weak ties on individual political empowerment in the context of CBE in rural Ghana. Thus, no assumptions were made in this context regarding the specific functions of strong and weak ties in this particular case, rather their association with political empowerment goals were broadly examined.

To sum up, given the importance of active citizenship for the well-functioning of CBNRM and the inherent heterogeneity of communities, I investigate the potential role of social capital as a facilitator of political empowerment for often-excluded minorities (in this case, women and non-local residents). I ask whether (and how) social capital plays a role in politically empowering individuals despite the existence of norms and practices that may systematically exclude minorities from ecotourism benefits. Drawing on insights related to the specific and differentiated empowering roles of social capital elements (per Lin) combined with a feminist political ecology perspective, recommendations are offered for how this understanding might enable new approaches to CBE.
3.2 Methods

3.2.1 Study context

This study takes place in a CBE village in the Volta Region of Ghana (Community B as described in Chapter 2). The village offers hikes in the community’s forests, attracting both domestic and international visitors. The most common livelihoods are subsistence farming along with logging, charcoal burning, and selling surplus farm products. According to local elders, migration to the current settlement dates back to the 18th century. Approximately 2000 people reside in the immediate area, including members of local clans (i.e., local residents) and migrant farmers from northern Togo (i.e., non-local residents) who are mostly farm labourers for local residents. Though some migrants have lived here for several generations, they may still be referred to as strangers or non-local residents. Non-local residents tend to live in small, isolated family compounds on the outskirts of town.

With the support of public agencies as well as national and international development partners, the village developed a CBE project to pursue conservation and livelihood opportunities. The CBE project has been managed independently since 2005, when external funding ended. Under the CBE model, the community has full control of decision making and revenue distribution and operates under a locally enacted constitution (led by a locally elected board and ratified by villagers at community meetings). While decisions are undertaken by the board, the community is informed and consulted periodically through community meetings. The project employs a manager, receptionist and several tour guides, and offers indirect employment to food vendors, village stores and transportation providers, among others. Based on agreed-upon percentages, visitors’ fees are distributed among landowners, chiefs, project reinvestment and a community fund for development projects. Individual direct and indirect benefits include improved local infrastructure (i.e., school buildings, clinic, streetlight, and sanitation), community pride,

19 ‘Native’ and ‘local’ versus ‘non-native’, ‘stranger’ or ‘non-local’ are locally accepted ways to differentiate between descendants from families/clans who originally settled in the area prior to colonial times versus those who arrived subsequently.
natural protection of forests from winds and storms, access to employment opportunities, economic diversification, or participation in tourism decision making. Communal labour goes into the improvement of community infrastructure partially financed with CBE revenues. While some people are more involved than others in the CBE project, all community members are seen as benefiting to a certain degree from the project through infrastructural development or opportunities to participate and engage with tourists (i.e., selling food, attending community meetings, etc.).

3.2.2 Data collection

Data was collected from village residents by six Ghanaian trained field assistants and by me through face-to-face conversations in English or Ewe\textsuperscript{20} between February and July of 2013 that followed a pre-field work visit in 2012. Partnership with NCRC, a local NGO, was established and community as well as institutional BREB\textsuperscript{21} protocols were followed. Convergent triangulation was used to validate quantitative results with qualitative interview results, while complementary triangulation produced a more complete picture by combining information from different data sources and analyses (Nightingale, 2009). Data was collected at different times of the day through a quantitative survey of 130 randomly selected respondents (i.e., the available adult household member at the time of survey was selected, regardless of level of involvement in the CBE). Twenty semi-structured interviews, including a group interview with non-local residents, were also undertaken, selected through a convenience sample of people with whom trust had been built.\textsuperscript{22} Unlike the quantitative sample, which aimed at statistical representation of the population, the aim of the qualitative sample was to identify a variety of views held in the community.

\textsuperscript{20}Answers in Ewe were recorded verbatim in English.

\textsuperscript{21}Behavioural Research Ethics Board at the University of British Columbia

\textsuperscript{22}During pre-fieldwork and fieldwork visits, partaking in local community activities allowed for trust building between me and the community as well as with field assistants (e.g., sports events, ceremonies, communal labour, community meetings, cleaning campaigns, funerals, etc.)
community. Hence, for qualitative interviews, respondents from different ethnic groups, social classes, clans, and genders were selected to capture a diversity of perspectives.

Seven pairs of statements, shown in Table 3.1, were employed to describe potential political (dis)empowering processes associated with CBE drawing from previous studies on empowerment (see Harpham et al., 2002; Kabeer, 2005; Narayan, 2002; Perkins & Zimmerman, 1995; Scheyvens, 2000; The World Bank Institute, 2007). In order for statements to qualify as measures of political empowerment in this study, they had to relate to decision making and closely relate to one of the themes defined in Zimmerman’s (2000) individual empowerment theory: either being related to a feeling of control, critical awareness of one’s environment, or active engagement. In addition, each statement was pre-tested in the community, and through conversations with several local key informants, the questions were adapted to the context, in order to increase the reliability and validity of the measures. Seven-point visual analog scales were constructed for each pair of statements so respondents could indicate their level of agreement. PCA – a data reduction technique to detect components which explain the underlying variation in the multiple indicators – was used to uncover latent empowerment constructs (Table 3.1) and to develop empowerment subscales from the seven pairs of statements queried (Tabachnick & Fidell, 2001). Efforts made to contextualize empowerment measures should not be seen in opposition to the use of PCA. While PCA is a reductionist, quantitative approach to the study of empowerment, research suggests that it is nonetheless an effective approach to uncover distinct underlying components of complex constructs in a given context (Blanchard et al., 2013; Coleman & Mwangi, 2013; Islam et al., 2012; Itzhaky & York, 2000; Sharaunga & Mudhara, 2016). Based on the two distinct components resulting from PCA, two empowerment scales were constructed by averaging responses from the empowerment questions that loaded most highly on each of the PCA components (see Table 3.1). Qualitative data aids the interpretation and contextualization of these constructs.

Aggregated Likert-scale questions were used to assess three cognitive social capital aspects: trust, reciprocity and collaboration. Three questions related to trust in those
managing the tourism project, two questions related to respondent’s willingness to reciprocate and two related to collaboration in the community. While grounded in previous research (see Dohmen et al., 2008; Glaeser et al., 2000; Westermann et al., 2005), initial interviews, and local informants helped to adapt questions to the local context. Two variables pertaining to structural social capital were created (the number of strong and weak ties) through a name generator technique (Lin & Erickson, 2010b) based on the question: Who have you discussed ecotourism matters with at length over the past year? After each name cited, respondents were asked whether the person was a close friend, lived in the same community as the respondent and belonged to their same church, clan, political party and family. Being a close friend and each other shared characteristic contributed one point towards tie strength. A weak tie resulted when the score was lower than three; a strong tie resulted when the score was equal to, or greater than, three. Gender and ethnicity information was also collected.

Qualitative data was collected to describe and contextualize the similarities or differences between men and women, as well as local and non-local access to social capital and empowerment from ecotourism. A semi-structured interview schedule invited narratives regarding: 1) the ways men, women, local and non-local residents participate in ecotourism 2) the respondent’s willingness and perceived constraints to participation in the project as well as 3) interviewees’ daily routines. The goal was to capture a variety of experiences and understandings regarding norms of engagement with the ecotourism project in order to better characterize the results.

3.2.3 Analysis

Using the two political empowerment scales that resulted from PCA analyses, analysis of variance (ANOVA) were conducted to determine if women and non-local residents had lower levels of political empowerment than men and members from the local clans in the village. Ethnic and gender differences were tested to uncover potential differences in cognitive and structural social capital (Table 3.2).
Two hierarchical regression analyses were then conducted (one per empowerment scale), to examine whether higher levels of social capital access (including both cognitive and structural elements) were associated with higher political empowerment levels (Table 3.3). Gender and ethnicity were entered first, followed by cognitive social capital variables and structural social capital variables, to test the relative contribution of each of these three main explanatory sets of independent variables (Tabachnick & Fidell, 2001). This approach helps to determine the influence of one’s gender and ethnicity on empowerment, and whether this was mediated by cognitive and structural social capital.

Qualitative analysis focused on daily routines and norms related to tourism decision making that might be shaping access to social capital and active participation in CBE decision making. As detailed in the results and discussion sections, these narratives are offered to substantiate and elaborate the quantitative analyses, providing a more contextually-driven interpretation of the results. Interview responses were transcribed and open-coded using descriptive coding and subsequently pattern coding (Saldana, 2013). Initial descriptive coding of responses consisted of labelling passages with a word or short phrase that summarized the topic discussed. At this stage, codes covered a wide breadth of topics from division of labour, family duties and responsibilities, cultural taboos, forest rules, or access to resources and decision making and relationships to ecotourism. A second cycle of coding was then assigned to shorter passages within each topic code to classify responses by gender and ethnicity. Employing NVivo10 software, nodes were created based on the codes established, interview excerpts were assigned accordingly and then tables were created to compare responses in relation to the core research questions.
3.3 Results

3.3.1 Descriptive results

3.3.1.1 Unequal engagement spaces

Among 130 respondents surveyed, 69.2 % were local residents and 57.7 % were women. Sixty-five per cent reported having a relationship with ecotourism (of which 58.9 % were women, and 41.1 % men. 76.5 % local residents and 23.5 % non-local residents). Both interviews and surveys show that women engage in ecotourism mainly through indirect employment such as selling food to tourists, while men engage mostly through decision making and as direct staff (being or having been tour guides or part of the management team). Overall, individuals from local clans are involved in tourism more often than non-local residents. Among the latter, non-local women are more involved than non-local men (albeit indirectly, once again, by selling food to tourists).

3.3.1.2 Two political empowerment components revealed

As shown in Table 3.1, the PCA revealed two political empowerment components. The first joins empowerment aspects related to engagement and information access (the first four statements in Table 3.1) and as such is closely related to the idea of political involvement (Pinkleton, 2008). The second appears to refer to politically active participation and agency in decision making, such as speaking at meetings or providing input (the last three statements on Table 3.1) —referred to here as political efficacy. Although these elements might be thought of as related, it has also been argued that efficacy in decision making should be conceptualized as distinct from general political involvement (Hickey & Mohan, 2004) —justifying a separate analysis.

23 Further details about board and staff membership can be found in Appendix C
Table 3.1 Principal component analyses run on political empowerment statements.

<table>
<thead>
<tr>
<th></th>
<th>Access to political involvement</th>
<th>Political efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (don’t) care to attend community meetings about the tourism project.</td>
<td>.830</td>
<td></td>
</tr>
<tr>
<td>Because of tourism I have (more/less) opportunities to participate in community decisions</td>
<td>.770</td>
<td></td>
</tr>
<tr>
<td>I am (not) aware of community meetings where tourism matters are discussed.</td>
<td>.701</td>
<td></td>
</tr>
<tr>
<td>It is (easy/difficult) for me to get information about tourism matters.</td>
<td>.650</td>
<td></td>
</tr>
<tr>
<td>I feel I have (no) say in tourism decisions.</td>
<td></td>
<td>.827</td>
</tr>
<tr>
<td>I am (not) afraid to provide my views and suggestions about tourism to the board.</td>
<td></td>
<td>.774</td>
</tr>
<tr>
<td>I (often/never) bring suggestions about tourism matters to community meetings</td>
<td></td>
<td>.724</td>
</tr>
</tbody>
</table>

Note: Varimax rotation. 60.2% of variance explained. Only factor loadings above 0.4 are reported. KMO is 0.692. Bartlett’s Test is significant at p < 0.000. Determinant of the R-matrix: 0.174. Cronbach’s alpha of scales constructed based on the two PCA components: access to political involvement =0.685, political efficacy =0.759.

3.3.2 Inequities concerning political empowerment and social capital

While no significant differences were found between men and women in their reported levels of access to political involvement (Table 3.2), this was significantly lower for non-local residents compared to local residents (p< 0.025). This indicates that non-local residents are likely less informed and are invited to fewer decision-making tables than local residents are. Concerning political efficacy, absolute levels were generally low and ANOVA results show (Table 3.2) a significant difference between women and men (p<0.001). This means that, men are significantly more likely to speak at meetings and share their thoughts on ecotourism matters with the board than women.
Table 3.2 ANOVA comparing political empowerment and social capital based on gender and ethnicity

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>5.059</td>
<td>3</td>
<td>1.686</td>
<td>3.289</td>
<td>.023</td>
</tr>
<tr>
<td>Intercept</td>
<td>.255</td>
<td>1</td>
<td>.255</td>
<td>.498</td>
<td>.482</td>
</tr>
<tr>
<td>Gender&lt;sup&gt;d&lt;/sup&gt;</td>
<td>1.129</td>
<td>1</td>
<td>1.129</td>
<td>2.202</td>
<td>.140</td>
</tr>
<tr>
<td>Ethnicity&lt;sup&gt;e&lt;/sup&gt;</td>
<td>3.332</td>
<td>1</td>
<td>3.332</td>
<td>6.497</td>
<td>.012&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Gender x Ethnicity</td>
<td>.264</td>
<td>1</td>
<td>.264</td>
<td>.515</td>
<td>.474</td>
</tr>
<tr>
<td>Error</td>
<td>64.611</td>
<td>126</td>
<td>.513</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69.672</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>69.669</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Access to political participation

| Source                          | Sum of Squares | df  | Mean Square | F     | Sig. |
|Corrected Model                 | 14.312         | 3   | 4.771       | 10.462| .000 |
| Intercept                      | 6.894          | 1   | 6.894       | 15.118| .000 |
| Gender<sup>d</sup>             | 10.909         | 1   | 10.909      | 23.923| .000<sup>***c</sup> |
| Ethnicity<sup>e</sup>          | 1.892          | 1   | 1.892       | 4.149 | .044 |
| Gender x Ethnicity             | .189           | 1   | .189        | .414  | .521 |
| Error                          | 57.457         | 126 | .456        |       |      |
| Total                          | 79.921         | 130 |             |       |      |
| Corrected Total                | 71.769         | 129 |             |       |      |

Dependent variable: Political efficacy

| Source                          | Sum of Squares | df  | Mean Square | F     | Sig. |
|Corrected Model                 | 2.248          | 3   | .749        | 2.063 | .108 |
| Intercept                      | 9.439          | 1   | 9.439       | 25.983| .000 |
| Gender<sup>d</sup>             | .230           | 1   | .230        | .634  | .427 |
| Ethnicity<sup>e</sup>          | 1.782          | 1   | 1.782       | 4.906 | .029<sup>c</sup> |
| Gender x Ethnicity             | .026           | 1   | .026        | .071  | .791 |
| Error                          | 45.773         | 126 | .363        |       |      |
| Total                          | 64.324         | 130 |             |       |      |
| Corrected Total                | 48.022         | 129 |             |       |      |

Dependent variable: Trust

| Source                          | Sum of Squares | df  | Mean Square | F     | Sig. |
|Corrected Model                 | 50.315         | 3   | 16.772      | 6.133 | .001 |
| Intercept                      | 180.751        | 1   | 180.751     | 66.095| .000 |
| Gender<sup>d</sup>             | 35.700         | 1   | 35.700      | 13.054| .000<sup>***b</sup> |
| Ethnicity<sup>e</sup>          | 4.990          | 1   | 4.990       | 1.825 | .179 |
| Gender x Ethnicity             | .137           | 1   | .137        | .050  | .823 |
| Error                          | 344.577        | 126 | 2.735       |       |      |
| Total                          | 612.000        | 130 |             |       |      |
| Corrected Total                | 394.892        | 129 |             |       |      |

Dependent variable: Number of strong ties

NOTE: No effects were found in the ANOVAs run with the dependent variables: reciprocity, collaboration and weak ties, so results are not reported. Two-way interactions of gender and ethnicity with measures of cognitive and structural social capital were tested as well as with the two empowerment scales. Only the one-way ANOVA results are presented because there was no significant interaction in any of the two-way ANOVA results. * p < 0.05; ** p < 0.01; *** p < 0.001. <sup>b</sup> Due to moderate violation of the heterogeneity of variance a more stringent alpha level was used. In this case p < 0.025. <sup>c</sup> Due to severe violation of the heterogeneity of variance a more stringent alpha level of p < 0.01 was used (Tabachnick & Fidell, 2001). <sup>d</sup> women=0; <sup>e</sup> non-local residents = 0;
These results resonate with qualitative interviews that reveal that men and local residents in general have more power in community tourism decisions than women and non-local residents, although there is a general desire for improved political engagement by all social groups. Non-local residents (both men and women) often stated that they attend tourism meetings when aware of them, but they are often not informed of such meetings. Women and nonlocals often argued that it should not only be the men or locals who participate in tourism decisions. A local woman illustrated this sentiment as follows:

“I would like it, it shouldn’t be only the men (...) because sometime what the men will be saying or discussing we realize that that is not how it is supposed to be. But because we are women we would just listen and shut up because we don’t want to challenge the men.” (A local woman from Community B, PE605015)

Inequalities vis-a-vis gender and ethnicity also cohere with the over-representation of local residents and men on the CBE board, staff management team, as well as in traditional leadership. Interpretations as to why more men than women participate in community decisions varied. Men and women often stated that taking decisions and speaking up at meetings is mostly the role of men as head of the household – at times associated with the idea of God creating man first.

“A woman cannot be more powerful than the men, by all means it is the man that would be more powerful (...). It is the rib of the man that was used to make the women. Women cannot be more powerful than men.” (A local woman from Community B, PE605016)

Another woman explained that:

“That is how it has been since creation. The man is always the head. (...) For example, if there is a problem in the house, like an argument between me and my husband, when you come you can tell me to keep quiet but maybe if you tell the man to keep quiet, the man may still talk. But if you ask me to keep quiet I will keep quiet: (...)” (A local woman from Community B, PE605015)

On several occasions, lack of education or the incompatibility of meeting times with domestic duties were also cited by women for their lack of representation on decision-making boards. The following quotes illustrate such situations:
“(…) sometimes ahhh uhm because of their education. The men are more educated than the women. If one is not educated one can’t be a treasurer.” (A local man from Community B, AR601007)

With regards to meeting attendance, the following two quotes illustrate two common and different perceptions by men and women would hold:

“The meeting time will clash with the time I have to go and sell my things. So because of that, the women would say, ok I don’t want to do it. But for the men it is maybe only the farming that they are doing, so they can say that: ok, I will not go the farm and then go for the meeting. But the women would be doing other things.” (A local woman in Community B, PE605019)

“The women, they normally have different excuses: that they are doing this, they are doing that, they are busy. But, as for the men, any time that we are called upon us, we make sure we reach there.” (A local man in Community B, NH601008)

In addition, characterizations of women as either “naturally shy” or “talking too much” were offered as justifications for women participating less effectively in decision making.

“Whenver the matter is exposed to the public the men usually ask questions and give suggestions but the women feel shy to talk.” (A local man from Community B, NH620040)

“It takes scarcely before they call women to talk (...) After the leaders give their talk, then if you have questions, then you can ask. But if you raise your hand you have to wait until they call you before you can talk. (...) Women they don't raise their hand (...) I think it might be because they are shy.” (A local man from Community B, NH601009)

Finally, some women indicated they were hesitant to speak up due to fear of being shamed for presenting their ideas in public, a phenomenon known to determine social action as discussed in Goldin (2010).24

With regards to social capital, Table 3.2 also shows that non-local residents trust the ecotourism management team significantly less than local residents (p< 0.05) and that men

24 Further illustrative quotes can be found in Appendix C
discuss ecotourism matters with their close ties significantly more often than do women (p<0.001). Here again, qualitative interviews substantiated these results. The group interview with non-local residents revealed that while they are proud of being part of the community, some carry grievances arising from their perception of being marginalized from tourism benefits (such as not being hired as tour guides or the lack of development infrastructure in their settlements). As a point of contrast, local leaders described locals and non-locals as being ‘one’, yet non-local residents perceive that local residents do not include their traditional leader (a male leader) in community decisions and are only actively called to meetings concerning communal labour duties. This seems to foster a sense of mistrust and disengagement in CBE matters by non-local residents. This is illustrated in the following quote:

“(…) the traditional leaders of the non-natives are not regarded by the traditional leaders of the natives in terms of decision-making. They think that tourism has cost them a lot because most of their cocoa and coffee farms were ceased by the natives since tourism arrived. They also think the natives are cheating them because some of their youth are capable of working in the tourism team but the natives don’t allow them. Some of the non-natives also said the natives invite them for meetings that are based on communal labour but when beneficial things come to the community they are not invited to be part of it (…)”. (From field notes taken by a local field assistant after a group interview with non-local residents, NH621043 GCM)

Additionally, field observations and interviews reveal physical and institutional isolation reinforcing the notion of difference along ethnicity lines. For instance, most of the non-local residents, who migrated to the area years after the natives settled, live on the outskirts of the village in small isolated compounds where water access and electricity is limited or non-existent. They are often referred to as (and call themselves) ‘strangers’ and their livelihood mainly depends on working on the farms of local residents. Altogether, these differences between local and non-local residents seem to have permeated the CBE’s operation. Not only are non-local residents less likely to hear about meetings announced over the village PA system due to their physical isolation, but non-local residents are de facto excluded from decision making as they did not partake in the development of the CBE constitution and are not represented on the CBE board and staff. It is not surprising then
that, according to both interviews and surveys, non-local residents discuss ecotourism matters with fewer individuals than local residents do. Overall, these results reflect and amplify patterns well characterized in the literature related to gender and ethnic exclusions in CBNRM (Agrawal & Gibson, 2001).

3.3.3 Social capital access as a mediator of political empowerment

Turning now to results in Table 3.3, hierarchical multiple regressions reveal that the relationship between gender and ethnicity vis-a-vis the two political empowerment scales (i.e., access to political involvement and political efficacy) changes as social capital variables are incorporated in the equation. Simply stated, regardless of whether the respondent is a man, a woman, a local or a non-local, one’s access to social capital is positively associated with higher levels of political empowerment (for both empowerment scales). More details follow.
<table>
<thead>
<tr>
<th>IV</th>
<th>Access to political involvement</th>
<th>Political efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women=0</td>
<td>1.313 (1.13)</td>
<td>4.118*** (.338)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>2.715** (.234)</td>
<td>1.320*** (.104)</td>
</tr>
<tr>
<td>Non-local residents=0</td>
<td>2.525 (.195)</td>
<td>2.082** (.165)</td>
</tr>
<tr>
<td>Trust</td>
<td>.250** (3.080)</td>
<td>1.837 (0.157)</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>.235** (3.067)</td>
<td>-1.355 (-.110)</td>
</tr>
<tr>
<td>Collaboration</td>
<td>.252** (3.228)</td>
<td>.543 (.045)</td>
</tr>
<tr>
<td>Strong ties</td>
<td>2.082** (.165)</td>
<td>1.991** (.165)</td>
</tr>
<tr>
<td>Weak ties</td>
<td>2.230** (.164)</td>
<td>2.720** (.209)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.579*</td>
<td>-6.684***</td>
</tr>
</tbody>
</table>

NOTE: IV independent variables; DV dependent variables; Standardized coefficients in parentheses. a women=0; b non-local residents = 0; * p < 0.05; ** p < 0.01; *** p < 0.001; Cronbach’s alpha of scales: trust=.656, reciprocity=.521, collaboration=.575
3.3.3.1 Access to political involvement

As indicated by the significant social capital coefficients in Models 2 and 3 (Table 3.3), higher levels of cognitive and structural social capital are positively associated with more opportunities to learn about and partake in tourism decisions, notwithstanding a respondent's gender and ethnicity. That is, the more access to social capital one has, the more likely one is to *access political involvement* in CBE. While ethnicity is also a significant predictor, the hierarchical regressions show that access to social capital partly mediates the relationship between ethnicity and *access to political involvement*. In brief, whether you are local or non-local, having more access to social capital (i.e., higher number of strong and weak ties, and higher levels of trust, reciprocity and collaboration in the community) increases one's *access to political involvement*.

3.3.3.2 Political efficacy

Concerning the second empowerment scale, the higher the number of strong and weak ties, the higher the *political efficacy* reported (see models 4, 5 and 6 of Table 3.3). Note that while gender is also significantly correlated (i.e. women report significantly lower levels of *political efficacy*), scores decrease considerably when network variables are introduced. This suggests that the effect of gender is partly mediated by one's number of strong and weak ties. In this case, cognitive social capital and ethnicity show no significant correlation with *political efficacy*.

To summarize, while respondents' ability to *access political involvement* seems contingent upon their ethnicity (non-local residents report lower levels) and while one's level of *political efficacy* seems contingent upon gender (i.e., women report lower levels), the degree to which those individuals access social capital, partly determines their level of empowerment. What is key is that, despite sociocultural norms that underlie behaviours of men, women, local and non-local residents vis-a-vis CBE, access to social capital seems to contribute to increased political empowerment (in both scales measured and regardless of
gender or ethnicity). As is discussed next, this information may be valuable to avoid tokenistic approaches to political empowerment processes.

3.4 Discussion

Consistent with past feminist claims in CBNRM, results show unequal distribution of decision-making power and access to social capital (Agarwal, 2001; Cleaver, 2005; Rocheleau, Thomas-Slayter, et al., 1996), this time in the context of CBE in Ghana. Yet, analysing the links between social capital and empowerment in a disaggregated manner provide a higher resolution the kinds of political exclusions and social capital differences in place and, most importantly, reveals that despite inequities, social capital can still contribute to higher levels of political empowerment.

3.4.1 What we learn from social differences and political exclusions

Quantitative analyses indicate that one’s gender and ethnicity markedly and differently shape opportunities for political empowerment. On the one hand, while gender does not seem to affect one’s ability to be informed of, and attend meetings (i.e., access to political involvement), being a non-local seems to diminish such chances. Previous ecotourism research elsewhere (Key & Pillai, 2006) has shown that higher levels of empowerment are more often observed among the native people (i.e., local clans) which has the potential to reinforce the subordinated position of certain ethnic groups. This pattern might be reinforced here, given the physical isolation of non-local residents. On the other hand, having the opportunity to speak up at meetings or directly address one’s concerns to the CBE board or the chiefs (i.e., political efficacy) is something that seems harder for women than men, within the context of this study. Given what we know about empowerment as being a process as well as an outcome (Zimmerman, 2000) one could think about these two types of empowerment as sequential processes that are differently accessible based on social hierarchies (in this case rooted in gender and ethnicity). One first would need to be
able to access decision-making spaces (particularly for non-local residents, based on results) to then be able to participate effectively (gender differential). As Cornwall (2004) clearly noted: “Having a voice clearly depends on more than getting a seat at the table” (p.84). Given that the levels of political efficacy reported were generally low for all groups analyzed and that qualitative data described the physical and institutional isolation of non-local residents, I pose that non-local women in this study likely experience higher levels of political exclusions than any other groups analysed. While unable to show quantitative evidence of that (ANOVA analyses did not find gender-ethnicity interactions), the expansive literature on intersectionality (see Nightingale, 2011; Thompson, 2016; Veenstra, 2011) points to the importance of understanding social difference as a complex experience produced out of everyday practices, and in relation to multiple notions of difference and inequality. Since social difference is a contested and dynamic process, and thus opportunities for side-stepping hierarchies do exist (Nightingale, 2011), results suggest that increasing social capital access has the potential to contribute to reducing political inequities for non-local women, as I discuss next. While not a simple task, the recognition of the existence of such complex intersections in CBE seem key to devising effective local policies.

3.4.2 The nuanced role of social capital

Separately analyzing cognitive and structural social capital permits the identification of particular aspects more relevant for the achievement of either access to political involvement or political efficacy. In this case, while access to political involvement was influenced by one’s structural social capital, qualitative and quantitative results indicate that cognitive social capital (i.e., ones’ trust in the CBE management as well as ones reciprocal and collaborative behaviour in the community) were also important. Individuals with higher levels of trust, reciprocity and collaboration were associated with greater access to political involvement, regardless of their gender and ethnicity (Table 3.3). This means that, even when non-local residents reported having significantly less access to
political involvement, non-local residents with higher cognitive social capital had more access to political involvement. Social capital theory states that habits of trust, cooperation and participation in public life act as a social glue and make it more likely that people will be active citizens and engage in exchanges (Cook, 2005). Arguably, ethnic exclusions from CBE participation and benefits have resulted in mistrust and disengagement among non-local residents regarding tourism matters which weakens both community cohesion (Afenyo & Amuquandoh, 2014; McDermott, 2001) and opportunities for collective action (Shackleton & Campbell, 2000). Trust and reciprocity building across ethnic backgrounds, the establishment of meaningful collaboration opportunities for non-local residents and dealing with spatial dimensions of participation will likely go a long way to fostering greater inclusion, and empowerment (Cornwall, 2003; Nath et al., 2010). For instance, the incorporation of non-local representatives on the board as well as active support towards the development of infrastructure and jobs that directly impact non-local residents may contribute to the re-establishment of trust and collaboration by non-local residents.

Returning to structural social capital variables, both strong and weak ties were associated with having more access to both political involvement and political efficacy, even after controlling for gender and ethnic variability. This suggests a mediating effect of ecotourism discussion ties on the relationship between social difference and both political empowerment scales. Previous research has identified a different kind of mediating effect: Tindall and Cormier (2010) identified mediating effects of gender on the relationship between social networks and political participation in the Canadian context that reinforces the idea of gendered political participation. Complementarily, I suggest that social capital access, and particularly the amount of strong and weak ecotourism discussion ties, can contribute towards the political empowerment of individuals, regardless of gender and ethnicity. Particularly for this case study, the results show that the greater the number of both strong and weak discussion ties, the better informed and supported one is in accessing and participating effectively in decision making. That women reported significantly less political efficacy than men did suggests furthermore, that if women (including non-local women) expanded the number of ties (strong and weak) with whom
they discuss tourism matters with at length, they may increase their ability to participate effectively in political matters. Although prior studies (Granovetter, 1973; Lin & Erickson, 2010a; Tian & Lin, 2016) have clearly identified distinct functions between strong and weak ties (e.g., strong ties for emotional support, trust building and cohesion and weak ties for the flow of novel information), in this context, no specific differences vis-a-vis the two political empowerment scales analyses were noted. Both kinds of ties would seem to help community members strengthen their ability to effectively partake in community gatherings and speak their mind. Given the relatively small size and isolated location of the community, I suggest that the total number of ties is likely to be more relevant than the strength of such ties.

While some of the key insights here relate to the quantitative results, the qualitative results have been critical to contextualize and better understand what leads to ongoing exclusions and the potential of social capital for political empowerment. To highlight this final point, three of the women interviewed reported discussing tourism matters at length with an above-average number of individuals. One thing that sets these women apart was that they were, in the past or at present, involved in the CBE project as staff or as a board member allowing them to expand their network of people with whom they discuss tourism matters with (both strong and weak ties). As a result, all were able to provide richer and more nuanced descriptions of the CBE’s functioning, project benefits and challenges, and each had specific suggestions for CBE improvements. Additionally, they consider themselves leaders in the community (either as heads of cultural groups, associations or as board members). Yet, despite their active involvement, and confidence gained through close involvement with the projects, two of them acknowledged that, at times, their active involvement had sparked community criticism. The fear of criticism when speaking at meetings was a common deterrent reported by women at large. As a result some preferred to share their ideas with women who ‘have the zeal’ to speak on their behalf. Similar challenges and costs associated with active participation by marginalized community groups have been reported elsewhere (Kabeer, 2005; Morales & Harris, 2014). The accounts of these three well-connected women illustrate some of the complexities around
decision making and the need for community support for effective political participation. Participation literature has argued extensively that unless broader sociocultural norms and institutions support that engagement, the participation of marginalized social groups will be superficial or limited to those individuals who have the courage in the face of criticism or institutional challenges (Morales & Harris, 2014). As such, the ability of marginalized individuals to actively partake in decision making in CBNRM is entangled with broader community dynamics, histories and sociocultural beliefs – not all of which are amenable to individual actions.

Network research shows that strong ties (i.e., relationships with high emotional intensity) reinforce norms and trust, enable influence and social support and safety (Lin, 2001; Paletto et al., 2012). As such, strong cohesive networks of individuals may be able to offer the necessary support to marginalized groups to more actively partake in natural resource management decisions. In the context of this study, tapping into current cohesive networks in the community where women (both local and non-local residents) could discuss tourism matters and strategize their participation, may offer new possibilities for effective participation. These support networks may offer the confidence needed for women to speak at meetings discussing ecotourism matters, given that “the power gained in one space may be used to enter new spaces” (Gaventa, 2004, p. 39).

Relatedly, prior studies have argued extensively about the benefits of thinking spatially to improve participation and help build strategies for more genuinely transformative social actions (Cornwall, 2004; Gaventa, 2004; Morales & Harris, 2014). Micro-financing groups in the community offer a possible platform to initiate such discussions and claim those groups as political spaces for ecotourism discussions. These are well-established women-led groups (consisting of both local and non-local women) that meet weekly to make their deposits and discuss matters of concern. Since many of the participants regularly sell food to tourists, I pose that opening up strategic discussions about ecotourism concerns or improvements at those weekly meetings may plausibly build capacity for effective political participation among women from different ethnicities through information exchange, rehearsing argumentation skills, and through the use of a designated spokesperson for the
group (Kesby, 2005). Such discussions would take place within a broader set of sociocultural norms and not all women would speak up directly at meetings. But I concur with prior researchers that over time, the discussion of tourism matters within these spaces may produce small empowerment changes for minorities by first sharing ideas in smaller and trusted groups (Cornwall, 2004; Gaventa, 2004; Kesby, 2005). For non-local women in particular, the increase in ecotourism discussion ties may help them to learn about upcoming meetings or opportunities to engage in CBE, in turn, potentially increasing their access to political involvement. This network-based approach, drawing from cohesive and supportive groups, may be a starting point to shift norms of engagement and improve equitable decision making in CBE.

3.5 Conclusions

While past studies have shown the clear need to detail specific relationships between social capital, political empowerment and exclusions, I provide a novel contribution to these debates, showing that social capital may contribute to the empowerment of minorities, even in the face of persistent inequalities. Some of the results amplify themes long present in the feminist literatures. In addition, I also have offered novel insights into the value of social capital to these discussions. This work also shows, within a CBE context, how social difference is embedded in complex sociocultural norms that shape one’s social capital access and political empowerment. Notably, I find that employing a feminist political ecology perspective enriches explanations for both the inequalities in empowerment and access to social capital, which can help develop more contextually-driven, and effective, social capital interventions.

Given that CBNRM depends on the effective participation of all community groups (Agarwal, 2001; Agrawal & Gibson, 1999; Westermann et al., 2005), in the particular project under study, the community would need to invest in efforts to reduce challenges for social capital access and offer opportunities for marginalized community groups to
participate effectively in decision making. Failure to do so may lead to further reinforces of exclusions, community instability and possibly even the collapse of the CBE.

Finally, the cross-sectional nature of this study limits the ability to provide empirical causal evidence for these links. Nevertheless, results’ interpretations are informed by robust theoretical causal pathways (Lin, 2001; Lin & Erickson, 2010b; Storberg, 2002) and supported by the ample evidence provided by previous studies showing that social capital access and social networks are significantly related to a variety of individual and group outcomes (e.g., power, influence, wealth). The qualitative data further supports such claims. Nevertheless, the positive feedback loops between social capital and empowerment identified in other studies (Tindall et al., 2012; Wagner & Fernandez-Gimenez, 2008) are likely at play in this context as well. I urge future scholars to continue to critically examine these relationships under different contexts to more effectively employ social capital towards the goal of promoting social equity and inclusion in CBE, and more broadly in CBNRM.
Chapter 4:
What a small group of people can do

A comparative analysis of the role of agency for the mobilization of social capital in two ecotourism communities in Ghana

4.1 Introduction

The conditions leading to the strength of CBE institutions are complex, multifaceted, and embedded in cultural and political contexts — a suite of considerations that often lead CBE outcomes to be poorly understood (Jones, 2005; Mansuri & Rao, 2004). A growing body of scholars in NRM have made calls to examine the role of social capital and social networks in the development and maintenance of effective community projects (e.g., Liu et al., 2014; Pretty & Smith, 2004; Stronza & Gordillo, 2008). Yet, the role of social capital in collective action cannot be effectively understood without studying agency (Krishna, 2002; Newman & Dale, 2007; Prell et al., 2011).

Agency is interpreted here as individuals or collectives (i.e., agents) that enact a process that drives change (Ling & Dale, 2013). Social capital remains latent until agents activate this stock and use it to produce a flow of benefits. What makes an agent of change capable is issue-specific (Krishna, 2002). Yet broadly defined, capable agents are individuals or institutions that are well connected, resourceful, with a clear vision, and engaged in a particular issue to mobilize social capital for community change.

The importance of agency for social capital mobilization has been supported by community development and, more broadly, social-ecological change research (Crona et al., 2017; Krishna, 2000; Ling & Dale, 2013). While collective action can occur in the absence of
informed and effective agents, it is not likely to be as productive or as sustainable (Krishna, 2002). Studies in this direction have been encouraged (see Bodin & Crona, 2008). The identification and examination of agents’ networks and personal profiles would then seem to be relevant to understanding collective action in CBE.

At the community level, SNA applied to the study of social capital in community-based projects is increasingly employed as a useful analytical tool for understanding both ongoing processes and why a project might have stalled (Bodin & Crona, 2008; Chang et al., 2012; Daniere et al., 2002; Falk & Kilpatrick, 2000). Among these, the study of stakeholders’ networks has proven particularly insightful (Crona et al., 2017; Prell et al., 2009). The often small and relatively isolated CBE projects are highly dependent on the interpersonal dynamics of the individuals involved (Molnar et al., 2007; Perera, 2008; Wood, 2002). This further justifies the need to examine local CBE networks and key community mobilizers to understand the capacity of a community to manage a community-led ecotourism project. While important mechanisms for effective collective actions have been uncovered with SNA, research in CBE has not noticed these analytical merits. Furthermore, while SNA has been employed to study agency (i.e., structural social capital of agents) within CBNRM contexts, the incorporation of qualitative analyses within SNA to examine personal characteristics of agents (i.e., their resources, visions and engagement levels) is rare. This has limited the interpretability of prior SNA studies for collective action.

The purpose of this study is to critically examine the role of agents as mobilizers of community social capital in the context of CBE. I discuss whether an agent’s structural social capital and personal characteristics (individually or in combination) may partly explain challenges and differences in community outcomes when mobilizing social capital for community empowerment. Drawing from an embedded comparative case study of two CBE projects in Ghana, a mixed-methods approach is employed, including SNA, to: (1) identify and characterize legitimate agents of change in each community; (2) evaluate the structure of their discussion and nomination networks; and (3) explore comparatively how their characteristics, along with broader cognitive social capital elements, shape possibilities for empowerment in each community. While the communities under study are
similar at the outset, different community empowerment levels evaluated and reported internal social struggles according to NCRC reports, permit the examination and identification of particular social capital and agency aspects that may influence such outcomes. Throughout the comparative analyses, I seek to illustrate an approach to the mixed-methods study of the links between social capital, agency and community empowerment, which contribute efforts to quantify and critically discuss aspects of social capital within a CBE setting that can help suggest more effective policies for community empowerment. Without neglecting contextual influences (Ballet et al., 2007; Fletcher, 2012; Grischow, 2007), I argue that the examination of the social networks of agents of change in CBE contexts can greatly elucidate some of the internal constraints and opportunities for social capital mobilization towards empowerment.

4.2 Social capital at the community level

Social capital’s defining characteristics are multidimensional and measurements vary depending on research tradition and focus. Here the focus is on community-level outcomes and I draw from Lin’s (2001) theory of social capital, which is rooted in social network analysis. Lin defines social capital as resources embedded in a social structure, which are accessed and/or mobilized through one’s direct and indirect ties. Although Lin’s (2001) theoretical model has mostly been applied to individual outcomes, he acknowledges that social resources embedded in networks can also provide group gains. For instance, the structure of a community network and the diversity and strength of association has been shown to correlate with collective outcomes. In NRM, a SNA approach in the study of social capital has proven to be a powerful analytical tool to understanding collaborative resource management (e.g., Bodin & Crona, 2008; Crona, 2006; Prell et al., 2009) beyond accounting for the assessment of the vibrancy of associational life\(^{25}\) in a community. For instance, Isaac

\(^{25}\) Vibrancy of associational life refers to the degree of participation in voluntary associations by members of a community. It is seen as a proxy for social capital by some but has also been deemed a simplistic measure (Porter & Lyon, 2006)
et al. (2007) mapped the informal advice network structures of farmers in Ghana to identify well-positioned farmers in the network who could introduce new agroforestry techniques and lay, in this way, the foundation for community-based adaptive management. Similarly, other studies have quantified how social networks influence environmental behaviour (e.g., Barnes-Mauthe et al., 2014; Matous, 2015). I adhere to the large group of scholars using network measures to assess social capital (i.e., structural social capital). Nevertheless, given that collective goods, such as trust and norms of collaboration, are seen to be closely related with social capital and are essential mechanisms for the successful management of the commons (Ostrom, 1990) and CBNRM (Bodin & Crona, 2008), those aspects were also examined in this study. To maintain comparability with prior studies (e.g., Ballet et al., 2007; Krishna & Shrader, 2000; Uphoff, 2000) I term those cognitive social capital aspects.

### 4.3 Capable agents

Krishna (2002) reviewed and tested several hypotheses about the relationship between social capital and three development outcomes (economic development, community harmony and democratic participation) in rural villages in India. He concluded that capable agents are necessary for activating latent stocks of social capital for successful community development; that effective and sustainable collective action in support of shared goals can only be achieved where – in addition to high social capital – capable agents are also available.

While Krishna (2002) argues that a diverse set of well-connected agents seem most helpful to address a multiplicity of community goals, Krishna does not engage directly in SNA. Yet studies in adaptive management have focused on stakeholder network analyses and illustrated the variety of ways that SNA can explain challenges and opportunities in collaborative management (Bodin et al., 2006; Prell et al., 2009). For example, Bodin and Crona (2008) characterized community leaders and their networks in a fishing community. In that study, they found that the lack of common initiatives to address the overexploitation...
of fisheries was partly dependent upon the structural characteristics of their relational network and the homogeneity among key individuals regarding poor recognition of the consequences of ecological change conditions.

Certain network structural characteristics and specific positions in networks have been shown to serve specific functions with respect to natural resource management and governance (Bodin et al., 2006; Newman & Dale, 2005). For instance, the number of ties among a homogeneous group of individuals indicates the overall level of cohesiveness (or bonding) of the group and its ability to act in the common interest (Coleman, 1990; Granovetter, 1973). Although, in general, the higher the number of relationships within a team the better, the proportion of relationships within groups (i.e., bonding) and between other groups (i.e., bridging) is also important to avoid groups being too homogeneous, or too heterogeneous (Bodin & Crona, 2008; Pretty & Smith, 2004; Woolcock & Narayan, 2000). Thus, bonding and bridging ties of agents of change (further described in methods) are important characteristics of a network from which to evaluate the potential of a group to mobilize resources for community empowerment. Also, the potential for social influence is closely tied to an actor’s structural position in a network (e.g., Wasserman & Faust, 1994 in Bodin & Crona, 2008). By identifying key individuals in a network based on their position, one is able to identify those actors whose views and perceptions may strongly shape a project’s worldview and future direction. It seems then, that examining agents’ networks and their position within these networks would be key to understanding social capital mobilization for community empowerment in CBNRM.

Concerning specific personal characteristics that may qualify agents as capable, Krishna (2002) suggests that different agent types have comparative advantage for different societal domains. For example, in his analyses of different agent types he finds that while new village leaders are important for achievements related to economic development, another type of agency, the traditional Village Council, matters more for the goal of community harmony. These two different types of agents, he argues, have different, specialized knowledges and competencies that enable them to mobilize resources for different outcomes. At the same time both types are familiar with particular institutional
processes and practices that can help villagers to organize in ways that are more likely to succeed. This, Krishna (2002) says, makes for effective agents of change. In addition, Oliver and Marwell (1988) point to educational levels, political consciousness, availability of discretionary time, and economic power as important characteristics of effective agency. I suggest that agents with these characteristics could be seen as resourceful and competent agents. Yet Krishna (2002) cautions that there are costs to collective action in terms of time spent, alternatives foregone and resources devoted. Hence, agents who can maximize the benefits that can be achieved after incurring these costs are preferred.

In addition to being resourceful and competent, capable agents need to also be genuinely interested in mobilizing broad support for community improvements (Crona et al., 2017; Ling & Dale, 2013; Oliver & Marwell, 1988; Onyx & Leonard, 2010). Thus, engagement is also considered a personal characteristic of a capable agent in this study. Relatedly, Folke et al. (2005) identify, from prior studies on adaptive co-management in NRM, the importance of leaders having a clear and convincing vision along with an understanding of the socio-ecological context under which they operate. While the particular profiles needed for capable agents to mobilize social capital are necessarily bound to each particular context and goal, the above mentioned personal characteristics (i.e., capable agents’ resourcefulness/competence, genuine engagement and clear vision) seem a good starting point from which to begin to examine, along with their networks, the role of agents as mobilizers of social capital in the context of CBE. In the particular context of CBE, it would be important for capable agents to be particularly knowledgeable about the CBE project challenges and context.

Finally, it is noteworthy that capable agents or, more generally, community leaders may not necessarily work towards the improvement of a community and instead serve personal interests. Even if they may have the necessary networks (i.e., structural social capital), and the personal resources, engagement and vision to be involved in program activities, villagers may not recognize them as legitimate agents (Laverack & Wallerstein, 2001). So, elite capture may impede or limit the realization of benefits from CBNRM (Mansuri & Rao, 2004). It would be important then, to identify who, in the eyes of villagers, are the
legitimate capable agents in a community (Laverack & Wallerstein, 2001; Mansuri & Rao, 2004). In this sense, feminist researchers have cautioned against depoliticizing the study of social capital and have called for analyses that account for power dynamics in order to better explain the challenges and merits of community approaches to NRM (Cleaver, 2005; O’Neill & Gidengil, 2006; Schuurman, 2003; Silvey & Elmhirst, 2003).

Altogether, this study combines Krishna’s (2002) understanding of social capital – as an asset to be activated by legitimate and capable agents – with Lin’s (2001) social capital model rooted in networks. I replaced ‘development’ – the outcome variable examined in Krishna (2002) – with ‘community empowerment’. Community empowerment is defined here as the mechanism by which communities gain mastery over their affairs (Rappaport, 1987). Two relatively similar communities are examined to explore whether community empowerment outcomes could be partly traced back to social capital and agents’ characteristics, while considering broader internal and external trends that may have impeded further success. Although cognitive elements of community social capital are accounted for (see methods), the focus here is on the study of structural social capital, particularly on bonding, bridging and network influence of agents. In addition, drawing on qualitative interviews, relevant personal characteristics of agents are also studied. Specifically, I focus on agents’ resources, engagement levels, and clarity of vision. Hence, social capital and agency are studied together (Figure 4.1). SNA combined with qualitative characteristics of agents is a rare approach in the study of CBNRM and is almost non-existent in CBE (for an exception see García-Amado et al., 2012). This is surprising, given the demonstrated merits of the analyses of powerful actors’ networks and individual characteristics of leaders for collective action. In this study, I take such an approach to gain a deeper understanding of the challenges and opportunities small community projects have in managing their natural resources. I contend that investigating agents’ networks and their personal profiles allows a comprehensive examination of their roles that, together with cognitive social capital elements, may shed light on previously hidden challenges and opportunities for community empowerment. I suggest that such an approach opens a path towards effective practices in CBE.
4.4 Methods

4.4.1 Study context

The Ghanaian tourism sector has shown a consistent growth trend over the past few decades and is among the top four foreign exchange earners (Ackuayi et al., 2014; The Natural Resources Information Clearinghouse & Is, 2005). Insufficient support of tourism by Ghana’s government however has impeded the sector from fully thriving. The study takes place in two rural ecotourism villages, (Community A and Community B) in the Volta Region, one of the most topographically diverse areas, with the highest concentration of community-based projects in the country (Ghana Comission for UNESCO, 2010). Both villages established CBE projects with the support of a Ghanaian conservation NGO (i.e., NCRC) over 20 years ago. Estimated at 3,500 inhabitants in Community A and 2,000 inhabitants in Community B, residents include members of local clans (i.e., local residents) and migrant farm labourers from other ethnicities living in surrounding smaller
settlements (i.e., non-local residents). Surrounded by semi-deciduous forest and farmland, the majority of households depend on subsistence farming for their income, while small-scale farming and small-scale businesses represent alternative livelihoods for some.

The comparability of the cases was established based on pre-fieldwork observations, archival data study and fieldwork data collected between February and July of 2013 with the aid of NGO key informants. CBE projects shared the same ecotourism development strategy, capacity training, funding and organizational support from NCRC over a similar period. Forest resources around the villages have been conserved to attract domestic and international eco-tourists. While in Community A, wildlife viewing and forest walks and hikes are the main ecotourism attraction, in Community B, visitors additionally enjoy natural features such as waterfalls. Both CBE projects are run under a community-agreed constitution and have set similar revenue sharing arrangements with stakeholders. Such an arrangement sets them apart compared to many other communities in Ghana where tourism services have developed through individual private investors or the government. The community development fund receives the largest share (50%). The ecotourism projects employ residents as tour guides and management staff, and provide indirect economic opportunities in the community for selling food, providing transportation or offering entertainment activities such as drumming, dancing or story telling. These community projects have not received external funding since 2005. Access by road and proximity to an urban centre is comparable, and their annual revenues, visitation and village size (in population and area covered) is within the same order of magnitude at the time data was collected. Despite contextual and procedural similarities between communities and their CBE projects, NGO reports describe internal social struggles in both communities, which have diminished the potential of each CBE project to empower communities. As reported by NGO key informants, Community A has over the years, been struggling with a dysfunctional traditional leadership, while Community B seems to lack commitment from leaders in the CBE. Such similar contexts and the existence of internal social struggles offers a good opportunity to examine comparatively the role of agents in
community empowerment and empowerment barriers, and possible opportunities for improved social capital mobilization.

4.4.2 Data collection and analysis

Three main data collection instruments were employed. First, a survey of randomly selected residents in both villages\(^\text{26}\) was employed to assess community empowerment, cognitive social capital and to identify legitimate agents in each community. Second, semi-structured interviews were used to query agents about their networks as well as their resources, engagement and visions. Finally, to contrast and enrich explanations from surveys and interviews, as well as to assess the comparability of the cases, field notes, NGO key informants and archival data were also employed.

While it is not the focus of this chapter to problematize empowerment, I recognize that, at the community level, empowerment is not simply the aggregate of many empowered individuals but rather the increasing ability of a community to effectively participate in and influence decisions that affect its own well-being (Zimmerman, 2000). Considering local NGO reports on the specific CBE project goals and community empowerment literature (Hur, 2006; Laverack & Wallerstein, 2001; Maton, 2008; Rocha, 1997), ten multiple-choice questions where designed, pre-tested and adapted to fit the local context to assess community-level empowerment changes since the development of CBE, that touch on political, economic, social, psychological and environmental aspects. Questions assessed the improvement/worsening/no change of community finances, wealth, infrastructural development capacity, quality of life, pride, conflict, political leverage at the district level, environmental awareness, and forest conservation (see questions in Appendix A3).

\(^\text{26}\) Survey questions regarding trust and the nomination of agents were surveyed from a larger sample (n\(_{\text{Community A}}\)=179 and n\(_{\text{Community B}}\)=166). Survey questions regarding other cognitive social capital and community empowerment were surveyed from a smaller sample (n\(_{\text{Community A}}\)=81 n\(_{\text{Community B}}\)=59).
Cognitive social capital was measured as follows. First, trust was measured by employing three Likert-type scales (i.e., trust of the board, ecotourism staff, and traditional leaders). Second, villagers’ predisposition towards collaboration was examined by assessing the extent to which villagers preferred ecotourism benefits to be used for community projects instead of individually shared and the extent to which the community would work together to resolve situations of risk such as crop disease or forest fire (Grootaert et al., 2004; Krishna, 2002). Third, similar to the approach used by Bodin and Crona (2008), I measured the effectiveness of institutions in place for conflict-resolution by assessing the extent to which individuals used common institutional procedures in situations of conflict which they are not able to resolve on their own. Fourth, similarly to Bodin & Crona (2008), villagers’ willingness to report rule breaking was assessed by presenting the scenario of witnessing a person cutting forest branches or trees for firewood. Scenarios and questions were adapted to the local context after pre-testing.

Structural social capital was evaluated mostly through the study of agents’ networks (Table 4.1). However, to maintain comparability with other studies, I also assess the number of local organizations that residents belong to, on average (i.e., vibrancy of associational life), as well as the average number of ties with whom residents discuss ecotourism matters. To identify legitimate agents from which to assess their boding, bridging and network influence, survey respondents were asked to name up to three trustworthy, honest and well-respected community members able to bring improvements to the community – all of which are important leadership characteristics as indicated in Onyx and Leonard (2010). Names cited were ranked by number of citations; the most cited individuals were considered legitimate potential capable agents (their actual capacity would be contingent upon their network and personal characteristics). The same question was asked of these

27 Studies often explore formal leadership networks, but given the importance of informal networks in Ghana (Woode, 1999), as well as in small-scale enterprises, as CBE ventures often are (Wood, 2002), informal leadership networks could potentially have important consequences for social capital mobilization (Bodin & Crona, 2008; Lachapelle et al., 2004). Thus, agents were identified regardless of their formal position in traditional and legal institutions.
agents, showing the extent to which legitimate agents recognize each other as such (i.e., nomination network in Table 4.2). A higher internal nomination would suggest a higher predisposition towards collaboration (Oliver & Marwell, 1988; Onyx & Leonard, 2010).

Potential capable agents were then interviewed to identify those whom they discuss ecotourism matters with at length. This resulted in the discussion network of agents (Table 4.2). It is from this discussion network that, following Bodin and Crona (2008), structural social capital is assessed by measuring bonding and bridging ties as well as network influence (Table 4.2). Network influence was measured by employing the HITS algorithm (Kleinberg, 1999), that determines hubs and authorities’ scores for each agent based on the nomination network (described in Table 4.1). These measures are a natural generalization of eigenvector centrality (Kleinberg, 1999; Oliver, de Vocht, Money, & Everett, 2013) and point towards influential people in a network. For instance, the highest hubs and authorities in the network will have considerable influence to steer the ecotourism project in a certain direction, especially when their visions and plans align with other hubs and authorities. By using the HITS algorithm, the identification of the top influential agents was not limited to residents’ and legitimate agents’ perceptions, nor to formal (traditional) leadership. Rather, like Bodin and Crona (2008), influential actors were identified based on the structure of direct and indirect nominations from the whole network of agents.

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28 HITS means Hyperlink-Induced Topic Search, also known as 'hubs and authorities' algorithm (Kleinberg, 1999).
# Table 4.1 Structural social capital measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Survey respondents networks</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vibrancy of associational life:</strong></td>
<td>A higher participation in voluntary association by members of a community represents a community with predisposition to collaboration and collective action (Pretty &amp; Ward, 2001).</td>
</tr>
<tr>
<td>Survey respondents networks</td>
<td>Average membership in voluntary organizations</td>
</tr>
<tr>
<td>Residents' ecotourism discussion ties:</td>
<td>Measures the average number of ties that residents in a community report discussing ecotourism matters.</td>
</tr>
<tr>
<td><strong>Agents' whole networks</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bonding:</strong></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>Two complementary relative measure were used as per Bodin and Crona (2008): the average number of discussion ties per agent and the average number of reported discussions ties only among agents. The number of reciprocal ties was also measured.</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Assessed by the number of isolated subgroups within a network or unconnected individuals, indicating to what degree the groups are divided.</td>
</tr>
<tr>
<td><strong>Bridging:</strong></td>
<td>Bridging is assessed here relative to bonding as per Bodin and Crona (2008). Refers to the ratio of agents’ discussions versus all reported discussions (i.e., the percentage of bonding ties of that group).</td>
</tr>
<tr>
<td><strong>Influence:</strong></td>
<td></td>
</tr>
<tr>
<td>Hub</td>
<td>The hub score of an individual is proportional to the sum of authority scores of the out-going ties.</td>
</tr>
<tr>
<td>Authority</td>
<td>The authority score of an individual is proportional to the sum of the hub scores of the people pointing at the authority (in-coming ties)</td>
</tr>
</tbody>
</table>
Table 4.2 Types of agents networks used in this study

<table>
<thead>
<tr>
<th>Network name</th>
<th>Type of network</th>
<th>Metric applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nomination network of agents</td>
<td>Identifies the people who the agent considers trustworthy, honest, well respected and able to bring improvements to the community</td>
<td>Hubs and authorities</td>
</tr>
<tr>
<td>Discussion network</td>
<td>Identifies the people with whom each agent discusses ecotourism matters at length</td>
<td>Bonding (density and fragmentation) Bridging</td>
</tr>
</tbody>
</table>

Finally, aside from network data collection, interviews queried agents about their perceived level of engagement in ecotourism matters, as well as their vision for the future of CBE, including their perception of the current state of the projects. Basic attribute data (i.e., gender, ethnicity, education, occupation and traditional leadership roles) were also collected and compared to the rest of the community to assess agents’ representativeness and resources, such as competencies and their material and wealth resources.

Independent t-tests, descriptive statistics and open-ended questions in surveys were used to compare answers between communities’ empowerment and cognitive social capital levels. UCInet software was employed to visualize and calculate network centrality and network influence measures. Using NVivo, interviews were transcribed and coded by themes to compare answers between agents regarding their engagement levels, resources, and CBE vision. Qualitative and quantitative results were triangulated with the help of archival data, survey open comments and NGO key informants, which helps to enrich the interpretation of results.

29 T-tests reported in Appendix D.
4.5 Results and discussion

4.5.1 Differences between communities in empowerment levels

In nine of the ten empowerment questions, over 75% of survey respondents in each community agreed that CBE has empowered the community. Compared to Community A, Community B scored significantly higher regarding the community’s capacity to develop since the development of the ecotourism project \((p<0.05)\) and the community’s capacity to coordinate petitions to the local government \((p<0.05)\). Community B also scored significantly higher regarding the improved status of the forest \((p<0.05)\) yet in Community B, significantly more people than in Community A perceived that ecotourism brought more conflict \((p<0.05)\). The remaining empowerment responses were comparable (see Appendix A3 and C4).

Returning to the question of the improved forest status, field notes and interviews with agents revealed that forest degradation was likely more rampant and visually more apparent in Community B at the beginning of the CBE project due to slash and burn practices (practices not reported in Community A). This may partly explain why the forest growth experienced in Community B has likely been more noticeable than in Community A.

Concerning conflict level differences identified, survey respondents in both communities, clearly indicated that CBE had not reduced conflict considerably. The perceived increased conflict in Community B was very often associated in the survey open comments with the increased rivalry with neighbouring communities over tourism matters; Moreover, respondents explicitly noted that ecotourism has not brought internal conflicts in the community. As one local woman put it: “I think tourism has brought little conflicts between the community and other neighbouring communities. But I haven’t seen any dispute within the community as a result of tourism.” (A local man from Community B, ID 100). This was further confirmed by agents’ interviews and NGO reports. Conversely, in Community A, pre-existing community conflicts over the lack of financial transparency of traditional leadership matters seem to have permeated the CBE since its inception. As expressed by a local woman in Community A “Chiefs connected to tourism are not helping at all. Some of the
accounts rendered are not true results (...) people within the committee are spending the
money (...) people who work at the centre only use the centre to make money for themselves.”
(A local man from Community A, ID 79). Nevertheless, respondents in Community A
perceived that the levels of conflict in the community have neither increased nor decreased
with the CBE.

Altogether, CBE has brought a variety of improvements to both communities yet
Community A seems less able to mobilize resources around the ecotourism project for
community empowerment, which supports the perceptions of NGO key informants. While
it is possible that residents in Community B are more optimistic about the project, I argue
that CBE in Community A struggles to bring improvements without strong leadership and
community trust. Next, this argument is explored by discussing how social capital and
agents might affect community empowerment results in both communities.

4.5.2 Community-level social capital

As is often the case, results indicated that different communities are differently endowed
with social capital (Krishna, 2002). Respondents from Community B indicated significantly
higher levels of trust as compared to Community A in all three questions: trust in the board
(p<0.001), the management staff (p<0.001), and traditional leaders (p<0.001). A hesitancy
in trusting those managing the ecotourism project and the traditional leadership in
Community A points to a barrier for collective action since a lack of trust can impede group
efficacy (Coleman, 1990; Putnam, 2000). Trust issues reported by survey respondents in
Community A were supported by NGO reports and become more evident when examining
agents’ networks and perceptions concerning CBE. Below is a quote which illustrates the
lack of trust that people have in the board:

“Yes, we have. They can run everything, they can do everything. Because the
problem is, unless we stop gossiping, because even Jesus can take up, even when
Barak Obama and Mahama comes to become the board chairman, we would talk
[gossip] about them. Unless we stop, if we do not then there is a problem. So we
Communities’ predisposition toward collaboration in the CBE seemed to be in place as were common, accessible and local mechanisms for conflict resolution. However, clear rules, sanctions and effective monitoring were lacking, particularly in B. Although local bylaws for forest conservation were identified in both villages along with associated sanctions, not many were aware of these official directives nor were they clear about the specifics. For instance, while bylaws prohibited the cutting of tree branches for firewood (picking deadwood was allowed), interviewees indicated that entering the forest was not allowed at all; concurrently some respondents indicated not knowing about any rules in the forest or reported contradictory rules. Finally, some respondents declared it was difficult to report a family member, a close friend or a church member because it could either bring division in the community and/or result in harsh criticism for reporting this. As stated in Bodin and Crona (2008) reporting rule-breaking might have strong negative consequences for the whistleblower and affect community cohesion. Since fetching firewood was often done by women, the lower rates of reporting of rule-breaking by women in Community B could be attributed to high levels of social capital among women as suggested in Bodin and Crona (2006). If that is the case, the degree of social capital held by women that do not report rule breaking in the forest may be a hindrance for the sustainable management of the natural resource and the resilience of the CBE. Finally, some respondents perceived unfairness in rule enforcement. A woman from the local clan stated: “I think there is a lot of bias in the community, because there are certain people if they break the law on tourism matters, they take it as if nothing had happened. But when some people violate the laws, they take their own very seriously.” (Community B, ID 81). This further justifies the need for clear and open discussions and establishment of forest rules and sanctions.

Concerning structural aspects of social capital by the general community, over 84% of survey respondents in both communities were members of local volunteer groups such as a church, music/cultural, youth and student associations, micro financial institutions, or workers’ unions. The average membership in voluntary associations reported by residents
in both communities (1.4 groups per person in Community A and 1.8 in Community B) is comparable to prior studies in similar rural villages in Tanzania (1.5) (Narayan & Pritchett, 1999). When compared to North American sub-populations with similar educational levels (between 1.4 to 1.1 groups/person) (Putnam, 1995), this study results show slightly higher levels of associational life per person – which is not surprising given the historically vibrant associational life across many African countries (Bratton, 1989). Concerning residents’ discussion ties, one-third of respondents in both communities never discussed ecotourism matters with others; but on average people in Community B reported discussing ecotourism matters with significantly more people than in Community A (1.3 ties/person in Community A and 1.9 in Community B). A similar study done in a Kenyan fishing community reported an average of 3.7 per person for the combined social support and knowledge network and 1.3 ties for the social support network alone (Bodin & Crona, 2008). At first glance, study figures suggest lower levels of communication compared to Bodin and Crona (2008). However, respondents were asked to report ties with those they specifically discussed ecotourism matters with rather than just general support or information ties about natural resources, as was the case in the study cited. Therefore, this study’s comparison indicates that the average number of reported discussion ties in the communities under study is within the same order of magnitude, although in the lower range for respondents in Community A. Taken together, and despite cognitive social capital challenges reported, both communities seem to be generally predisposed towards collective action. The current challenges noted could be reinforced or discouraged by agents, based on their characteristics and the structure of their networks. Those structural aspects and the characteristics of agents are discussed next.
4.5.3 Agents’ structural social capital and personal characteristics

The most cited agents in Community A were ten men from the local clans and in Community B eight men and one woman from the local clans (Table 4.3). In both communities, agents unanimously reported caring for their village and for the ecotourism project. It was notable that chiefs in the community were not at the top of the list of legitimate agents as nominated by survey respondents, nor did other agents see them as authorities in the network. Although is not uncommon that formal leadership does not match with who communities perceive as the top agents of change, it seems clear that local management actions should consider the relationships between network authorities and formal authorities (Bodin & Crona, 2008).

Agents in Community A nominated seven other individuals outside the list in Table 4.3 while in Community B most agents nominated people already in the list of agents and only three other new people were mentioned (see Figure 4.2). In Community A, three nominations were reciprocated and in Community B, six were. Collaborative arrangements are highly dependent on the extent that parties recognize the legitimacy of one another (Carlsson & Berkes, 2005). In this sense, Community B relative to Community A shows a higher level of agreement among residents and among agents of who the legitimate agents of change in the community are, legitimizing to a higher extent the network of leadership and in turn enabling better collaborative performance (Crona et al., 2017).

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30 A total of 459 nominations were collected from 228 responses in Community A. Of those, 214 make up the top 10 names. In Community B, 554 nominations were collected from 220 responses and 351 citations make up the first nine most cited names. In both communities some respondents mentioned no names.
Table 4.3 Top legitimate agents as indicated by survey respondents

<table>
<thead>
<tr>
<th>Rank order</th>
<th>Community A</th>
<th>Community B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>1</td>
<td>48</td>
<td>village</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>Accra</td>
</tr>
<tr>
<td>2</td>
<td>52</td>
<td>Ho</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>village</td>
</tr>
<tr>
<td>4</td>
<td>37</td>
<td>village</td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>village</td>
</tr>
<tr>
<td>6</td>
<td>43</td>
<td>village</td>
</tr>
<tr>
<td>7</td>
<td>36</td>
<td>Kpando</td>
</tr>
<tr>
<td>8</td>
<td>63</td>
<td>village</td>
</tr>
<tr>
<td>9</td>
<td>61</td>
<td>Accra</td>
</tr>
<tr>
<td>10</td>
<td>55</td>
<td>village</td>
</tr>
</tbody>
</table>

(1) Age (2) Location (3) Formal Education (4) Main occupation (5) Role in ecotourism (6) Hubs score (7) Authority Scores. Agents listed in order according to frequency or citation. * Chief **Traditional leader ***Unit committee chairperson. *Only scores above 0.4 shown
Agents of change in both communities reported CBE to be very important for the future of their community. However, their engagement levels and the available resources to mobilize social capital for empowerment through CBE differed between communities. In Community A, none of the network hubs and authorities were actively engaged in ecotourism, (see Table 4.3). Given the passive ecotourism role of many agents, and given their lower levels of formal education, community empowering capacity in Community A through CBE seems low. Conversely, agents in Community B played several roles within the ecotourism context (staff, board members, advisors, chiefs), enabling the exchange of a wider set of ideas and experiences within the CBE project. Social mobilization theory suggests that organizations need to locate and access a variety of valuable resources (i.e., economic, material, political, and symbolic) to be able to carry out action (Diani, 2003). Results here seem to support
this claim, considering the diversity of occupations and higher levels of education reported by agents in Community B, and given the higher capacity to develop and coordinate petitions to the local government reported in survey.

Interviews in both communities revealed that some agents were reluctant to continue their future involvement in ecotourism (as advisors, employees, or board members). While some agents stated they were too busy with their jobs and lives and lived abroad, others (particularly in Community A) noted that jealousies and past criticisms discourage their continued active involvement. As one agent in Community A noted, “I would never be part of that [the CBE project]. One thing with me is that a good name is better than riches. If the little I do you appreciate it, fine. But, when I try to “kill” myself for the community and you see it as if I go there for parochial interest then I don’t become happy. We are in a group and whenever they find something wrong in the group they brand all of us (...) my hard won reputation is being dragged in the mud which I am not comfortable with.” (A local man from Community A, AR509030ICA). Speaking to disengagement, it is noteworthy that one of the chiefs in Community A does not take part in any ecotourism role (i.e., the isolate indicated in Table 4.4), not even as an advisor. According to key informants and agents’ interviews, past grievances and perceived mismanagement of community matters have resulted in the exclusion of that chief from ecotourism matters for almost a decade. Overall, passively engaged leaders would be less able to respond to changes in the forest or the ecotourism management than would actively engaged actors who are regularly informed and embedded in the ecotourism network (Crona et al., 2017). As such, leadership disengagement may inhibit the activation of agency and the mobilization of resources for collective goals in the future (Ling & Dale, 2013).

At this juncture, it seems particularly relevant to describe the profiles of the most influential agents (as indicated by their hubs and authorities’ scores, Table 4.3). Hubs and authorities analyses in UCI.net identified two distinct authorities and four hubs in each community. From a network perspective, those are the most influential agents. While all agents see themselves as having a great deal of, or at least some, influence on ecotourism decisions, I argue that the similarity of characteristics among those top hubs and
authorities in each community, as well as the stark contrast of the profiles between communities, partly explain the empowerment differences between each. In the case of Community A, hubs and authorities share basic education levels, all reside in the village, all are advisors in ecotourism and many hold traditional leadership positions. Leaders who are similar to one another are better able to share complex information effectively due to the higher mutual understanding between such actors. However, in addition to the likely exclusion of interests from dissimilar groups, such homogeneity can be a hindrance to resolving complex socio-ecological systems because the need for different views and skillsets is key (Crona, 2006; Prell et al., 2009). Thus, the homogeneity among hubs and authorities in Community A likely limits the groups’ abilities to access new information, adapt to changes and mobilize resources for the community and in particular for CBE – despite holding formal leadership positions (Bodin & Crona, 2008; Oh et al., 2004). Although chiefs residing abroad (none of whom are hubs or authorities) have been able to bring infrastructural development, for the most part, the top two authorities rely on NGOs and philanthropy when questioned regarding means to improve the community. Given the importance of network boundary spanners that can provide links to institutions and information, education and support, the engagement by hubs and authorities of other agents in the periphery of the nomination network – particularly those living abroad and actively engaged in tourism – might offer new possibilities of social capital mobilization and support in community empowerment (Cross et al., 2002).

In Community B, hubs and authorities are mostly highly educated community members some of whom reside in the capital, while others reside in the village. Although sharing many similarities, they play different roles in the community and bring to the table a diversity of experiences in ecotourism, localities and a record of diverse, prestigious occupations. In particular, the external location of some hubs and the authorities and occupational prestige seems to have enabled, among other things, the mobilization of resources for petitioning for improvements in the community such as road infrastructure, marketing, or legal support to resolve conflict with neighbouring communities. Hubs and authorities in Community B also are aware of possibilities for attracting investment by
government, tour operators or personal contacts and rely to a lesser extent on philanthropists or NGOs. In addition, the wealthiest agents would pre-finance some ecotourism or community projects if needed. These results seem to be in line with Oliver and Marwell (1988) who illustrated the critical importance for collective action of a well-educated, economically independent and concerned minority who are politically conscious and have high discretionary time. Taken together, the configuration of hubs and authorities in Community B seems more conducive to collective action than in Community A, which may partly explain the higher levels of empowerment in B.

The structure of the ecotourism discussion ties among agents also reveals interesting differences that seem to support the existence of higher levels of community empowerment in Community B (Table 4.4). On average, agents in both communities discuss ecotourism matters with others more often than general residents do. They reported discussing ecotourism matters with people outside the network of agents who included other board members, staff, tour operators and traditional leaders and external NGOs or other members of the community residing abroad. When comparing these networks between communities, Community B seems more cohesive than Community A does, as indicated by a higher density of discussion ties. Agents in Community A mentioned discussion contacts outside the network of agents more frequently than in B, thus the ratio of bonding/bridging of agents in Community B is higher than in A. This means that leaders in Community A were not interested as much as leaders in B in discussing ecotourism matters with other agents.
Table 4.4 Agent’s discussion network summary

<table>
<thead>
<tr>
<th></th>
<th>Community A</th>
<th>Community B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of agents</strong></td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td><strong>Network size</strong></td>
<td>42</td>
<td>37</td>
</tr>
</tbody>
</table>

**Bonding**

<table>
<thead>
<tr>
<th></th>
<th>Community A</th>
<th>Community B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Density</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Average discussion ties</td>
<td>4.9</td>
<td>6.8</td>
</tr>
<tr>
<td>- Average internal discussion ties</td>
<td>1.3</td>
<td>2.8</td>
</tr>
<tr>
<td>- Reciprocal ties</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

**Fragmentation**

<table>
<thead>
<tr>
<th></th>
<th>Community A</th>
<th>Community B</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Components</td>
<td>2 largest n=41 (97.6%)</td>
<td>1 largest n=37(100%)</td>
</tr>
<tr>
<td>- Isolates</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Bridging**

<table>
<thead>
<tr>
<th></th>
<th>Community A</th>
<th>Community B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ratio of bonding/bridging</strong></td>
<td>26.5%</td>
<td>41%</td>
</tr>
</tbody>
</table>

a. Refers to the total number of individuals in the network. Includes agents interviewed (in-group members) and the individuals they mentioned (out-group members).
b. The total number of reported relations to individuals irrespective of being in-group or out-group members divided by the total number of in-group members (i.e., agents).
c. The number of reported in-group relations (i.e., agents' internal discussion ties) divided by the number of in-group members (i.e., agents).
d. The ratio of within-group relations versus all reported relations (i.e., the percentage of bonding ties of that group).

The tighter network of discussion ties among agents in Community B when compared to Community A is more conducive to trust building and mobilizing social capital for collective benefits (Prell et al., 2009). Less cohesion and common understanding of who the leaders are in Community A likely constrains this community’s ability for collective action via the CBE project. When comparing the bonding/bridging outcomes with similar studies in other communities, bonding ties associated to a knowledge network were generally higher (exceeding 50% but never more than 75%) in a fishing community in Kenya (Bodin & Crona, 2008). Comparatively then, the proportion of bonding versus bridging ties is more balanced in Community B (41%) than in Community A (26.5%), which suggests that Community B is in a better position to mobilize resources among leaders for collective action. Although a higher degree of external discussion ties (i.e. external to the agents network) may allow for the flow of new ideas and resources in a group of leaders, new ideas may not have a way to act on them (Oh et al., 2004) without a tight core of agents who discuss matters among themselves. To this point and from a structural social capital point of view, it seems that Community B is in a better position to mobilize social capital.
resources for empowerment. A cohesive ecotourism discussion network of agents with access to external resources may enable benefits for the community and mobilize resources to improve rule-breaking monitoring as well as forest and ecotourism rule compliance. In this, Community A seems to be less advantaged, given a weaker network structure of agents and trust issues in the community.

Concerning agents’ perceptions of the current state of the CBE project, those in Community A are generally not satisfied with the functioning of the project despite achieved community improvements. Mistrust and conflict in the community regarding the lack of accountability and transparency by the board and traditional leaders, as well as jealousies and a lack of forward thinking were aspects that, according to several agents, cast doubts on whether the project would exist in ten years. At least three agents suggested that if the community could not manage the project, it might need to be transferred to the district government authorities or outsiders in the future. These testimonies reinforce trust results from surveys. Conflicts reported among traditional leaders (some of whom are agents) also resonate with a lower degree of bonding in the agents’ discussion network and in the nominations’ network. Broader unresolved community matters related to conflicts between chiefs and elders around the mismanagement of community lands and the legitimacy of some chiefs seem to have resulted in a general mistrust of the traditional leadership by the community. Agents recognized that these events have also contributed to mistrust in the CBE project, given that a high proportion of the tourism revenues have been employed for perceived inefficient or non-transparent, chieftaincy expenses.

Within an environment of mistrust, it seems logical that agents would hesitate to take an active role in ecotourism leadership positions for fear of criticism and public scrutiny. All together, these perceptions have contributed to grievances and a lack of collaboration for a common strategy for the community. These testimonies support NGO reports on community struggles arising from dysfunctional leadership and further explain the community’s struggles to empower the community through the CBE project.
In Community B, mistrust did not seem to be prevalent. Agents generally perceived that the board and staff are doing their best to manage the project but they do see several challenges. The lack of good road access (which would improve tourism and trading in and out of the community), the sporadic unregulated cutting of trees in the forested area of the project, and ineffective communication and coordination among ecotourism leaders and the management team were prevalent themes of concern. Concerning road improvements, several agents recounted their efforts to petition the government to approve construction of the road. The cutting of trees was associated with the lack of proper compensation by the CBE project for those who released their land from farming for the ecotourism project.

A recurrent challenge in Community B was the effective coordination of the CBE project. While the most committed agents are also executive board members, they also live away and discuss ecotourism matters mostly among themselves while communicating only infrequently with village local leaders. Only the Chief in the village and the financial secretary act as information brokers locally; they act as ‘structural holes’ (Burt, 2001) between the community and outside agents. While agents see the need to meet more often and redistribute the workload so that the burden does not fall on only a few, some pointed to carelessness and disengagement by villagers from improving the ecotourism project due to the lack of financial incentives (i.e., the lack of regular receipt of royalties by forest landowners on the board). Below is an illustration of this situation:

“Most of the times it is the youth that drives the developmental agenda of the community. And most of them they don’t have the same mindset like we have (...) they would find it difficult to buy into what you are doing, (...) Because I would be in Accra and I would ask them, ‘do this before I come, do this before I come’. When I come, nothing is done. Sometimes they want to take money before they do it. And I don’t believe in that at all. Ahaa! (...) So they are a bit hesitant when it comes to getting involved in those things. Sometimes they think that you demand too much from them. So that is how it has been.” (A capable agent from Community B, AR630056ICA)

Additionally, some local agents wished for higher management engagement and guidance from the board members in Accra. Although the constitution establishes quarterly board meetings, those only occur when events (e.g., funerals, celebrations) bring the external
executive board to the village. On those occasions, meetings do not necessarily include all board members from the village. Hence, communication and coordination of the project seem difficult and lead to frustrations and ineffective management. Coordinated efforts to improve interaction and dialogue between leaders in different geographical locations seems key (Derek, Berkes, & Doubleday, 2007). As Oliver and Marwell (1988) argue, not only do individuals need to be interested and resourceful enough to provide outcomes when acting in concert, they also need to have sufficient social organization among themselves to act together.

Concerning agents’ vision for CBE, all of them unanimously believed that ecotourism will be very important in the future of the community and provided many examples of past village improvements from CBE: the construction of buildings (schools, public toilets, libraries, clinic, ecotourism reception and accommodation), maintenance of street lights, scholarship programs, tree planting, support for chieftaincy matters, etc. Leaders envision that these kinds of benefits will continue in the future but interviews revealed that there is not a common nor clear vision for the CBE project in either of the communities. In Community A, agents described their visions broadly by stating that in ten years ecotourism would bring more improvements similar to ones already seen. Better infrastructure for the community and for the ecotourism project are expected (i.e., a fully equipped guesthouse, restaurants, community hall) as well as the expansion of forests, less conflict and an educated youth that contributes to community well-being. In Community B, agents’ visions were broad and at times seem to differ considerably. Generally, it is expected that more people will be employed in the tourism industry and more tourism infrastructure would be in place, including new guesthouses and restaurants. While some envision the village becoming a modern city, others envision it as a place for relaxation in a continued village environment.

Changes in the community project are not solely the result of a single vision; changes require systemic transformations (Westley et al., 2013). However, given the lack of a clear vision by agents in general in both communities, the particular visions and project perceptions held by the most influential agents (in this study assessed by their hubs and authorities scores) may have a particularly strong influence on the future of these projects.
and their sustainability (Folke et al., 2005). Understanding network authorities’ particular
views and relationships with other agents of change may enable the projection of likely
future developments and may help devise effective actions for community empowerment.
These will now be discussed.

Hubs and authorities analyses reveal that in Community A, one of the top authorities is also
a top hub. This places this one actor in a comparative advantage within the network of
agents concerning his ability to influence the views of the community as well as to act as a
gatekeeper of information (Crona & Bodin, 2010). Thus, his actions, visions and
characteristics are key to understanding future trends in the CBE. This agent envisions a
future where educated youth would return to the village and help with community
improvements. Although he reported that in the past, chiefs and elders might have been
overly influencing CBE, his perception is that the problem of mistrust is rooted in the
jealousies of the youth, resulting in frequent changes of board members and staff due to
youth pressures. For him, lack of education is what makes people envious when they see
that the tourism staff is able to improve their lives through their salaries. Given those
struggles, this agent stated that if the government and NGOs would bring someone in to
handle the CBE project, then jealousies would stop and the project would function better.
The second top authority in that community also closely follows the same views. The latter
however, agreed that the lack of transparency by traditional leaders and within the CBE has
broken community trust in their leadership.

In Community B, the most actively involved authority envisioned the village in 10 years
becoming a small city with modern buildings and many visitors. External and private
investment in tourism was seen as beneficial to the community and given his time
constraints and the absence of an effective local manager (as perceived by many other
agents) he also stated that the project could soon be transferred to local authorities. This
authority seemed to lack interest in community engagement in CBE, something that his
close group of discussion ties also mentioned. I argue that this may reinforce the division
between the local board members and those in Accra and gravitate the project towards
more top-down directed activity by a small, highly-educated elite removed from the local
realities in the village. This, in turn may risk the community nature of the project and the political empowerment of local residents (Mansuri & Rao, 2004).

To sum up, in both communities, the current most influential agents consider transferring the project to local government authorities a possibility. The consequence of that change for the community’s empowerment is uncertain, although a decreased local decision-making power is likely. As Weinberg, Bellows and Ekster (2002) have noted, challenges in ecotourism development are for the most part political. Given that communities are embedded within broader political systems and are without much manoeuvring room to control outside trends, those communities with a higher ability to mobilize social capital may be more able to overcome such political challenges (Stronza & Gordillo, 2008). From a SNA perspective, Community B, which has a more cohesive network of agents with access to a variety of external resources, would be more capable to change the current situation. Yet that depends upon the ability of agents to improve communication between board members and the community as a whole.

To close this section, the seeming lack of community representativeness as seen in the agents’ demographics should be highlighted. Agents in Community A were all men from the local clans (while in Community B, they were almost all men). This is indicative of the greater power local men have to bring change to the communities. Only in Community B do residents – often women residents – see the queen mother (a female chief) as an agent. Not only do most agents nominated like people, but also the vast majority reported discussing ecotourism matters with people of the same gender and ethnicity. Homophily is a well-studied, social phenomena that structures connections whereby similar actors are attracted to one another and establish connections with each other (McPherson, Smith-Lovin, & Cook, 2001). Homophily can be seen as limiting people’s social worlds with important implications for the information they can access, the attitudes they form and the interactions they experience. As argued elsewhere, communities are not homogeneous units; rather, they are composed of individuals with diverse identities, that when overlooked in CBNRM, may reinforce patterns of exclusions (Belsky, 1999; Grischow, 2007; Mansuri & Rao, 2004; Nunan, 2006). Institutions embedded in the social life of a
community tend to reproduce pre-existing relationships of inequality and marginalization of the communities’ culture (Cleaver, 2005). Thus, without local practices that actively challenge social and structural inequalities, agents of change, while capable, may reproduce exclusions in the community. In the context under study, this means that if the network of capable agents do not account for the diversity of views and activities in the community when it comes to the implementation of community projects from ecotourism revenues, the mobilization of resources for community empowerment by these capable agents may systematically exclude certain populations that result in their disengagement or even boycott of the project. For example, a socio-demographically homogeneous group of capable agents may, advertently or inadvertently, concentrate efforts in the development of forest rules or on the improvement of infrastructures that benefit only certain interests in the community. Given the configurations of the agents in both communities, I posit that this could be a potential barrier for the empowerment of non-local residents and women in the communities who – as discussed in Chapter 3 – may face particular participatory exclusions that limit their individual empowerment possibilities.

4.6 Implications and conclusion

Formal leaders in the communities were not the main agents of change recognized in these communities. This illustrates the importance of identifying, in the eyes of the community, legitimate agents of change to ensure that policy efforts target legitimate leaders rather than formal leadership only. Actions to improve community empowerment will also need to account for particular community challenges, as well as for cognitive and structural social capital elements. Understanding agents’ networks and their perceptions can help managers or other practitioners to locate areas of a network that may need more work, such as building ties, or encouraging exchange or helping managers identify key actors to work with for the project’s improvement (Crona et al., 2011).
In Community A, efforts at increasing transparency and accountability in CBE and in the traditional leadership may restore trust and enable a richer exchange of information and resources between agents for collective actions (Mansuri & Rao, 2004). Restoring trust is not an easy task, but without it, the chances of establishing common norms, sanctions and collaborations between board and traditional leaders are low (Folke et al., 2005). The establishment of a common clear vision among agents and the revision of the current ecotourism constitution to establish adequate protocols may be good starting points. SNA in resource governance has shown that stakeholders are highly influenced by those with whom they speak on a regular basis regarding land management (Prell, Reed, Racin, & Hubacek, 2010) and by those who they trust and seek out for emotional support (Cróna, 2006). Accordingly, I suggest the active engagement of network authorities’ closest ties within the ecotourism board and staff, as well as within the traditional leadership, in order to discuss, together with the authorities, mechanisms for trust building among traditional leaders, agents and ecotourism board members. Sharing of information with one’s closest ties can enhance mutual learning and influence people’s propensity to think and act differently (Newman & Dale, 2005; Onyx & Leonard, 2010). In particular, close and educated board members and traditional leaders living away might serve as a bridge for new information and ideas about transparency and accountability.

Community B seems to be better positioned to mobilize resources for collective action, given their agents’ overlap with ecotourism decision-makers, the cohesion and balance between bonding and bridging ties, and both greater educational capacities and communities’ trust in their leaders. This situation eases collaboration (Pretty & Ward, 2001). However, the lack of a clear vision, ineffective project management led by agents residing outside the community, along with a lack of interest from the top authority concerning local participation in decision making, together risks the further disengagement by local community members. Shared decision making and the embeddedness of leaders in the community through formal and informal networks, helps maintain social capital and facilitates adaptive management (Onyx & Leonard, 2010). Focusing efforts on the creation of local discussion spaces among residents, where the forest rules can be discussed as well
as policies for monitoring and sanction, seem necessary to increase community collaboration in the conservation of the forest as well as community participation in decision making. To this end, it would be important to involve agents of change living both outside and within the community, as well as to account for views not represented in the current network of agents (such as those of women or non-local residents) to avoid exclusionary outcomes from agent’s homophily (Newman & Dale, 2007). Furthermore, external board member commitment to regular meetings with local board members seems necessary, in addition to regular communication and effective coordination with the CBE management team. As well, efforts towards collaborative ecotourism goals and activities with neighbouring communities and the establishment of common norms may reduce external conflict and disloyal competition and open up new opportunities for community empowerment. I suggest that the authority’s closest ties in the traditional leadership and in the ecotourism board support the mobilization of resources. If the authorities’ trusted networks encourage such a process, the authorities’ views and actions around community participation and the need for regular meetings with local agents may change.

Overall, study findings contribute to the growing efforts to quantify empirically and discuss critically, aspects of social capital in a CBNRM context utilizing SNA. To this end, I have focused on the comparison of two CBE cases in Ghana, drawing from mixed data sources and a combination of quantitative and qualitative analyses (including SNA). The mixed-methods approach to the examination of agents along with cognitive and structural social capital aspects seems key to understanding the differences in collective empowerment outcomes in these two communities. Findings supports the idea that while social capital may predispose and facilitate collective action, certain agents’ characteristics (relational and personal) are critical in the activation and mobilization of social capital (Krishna, 2002). Results offer rich information that illuminate strategies for improving community well-being through CBE. In particular, it further illustrates through the close analyses of agent’s hubs and authorities, that social capital mobilization at the community level cannot be understood without considering the qualitative characteristics of the most influential leaders. Examining their networks, resources, level of engagement, perceptions and visions
proved a useful way to understand the potential role of agents (Crona et al., 2017; Krishna, 2002; Prell et al., 2009).

Future scholars are encouraged to continue to examine these relationships under different contexts through a mixed-methods approach to more effectively employ the notion of capable agency in combination with social capital to promote effective CBE and, more broadly, CBNRM. I did not statistically test correlations between community empowerment outcomes vis-a-vis social capital and agency nor did I fully discuss other socio-political, historical or cultural aspects. Rather, a combination of two theoretical frameworks (Krishna, 2002; Lin, 2001) and a comparative analyses of similar communities with different empowerment outcomes was employed to explore potential links between social capital, agency and community empowerment. Correlational or predictive analyses employing multiple cases are encouraged in order to refine understandings of the functions of capable agents as mobilizers of social capital for community empowerment.
Chapter 5:
Disentangling the social net: conclusions

Reconciling the conservation of natural resources with rural community empowerment is a much-needed endeavour, but remains a global challenge. Community approaches to NRM are one attempt to reconcile such goals. Attracted by its promises, social capital has become a focus for policy and research in CBNRM and community development in recent years. However, many authors have approached social capital as a catchall and a decontextualized concept, which has rendered the term almost unusable (Lin & Erickson, 2010b). Furthermore, the tendency to treat communities as homogenous units has created further confusion when examining the role of social capital and developing appropriate practices. In this context, the aim of this doctoral dissertation was to critically investigate social capital as it relates to empowerment and equity impacts in order to offer new insights for effective and contextually-driven practices in CBE.

This research had three objectives: First, to examine the different roles that social capital plays in empowering individuals in two community-based ecotourism projects in Ghana, while accounting for demographic differences and different levels of involvement (Chapter 2). Second, to critically explore the merits of social capital in light of inequalities drawing on Lin's (2001) social capital approach and incorporating a feminist political ecology perspective (Chapter 3). The third and last objective was to examine the role of agents as mobilizers of social capital for community empowerment outcomes in the context of CBE (Chapter 4).

This chapter is a synthesis of the main results from each research objective and a discussion of implications (theoretical and practical) vis-à-vis relevant literature. In
addition, I outline the strengths and limitations of this research and suggest directions for future research.

5.1 Summary of findings

Chapter 2 illustrates an approach to avoid oversimplification of development practices by examining the links between different social capital and empowerment dimensions within different subpopulations. Demographic differences and different levels of involvement were analyzed to account for the diversity of subpopulations within communities. Results show that the relationship between social capital and empowerment depends on the empowerment dimension under analysis. So, social capital, operationalized here as the number of people with whom one discusses tourism matters (both strong and weak ties – what I call structural social capital), and also operationalized as the degree to which one trusts the management of the CBE project, engages in reciprocal behaviours and collaboration in village activities (cognitive social capital), seems to contribute to the empowerment of individuals in a variety of ways. The different components of individual empowerment considered were: increased access to decision-making spaces and the ability to speak up at meetings, increased socioeconomic possibilities, improved credentials and increased satisfaction with tourism and forest protection. Results also show that the relationship between social capital and empowerment, as measured in this study, is less apparent among those residents who are more involved in ecotourism. Finally, results indicate that women and members of non-local ethnic groups tend to have less access to social capital and empowerment in the ecotourism projects covered in this study.

Chapter 3 is an in-depth examination, in one of the communities, of unequal political empowerment and unequal access to social capital associated with the CBE based on two key demographic variables: gender and ethnicity. This was accomplished by describing sociocultural norms that might shape unequal social capital and political empowerment in the context of ecotourism, and by examining whether (and how) access to social capital
plays a role in empowering marginalized community members despite structural inequalities. Results show that, although women report, more often than men, that they are involved in tourism activities, they exhibit significantly less political efficacy than men do. Further, women have significantly fewer number of strong ties to people they discuss tourism matters with. Results also show that non-local residents are less involved in tourism matters and report significantly less access to political involvement than local people while also trusting the tourism project less. The mixed-methods approach helped to uncover some of the why and hows of the above-mentioned differences. Most importantly, Chapter 3 shows that despite existing inequalities, social capital (including social network tie strength) partly mediates the relationship between social difference (i.e., gender and ethnicity) and political empowerment (in this case access to political involvement and political efficacy).

In Chapter 4, community-level social capital, agency and community empowerment were investigated. Here, social capital was operationalized mainly as the degree of trust in CBE management, community-collaborative predisposition and norms of conflict resolutions and rule breaking. Social capital was also operationalized as the vibrancy of associational life in the community, the frequency of ecotourism discussion ties among community residents and also through the bonding, bridging and network influence of agents. Agents of change were considered capable when legitimized by community members, and based on their resourcefulness/competence, genuine engagement and clear vision. Results of the comparisons made between communities show that greater community trust and a greater density and cohesiveness of agents’ networks with access to external resources coincides with increased levels of community empowerment; that is, increased the community’s capacity to develop since the beginning of the ecotourism project, and increased the community’s capacity to coordinate petitions to the local government. While there is a general predisposition towards collective action in both communities, differences between communities in the network structure of agents as well as differences in their resources, engagement, views and visions exposed key barriers to social capital mobilization in each community. Community B seems better positioned to mobilize resources for collective
action, given agents’ involvement in ecotourism decision-makers, the cohesion of their discussion networks along with the balance between bonding and bridging ties, and the existence of greater educational capacities and community trust in their leaders. In such a context, collaboration seems to be more conducive to collective action and so, not surprisingly, Community B reported significantly greater empowerment than Community A did (i.e., increased community’s capacity to develop since the beginning of the ecotourism project, and increased community’s capacity to coordinate petitions to the local government). While agents in both communities face challenges to continue making CBE a tool for community improvement, I argue that from a social capital stance, Community B would be in a better position to face such challenges.

5.2 So what?

While theory testing was not the main aim of this dissertation, results throughout supports the general hypothesis in Lin’s (2001) social capital theory that resources embedded in networks may serve individual and community outcomes (in this case empowerment). Yet, what I find more relevant is that, by drawing on a combination of Lin’s (2001) and Krishna’s (2002) theoretical models of social capital, this dissertation provides evidence of the differing roles that the components of social capital may play according to the empowerment dimension under study, as well as according to the unit of analyses. This is one of the key contributions of this dissertation. The disaggregated analytical approach employed in this research offers a more nuanced understanding of the links between social capital, social difference, and empowerment. As such, this dissertation echoes social capital critics that discourage the employment of simplistic measurements and analyses of social capital. Throughout this thesis, it is shown that social capital, when understood as a network concept (in this case as the number of strong and weak network ties with whom one discusses tourism matters with), is a helpful analytical framework from which to examine CBE outcomes (in this case, empowerment). For instance, when agents’ nominations and discussion networks are compared between communities (Chapter 4), the
community with a more cohesive network of agents was shown to have an advantage concerning empowerment (i.e. Community B). Here, by cohesive network, I mean a network of people that recognizes each other as also being agents of change. Yet with the sole analyses of individuals’ responses regarding cognitive social capital aspects (i.e., trust, collaborative predisposition, conflict resolution, rule breaking sanctions), the study would have rendered limited information for understanding community empowerment challenges vis-a-vis mobilizing social capital. It is the study of agents’ networks and their resources, engagement, perceptions and visions that shed light on the current constraints for social capital mobilization. Then, in response to the question ‘How does social capital, understood as being rooted in networks, empower communities and individuals engaged in the CBE projects under study?’, social capital seems conducive to empowerment in a variety of ways, according to the empowering outcome under study. This answer, rather than offering a direct solution to social capital interventions or CBE management in general, calls for caution when suggesting ‘social capital building’ as an approach to the improvement of communities’ well-being or a CBE project. Results particularly suggest caution when analyzing social capital through single measurements (or equating social capital with trust), or simply employing cognitive social capital elements. As I describe in more detail below, these results should encourage practitioners in NRM to focus on network measures when approaching social capital and to question critically what aspect of social capital is under analyses concerning which empowerment goal.

Another key contribution that emerged from the results in all three chapters is that communities cannot be considered homogeneous units when it comes to empowerment outcomes and social capital access. As for the questions, ‘How is social capital different among various community social categories? And how may that impact the empowering potential of social capital?’ results in each research chapter indicated differences in social capital access depending on the cohorts and social categories under study and reported associated empowerment differences. In Chapter 2, differences in access to social capital are shown according to a respondent’s level of involvement in the CBE project. More specifically, the same chapter showed how social capital plays a minimal role at
empowering those most involved in ecotourism matters. While that subpopulation reported greater empowerment, the social capital components analyzed did not often coincide with higher empowerment outcomes. For example, although S2 respondents (i.e., ecotourism-involved individuals) reported higher numbers of people with whom they discuss tourism matters with, as compared to regular community members, these ties (i.e. structural social capital) did not seem to contribute towards their empowerment. This is not the case for the S1 sample, in which general community members, while reporting lower numbers of people with whom they discuss tourism matters, have social connections that seem to contribute to higher levels of empowerment – that is, contribute to higher levels of decision-making access or socio-economic status among others. Arguably, this subpopulation (S2 respondents) is drawing from other unmeasured social capital resources, such as access to a wider diversity of ecotourism resources, or access to highly prestigious agents. In Chapter 3, social capital differences between social categories were shown that determined the participation of women and men, as well as local and non-local resident, in CBE decision making.

Social inequalities in social capital access and empowerment identified through the research I argue are partly rooted in sociocultural norms. In Chapter 3, those seem to limit the ability of non-local residents and women to access political empowerment. This becomes more evident in Chapter 4, in which analysis of the network of agents revealed the involvement of only one woman and not a single non-local representative. While not explicitly examined, it seems logical to assume that sociocultural norms concerning what is appropriate and common participatory roles for men, women, local and non-local residents (revealed through the interviews in Chapter 3) in CBE, likely influence the differing distribution of empowerment outcomes across the different dimensions explored in Chapter 2.

The merits of employing mixed-methods and a feminist political ecology perspective to examine social difference in social capital and empowerment become more evident in Chapter 2. This perspective enriches the quantitative results and enables an innovative way to begin to think about social capital interventions in CBE not seen before in the ecotourism
literature. Overall, the cumulative evidence of this dissertation illuminates how social difference (i.e., level of involvement; Chapter 2 and 4) and sociocultural norms (Chapter 3) shape one’s ability to access social capital and empowerment. These findings reinforce the importance of considering sociocultural contexts (in this case structural inequalities in any given community) when examining social capital: this has been extensively argued in other settings (Lin & Erickson, 2010a; Silvey & Elmhirst, 2003).

The third key contribution of this dissertation is that, despite structural inequalities, results from Chapter 2 and 3 show that greater levels of cognitive and structural social capital are often associated with greater levels of empowerment. Thus, being well connected (in this case having a greater number of people with whom you can discuss ecotourism matters at length) and having trust in the project as well as a collaborative behaviour existing in the community, all generally put community residents at an advantage when it comes to empowerment. This is important because it suggests that social capital, even when theorised and analyzed as subjected to sociocultural norms and power dynamics, it may still contribute towards empowerment.

The fourth contribution of this research concerns scale. I have shown how social capital and empowerment at the individual and community level, while interconnected, are not simply the sum of empowered individuals or the sum of their individual-levels of social capital. While it is difficult to imagine an empowering community or organization devoid of empowered individuals (Zimmerman, 2000), this dissertation offers such a case. For instance, agents in Community B have been able to provide political empowerment outcomes at the community level, including an increased ability to petition regional government for community improvements (Chapter 4), despite individual respondents often reported low levels of political empowerment (which were significantly lower for women and non-local residents, Chapter 3). As such, one of the tasks that remains is for agents in Community B to create the necessary institutional arrangements to incorporate the views of the residents (particularly those of marginalized community members) to improve participation in decision making and reduce inequalities.
Concurrently, results show that the opposite is also possible: individuals in a community might become empowered through social capital access while facing challenges at the community level to bring about collective action. That is the case in Community A where, despite individuals with higher levels of social capital report greater overall empowerment levels, this does not seem to have translated into the community’s ability to mobilize resources for collective action – at least not to the same extent as in Community B (Chapter 4).

Throughout the research chapters, social capital access and empowerment at each level is shown to be inherently connected to other levels. This seems a logical result, given past research exploring these interdependencies with outcomes other than empowerment (Lin & Erickson, 2010a). One example is that agents in Community A also shared lower levels of trust towards the CBE project as reported by surveyed residents (Chapter 4). Interviews with capable agents indicated how such mistrust in turn shaped a non-cohesive network of leaders and a lesser ability for social capital mobilization. While prior research has offered similar cautions against the characterization of a community as empowered based on the sum of empowered individuals and vice-versa (Zimmerman, 2000), this dissertation adds resolution to such claims and offers two new cases in the context of CBE in Ghana.

5.2.1 Practical implications

In what follows, I describe practical implications in answering the last question that framed this dissertation: ‘What specific strategies emerge from this research approach to promote social capital in CBE given structural inequalities?’ While specific examples have been provided throughout this dissertation, results from this research can be useful more broadly for policy makers and practitioners working in rural community settings who are

31 In Chapter 2, no community differences were found in the level of overall individual empowerment in the analyses of S1 (See Table 2.2).
interested in the collective management of natural resources, in particular through ecotourism.

Concerning the disaggregated analyses of social capital into cognitive and structural social capital elements, results suggest that practitioners would be well advised to understand and account for community and individuals’ predispositions towards trust, reciprocity, and cooperation – as well as their accessibility and diversity of discussion ties – when assessing the empowerment potentials of CBE projects. Although not an easy task, it seems clear that given the complexities therein, simplistic approaches to assessments of social capital and empowerment may render practices ineffective. By increasing the level of resolution of the exploration of social capital and empowerment, I set out to clarify and elaborate aspects of social capital theory in the context of CBNRM. Particularly, I have problematized, in novel ways, the risks of simplistic and generalist approaches to the study of these very complex concepts. As such, a practical recommendation is to avoid conflation of terms and to separately assess cognitive and structural social capital components vis-à-vis empowerment outcomes. For example, this study, and in particular Chapter 4, shows practitioners how the analyses of network structure, combined with an understanding of who the influential leaders are, and what their views are concerning CBE, permit the projection of possible futures in CBE project and the design of practices for improved CBE empowering outcomes. The approach and results of the research are relevant because it allows for the emergence of specific policies targeted to agents of change and their networks, to address CBE project barriers. In particular, I suggest that practitioners identify – prior to a community intervention – who the potential capable agents are, how they are related and further, explore their perspectives and visions to find common ground between them as a base from which build an intervention. Understanding agents’ networks and their perceptions can help managers and other practitioners to locate areas of a network that may require attention to improve the project, such as building ties, or encouraging exchange or information, or helping managers to identify key actors to work with (Crona et al., 2011). Such an intervention will also be more likely effective at mobilizing social capital.
With regard to the importance of separately examining social capital at different scales (e.g., community level and individual level) while recognizing that all levels are connected, an example of a practical intervention in Community B follows. Given that almost all agents in Community B, and most certainly, network authorities are men (see Chapter 4), it would seem paramount that they be informed of current participatory exclusions (as described in Chapter 3) and the impact that this can have on the CBE functioning well to encourage the mobilization of all resources to reduce such inequities. How to do this is not simple. This investigation supports calls for caution to avoid employing social capital and empowerment as a depoliticized and decontextualized term in CBNRM project evaluations or practices (Butcher, 2010; Kabeer, 2005; Mansuri & Rao, 2004; Rowlands, 1995; Thompson, 2016). Social capital interventions may help re-design institutions by incorporating traditionally marginalized populations to creatively co-design programs that facilitate community and forest well-being with the help of capable agents. However, such approaches need to be contextualized and carefully crafted to avoid oversimplification in policy recommendations, elite capture and the tokenistic inclusion of marginalized community members within decision-making spaces. For instance, knowing that men, women, and people from different ethnicities and with different levels of involvement have differing access to social capital and empowerment – partly shaped by sociocultural exclusionary norms – is helpful background to improve the CBE projects under study while challenging oppressive norms and ideologies that produce inequalities that serve to isolate or marginalize people. As such, it is important to carefully contextualize social capital assessments and interventions by attending to sociocultural norms and the socio-political contexts that may be creating inequities in social capital access and empowerment.

Having a clear understanding of the target groups under analysis when preparing for an intervention is critical as not all social capital components investigated contribute to all kinds of empowerments and for all social categories. A particular group cannot be targeted without recognizing their interconnectedness with other community members and their environments, without understanding their specific needs, routines, gathering spaces, and networks, and the impacts of sociocultural norms. This research suggests that all of those
are relevant aspects to be considered when devising ways in which certain outcomes may be achieved through social capital building. For instance, increased cohesion and trust among capable agents in communities that I examined may not automatically lead to the empowerment of women and non-local residents, unless the capable agents develop networks of trust, information sharing and cooperation with those most marginalized. Thus, an intervention in that direction must include the design of mechanism to enable the flow of information between capable agents and marginalized community members.

As for specific ecotourism implications, study results provide further evidence of the potential exclusionary impacts of CBE projects when sociocultural exclusionary norms are not accounted for at the early stages of project development. Regardless of whether addressing social exclusions in CBE is justified on the basis of equality concerns, business efficacy, or conservation goals, what seems clear is that such a concern needs to be addressed by employing gender-sensitive (or intersectionality-sensitive) planning methodologies (Ferguson & Alarcón, 2014). CBE planning with such concerns in mind is necessary for clarifying and devising ways to overcome political, technical and ideological barriers that support participatory exclusions in CBE. As such, the ways gender and ethnicity are constructed in the process of CBE development will be crucial for the formulation of mechanisms that reduce participatory exclusions. Drawing from Ferguson and Alarcon’s (2014) suggestions for effective gender mainstreaming in sustainable tourism, I suggest that if CBE in Ghana (and also more broadly) is to be sustainable (socially, ecologically, economically) there is a need to incorporate intersectionality into the vernacular of the community-based tourism cycle, from its planning phase to implementation and adaptation strategies. Equal opportunities for women and men, local and non-local residents and all community groups are required, in addition to the active participation of all interest groups within their respective knowledges and needs. Training and effective mechanisms that challenge exclusionary roles and stereotypes and greater equality of opportunity in the workplace, household, and community are also needed for CBE to empower individuals and communities as a whole. Given that social capital as operationalized in this investigation has shown its ability to empower individuals in CBE
settings (particularly with regards to political empowerment outcomes), I suggest the promotion of social capital in CBE projects should be considered in order to design and adapt decision-making spaces that encourage participation of all residents. It is important to recognize that initiatives that target equitable outcomes from community projects are often accomplished more subtly through relationship development, and not necessarily by directly targeting the perceived problem. Instead, many interventions in systems have the intent of changing broader patterns that may ultimately address the particular problem (see Christens, 2012). This is the case in a Nicaraguan study, where Grabe (2010) shows that the landownership of women may trigger changes in gendered ideologies which enable women to exercise more power in the household, reducing domestic violence. In the same vein, the development of CBE models that facilitate women’s cooperatives (e.g., restaurants, crafts, accommodation) may in turn challenge gender roles in the community.

5.2.2 Theoretical implications

Although theory testing was not the main purpose of this dissertation, this investigation does provide support for the empowering capacities of social capital (as operationalized in this study) within the context of two CBE cases in Ghana. Thus, the merits of Lin’s (2001) social capital theoretical approach to examine empowerment in the context of CBE were demonstrated in this dissertation. Likewise, the importance of accounting for context (i.e., the community subpopulations and settings as well as the empowerment dimensions and social capital elements examined) in the study of social capital were shown and cannot be overstated. Also, the exploration of agency in Chapter 4 offers support to Krishna’s (2002) hypotheses that social capital mobilization at the community level cannot be understood without considering the roles, resources and networks that make agents capable of community-level empowerment.

This research illustrates an approach to the disaggregated study of social capital drawing upon a combination of Lin’s (2001) and Krishna’s (2002) theories at the intersection of empowerment and social difference that has not been seen previously in the CBNRM.
literature. Drawing on sociology, empowerment, and feminist literature, and applying them in the context of CBNRM, I unpack complex concepts popularized in CBNRM and analyze them in a disaggregated manner (i.e., cognitive social capital, structural social capital, agency) for an improved understanding and a more precise and contextualized development of social capital interventions. The employment of different measures of social capital and empowerment, according to the scales of analyses has proven useful to disentangle, at least partly, some of the relationships between social capital and empowerment at different scales. Empowerment at the community level is concerned more with collective actions that require the coordinated efforts of community members along with a set of agents. At the individual level, empowerment measures were not concerned with collective actions but with the increased ability of individuals to take charge of their lives concerning different dimensions. Such an approach advances our understanding of the social capital capacities and limitations vis-à-vis empowerment in the context of CBNRM and contributes to the growing efforts (see Bodin et al., 2006; Crona et al., 2011, 2017) to empirically quantify and critically discuss aspects of social capital in an NRM context, utilizing SNA. I describe these contributions below.

In terms of the contribution of this study to the field of feminist political ecology, past studies have shown the clear need to detail specific relationships between social capital and exclusions (e.g., Silvey & Elmhirst, 2003) and this research offers some verification of this. While previous research has explored social capital inequalities as they relate to social networks (Bodin et al., 2006; Isaac et al., 2007; Prell et al., 2011; Westermann et al., 2005), mixed-methods approaches that include feminist political ecology perspectives remain all too infrequent, particularly in the context of ecotourism (Jones, 2005; Stronza & Gordillo, 2008). Results in this thesis support the findings of Silvey and Elmhirst (2003) on Indonesian women migrant networks. In both cases, it can be seen that social hierarchies within networks often result in differentiated access to social capital, empowerment, as well as differentiated work and community engagement. The feminist political ecology lens employed has highlighted the differentiated experiences of men and women, and locals and nonlocals, as well as their different responsibilities and interests in the CBE projects and
their surroundings. This uncovered relational processes of inclusion and exclusion concerning decision-making has been reported in other NRM contexts (Resurrection & Elmhirst, 2008). Engaging this approach, notably through our qualitative analysis in Chapter 3, revealed specific labour practices, environmental dynamics and cultural narratives related to ecotourism that seem to shape unequal involvement in, or benefits from, the projects and that seem, more generally, to entrench key inequalities that negatively affect women and non-local members of the community. Thus, this research supports previous claims from feminist political ecologists for the need to consider structural inequalities and context when examining social capital.

What seems a most novel contribution to the works of feminist political ecologists and qualitative feminist researchers in CBNRM is that results from Chapter 3 show that, even when accounting for sociocultural contexts which create exclusionary empowerment boundaries, better access to social capital can contribute to political empowerment. In other words, having more access to social capital may contribute to the empowerment of minorities, even in the face of persistent inequalities (Chapter 3). This is a contribution to CBNRM literature on social capital and structural social inequalities that, to date, has been unexplored. An approach that draws from both quantitative and qualitative analyses allows for the understanding of ongoing exclusions, while also recognizing the ways in which various community minorities may, nonetheless, benefit from CBE projects through social capital access. In a way, by incorporating the study of structural inequalities through the examination of local social norms in these two communities, this dissertation has offered an approach to repoliticize the study of social capital employing mixed methods. This contributes to the debates in the literature on the value of social capital examinations, given its common depolitization in the academic and development literature (Mayoux, 2001; Molyneux, 2002; Silvey & Elmhirst, 2003). While some of our results amplify themes that have long been present in the feminist political ecology and gender and participation literatures, we also have offered insights into the value of social capital to these discussions which also provide guideposts for policy actions in such contexts. Overall, results from the examination in Chapter 3 offer some guidance towards the merits of analyzing social
capital under a given context and considering structural inequalities. Despite this, it is important to remain cautious and to not overestimate the role of social capital. Further examination is necessary to understand the extent to which social capital contributes towards empowerment in the face of structural inequalities, both in the long run and in other contexts.

There has been much debate about whether collective assets such as trust and norms of collaboration (i.e., what I have called cognitive social capital) are social capital. Lin (2001) maintains that while collective assets such as trust are related to social capital, they are not to be seen as replacing one another. Thus, Lin (2001) in his theoretical framework, recognizes that those collective assets are part of the preconditions of social capital that may facilitate the flow of social capital. Meanwhile much of the social capital literature outside sociology has evolved with a broad understanding that trust is part of the definition of social capital and is key to the idea of collective action (for a review see Field, 2003; Storberg, 2002). Relatedly, research on community approaches to NRM has persistently shown that trust and norms of collaboration (e.g., mechanisms for conflict resolution and monitoring) are key prerequisites for collective action (Ostrom, 1990). As such, social capital scholars have often lumped together ideas of trust and networks when defining and measuring social capital.

In trying to disentangle these terms, Lin (1999) states that “causal propositions may be formulated that collective assets such as trust, reciprocity and cooperation promote relations and networks and enhances the utility of embedded resources or vice versa. But they should not be assumed to be alternative forms of social capital or are defined by one another” (p.33). Lin justifies his argument by stating that social capital is, at the core, a relational asset (rather than a collective asset) that may lead to both collective and individual outcomes. As such, social capital must not be equated with collective assets (Lin & Erickson, 2010b). To further emphasize this point, research done by Lin and other allied scholars have examined causal relations between trust, (structural) social capital and a variety of outcomes that have shown how often trust is not a significant contributor to those outcomes (Lin & Erickson, 2010b). Hence, from Lin’s perspective, what I have called
cognitive social capital is not properly social capital, but a precondition for social capital to occur. This research did not engage in these debates in previous chapters. My views on this matter follow.

While I have maintained the nomenclature of cognitive and structural social capital for comparability with other relevant social capital studies (e.g., Gotschi et al., 2008; Jones, 2005; Krishna & Shrader, 2000; Liu et al., 2014), I think that this nomenclature, most popularized in the development literature, is practical but confusing when it comes to understanding social capital within well-established social capital frameworks such as Lin’s. I would argue that, to the extent that researchers separately investigate both constructs in their study of social capital in a given context, the disagreement is largely one of semantics. For example, much in the same way as described by Lin (2001), scholars in development agree that while cognitive elements of social capital may predispose individuals toward mutually beneficial collective action, structural elements may facilitate such action by mobilizing social resources through social networks (Krishna & Shrader, 2000). They still call it cognitive social capital, but recognize that those elements are preconditions. In this sense, Krishna and Shrader (2000) and Lin (2001) are saying that both elements are related but separate, that cognitive aspects of social capital somehow are enabling preconditions for enhancing the utilities of structural social capital elements. Unfortunately, the employment of the terms ‘cognitive social capital’ seems to suggest for many that those elements are also social capital – something that Lin’s argues is not. While from a practitioners’ perspective it might be helpful to employ those terms, it is important not to default to the idea that trust and social capital are interchangeable terms. (2000) and Lin are saying that both elements are related but separate, that cognitive aspects of social capital somehow are enabling preconditions for enhancing the utilities of structural social capital elements. Unfortunately, the employment of the terms ‘cognitive social capital’ seems to suggest for many that those elements are also social capital – something that Lin’s argues is not. While from a practitioners’ perspective it might be helpful to employ those terms, it is important not to default to the idea that trust and social capital are interchangeable terms.
To navigate these debates, and to avoid much of the confusion around social capital, I have taken an intermediate position between Lin’s (2001) theoretical positioning and that of many development scholars engaged in social capital (e.g., Krishna & Shrader, 1999; Krishna & Uphoff, 2002). While I agree that social capital inheres in networks, and is a network concept, analyses throughout the chapters accounted for both aspects (cognitive and structural), but separately to elucidate in a CBE context, which aspects seemed more relevant for empowerment, without assuming that they were substitutable. The reason is that if analyses of social capital in this dissertation had accounted for collective assets and networks together, this examination would have provided much more limited insights. That is, I made a conscious effort to analyze and discuss separately each of these two distinct but related social capital elements. As such, besides relational measures of social capital (i.e., structural social capital such as strong and weak ties), this dissertation also accounted for relevant contextual factors, in the examination of social capital (i.e., cognitive social capital such as trust or norms of collaboration). By this, I may have avoided the much-criticized conflation of terms, while accounting for both elements. Overall, more than contributing to the expansion of social capital theory, the approach taken here offers bridges of mutual understandings between a variety of scholars studying social capital (e.g., in the sociology field, in the development field, or in the political science field). Particularly between those who combine measurements of trust, cooperation and networks and those who do not; also, between those who employ cognitive social capital elements as valid measures of social capital on their own, and those who do not. This research has provided evidence of the importance of examining both constructs separately, in order to gain a more nuanced understanding of the contributions of each towards empowerment. I suggest that structural social capital (i.e., network measures of social capital) is the crux of the social capital concept and that cognitive social capital elements are a separate concept that relates more to the contextual factors or preconditions of social capital. While the particular results in this dissertation cannot be extrapolated to other contexts, the analytical approach can be. Moreover, I posit that a social capital analytical approach applied in the context of CBNRM that does not incorporate the study of cognitive social
capital and structural social capital without equating them, would likely contribute to confusion and discrediting the term and would result in ineffective policies being derived.

5.3 Strengths and limitations of this research

This research presented a novel way of investigating the merits of social capital in CBNRM and applies this approach in the context of CBE. By employing a combination of Lin’s (2001) social capital theory with Krishna’s (2002) approach to capable agents, and by incorporating a feminist political ecology perspective, resolution can be added to enrich explanations of the roles of social capital vis-à-vis empowerment. Additionally, the exploration of these links through a mixed-methods and multilevel approach in the two case studies offers a methodology through which results can be contrasted and triangulated. Furthermore, this research draws from multiple disciplines to offer new insights to the CBNRM literature. In short, this dissertation offered an interdisciplinary analytical approach to look at social capital that helps unpack complexities, describe inequities and recognize the importance of context.

The inclusion of an intersectional lens to the study of gender and ethnic inequalities of social capital and empowerment helps the interpretation of results and offers insights for CBE management that single analyses of gender or ethnicity would not be able to show. While other categories could have been included in the intersectional analyses of social capital and empowerment (i.e., class, age, sexual orientation, religion, etc.), this dissertation only includes gender and ethnicity to show an initial approach to the study of such complexities in the context of CBE. While limited, the intersectional approach taken was at least able to show how the identities and opportunities of local and non-local women overlap in some instances, and differ in others, when it comes to social capital and empowerment access.

It is also important to note that, networks of trust, reciprocity and cooperation were built and strengthened within the communities, and broadly between the communities and
researchers. Partaking in local community activities such as communal labour, community meetings, cleaning campaigns, funerals, visiting local farms, fetching water, learning how to make palm oil, attending sporting events, learning the local greeting customs and greeting people in their households allowed for the establishment of trust between me and my field assistants with a diversity of community members during both pre-fieldwork and fieldwork visits. Through these visits, many discussions were facilitated and different leaders and community members were able to discuss and learn about the CBE and its challenges. One of the women who attended the workshops during the knowledge mobilization process stated that this research has allowed the women to speak about matters that they do not often speak about. Many women, as well as non-local residents and community leaders echoed that sentiment. Their appreciation for this research endeavor was particularly noticeable during my last field visit. On that occasion, research results were shared in the communities with the support of community leaders. A knowledge mobilization plan had never been part of the research process of prior researchers in the area and that process opened a variety of opportunities for leaders, women, non-local residents and the community as a whole to discuss their current challenges in CBE.

Despite these contributions, this research has several limitations. First, the results presented here should not be thought of, in a statistical sense, as representative of other CBE projects in Ghana or in other West African contexts. Nevertheless, it would not be illogical to assume that the contextualized and disaggregated examination of social capital links vis-à-vis empowerment at different scales may offer important insights to other CBE and CBNRM projects as well.

Second, given that the study employed a cross-sectional design rather than a longitudinal approach, the causality of the links studied is inferred from the theories employed (Son & Lin, 2008). From a strictly statistical perspective, this study assessed correlations. However, based on Lin’s (2001) and Krishna’s (2002) theoretical models and triangulation approaches employed, the empirical models used suggest a causal order among social capital and empowerment measurements. Relatedly, empowerment is understood to be
both a process and an outcome (Zimmerman, 2000) but this research examined only empowering outcomes. Thus, results from this investigation are unable to offer direct evidence of the temporal empowering patterns and changes in both individuals and communities that may occur over time. For example in Chapter 3, I discuss the possibility that access to political involvement and political efficacy (the two dependent variables examined there) might represent two different stages in the process of political empowerment. However, the cross-sectional nature of this investigation limits my ability to offer insights concerning the changes in political empowerment that individuals may experience as they access greater and more diverse set of social networks related to tourism.

Third, other more sophisticated statistical approaches could have been used to examine mediation (see Preacher & Hayes, 2004), such as employing the Sobel test and bootstrapping. I drew from Baron and Keny (1986) criteria for analyzing mediation given its wide use. However, instead of employing the SPPS mediation macro (unavailable at the time of analyses), I chose to assess mediation by interpreting how regression coefficients of the gender and ethnicity variables changed as cognitive and structural variables were entered (through forced entry blocks) into the hierarchical multiple regressions (Fox, 2016). In this way I assessed indirect effects of cognitive and structural social capital in a similar way as suggested by Baron and Kenny (1986). More sophisticated analyses would have offered more robust results. I encourage future researchers to expand this first exploratory approach to the study of the mediating role of social capital by employing the SPSS mediating macro.

Fourth, while not all network measures have been proven to assess social capital (Lin, 2001), one well-known social capital measure is diversity of ties. Such a measure is often collected using the position generator survey approach. I instead employed a name generator approach and measured social capital access as the total number of strong and weak discussion ties to people respondents could name. Social capital literature has suggested the higher validity of the resource (or position) network survey approach and the measurement of diversity of ties rather than the total number of ties (Lin & Erickson,
The choice of this name generator approach was justified because, in the context of Ghana, no prior studies in rural areas had established a prestige occupational scale from which to assess the diversity of ties. Furthermore, in the context of the communities, only a few individuals had reasonably different (or higher) occupational positions of prestige. Most of the population were farmers or traders, so a position generator approach and the measurement of diversity of ties would have likely rendered very little variability in my independent structural social capital variables. While careful consideration was in place and attempts were made in the pre-fieldwork stages to take such an approach, the position/resource network approach was finally deemed inappropriate in the context of rural Ghana at this point. To counteract the disadvantages of the name generator approach – such as recall bias of often closer ties, time constraints, or respondents forgetting the names of particular individuals – I allowed time for the question, encouraged the citation of names (even if not fully recalling the complete name), and, encouraged the citation of acquaintances or less close individuals with whom the respondent would discuss tourism matters with. Since I was interested in tracing the social resources associated with the CBE project, I considered it important to enquire of respondents about specific people with whom they would have conversations about ecotourism. In this context, it made sense to ask about specific names when tracing networks.

Fifth, while the role of agency (Chapter 4) was to a certain extent investigated when looking at community-level social capital, the role of agency was not explicitly explored at the individual level in Chapters 2 and 3. While Lin’s (2001) social capital theory incorporates individual agency as a critical piece, its measurement and operationalization has not been explicitly developed. It seems that Lin is most interested in social capital access through social networks rather than on the ‘exercising’ of the choice to mobilize those social resources. The assumption is that when individuals who have access to social capital chose to mobilize their networks, empowering outcomes are more likely to result than if they do not have access to those resources. In sociology, agency is seen as a complex construct consisting of several dimensions (i.e., routine, purpose, judgement, temporality, etc.) (Emirbayer & Mische, 1998) in dynamic interaction with its context. As such, agency
cannot be seen as simply the ability of individuals to choose, or act freely and according to one’s chosen desires (Madhok, 2012), but that those choices (or lack thereof) exist within a social, temporal and moral space (i.e., social structure), and are influenced by the desires of other individuals and by one’s own conflicting desires. Thus, agency is dependent upon structure since it shapes both one’s ability to choose and one’s choices (Emirbayer & Mische, 1998). While I partly consider sociocultural norms in Chapter 3, within the analyses of these links and discuss possible ways in which those norms might shape social capital access and empowerment based on gender and ethnicity, I did not explore in depth, different dimensions of agency that may explain empowerment inequities beyond those tied to social capital access differentials.

Sixth, qualitative data in this investigation enriches interpretations of quantitative patterns. Yet the small sample of people interviewed preclude the identification of clear and generalizable patterns in the community. For instance, the particular qualitative accounts or interpretations provided concerning the secondary role that women play in CBE decision making cannot be considered representative of the whole community (nor of other communities). For example, the religious belief that God created man first and woman came after to support him was employed by a few interviewees to justify why men are the main decision-makers in community affairs. While I suspect that this might be a common belief, given the large amount of Christian churches (over ten different denominations of churches were reported in each village), the small sample of qualitative interviews cannot provide sufficient evidence to consider this belief as representative of the community. Nevertheless, given that religious beliefs could be influencing CBE participation, this could present a potential rich avenue for further research; an avenue of research in which the inclusion of quantitative methodologies to assert the extent to which those religious beliefs are representative of the whole community may help clarify the importance of religious beliefs and religious institutions as places where social capital interventions could take place to improve CBE management and equitable benefit distribution.
Concerning quantitative approaches, I consider in retrospect, that since they are reductionist in nature, the breadth of meaning embedded in each of the key terms quantitatively analysed in this research (i.e., social capital, collective action, empowerment, capable agents) cannot possibly have been captured in the quantitative analyses despite diligent efforts made to adapt those measures to local realities. For example, other additional personal characteristics for understanding capable agency at the community level (cf. Crona et al., 2017; Onyx & Leonard, 2010) could have been considered in addition to being resourceful, engaged and having a clear vision. Also, other individual and community empowerment measures could have been employed to capture a wider set of empowerment dimensions. Altogether, while the mixed-methods research approach employed here facilitated results’ interpretation and triangulation, the approach still suffers from limitations.

Seventh, the results of this study also point to the limits of examining social capital and empowerment links in isolation from context. Context has been considered in the analyses only to a limited extent. Current community challenges in the maintenance and improvement of CBE cannot be detached from broader trends beyond communities’ internal politics and socio/cultural patterns (Cater, 2006; Fletcher, 2012; Mansuri & Rao, 2004; Weaver & Lawton, 2007). Greater understanding of social capital dynamics and the role of agents, though key to the success of CBE, are not the only factors to consider. I recognize that empowerment processes and struggles do occur at many different scales and across a variety of actors in the context of CBE. As such, other internal and external factors also shape CBE and its ability to provide empowering outcomes. I chose to focus on the empowerment of individual residents and communities as it relates to direct and indirect CBE activities in the villages for practical reasons. While these empowerment units of analyses have been proven relevant to the development of long-term effective CBE projects, global, national or regional policies as well as historical ecotourism NGO dynamics within the communities, which I did not explore in this dissertation, may also affect the ability of CBE to result in empowering or disempowering outcomes. These include NGO project expectations, limited government support, financing mechanisms, marketing and
other factors likely at play when it comes to CBE success. I recognize the importance of such interactions as poignantly argued by (Constantino et al., 2012; Duffy, 2006). Combining study insights with other post-colonial, ecological, historical, cultural or socio-political lenses would further improve the effectiveness of such community projects for communities’ well-being (Grischow, 2007). In addition, while different axes of differentiation have been analyzed (i.e., gender and ethnicity, and to some extent age and education in Chapter 2,) other individual characteristics tied to socio-political control have not been considered (i.e., class, clan). While an intersectional approach to the study of social capital has been emphasized, such an approach has only been analyzed to a limited extent.

While I aimed to represent a variety of voices in this dissertation, I acknowledge that some voices are missing. For instance, the voices of the tourists and the younger community adults in the communities are absent. Also, while NCRC supported this research and provided several contextual reports and advice, I mostly engaged with them during the first stages of my research when they introduced me to the communities. Other local NGOs and local governments and the Ministry of Forests were informed of this research and, while they offered helpful contextual information, they seemed overburdened and I did not seek out further help from them. A closer examination of the role of all of these institutions would have offered a more holistic understanding of the links explored in this research. However, due to time and resource limitations, I decided to focus on the study of the social capital and empowerment links at the individual and community level. Since mixed methods implies a compromise between numbers and words, I also recognize that I was able to account for the voices of the communities only to a limited extent. Finally, a few Ghanaian authors are considered in this research and offer the basis from where to examine gender and ethnic differences in Ghana. This research would have been enriched by the employment of more Afrocentric literatures in the exploration of social networks and empowerment. This is an avenue for future research.

I also did not directly assess the ecological status of the forests, but instead assessed residents’ perceptions concerning such status. As such, this dissertation could be
strengthened with the analyses of the links between community-level social capital and ecological data to explore interdependencies. Such an approach has been undertaken in Bodin and Tengö (2012). For logistical, financial and practical reasons I was only able to consider residents’ perspectives on conservation and bibliographic data based on individual explanations of the conservation of the areas and the challenges to it.

Lastly, my position as a Spanish middle class woman is both a limitation and a strength. My relationship with Ghana began over a decade ago and, since then, I have been actively engaged in projects to support both Ghanaian youth who have emigrated to Spain and youth living in the Northern Region of Ghana. Despite my familiarity with Ghanaian culture and the many times I have visited the country, the Volta Region was an area that I had not visited prior to my research. Language limitations were notable, particularly when communicating with non-local community members whose native language was often not Ewe and who did not speak English. While all field assistants were fluent in Ewe and in English, several mechanisms were in place to reduce the chances of misrepresentation, including regular clarifications with field assistants, non-rushed interviews, triangulation of personal field notes with field assistants notes, triangulation of contextual data with local NGOs and key informants, and field assistant sessions where terms were defined.

Regardless, from a post-structural stance, identities and knowledges are contingent and subjected to environmental conditions. As such, I recognize that this dissertation reflects my abilities and limitations to critically describe, analyze and interpret social capital and empowerment dynamics as both an outsider and as a guest welcomed to the communities for a short period of time.

Research done with, and in, communities comes with incommensurable consequences. During the knowledge mobilization process, much of the feedback from community members was overwhelmingly positive; however, this research irremediably has unintended consequences that may not have met the expectations of all community members. As one young man pointed out to me during the knowledge mobilization phase, he wished I would have studied the different impact of social capital access vis-à-vis youth empowerment and socio cultural norms. From his perspective, that is much-needed
research with great opportunities for youth. I had a longer conversation with this individual to discuss ways to increase participation of youth in the CBE. My hope is that the public recognition of the limitations of this research – acknowledged and discussed during the community workshops – along with the community engagement undertaken through the research process has illustrated an approach to community-based research that empowers individuals and communities to set up the boundaries, research protocols and expectations of future researchers and research topics.

Finally, this investigation is exploratory in the sense that it only scratches the surface of the merits of employing Lin’s (2001) and Krishna’s (2002) social capital theory in the context of CBE along with the aid of a feminist political ecology perspective. This study by no means aspires to provide a definitive and universal answer to the merits of social network measures of social capital for empowerment. Rather the aim has been to problematize social capital generalizations and simplifications. Nevertheless, research in the direction of defining particular ways in which social capital (both structural and cognitive elements) may be employed for empowering communities in CBE or CBNRM is encouraged. For example, it seems relevant to further explore the effectiveness of certain social network ties at empowering individuals and communities in CBNRM.

5.4 Future research directions

Owing to the novelty of this interdisciplinary, multimethod and multilevel approach as well as to the exploratory nature of this investigation, several future research avenues are warranted.

Specifically, further studies are needed to better understand the dynamic nature of social capital and empowerment links in a temporal scale. This dissertation offers a snapshot of two communities and the lack of longitudinal data limits the ability to understand the impacts of changes in the communities’ tourism discussion networks over time. Future
research is encouraged to monitor over time, social capital access and empowerment outcomes in CBE to gain further insights on the merits of social capital.

The replication of this interdisciplinary and multilevel approach in other CBE projects may also help refine ways in which to understand and articulate social capital vis-à-vis empowerment in CBNRM contexts. With only two case studies, generalizability of the particular results is limited. Yet, the dialogue between feminist political ecology, social networks and CBNRM seems promising and is needed to address current global socio-ecological challenges. With an interdisciplinary and multiscale approach, researchers are encouraged to investigate what particular social capital aspects may be more necessary to improve both individual and community empowerment levels for conservation goals, economic sustainability and equity. As an example, in this dissertation the total number of ties (both strong and weak) contributed to both *accessing political involvement* and *political efficacy*. Yet literature has pointed to the importance of tie diversity (not just the total number and strength) to political empowerment (Lin & Erickson, 2010a). As such, further research is encouraged to explore the merits of tie diversity on political empowerment in the context of CBE through the incorporation of a feminist political ecology perspective. In addition, the development of rigorous occupational prestige scales across different societies may encourage the employment of the currently most popular position generator approach among sociologists, to the study of social capital (rather than the name generator approach employed here).

Future research could also incorporate other categories of difference in the intersectional analyses including age, class, political affiliation or religion. All of these, including gender and ethnicity have been pointed to as clear axes of differentiation in Ghanaian culture (Nukunya, 2003). In addition, the disaggregated and contextualized exploration of the links between social capital and empowerment in other geographical locations and in other CBNRM projects may offer new understandings of the different roles of social capital for empowerment. As suggested in (Lin & Erickson, 2010b), Chinese populations rely more than North American populations on strong ties for job attainment. This is a reminder that
social capital is contextual and thus needs to be studied, and practices adapted, according to broader sociocultural norms in any given setting.

5.5 Concluding remarks

Social capital and empowerment in the context of CBNRM are contested terms; often the lack of specificity, contextualization and critical analyses have to some extent discredited both these terms. Based on the critical and contextualized examination of these concepts in this thesis, I remain convinced of the merit and validity of these investigative categories for improved practices in the context of CBE and more broadly CBNRM. This dissertation has sought to contribute to CBNRM by offering an interdisciplinary approach whereby the merits of analyzing social capital and empowerment links are illustrated through the disaggregated analyses of social capital and empowerment at two different scales, in two communities and through an interdisciplinary approach. This dissertation aimed to contribute to the fields of social capital, feminist political ecology, CBNRM and CBE by offering data on the links between social capital and empowerment that account for broader structural inequalities and that focus on the role of networks in empowerment of both individuals and communities. While interdisciplinary approaches may mean, at times, a less in-depth examination of each of the variables studied in this dissertation, I posit that any single discipline may find interesting insights here from other fields that may inform their disciplinary research and practices. For instance, from the incorporation in their fields of literatures from other fields, including social networks, sociology, community development, community psychology, feminist political ecology, and CBNRM. Particularly in the context of CBE, the exploration and problematization of these links (social capital, empowerment, agency, and inequity) have not yet been widely explored. Based on results, further study of social capital in ecotourism promises relevant insights for management if subsequent exploration in this direction continues. With its approach, this research also aimed at inspiring researchers to employ interdisciplinary approaches to the study of complex socio-ecological systems such as CBE and CBNRM. A better understanding of how
to develop successful CBE will represent a step towards achieving sustainable natural resources management, reducing deforestation and promoting social equity and well-being.
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Appendices

Appendix A Surveys and interview schedules

A.1 Survey employed in Chapters 2 and 3 to assess individual-level social capital and empowerment

<table>
<thead>
<tr>
<th>1. Please tell me how tourism in __________ has affected your life. For each pair of statements please draw an “x” between the two end-points indicating how tourism has affected your life. The closer you put the “x” to a statement the more you agree with it. The middle mark indicates a neutral position. Please “x” the box on the right NA if the statements on any line do not apply to you.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples:</strong> I am happy. I am happy. I am unhappy. I am unhappy. This answer indicates the person is a little unhappy but not very unhappy. This answer indicates the person is neither happy nor unhappy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I like seeing tourists in</th>
<th>N</th>
<th>I don’t like seeing tourists in</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I have a say in tourism decisions in</td>
<td>N</td>
<td>I feel I have no say in tourism decisions in</td>
<td>O</td>
</tr>
<tr>
<td>I am happy with the tourism project in</td>
<td>N</td>
<td>I am unhappy with the tourism project in TA</td>
<td>O</td>
</tr>
<tr>
<td>I often bring suggestions about tourism matters to community meetings</td>
<td>N</td>
<td>I have never provided suggestions about tourism matters to community meetings.</td>
<td>O</td>
</tr>
<tr>
<td>It is easy for me to get information about tourism matters in</td>
<td>N</td>
<td>It is difficult for me to get information about tourism matters in</td>
<td>O</td>
</tr>
<tr>
<td>I am aware of community meetings where tourism matters are discussed</td>
<td>N</td>
<td>I am not aware of community meetings where tourism matters are discussed</td>
<td>O</td>
</tr>
<tr>
<td>I think tourism has damaged the forests around</td>
<td>N</td>
<td>I think tourism has helped to protect the forests around</td>
<td>O</td>
</tr>
<tr>
<td>I think that it is important to protect the forests of [ ] for the future of the community</td>
<td>N</td>
<td>I don’t think it is important to protect the forests of [ ] for the future of the community</td>
<td>O</td>
</tr>
<tr>
<td>The rules and regulations of the __________ have not made my daily routines more difficult</td>
<td>N</td>
<td>The rules and regulations of the __________ have made my daily routines more difficult</td>
<td>O</td>
</tr>
<tr>
<td>I am afraid to provide my views/suggestions about tourism to the board</td>
<td>N</td>
<td>I am not afraid to provide my views/suggestions about tourism to the board</td>
<td>O</td>
</tr>
<tr>
<td>I am afraid to provide my views/suggestions about tourism to the chiefs and elders</td>
<td>N</td>
<td>I am not afraid to provide my views/suggestions about tourism to the chiefs and elders</td>
<td>O</td>
</tr>
<tr>
<td>I care to attend community meetings about the tourism project</td>
<td>N</td>
<td>I don’t care to attend community meetings about the tourism project</td>
<td>O</td>
</tr>
<tr>
<td>When I have attended meetings, I often learn something new about the tourism project</td>
<td>N</td>
<td>When I have attended meetings, I don’t often learn anything new about the tourism project</td>
<td>O</td>
</tr>
<tr>
<td>Question</td>
<td>Positive</td>
<td>Neutral</td>
<td>Negative</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>Because of tourism in [□]...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... I am more hopeful about my future.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I am less hopeful about my future.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I am more dependent economically on my family and friends.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I am less dependent economically on my family and friends.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have more opportunity to participate in community decisions (attending meetings or bringing suggestions).</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have less opportunity to participate in community decisions (attending meetings or bringing suggestions).</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Since the tourism project came to [□]...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... I make more money.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I make less money.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have better social services (sanitation, health care, schools, road quality, water supply, etc.)</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have worse social services (sanitation, health care, schools, road quality, water supply, etc.)</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have more employment opportunities.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have less employment opportunities.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have more possibilities to do what I want in my life.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have less possibilities to do what I want in my life.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Because of my relationship with the tourism project in [□]...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... I now get along better with my neighbors in [□]</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I now get along worse with my neighbors in [□]</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... people respect me more now.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... people respect me less now.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Overall,...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... I have learnt many things about our forests in [□] as a result of tourism development.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I have not learnt anything about our forests in [□] as a result of tourism development.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I think the benefits (or positive impacts) from tourism in the community are greater than the costs.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... I think the costs (or negative impacts) from tourism in the community are greater than the benefits.</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... tourism benefits only a few people in [□]</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>... tourism benefits many people in [□]</td>
<td></td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>
2. If you do not usually attend (or speak at) community meetings on tourism, please explain why.

3. These questions are about your relationship with other people in the community as well as with the forests in [ ]. Please indicate your answer with an x.

   When nobody is home how often do you intentionally leave your house unlocked?  
   ○ never  ○ rarely  ○ sometimes  ○ often  ○ always

   How often do you lend your possessions (eg. house utensils, mortar, shovel, fuel, cloths, etc.)?  
   ○ never  ○ rarely  ○ sometimes  ○ often  ○ always

   If you have a concern about tourism, who would you talk to?  
   ○ board member  ○ tour guide  ○ chiefs  ○ a clan head  ○ youth leader  ○ the manager  
   ○ talk at community meetings  ○ I would not tell anyone  ○ other (specify): ________________

   Which of the following activities do you personally do in the forest? You can select more than one.  
   ○ collect fruits and vegetables  ○ fetch water  ○ hunt  ○ collect herbs
   ○ collect firewood  ○ none  ○ other (specify): ________________

   Which of the following activities are more difficult for you to do since tourism arrived to [ ]?  
   ○ collect fruits and vegetables  ○ fetch water  ○ hunt  ○ collect herbs
   ○ collect firewood  ○ none  ○ other (specify): ________________

   Are you a member of any social group in [ ] or elsewhere?  
   ○ no  ○ yes → if yes, how many? ________________

   Please write the names of the main groups you belong to.
   After the group name, indicate if it is a women’s group, a men’s group, or a group made up of both men and women.

4. Please indicate with an (X) your level of agreement with the following statements.

   Generally, I trust the people working at the tourist reception office.  
   strongly disagree  disagree  neutral  agree  strongly agree

   Generally, I trust the tourism board of [ ]
   Generally, I don’t trust people from outside TA as much as I trust people of [ ]
   Generally, I trust the youth of [ ]
   Generally, I trust the chiefs and elders of [ ]
   Generally, I attend communal labour.

   If someone helps me, I help them when they need help.

   I am willing to undergo personal costs to help someone who helped me.

   If someone dies or marries in my community I usually help with the preparations.
5. Looking back over the past year, list the people with whom you have discussed about the _________ or about tourism in __________at length. Please use the codes from the legend to describe the people you list. If you don’t know the answer to some questions please write DK.

<table>
<thead>
<tr>
<th>Name</th>
<th>Codes from legend</th>
<th>What is your relationship to this person?</th>
<th>Is this person a family member? If yes, please specify:</th>
<th>Male or female?</th>
<th>Lives in all year long?</th>
<th>Does this person belong to the same...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example): Chris</td>
<td>3. 54</td>
<td>X</td>
<td>Cousin</td>
<td>M</td>
<td>No</td>
<td>Yes No</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes No</td>
<td>Yes No</td>
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<td></td>
<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
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<td>No Yes:</td>
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<td>Yes No</td>
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<td>No Yes:</td>
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<td>Yes Yes</td>
<td>Yes No</td>
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<td>Yes No</td>
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<td>No Yes:</td>
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<td>Yes No</td>
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<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
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<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
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<td></td>
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<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
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<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>M</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Yes:</td>
<td>F</td>
<td>Yes Yes</td>
<td>Yes No</td>
</tr>
</tbody>
</table>
6. Finally, please complete this set of questions about you. Please remember that all of the information is strictly confidential. It will not be shared with anyone.

<table>
<thead>
<tr>
<th>How long have you lived in [ ]?</th>
<th>_______ years</th>
<th>How old are you?</th>
<th>_______ years old</th>
<th>What is your gender?</th>
<th>○ male ○ female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, how has tourism impacted your life?</td>
<td>○ very positively ○ positively ○ negatively ○ very negatively ○ it has not impacted my life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you a native?</td>
<td>○ no ○ yes (specify clan): ____________________</td>
<td>What is your tribe?</td>
<td>____________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where do you live?</td>
<td>○ [ ] ○ [ ] ○ [ ] ○ [ ] ○ [ ] ○ [ ] ○ [ ] ○ other: ____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you don’t live in [ ] how often do you visit?</td>
<td>○ once a week ○ once a month ○ 3 times a year ○ once or twice a year ○ other: ____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your religion?</td>
<td>○ Christian (specify denomination): ____________________ ○ Muslim ○ Traditionalist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How involved are you in tourism in the community?</td>
<td>○ very involved ○ somewhat involved ○ not involved at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you a leader in [ ] (such as youth leader, spokesman, cultural group, religious, traditional, women’s group, etc.)?</td>
<td>○ no ○ yes (specify): ____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your main occupation/source of income?</td>
<td>____________________ or ○ schooling or ○ I am retired</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What other sources of income do you have?</td>
<td>____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Think about the most honest and respected people in [ ] you know. From those, please write the names of the 3 who you think have more ability to bring improvements to [ ] 1) ____________________ 2) ____________________ 3) ____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your relationship with tourism in [ ]? You can select more than one.</td>
<td>○ I am a board member ○ I am an advisor to the board ○ I have no relation at all with tourism in [ ] ○ I was a board member ○ I belong to a group involved in tourism matters (specify): ____________________ ○ I am a tour guide ○ my business/job relates to tourism/tourists (specify): ____________________ ○ I was a tour guide ○ other (specify): ____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compared to your neighbours in [ ], the amount of money that you personally make is:</td>
<td>○ Low ○ Average ○ High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compared to your neighbours in [ ], the amount of money that people in your nuclear family make is:</td>
<td>○ Low ○ Average ○ High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compared to your neighbours in [ ], the expenses in your household are:</td>
<td>○ Low ○ Average ○ High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What languages do you speak fluently</td>
<td>____________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What party did you vote for in the last national election?</td>
<td>○ I did not vote. ○ NDC ○ NPP ○ Other: ____________________ ○ I don’t want to say.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What were your main expenses during the past year?</td>
<td>How many family members depend on your resources?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is your current marital status?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ single  ○ married  ○ divorced  ○ widowed  ○ live with a partner  ○ re-married</td>
</tr>
<tr>
<td>○ married to more than one person  ○ have a boyfriend/girlfriend</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is your highest level of completed education?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ basic  ○ secondary  ○ tertiary (polytechnic, HND, teachers or nurse training)</td>
</tr>
<tr>
<td>○ university degree  ○ master  ○ doctorate  ○ no schooling</td>
</tr>
</tbody>
</table>

Thank you very much for agreeing to participate in this research. If there is anything further you would like to add regarding the impact of tourism on your life or on the community, or about any other matter please feel free to do so below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

*We may be interested in talking with you further about your community and tourism. If you would be willing to speak with us, please tick here ○ and write your phone number so that we can contact you again (phone): ____________________________
Legend to describe network ties in question five of the above survey

<table>
<thead>
<tr>
<th>Positions related to tourism</th>
<th>41</th>
<th>Youth leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>Fetish priest</td>
</tr>
<tr>
<td>Former tourism board member</td>
<td>5</td>
<td>Common local occupations</td>
</tr>
<tr>
<td>Landowner</td>
<td>43</td>
<td>Farmer</td>
</tr>
<tr>
<td>Owner</td>
<td>44</td>
<td>Business owner</td>
</tr>
<tr>
<td>Ghana Tourism Board member</td>
<td>45</td>
<td>Market vendor/food vendor</td>
</tr>
<tr>
<td>Ecotourism Office at Hohoe</td>
<td>46</td>
<td>Trader</td>
</tr>
<tr>
<td>Tourism positions elsewhere</td>
<td>47</td>
<td>Car driver</td>
</tr>
<tr>
<td>Manager</td>
<td>48</td>
<td>Clay layer/mason</td>
</tr>
<tr>
<td>Tour guide</td>
<td>49</td>
<td>Electrician/mechanic/repairer</td>
</tr>
<tr>
<td>Board member</td>
<td>50</td>
<td>Student</td>
</tr>
<tr>
<td>Tour guide</td>
<td>51</td>
<td>Palm wine tapper/distiller</td>
</tr>
<tr>
<td>Board member</td>
<td>52</td>
<td>Carpenter</td>
</tr>
<tr>
<td>Board member</td>
<td>53</td>
<td>Chainsaw operator</td>
</tr>
<tr>
<td>Manager</td>
<td>54</td>
<td>Drinking spot</td>
</tr>
<tr>
<td>Tour guide</td>
<td>55</td>
<td>Hair dresser</td>
</tr>
<tr>
<td>Board member</td>
<td>56</td>
<td>Seamstress/Tailor</td>
</tr>
<tr>
<td>Manager</td>
<td>57</td>
<td>Old person</td>
</tr>
<tr>
<td>Tour guide</td>
<td>58</td>
<td>Senior High School Teacher</td>
</tr>
<tr>
<td>Board member</td>
<td>59</td>
<td>Junior High School Teacher</td>
</tr>
<tr>
<td>Occupations related to Tourism</td>
<td>60</td>
<td>Primary School Teacher</td>
</tr>
<tr>
<td>Tourism manager at</td>
<td>61</td>
<td>Kindergarten Teacher</td>
</tr>
<tr>
<td>Former tourism manager at</td>
<td>62</td>
<td>Nurse</td>
</tr>
<tr>
<td>Tour guide at</td>
<td>63</td>
<td>Pensioner</td>
</tr>
<tr>
<td>Former tourism guide at</td>
<td>64</td>
<td>General occupations</td>
</tr>
<tr>
<td>Moto rider</td>
<td>65</td>
<td>Assembly man/woman</td>
</tr>
<tr>
<td>Tour operator</td>
<td>66</td>
<td>Unit committee member</td>
</tr>
<tr>
<td>Restaurant</td>
<td>67</td>
<td>Area council member</td>
</tr>
<tr>
<td>Kente weaver</td>
<td>68</td>
<td>District politician</td>
</tr>
<tr>
<td>Souvenir vendor</td>
<td>69</td>
<td>Regional politician</td>
</tr>
<tr>
<td>Cultural groups or other groups of</td>
<td>70</td>
<td>National politician</td>
</tr>
<tr>
<td>Group</td>
<td>71</td>
<td>Lawyer</td>
</tr>
<tr>
<td>Cultural group</td>
<td>72</td>
<td>Judge</td>
</tr>
<tr>
<td>Youth Organization group</td>
<td>73</td>
<td>Policeman/woman</td>
</tr>
<tr>
<td>Women cooperative</td>
<td>74</td>
<td>Bank officer</td>
</tr>
<tr>
<td>Group</td>
<td>75</td>
<td>University professor</td>
</tr>
<tr>
<td>Other micro financing group at</td>
<td>76</td>
<td>Doctor (physician)</td>
</tr>
<tr>
<td>Moto riders union association</td>
<td>77</td>
<td>Priest</td>
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<td>Traditional leaders of</td>
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<td>Military</td>
</tr>
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<td>79</td>
<td>Engineer</td>
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<td>Queen mother</td>
<td>80</td>
<td>Community member living in Europe/North America</td>
</tr>
<tr>
<td>Linguist</td>
<td>81</td>
<td>Non-community member in Europe/North America</td>
</tr>
<tr>
<td>Stool father/mother</td>
<td>82</td>
<td>Government worker</td>
</tr>
<tr>
<td>Custodian (Odicro)</td>
<td>83</td>
<td>Private company manager</td>
</tr>
<tr>
<td>Clan leader (Elder)</td>
<td>84</td>
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</tr>
</tbody>
</table>

168
A.2 Interview schedule employed in Chapter 3

Gendered sociocultural context:

- Tell me what you do on a typical day at sunrise, at sunset, etc.
- What is deemed appropriate work for men and women
- Why do you say that X is for women’s labor (natural abilities, status or other social norms)
- What are the duties and responsibilities of the people in your household?
- How do you share/distribute money in the household?
  - (only if you have children) Compare to your spouse, how much of your income contributes to the resources necessary to raise and educate your children?
- Why are forests important to you? (e.g. brings revenue I value the forests now more than before)
- How often do you go to the forest (specify) and for what purposes?
- What specific uses of forest do you have? What other uses of the forest the community has more generally? How have those changed since ecotourism came to [name of town].
- What are the ways you interact with the xxxxxxxxxxx or with the forests around xxxxxxxxxxx
- During the time when the xxxxxxxxxxx were living in the village, are there specific things they have said/taught you that you found helpful? Were other things less helpful (or even clashed with your beliefs or customary uses and understandings of the forest)?
- Have you noticed if ecotourism has brought changes concerning the activities that men and women do in the community? What has changed? Probe for workload and hours of rest.
- Do you see many women participating in ecotourism? Board, TMT, other tasks? Why do you think this is?
- What would it mean if more women were involved? Is this something you would support? Why or why not?
- Would you like to participate more directly in the management of community ecotourism? For example, would you like to be part of the board or the management team? If yes or no, why? If yes, what limits you from doing it?
- What is the state of conservation of the forest around and its current threats?
- Is there anything you want to comment?
- Plus demographics and network data (this latter optional)
A.3 Survey employed in Chapter 4

Please select the option that best matches your opinion about tourism outcomes in the community.

1. Tourism in [ ] has improved community finances.
   ○ Tourism in [ ] has worsened community finances.
   ○ Tourism in [ ] has not affected community finances.

2. Revenues accrued through the tourism project have increased the wealth of the community.
   ○ Revenues accrued through the tourism project have decreased the wealth of the community.
   ○ Revenues accrued through the tourism project have not affected the wealth of the community.

3. Because of tourism the community is now more capable of developing than before
   ○ Because of tourism the community is now less capable of developing than before
   ○ Tourism in [ ] has not affected the capability of the community to develop.

4. The community’s pride has increased with the arrival of tourism.
   ○ The community’s pride has decreased with the arrival of tourism.
   ○ The community’s pride has not been affected by the arrival of tourism.

5. Tourism in [ ] has improved the quality of life in the community
   ○ Tourism in [ ] has worsened the quality of life in the community
   ○ Tourism in [ ] has not affected the quality of life in the community

6. Tourism in [ ] has brought less conflict to the community
   ○ Tourism in [ ] has brought more conflict to the community
   ○ Tourism in [ ] has brought neither more nor less conflict to the community

7. Tourism in [ ] has resulted in our assembly man gaining more respect at the district assembly.
   ○ Tourism in [ ] has resulted in our assembly man gaining less respect at the district assembly.
   ○ Tourism in [ ] has not affected the respect our assembly man has at the district assembly.

8. Because of tourism in [ ] the community joins together more often to petition the district assembly for improvements in the community.
   ○ Because of tourism in [ ] the community joins together less often to petition the district assembly for improvements in the community.
   ○ Tourism has not affected our petitions to the district assembly for improvements in the community.

9. Tourism in [ ] has helped our forest to grow.
   ○ Tourism in [ ] has caused our forest to shrink.
   ○ Our forests have not grown or shranked since the arrival of tourism.

10. Tourism in [ ] has made us care more for our forests.
    ○ Tourism in [ ] has made us care less for our forests.
    ○ Tourism has not affected how we care for our forests.

11. Do you think most people in this community can be trusted?
    ○ no
    ○ yes
    ○ not sure

12. Do you think the current board members are doing a good job?
    ○ no
    ○ yes
    ○ not sure

13. Do you think the tourguides are doing a good job?
    ○ no
    ○ yes
    ○ not sure
14 Instead of setting aside money for community development, would you prefer to split the money among all the individuals in the community?
   ○ no
   ○ yes
   ○ not sure

15 If there were a problem such as a crop disease that affected the whole village, who do you think would work together to deal with the situation? Please select one option.
   ○ Each person would deal with the problem individually
   ○ Neighbours among themselves
   ○ Local government/municipal political leaders
   ○ All community leaders acting together
   ○ The entire community
   ○ Other (describe): __________

16 If there was a fire in the bush that would seriously threaten the forest, who do you think would work together to deal with the situation? (If needed, use the options as probes)
   ○ The Board would do it
   ○ The tour guides would do it
   ○ The neighbours near by
   ○ Unit committee/area council
   ○ All community leaders acting together
   ○ The entire community
   ○ Other (describe): ______

17 Do you think most people in the village adhere to the rules and regulations regarding the protection of the forest?
   ○ no
   ○ yes
   ○ not sure

18 Have you found yourself in a situation with family, coworkers or neighbours that needs arbitration (insults, quarreling, stealing, etc.)?  ○ no  ○ yes  ○ not sure. If yes, who did you go to for arbitration?
   ○ Chief and elders
   ○ Family member
   ○ Unit committee
   ○ Other: ______

19 If you were walking in the forest and saw a person breaking the law (cutting firewood), would you report it?
   ○ no
   ○ yes  (If yes) Who would you report it to?____________________________________________________
   ○ not sure

19.1 Would your response be different if it was a woman?
   ○ no
   ○ yes
   ○ not sure

19.2 Would your response be different if it was an elderly person?
   ○ no
   ○ yes
   ○ not sure

19.3 Would your response be different if it was a young person?
   ○ no
   ○ yes
   ○ not sure

19.4 Would your response be different if it was a family member?
   ○ no
   ○ yes
   ○ not sure

19.5 Would your response be different if you saw someone setting up a trap?
   ○ no
   ○ yes
   ○ not sure
A.4 Interview schedule employed in Chapter 4

Capable agents interview schedule:

- What do you think the community needs to improve the well-being of its members?
- How do you think the community could fulfill those needs?
- How much influence do you think you have in community’s decisions? 
  (triangulation to their level of centralization) ○ a lot, ○ some, ○ little or ○ none
- How important is ecotourism for the future of the community?
- How do you imagine this community in 10 years from now?
- What do you think should happen to the xxxxxxxxxx project in the future?
- What is your opinion on the community’s ability to make of ecotourism a development tool?
- Are you satisfied with the current management of ecotourism? What are you major complaints?
- What are your suggestions to improve the ecotourism project?
- Do you think it would be a good idea to designate more responsibility for ecotourism management to the village? Why?
- How much interest you have in community ecotourism? How are you interested?
  ○ (If the agent already participates in ecotourism) What are your motivations for participating in the development of ecotourism in the community? 
  (Prompt: Do you participate for the purpose of individual gains (such as resources and higher personal status) or whether because of your desire to contribute to group or community benefit?)
- Would you consider taking a leading role (or if already involved, in taking a stronger leading role) in the improvement of ecotourism business?
- How willing you are to utilize your personal connections on behalf of other members of the community to help improve ecotourism in xxxxxxxxxx?
- What is the state of conservation of the forest around and its current threats?
- In your opinion, are forests around the community important for the future of the community? Why?
  ○ And, for the future of ecotourism?
- Plus demographics and network data
## Appendix B  T-tests referred to in Chapter 2

### B.1 Social capital elements compared: descriptive group statistics

<table>
<thead>
<tr>
<th>Cognitive social capital</th>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trust</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Generally I trust people working at the reception</td>
<td>S1</td>
<td>237</td>
<td>3.83</td>
<td>1.204</td>
<td>.078</td>
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<td>.077</td>
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<td>S2</td>
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<td>1.252</td>
<td>.118</td>
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<tr>
<td>-Generally I trust the chiefs and elders</td>
<td>S1</td>
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<td>4.14</td>
<td>1.231</td>
<td>.078</td>
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<td>S2</td>
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<td>4.11</td>
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<td><strong>Reciprocity</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-If someone helps me I help them when they need help</td>
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<td><strong>Collaboration</strong></td>
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<td></td>
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<tr>
<td>-If someone dies or marries in my community I help with preparations</td>
<td>S1</td>
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<td>8.59</td>
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<tr>
<td>-Generally I attend communal labour</td>
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<td><strong>Structural social capital</strong></td>
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<td>-Actual number of ties cited</td>
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### B.2 Cognitive social capital elements compared: independent t test

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<tr>
<th>Cognitive social capital</th>
<th>Levene’s test for equality of variances</th>
<th>T-test for equality of means</th>
<th>95% confidence interval of the difference</th>
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<tbody>
<tr>
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<td>Equal variances assumed</td>
<td>F</td>
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<td><strong>Trust</strong></td>
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<tr>
<td>-Generally I trust people working at the reception</td>
<td>Yes</td>
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<td></td>
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<td>-Generally I trust the tourism board</td>
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<tr>
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<td>-Generally I trust the chiefs and elders</td>
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<td>-If someone helps me I help them when they need help</td>
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<td>-If someone dies or marries in my community I help with preparations</td>
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### B.3 Empowerment measures compared: descriptive group statistics

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<th>Empowerment measures</th>
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<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
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<tbody>
<tr>
<td>Easy for me to get information</td>
<td>S1</td>
<td>245</td>
<td>4.408</td>
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<td></td>
<td>S2</td>
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<td>5.699</td>
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<td>Aware of meetings</td>
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<td>More opportunities to participate in community decisions</td>
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<td>Not afraid to provide views to Board</td>
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<td>I make more money</td>
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<td>Like seeing tourists</td>
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<td>6.640</td>
<td>0.621</td>
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<tr>
<td></td>
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<tr>
<td></td>
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<td>I get along better with neighbours</td>
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<tr>
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<td></td>
<td>S2</td>
<td>110</td>
<td>5.573</td>
<td>1.462</td>
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### Empowerment measures compared: independent t-test

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<th>T-test for equality of means</th>
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</tr>
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<td>I often bring suggestions at meetings</td>
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</tr>
<tr>
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<td></td>
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<td>Not afraid to provide views to Board</td>
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<td>Hopeful about my future</td>
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<td>I make more money</td>
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<td>Better services</td>
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<td>7.547</td>
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<td>More possibilities in life</td>
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Appendix C  Descriptive and qualitative accounts relevant to Chapter 3

C.1 Composition of staff members and tourism committee in Community B

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Board or tourism committee</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive members</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Regular members</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Observer (no voting)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>4 (23.5%)</td>
<td>17 (76.5%)</td>
</tr>
<tr>
<td><strong>Tourist reception staff</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tour guides</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Receptionist</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Financial assistant</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: All board members and staff identified belonged to the local ethnicity except for one male tour guide.
C.2 Illustrative quotes by themes from interviews with members of Community B

These are illustrative quotes associated with themes concerning the diversity of reasons why women seem to be less active in tourism decisions.

**Theme: time**

“Most of the time the women are busy doing other things. As you have come here right now, I excused myself to go and check something. Maybe later I will excuse myself again and go and see to what I am doing again. That is why women are not able to involve ourselves. When a woman is called upon to do something, they should be saying that oh, this is the day that I have to go and do this thing. And maybe at that same time I would be called upon to attend this meeting. The meeting time will clash with the time I have to go and sell my things. So because of that, the women would say, ok I don't want to do it. But for the men it is maybe only the farming that they are doing, so they can say that: ok, I will not go the farm and then go for the meeting. But the women would be doing other things.” (A woman)

“The women, they normally have different excuses: that they are doing this, they are doing that, they are busy. But, as for the men, any time that we are called upon us, we make sure we reach there. (…) Oh, some would say: this morning I haven't yet bath my children, others would say their children are sick, they did not sleep at night so they are busy doing something.” (A man)

**Theme: religious beliefs**

“The men are the head and God created him before the women, so…” (A woman)

“The reason why men are more powerful than the women is because […] God created a man first and later created the women [to] assist you.” (a woman)

“A woman cannot be more powerful than the men, by all means it is the man that would be more powerful [Why? I probed her]. It is the rib of the man that was used to make the women. Women cannot be more powerful than men.” (A woman)

“That is how it has been since creation. The man is always the head. (…) For example, if there is a problem in the house, like an argument between me and my husband, when you come you can tell me to keep quiet but maybe if you tell the man to keep quiet, the man may still talk. But if you ask me to keep quiet I will keep quiet. (…)” (A woman)

**Theme: social norms of respect**

“(…) Because men have the perception that when a women is a leader (…) they will look down on them (…) That is why they don’t appoint women to be leaders in the society. (…) I am older than many of my brothers, but they normally claim that they are the head. So…in the aspect of the land owners they said that in Africa here, women don’t have control of their father's things. So that
is why it is difficult for the men to accept that we are [land] representatives. That is why it is difficult to convince them or to understand.” (A woman)

“I would like it, it shouldn’t be only the men (...) because sometime what the men will be saying or discussing we realize that that is not how it is supposed to be. But because we are women we would just listen and shut up because we don’t want to challenge the men.” (A woman)

**Theme: Talking too much**

“Yes, they don’t give chance to [women]. Yes, one women can ask a question. We will be discussing it aaaaa and when you realise it, time is up. But when this one asks, this one asks, they’d said ok we will make sure you don’t ask any question again.” (A woman)

“(...) because sometimes they (the women) go on and on...” (A man)

**Theme: caring**

“They think they are existing on their own. Is not the chief who is taking care of them?” (A man)

**Theme: education:**

“Because I am not educated I cannot do, but maybe if I have to bring a suggestion or ideas which is not related to reading or writing I can do.” (A woman)

“It is because of educational background.” (A woman)

“It is the men that can be in the committee, the women cannot be in the committee for the mountain. If there is something that is going wrong the women would not know how to handle it.” (A woman)

“Oh no, well it depends upon the type of work that they are going to do. Sometimes ahhh uhmmm because of their education. The men are more educated than the women. If one is not educated one can’t be a treasurer...” (A man)

**Theme: traditional leadership structure**

“From the men, they are from various groups. The Mankrado, the Odicro and the Chief and they all have their various elders. So that is why there are more than the women. Because as for the women we only have the Queen Mother and [women] elders” (A woman)

“Because in the selection process we have people coming from various sections, like the Chiefs also select a male representative. The clans also select males as their representatives, and the Queen Mother also selects someone, the women youth also selects, the land owners also...most of the board members are land owners and they also selected men. That is why there are more men (...) There are three women in the board. If I may not forget, there are three.” (A man)
“Normally you have equal number, but the difference is clans in the village. The Elders are normally men. (...) the Queen Mother and the [women] Elders will come, and the Chief itself and his Elders and Mankrado will be there. It is only by that number that we outweigh the Queen Mother. Because we have gotten three stools, the Chief, the Odikro and that of the Mankrado.” (A man)

**Theme: shyness**

“Some women feel shy to talk in public. Even myself if I have something to ask I don’t do it. I keep it to myself. It is mostly the youth who asks questions.” (A woman)

“Whenver the matter is exposed to the public the men usually ask questions and give suggestions but the women feel shy to talk.” (A man)

“It takes scarcely before they call women to talk (...) After the leaders give their talk, then if you have questions, then you can ask. But if you raise your hand you have to wait until they call you before you can talk. (...) Women they don’t raise their hand (...) I think it might be because they are shy.” (A man)
Appendix D  T-tests referred to in Chapter 4

D.1  Trust compared: descriptive group statistics

<table>
<thead>
<tr>
<th>Trust</th>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. error mean</th>
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<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-Generally I trust people working at the reception</td>
<td>Community A</td>
<td>130</td>
<td>3.39</td>
<td>1.198</td>
<td>0.105</td>
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<tr>
<td></td>
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<td>142</td>
<td>4.20</td>
<td>1.119</td>
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<tr>
<td>-Generally I trust the tourism board</td>
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<td>-Generally I trust the chiefs and elders</td>
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<td>1.311</td>
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<td></td>
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D.2  Cognitive social capital elements compared: independent t-test

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<tr>
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<tbody>
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<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
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<tr>
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<td>No</td>
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<td>-Generally I trust the tourism board</td>
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<tr>
<td>No</td>
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<tr>
<td>-Generally I trust the chiefs and elders</td>
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### Community-level empowerment compared: descriptive group statistics

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<th>Sample</th>
<th>N</th>
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<th>Std. deviation</th>
<th>Std. error mean</th>
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<tbody>
<tr>
<td>Tourism finances</td>
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<tr>
<td>Community A</td>
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<tr>
<td>Impact of revenues on community well-being</td>
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<tr>
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### D.4 Community-level empowerment measures compared: independent t-test

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<th>95% confidence interval of the difference</th>
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<td>t df Sig. (2-tailed) Mean difference Std. error difference Lower Upper</td>
</tr>
<tr>
<td>Tourism finances</td>
<td>Yes 7.022 0.009</td>
<td>-1.351 115 0.179 -0.123 0.091 -0.304 0.057</td>
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<tr>
<td>Impact of revenues on community well-being</td>
<td>No 111.989 0.155</td>
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<tr>
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<tr>
<td>Quality of community life</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Care for forests</td>
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<td>0.732 114.387 0.466 0.047 0.064 0.080 0.174</td>
</tr>
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<td>Community joins for petitions</td>
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<tr>
<td>Care for forests</td>
<td>No 115 0.049</td>
<td>0.742 134 0.459 0.047 0.063 0.078 0.172</td>
</tr>
<tr>
<td>Forest status</td>
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<td>-1.479 116 0.142 -0.126 0.085 -0.294 0.043</td>
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<tr>
<td>Care for forests</td>
<td>No 114.387 0.049</td>
<td>0.732 114.387 0.466 0.047 0.064 0.080 0.174</td>
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</table>