Exploring the Pathways, Prospects, and Pitfalls of Adaptive Collaborative Management in Sierra Leone: A Critical Political Ecology Analysis

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Declaration of original authorship

I confirm that this is my own work and the use of all materials from other sources has been properly and fully acknowledged.

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Abstract

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Using the lens of critical political ecology, this thesis explores the pathways, prospects, and pitfalls of Adaptive Collaborative Management (ACM) of Forest Protected Areas (FPAs) in Sierra Leone based on two case studies in the Gola Rainforest National Park (GRNP). ACM has been extensively promoted in recent years among policy-makers and researchers as an interdisciplinary method to address multi-scale, multi-level society-environment dilemmas because of its strong emphasis on participation and learning. Yet, the concept of ACM is very broad, and documentation of its main achievements and shortcomings, especially in resource and capacity-challenged African countries has been very limited. The situation is particularly worrisome given that many scholars are already proposing that ACM could provide a useful mechanism for reducing emissions from deforestation and forest degradation (REDD) in the context of global climate change governance. To effectively explore the nature of participation and learning in ACM, as well as the underlying influence of institutions and power relations, the thesis utilizes a mixed method approach combining surveys, interviews, focus groups, and documents-in-use. The results indicate that despite considerable effort and some success, significant shortcomings are evident. The ACM-based forest governance in the GRNP scarcely resulted in shared decision-making; downward accountability; and increased opportunities for knowledge co-production. Severe challenges were also noted regarding the equitable distribution of benefits; ownership, commitment and trust. Furthermore, ACM practices appear to provide a facade for centralized forest governance by surreptitiously strengthening the remits and political influence of the state and international agencies at the expense of local communities. In the context of REDD+, ACM could reinforce, or at least be undermined by

power asymmetries and capacity challenges that can affect its legitimacy and effectiveness. Therefore, this thesis recommends priority investments in enhancing the adaptive capacity of local institutions and improving access to, and allocation of conservation benefits.

Index words

Adaptive Collaborative Management (ACM), political ecology, participation, learning, power, institutions, Forest Protected Areas (FPAs), forest governance, Sierra Leone, Africa

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Dedication

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Contents

List of abbreviations

ACM   Adaptive Collaborative Management

AM   Adaptive Management

BCP   Biodiversity Conservation Programme

CBFM   Community-based Forest Management

CBNRM   Community-based Natural Resources Management

CBO   Community-based Organisation

CCA   Community Conserved Area

CEFED   Centre for Environment and Development

CEPESL   Creating Enabling Policy Environment in Sierra Leone

CIFOR   Centre for International Forestry Research

CITES   Convention for International Trade in Endangered Species

CLGF   Commonwealth Local Government Forum

CM   Collaborative Management (Co-Management)

COP   Conference of Parties

CSSL   Conservation Society of Sierra Leone

EFA   Environmental Foundation for Africa

EIA   Environmental Impact Assessment

EJF   Environmental Justice Foundation

ENFORAC   Environmental Forum for Action

EPA   Environment Protection Agency

EUD   European Union Delegation

FAO   Food and Agriculture Organisation

FD   Forestry Division

FEC   Forest-edge Community

FFS	Farmer Field School
FMA	Forest Management Association
FMC	Forest Management Committee
FMP	Forest Management Plan
FPA	Forest Protected Area
GCF	Global Conservation Fund
GEF	Global Environment Facility
GFCCP	Gola Forest Conservation Concession Programme
GHI	Global Hunger Index
GoSL	Government of Sierra Leone
ICDP	Integrated Conservation and Development Projects
LCCA	Local Community Cooperation Agreement
MAFFS	Ministry of Agriculture, Forestry and Food Security
MLHE	Ministry of Lands, Housing and the Environment
MMMR	Ministry of Mines and Mineral Resources
MPA	Marine Protected Area
NGO	Non-Governmental Organisation
NPAA	National Protected Area Authority
NTFAP	National Tropical Forestry Action Plan
NTFP	Non-Timber Forest Product
PAM	Policies and Measures
PPC	Project Planning Committee
PRSP	Poverty Reduction Strategy Paper
REDD	Reducing Emissions from Deforestation and Forest Degradation
RSPB	Royal Society for the Protection of Birds
SPSS	Statistical Package for Social Scientists

TEK   Traditional Ecological Knowledge

UGFE   Upper Guinea Forest Ecosystem

UNEP   United Nations Environment Programme

UNFCCC   United Nations Framework Convention for Climate Change

USFSIP   United States Forest Service International Programmes

UNHDI   United Nations Human Development Index

UNHDR   United Nations Human Development Report

UNICEF   United Nations Childrens' Fund

USAID   United States Agency for International Development

VSLA   Village Savings and Loans Association

WANP   Western Area National Park

WHH   WeltHungerHilfe

WWF   World Wildlife Fund

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Chapter One

Introduction

1.1   Research background

Forests offer many benefits to local people and adjacent communities in developing countries. It is estimated that about 1.6 billion people, globally, depend on forests, and the contribution of forest resources to their livelihoods (MEA 2005; Ibisch et al. 2010; Shackleton et al. 2011; Senganimalunje et al. 2016). Forest benefits frequently highlighted in the literature include: subsistence goods such as timber and non-timber forest products (medicines, bush meat etc) (Nasi et al. 2016); direct benefits such as income from jobs provided by forest protection efforts (Lawlor et al. 2013); indirect benefits such as land, cultural identity, and ecosystem services such as water provision (McElwee 2010); and skills, knowledge, and infrastructure provided through conservation efforts (Thoms 2008). Therefore, forests form a crucial part of the livelihood strategies of individuals, households and communities in rural areas (Arnold 2001; Agrawal et al. 2013), especially in Sub-Saharan Africa where many rural communities depend on forests to meet their daily subsistence and income needs (Kaimowitz 2003; Phiri et al. 2012). Forests also provide a safety net during stress periods such as the lean season, crop failure, and natural disasters (Wunder et al. 2014). Moreover, forests and forest resources form the basis of rural community development because they are the most available local resource (McDermott

& Schreckenberg 2009), and hence, contribute directly or indirectly to economic development and growth (Agrawal et al. 2013). This implies that forests can contribute to reducing poverty in rural communities, and enhancing economic development in developing countries (Sunderlin et al. 2005; Muradian et al. 2010).

However, forests and forest resources have declined substantially, thus threatening current and future capacities of local communities to meet their daily subsistence and income needs (Sunderlin et al. 2005; White et al. 2016). The annual rate of forest loss in Africa is estimated at about 3.4 million hectares, and about 20,000 hectares every year between 1990 and 2010 in Sierra Leone (USAID 2010). National governments across Africa have made tremendous efforts to address and avoid deforestation (Ribot et al. 2006), though, in many cases, the opportunities provided are not accessed uniformly across local communities (Shackleton et al. 2007). Besides, forest areas are mostly in remote rural settings with limited livelihood opportunities and infrastructure (Sunderlin et al. 2005), which makes it harder for government resources to reach local people and communities. As such, the last three decades have seen the establishment of Forest Protected Areas (FPAs) to narrow down the focus of governments and affiliate agencies on specific forest areas that benefit local people through poverty reduction schemes (like ecotourism) and direct community development benefits (such as schools, jobs etc) (Ferraro et al. 2011). Nevertheless, as local populations have grown, FPAs have negatively affected local communities through food stress, livelihood loss and displacement (Cernea & Schmidt-Soltau 2006) by increasing restrictions to land and other essential resources for community health and wellbeing (West & Brockington 2006; Kari & Korhonen-Kurki 2013). Similarly, forests and forest resources in some FPAs have been overexploited due to the exclusion of local people in decision-making and tension over management roles, rights, and responsibilities (Agrawal et al. 2013). Some writers (e.g., Hayes & Persha 2010) have attributed these lapses to the lack of human and financial resources to effectively monitor forest resources and capture local interests,

which also raise questions about the effectiveness of FPAs (Geldmann et al. 2013).

Consequently, there has been an increasing interest in strategies for sharing the rights to access, manage and utilize forests and forest resources with local communities (Leach et al. 1999; Agrawal & Ostrom 2001). It is believed that institutionalizing local participation in forest governance can provide an incentive for sustainable resource use, while contributing to forest conservation (Persha et al. 2011). One way forest managers and policy makers have attempted to formalize the participation of local people and communities is through Integrated Conservation and Development Projects (ICDPs), which represent a shift from state-led forest management to the adoption of community-based approaches (Persha et al. 2011). ICDPs place a strong focus on conserving forest resources while simultaneously addressing the development needs of local communities (Dahal & Nepal 2016). Studies of ICDPs emphasize the importance of combining forest conservation and community development to achieve sustainable forest management and sustainable communities (Rico García-Amado et al. 2013). As such, ICDPs purport that there is a link between poverty and forest loss (Pfeifer et al. 2012; Geldmann et al. 2013), which implies that forest conservation cannot be achieved without addressing local poverty reduction challenges (Sanjayan et al. 1997). In many cases, ICDPs have enhanced local engagement with conservation actions through various forms of compensation and benefits (Abbot et al. 2001). Thus, ICDPs represent a shift towards transferring power and authority to local people and communities, and addressing concerns about participation and benefits (Brandon & Wells 2009). These projects are also thought to have strengthened the idea of managing resources based on local circumstances, which is known as Community-based Natural Resources Management (CBNRM) (Flintan & Hughes 2001). Collectively, the design of ICDPs is often expected to produce a win-win situation for both people (communities) and parks (conservation) (Winkler 2011).

However, in practice, ICDPs have not fully achieved their goal of simultaneously addressing biodiversity conservation and poverty reduction challenges (Newmark & Hough 2000; McShane et al. 2011). There are many reasons for their failure. Ferraro and Kiss (2002) argue that ICDPs provide wrong incentives, while Gibson and Marks (1995) assert that ICDPs provide inadequate incentives, which also means that ICDPs fail to provide adequate benefits to discourage local activities that threaten forest conservation and FPAs (West & Brockington 2006). In addition, it has been suggested that only a small fraction of ICDP benefits reach their intended target people and communities due to elite capture and corruption (Adams & Hutton 2007). Moreover, it is believed that ICDPs raise expectations without providing promised benefits, and engender inequalities in the sharing of roles, power and benefits (Hill 2009). ICDPs have also been associated with increased restrictions, conflicts and fines, which significantly undermine the social engagement and relationships needed for effective forest management (West & Brockington 2006). As such, many authors (e.g., Garnett et al. 2007; Hill 2009) argue that the effectiveness of ICDPs relies largely upon their design and delivery and the settings in which they are implemented. Minang and van Noordwijk (2013) believe that ICDPs are designed to oversell project targets to obtain funding and local support, though these targets cannot be achieved in the timeframe specified. Liu et al. (2012) note further that ICDPs simplify local attributes (capabilities, interests etc), thus depicting local people and communities as uniform in terms of relationships, abilities and interests. This also implies that developers and implementers of ICDPs presuppose that local people and communities lack the capacity to effectively engage and utilize the decision-making space and manage benefits (Brown 2002). Thus, ensuring the effective design and delivery of ICDPs to achieve the goal of integrating community development and forest conservation, rests entirely on the nature of participation, learning and benefits that policy-makers and forest managers encourage and facilitate in FPAs (Sanderson 2005; Garnett et al. 2007). This has heightened the need for alternative communal approaches to forest management, which emphasize participation, learning, power sharing, and

benefits (Dressler et al. 2010).

One approach that is receiving increasing attention as a way of achieving the dual objective of forest conservation and community development in protected areas is Adaptive Co-Management (Whaley & Weatherhead 2016). ACM is widely promoted as an effective means of governing social-ecological systems such as forests (Akamani & Hall 2015), fisheries (Trimble & Berkes 2015), and urban environments (Crowe et al. 2016). ACM combines the "participation" dimension of co-management and the "learning" dimension of adaptive management (Armitage et al. 2007; Plummer et al. 2012; Fabricius & Currie 2015) to foster a relationship between resource managers (mostly governments) and resource users (mostly local communities) (Olsson et al. 2007). Key attributes (Armitage et al. 2009) and aspects (Folke et al. 2005) include participation in a polycentric system of governance, learning, and power sharing. There is also an emphasis on feedbacks, leadership, and collaboration between multiple actors at different levels (Olsson et al. 2007). In the context of FPAs, ACM has been widely promoted as a win-win approach to simultaneously addressing forest conservation and community development challenges (Wollenberg et al. 2001; Mbile et al. 2005; Ojha et al. 2013).

However, the literature that explores the "on the ground" effectiveness of ACM especially in the context of developing countries of Africa remains very limited. While it is often acknowledged that the evolution and facilitation of ACM in FPAs may be challenging or even problematic in resource-challenged settings, few studies (e.g., Holloway & Short 2014; Krüger et al. 2015) have examined these challenges, experiences and risks involved in any significant detail. Likewise, it has been noted that the nature of participation (Bockstael et al. 2016) and learning (Reed et al. 2010) that is encouraged and facilitated by ACM efforts in FPAs remain rather poorly understood. Moreover, with only few notable exceptions (e.g., Stringer et al. 2006; Cundill & Rodela 2012), ACM research in the context of FPAs in Africa has paid more attention

to issues such as livelihoods (e.g., Ming'ate et al. 2014) while overlooking the underlying

complex social and power relations that either constrain or facilitate effective governance. As

such, there is a lack of knowledge of what works and what does not with respect to ACM-based

FPA projects in Africa, and by extension, what lessons can be learnt for future practice

(Armitage et al. 2008). This situation is particularly worrisome because many scholars (e.g.,

Sandbrook et al. 2010; Larson & Petkova 2011; Vatn & Vedeld 2013) are proposing that ACM

could provide a useful mechanism for reducing emissions from deforestation and forest

degradation (REDD) in the context of global climate change governance. The aim of this thesis

is to help fill this gap. Accordingly, with emphasis on participation and learning, this thesis

explores the pathways, prospects, and pitfalls of ACM in the Gola Rainforest National Park

(GRNP) in Sierra Leone. With a political ecology lens, the thesis investigates the nature,

dynamics and outcomes of participation and learning in ACM, and explores the institutions and

power relations that shape the effectiveness or otherwise of the ACM-based governance of the

"Gola Rainforest".

Sierra Leone is an ideal case for this research for many reasons. First, forest loss is a huge

concern in the country, affecting the livelihoods of local people and communities, and the

sustainability of globally recognized habitats and ecosystems in the Upper Guinea Forest

Ecosystem (Klop et al. 2010). Second, the GRNP adopted ACM-based practices for ten years

between 2002 and 2012 (Hipkiss 2012), which allows for significant changes to occur in

participation and learning, thus providing a context for studying the effectiveness of ACM-based

governance in forest communities (Berkes 2004). Third, forest institutions (such as government

agencies) play a central role in the evolution of participatory governance in FPAs, which

provides a context for understanding the broader implications of their role in facilitating and

constraining effective participation and learning in practice. Institutions are a pivotal variable in

exploring the effectiveness of ACM (Armitage et al. 2008) because they afford many years of

field experience (Angelsen & Wunder 2003), and engender multiple structures and relationships that bear on forest governance (Brandon & Wells 2009). Fourth, GRNP and Sierra Leone are at a crucial transition to REDD+ with high hopes of delivering global climate benefits and addressing local development challenges (Global Witness 2010). It is therefore possible that in addition to contributing to scholarly debates on ACM and the political ecology of forest governance in Africa, this study will also provide lessons for governing and implementing REDD+ in Sierra Leone, and Africa generally.

1.2   Research aims and objectives

This thesis aims to contribute to understanding the pathways, prospects and pitfalls of Adaptive Collaborative Management (ACM) in the Gola Rainforest National Park (GRNP) in Sierra Leone. The research is intended to investigate the nature of participation and learning in ACM practices in FPAs, and explore the underlying influence of institutions and power relations. To meet these aims, the objectives of this study are to:

1) Investigate the nature of participation and learning in ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone; and

2) Explore the ways in which structural conditions (power relations and institutions) shape the effectiveness of ACM practices in FPAs.

1.3   Research questions and approach

The central research question addressed in this thesis is: what are the pathways, prospects and pitfalls of Adaptive Collaborative Management (ACM) in the GRNP in Sierra Leone? This question is examined in relation to the nature of participation and learning that occurs, as well as the underlying influence of institutions and power relations. Therefore, the research sub-questions to be addressed are:

1) What is the nature of participation and learning in ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone?

2) In what ways do structural conditions (power relations and institutions) influence the effectiveness of ACM practices in FPAs?

To help address the above questions, the thesis uses a political ecology lens because of its suitability to help explore the intersection of ecological social sciences with principles of political economy (Bryant & Bailey 1997; Robbins 2012). In doing so, attention is given not only to analyses of the nature and outcomes of participation and learning in ACM, but also to the broader influence of institutions and power relations through which the attempt to foster participatory forest governance takes place. The thesis draws upon data collected from 2014 to 2016, including surveys of household and organizational informants; key-informant interviews; review of documents-in-use (Prior 2008); and focus group discussions.

1.4   Critical political ecology lens

This thesis employs a political ecology lens to explore the pathways, prospects and pitfalls of ACM practices in the GRNP in Sierra Leone. Political ecology evolved from the traditions of cultural ecology and political economy, which examine how human practices of resource use are influenced by social and power relations at multiple levels over time, and how these relations are shaped by the physical environment (Neumann 2014). Walker (1998) has distinguished political ecology along four strands of research, including: 1) the role of user groups and the capabilities of the decision-making environment to shape the way resources are used; 2) the ways in which local resource use is shaped by social and economic relations at multiple scales (e.g., household, community, the state etc); 3) the ways in which historical perspectives and experiences shape these relations; and 4) the ways in which society and the natural or human-modified environment mutually influence each other over time.

Therefore, political ecology examines the ways by which power and politics shape and drive the distribution of benefits and costs of human-induced environmental change (Lawhon & Murphy 2012). In other words, political ecology explores how social relations of power and domination cause, hinder, or help to solve environmental governance challenges (Forsyth 2003). However, political ecology does not only explore the influence of social and power relations on the way people use natural resources, it also asks how different groups of people are affected in different ways, including the process of turning local people into environmental subjects (Agrawal 2005). Thus, political ecology considers differentiated uses of and relationships to natural resources, and how broader social relations shape resource use by one group of individuals (e.g., women) relative to others (Zimmerer & Bassett 2003). In addition, political ecology examines how history and cultural meanings become part of the politics of resource control, and the role of knowledge in shaping people's perceptions and use of natural resources (Escobar 2006; Berkes 2007; Escobar 2012).

By using political ecology as the frame of this research, this thesis explores the nature of participation and learning in ACM and the underlying influence of institutions and power relations. The thesis explores factors and conditions that shape the effectiveness of ACM practices in the GRNP, focusing on questions such as who governs, what is being governed, how is governance taking place, on whose terms and behalf is governance occurring (Bulkeley & Newell 2015), who benefits and who loses from the existing institutional and political arrangement (Robbins 2012; Dryzek 2013). The research therefore contributes to literature on the utility of ACM in FPAs, providing important insights into how ACM principles are applied in the field to enhance participation and learning. More broadly, this thesis attempts to explore the social, political and institutional dimensions of the ACM-based governance of the "Gola Rainforest". Hence, insights from political ecology are relevant for this thesis, given its focus on participation, learning, power, and institutions.

1.5   Key concepts

Following from the political ecology lens described above, I propose that ACM is an appropriate conceptual lens for understanding the direction participatory forest governance is taking in the GRNP in Sierra Leone. Like political ecology, the key concepts of ACM examined in this research are participation, learning, power and institutions. Firstly, this thesis investigates the nature of participation and learning in ACM, making participation and learning important concepts for the analysis. Secondly, because an understanding of the nature of participation and learning underscores "who decides what to do, how decisions are made, how roles are shared, and who is, or should be held accountable for resulting outcomes" (Borrini-Feyerabend et al. 2013), power is central to exploring ACM practices (Plummer & Armitage 2007; Armitage et al. 2008; 2009). Thirdly, because the research explores the utility (prospects and pitfalls) of ACM, it is also critical to explore the influence of institutions on participation, learning and power relations (Huitema et al. 2009).

1.5.1   Participation

Participation is one of the mainstays of literatures on rural development and natural resources management (Leal 2007; Elliott 2012). Participation in environmental governance has proliferated during the past decade and has become a hallmark of communal approaches to natural resources management (Eversole 2011). Although defining participation remains a continuing challenge, it is generally conceived as a normative process that brings diverse stakeholders together to define important issues and forge mutual interests (Lewicki et al. 2003 p.17). In practice, participation involves giving local communities some control over the management of natural resources (Dressler et al. 2010), defining the course of governance, and sharing information about important arrangements (Gebremedhin & Theron 2007). Many terminologies have been used to describe participation, such as collaboration, cooperation, co-

management, and community, which convey the sentiment of sharing rights, roles and authority (Plummer & Fennell 2009). Although these concepts move participation from the periphery to the core of environmental governance discourse and practice (Hickey & Mohan 2004), they leave many assumptions; the most common being that more participation leads to the representation necessary for empowerment, benefits for all, and poverty reduction (Blair 2000 p.25). As such, critics have argued that participation "tyrannizes" development discourses with inadequate evidence that participatory approaches meet the promise of empowerment and benefits (Cooke & Kothari 2001). Despite such critiques, there are claims that even participatory approaches that appear forceful can engender positive outcomes (Morales & Harris 2014). The lack of consensus on what works and what does not in the context of participation, as well as who participates, how, why, and to what extent, warrants further investigation and analysis (Clarke 2008; Bockstael et al. 2016).

1.5.2   Learning

In the literature, it is stressed that learning is an important condition and outcome of an effective ACM-based programme. Learning is also strongly linked to participation because an understanding of institutional structures and processes has substantial impacts on how and why people participate (Nkhata & Breen 2010). Learning is defined as the capacity to understand the governance context, including changes occurring in participation, and to reflect on and find ways through which to appropriately act (McCool et al. 2013). The concept of learning encompasses ways by which actors acknowledge prevailing beliefs and update management practices based on the new evidence, experience and information obtained (Newig et al. 2016 p.354). In the context of FPAs, learning refers to the organization of governance to improve decision-making (McCool et al. 2013) by engaging participants to understand patterns and structures that may potentially create barriers to actions on the ground (Senge 1990). Given the critical nature of learning to participation in ACM, the gap in current levels of understanding warrants further

investigation. For instance, very little is known about the nature of learning that occurs in resource management contexts (Reed et al. 2010), and the ways by which learning can be facilitated, as well as the conditions under which it occurs (Biggs et al. 2012). Furthermore, far too little attention has been paid to analyzing learning in the context of projects and programmes (van Herk et al. 2015), which offers less field experience to inform future ACM practices (Armitage et al. 2008). Similarly, Yu et al. (2016) have stressed the need to explore learning in different contexts, such as in FPAs in Africa, including how, why and the extent to which learning occurs (Newig et al. 2016). Therefore, by investigating the nature of learning in ACM, this thesis contributes to research examining the role of learning in participatory governance in FPAs.

1.5.3   Power

Exploring power relations in ACM practices requires answering questions about how power is understood, shared and exercised (Borrini & Jaireth 2007). Questions such as who is involved, how they are involved, and on whose terms such involvement is created are bound to be asked in analysis that is sensitive to the political relations of ecologies and economies in communities and the broader institutional context (Robbins 2012; Lawhon & Murphy 2012). Therefore, an analysis of power relations in participation and learning inevitably leads to questions about how power is exercised (Gillespie 2012). However, the concept of power does not lend itself to simplistic definitions, being the subject of decades of ongoing scholarly debates. Two views have been distinguished in the literature: an agent-centered view and a realist view, which are commonly described in relation to three aspects (Raik et al. 2008). The first aspect is "power as coercion" (Lukes 2005), which limits the discussion of power to a simplistic view that some individuals and entities have more control and others do not, allowing them to do what others would otherwise not do (Dahl 1957 p.203). The second aspect views power as a "constraint", exercised to ensure inaction on identified challenges (Raik et al. 2008). Both agent-centered

views limit knowledge about the dynamic nature of power, because they conceptualize the individual as "possessor of power" and say nothing about the underlying social relations of importance (Raik et al. 2008). Therefore, a third dimension arises that understands power as forces above and external to the individual (Clegg 1989), which emphasizes that power resides within groups and emanates through the practices of institutions (Raik et al. 2008). Political ecology is attentive to this view, focusing on the ways in which power is exercised within individuals, rather than over individuals, communities and societies (Peet et al. 2010). Put differently, individuals are the "vehicles of power, not its points of application" (Foucault 1980 p.98). Thus, power is considered to exist in the practices, relationships, and discourses that structure daily life (Kesby 2005), which involve both the "powerful" and their "subjects" (Gillespie 2012).

In this thesis, the analysis of the utility of ACM goes beyond the observable essences of power as coercion and constraint to account for the social structural characteristics that define and shape interests. This interpretation of power is present in the practice of ACM, with claims that power imbalances often marginalize local people in negotiated decision-making and knowledge exchange with more influential participants (Armitage et al. 2008; Plummer et al. 2012). Much of the justification for encouraging participation and learning in ACM stems from the idea that local people are disadvantaged due to their social position, which means that social stratifications such as resource managers (e.g., government officials) are more powerful than resource users (Nadasdy 2007). Despite this recognition of the centrality of power to the practice of ACM, little empirical attention has been paid to the workings of power in FPAs. The gap in current levels of understanding of who decides what to do, how decisions are made, how roles are shared, and who is, or should be held accountable for resulting outcomes" (Borrini-Feyerabend et al. 2013), warrants further investigation.

1.5.4   Institutions

In the context of environmental governance, power in ACM is considered the result of the adaptive and collaborative management process rather than as an organizing condition (Raik et al. 2008). In this regard, participants contribute to a collaborative process of problem-solving through deliberation and negotiation facilitated by specific structures (Carlsson & Berkes 2005). This perspective focuses ACM more on function (or on utility) rather than on the existence of formal and informal structures, which leads to the next key concept examined in this research-institutions. Institutions, in the context of ACM, refer to "arrangements where responsibility for resource management is shared between the government and user groups" (Sen & Raakjaer Nielsen 1996 p.406). As such, ACM itself is an institution (Chuenpagdee & Song 2012) that can be examined to gain an understanding of how resources are governed (Cleaver 2012), "how people get access to resources, how much they can access, when, for how long, and access to which resources" (Nunan et al. 2015 p.204). Therefore, by examining institutional practices in ACM, this thesis contributes to research examining how individuals and groups of individuals influence whose voice matters in decision-making, what kinds of practices are accepted despite formal decisions and rules, how decision-makers respond to the needs of local people and communities, and how such actions are affected by social interactions, power relations, gender norms, and other contextual conditions (McDougall et al. 2013; Hall et al. 2014; Nunan et al. 2015).

1.6 Research propositions

Following from the political ecology lens and key concepts described in the preceding sections, the propositions to be examined in this thesis are that:

1) The nature of participation and learning in ACM reflects the diverse sources,

conditions and ramifications of power relations in FPAs; and

2) The nature of participation and learning in ACM reflects the quality (design) and strategic interests of institutional arrangements in FPAs.

1.7 Methodological approach

This thesis follows a critical realist ontology and epistemology (Teddlie & Tashakkori 2009), which employs both qualitative and quantitative methods and procedures to explore the paths, prospects and pitfalls of ACM-based governance practices in the GRNP in Sierra Leone. Data is collected in two forest communities that are selected purposively for their suitability to explore the key concepts of participation, learning, power, and institutions analyzed in this thesis (Eisenhardt & Graebner 2007). Mixed methods research is appropriate because of its potential to reduce bias and produce detailed knowledge about the research problem (Creswell 2013). The quantitative method used includes a survey of households and organizational informants, while the qualitative modes of enquiry include in-depth interviews, focus group discussions and documentary analysis. These data are analyzed separately and reported using charts, percentages and direct quotations (Teddlie & Tashakkori 2009).

1.8 Contributions

This thesis is a crucial academic undertaking because to date, relatively little data exists on the main achievements and shortcomings of ACM, and the key issues practitioners and local communities face in FPAs, despite being increasingly recognised as the way to go in reconciling the goals of conservation and development. Murphree (2004) has highlighted the lack of research on communal approaches (such as ACM) to natural resources management in Africa, while Plummer and Hashimoto (2011) have stressed the need for research on ACM efforts in various cultural contexts. The gap in current levels of understanding of the nature and outcomes

of participation and learning in ACM, especially in FPAs in Africa, warrants further investigation. This is because many rural communities depend on forests to meet their daily subsistence and income needs (Kaimowitz 2003; Phiri et al. 2012), implying that forests contribute directly or indirectly to economic development and growth in these places (Agrawal et al. 2013). Therefore, with a political ecology lens, this thesis contributes to knowledge about who participates in ACM practices, how, why (and why not), and to what extent. The thesis also contributes to research examining learning in ACM practices, focusing on learning for whom, as well as learning types, goals, mechanisms, roles, and barriers. These analyses inevitably lead to an understanding of the workings of power in FPAs, more specifically who decides what to do, how decisions are made, how roles are shared, and who is, or should be held accountable for resulting outcomes (Borrini-Feyerabend et al. 2013). Collectively, this thesis explores the pathways, prospects, and pitfalls of ACM in the GRNP in Sierra Leone, and hence, attempts to answer an enduring question about the influence of institutions and power relations on participation and learning in social-ecological systems (Plummer & Armitage 2007). Therefore, the thesis provides insights into the governance issues that matter in the pursuit of meaningful participation and learning in FPAs.

Furthermore, an analysis of the pathways, prospects, and pitfalls of ACM in the GRNP could contribute to REDD+ policy and practice in Sierra Leone, and Africa generally. Practical applications of ACM to other governance situations like REDD+ have not been fully defined. Therefore, an investigation into the nature of participation in ACM could help an understanding of the stakeholders that will be consulted and invited to provide input to REDD+, as well as those that will be empowered and conferred decision-making authority (Schroeder 2010). Moreover, an analysis of the nature of learning in ACM could provide lessons for increasing the adaptiveness of local REDD+ projects, since "adaptiveness" relates to learning and knowledge generation to tackle deforestation and forest degradation (Corbera & Schroeder 2011). Similarly,

insights into the workings of power and institutions in FPAs could be useful in understanding how rules are negotiated and administered (Paavola & Hubacek 2013), and how the quality of forest management decisions can be enhanced (Gupta 2008). Generally, this thesis contributes to empirical knowledge useful to spark debates on the kind of governance that can be facilitated to positively influence ACM practices in the field.

1.9 Organization of the thesis

The remaining part of this thesis proceeds as follows:

Chapter 2 reviews the literature on ACM to highlight current knowledge, key gaps and future directions for research. In doing so, the thesis gives prominence to two independently evolved strands of ACM research, Co-Management and Adaptive Management, to show the importance of participation and learning in multi-level, multi-actor governance practices.

Chapter 3 follows on from the literature review to describe the political ecology lens used to frame this research. It then goes on to describe the key concepts that underpin the analysis, which are: participation, learning, power, and institutions.

Chapter 4 provides a brief overview of the policy and research contexts for Adaptive Collaborative Forest Management in Sierra Leone. It presents a background to forest governance in Sierra Leone, highlighting key policy instruments, institutions, and actors. It then goes on to describe the research location- the Gola Rainforest National Park (GRNP), focusing on the emergence, design and delivery of ACM between 2002 and 2012.

Chapter 5 describes the methodology and methods used in this research. The first part describes the philosophical orientation, research design and methods for data collection. The second part

moves on to describe methods used to analyze, interpret, report, and validate data, and ethical issues considered at various stages of data collection, analysis, and reporting.

Chapter 6 is divided into four main sections, each of which presents the empirical results relating to the nature of participation in ACM practices in the GRNP in Sierra Leone. The sections include: 1) who participates; 2) how does participation occur; 3) why does participation (not) occur; and 4) outcomes of participation.

Chapter 7 is divided into five main sections, each of which presents the empirical results relating to the nature of learning in ACM practices in the GRNP in Sierra Leone. The sections include: 1) learning for whom; 2) learning goals; 3) mechanisms to support learning; 4) barriers to learning; and 5) impacts (outcomes) of learning.

Chapter 8 presents the first part of the discussion which explores the ways in which power relations influence the effectiveness of ACM practices in FPAs. The chapter focuses on nine broad political ecological themes to explore the sources, manifestations and ramifications of power, thus critically reflecting upon the first proposition made in this research. The themes include: state incapacity (weakness) and the politics of structural dependence; international conservation NGOs and the trap of neoliberalism; chief power, representation, and the struggle for democracy; community group dynamics, politics of autonomy, and co-optation; discursive spaces, trapped knowledge, and legitimization; deliberative empowerment, contestation, and development; land, identity politics, and the tribal slot; gender and the politics of poverty; and peasant politics: from covert resistance to overt dissent.

Chapter 9 is the second part of the discussion which moves on to consider in greater detail the institutional conditions that influence the effectiveness of ACM in FPAs. The chapter focuses

on seven broad political ecological themes to explore the influence of institutions in ACM, thus critically reflecting upon the second proposition made in this research. The themes include: territorialization: state spaces and the friction of terrain; locally-based NGOs: puppets or seeds of change; community agency and engagement; driving ownership: credible commitment or incentive alignment; transparency and accountability: matching parts or Siamese twins; ties and trust: coordination and the trust-control nexus; and the institutional design: ambivalent or contradictory.

Chapter 10 brings this thesis to a close by highlighting the broader significance and major contributions of the research to ACM theory. The chapter also provides recommendations for policy and practice, and suggests directions for future research.

Chapter Two

The Adaptive Collaborative (Co-) Management Literature

2.1   Introduction

This chapter presents a review of the Adaptive Co-Management (ACM) literature to highlight current knowledge, key gaps and future directions for research. The chapter gives prominence to two independently evolved strands of ACM research, Co-Management (CM) and Adaptive Management (AM), to show the importance of participation and learning in multi-level, multi-actor governance practices in social-ecological systems (such as forest protected areas). The chapter demonstrates that although the implicit message of current scholarship is that ACM enhances participation and learning, there is limited evidence of its paths, prospects and pitfalls in FPAs, which is a significant gap that this research intends to bridge.

2.2   Transition from "government" to "governance"

A great deal of previous research into forest governance has focused on the role of government, considering the dominant role nation states perform as developers and implementers of forest protection policies and procedures (Büscher & Dietz 2005; Lemos & Agrawal 2006). Kaimowitz (2003) suggests that the attention is partly because millions of people in Sub-Saharan Africa obtain a major share of their livelihoods from forests and forest resources. In the same vein, Shackleton et al. (2011) note that forest products form a major part of the

physical, material, economic, and cultural lives of people living in rural communities in Africa. For example, an estimated 70% of Sierra Leone's population lives in rural areas, depending on agricultural income and forest resources for their livelihoods (Beevers 2012). One study by Shackleton et al. (2007) found that forest communities show high dependence on forest resources because they are mostly located within rural and remote areas that are relatively underdeveloped in terms of government services, markets, and infrastructure. As such, forest communities are depicted by high levels of poverty and limited livelihood opportunities (Sunderlin et al. 2005), which present two fundamental challenges. Firstly, forest communities are faced with a "development challenge" because they are mostly marginalized in the making and implementation of decisions. Secondly, forest communities often face a "conservation challenge" arising from the threat of resource depletion that looms as people continue to use forest resources to meet their daily needs (Shackleton et al. 2007). Nonetheless, forest products provide significant economic returns, making sustainable use an effective way to achieve the dual objective of conservation and community development (Shackleton 2001; Sunderlin et al. 2005).

Although national governments have made remarkable efforts to ensure sustainable use of forest resources by protecting forests in many communities across Africa (Colfer et al. 2012), the literature has emphasized that they have been bad managers in many ways. For example, Ongolo (2015) argues that state forestry encourages resource exploitation in ways that may not be in sync with local priorities and the state's own conservation goals. Similarly, Alemagi and Kozak (2010) found that state forestry facilitates the issuance of concessions to business enterprises without having effective means of monitoring and accountability. This view is supported by Isikhuemen & Matthew (2014) who write that state forestry exposes forests to illegal and unsustainable resource use due to challenges with human, technical, and financial resources, and estranges local communities by informally promoting corrupt practices in forest

value chains and timber markets. As such, the ethicality and efficacy of state forestry has been questioned by conservationists, international donors, and local protest groups (Bose et al. 2012), who accept that restrictions are harmful to local wellbeing and may stir conflicts that could undermine conservation efforts (Brandon & Wells 1992). These efforts have drawn from notions of participatory management, which emphasize that because local people use and own forest resources, they should have a pivotal role in management processes. Terminologies frequently used to describe ways by which local people's abilities and knowledge could be tapped to make conservation more enabling and culture-friendly include Integrated Conservation and Development Projects (ICDPs) and Community-based Natural Resources Management (CBNRM) (Dressler et al. 2010). Although these approaches emerged with promise and hope to address local concerns about state forestry, they have been caught up in complex administrative and policy arrangements (Blaikie 2006), and a resurgence of protectionist conservation (Adams & Hutton 2007).

These practical drawbacks and conceptual critiques of state forestry have made "forest governance" a major catchphrase in the forestry literature. Arts (2014) points out that the transition from "forest government" or state forestry to "forest governance" has been influenced by questions about the kind of governance that would lead to sustainable forest management. The term governance refers to "the setting, application and enforcement of rules…" (Kjaer 2004 p.12), or the "entire range of activities of citizens, elected representatives, and public professionals as they create and implement public policy in communities" (Box & Sagen 1998 p.2). Crabbé and Leroy (2008) identify accountability transparency, responsiveness, equity, inclusion, effectiveness, and following participatory, consensus-oriented decision-making as benchmarks used to evaluate governance. In the context of environmental protection, Lemos and Agrawal (2006 p.298) see governance as "a set of regulatory processes, mechanisms, and organizations through which political actors influence environmental actions and outcomes".

Therefore, although environmental governance is a subset of the broader governance literature, some important differences can be identified. For instance, Armitage et al. (2012) suggest that environmental governance arrangements use institutions and incentives to forge collective action, which is rationalized by the limited capacity of government actors acting alone to solve environmental problems (Ludwig et al. 2001). Likewise, De Loe and Kreutzwiser (2007) hold the view that environmental governance practices include conscious efforts to give resource users a greater role in decision-making and benefit sharing, and place a strong emphasis on involving different kinds of knowledge and perspectives. In a similar vein, some authors (e.g., Glasbergen 1998; Armitage et al. 2009) claim that the environmental governance literature shifts attention away from simple notions of accountability and authority to how society should be organized, how problems should be addressed, and by whom.

This shift has engendered the evolution of participatory models of governance that involve state and non-state actors collaborating to address mutual concerns. Armitage et al. (2012) maintain that in these new ways of governing, governments are not, and cannot be, the principal source of decision-making authority because the governance process must include diverse views, opportunities for collaborative learning, and partnerships among state and non-state actors. Therefore, Backstrand et al. (2010) suggest that understanding the transition from centralized to participatory governance requires gaining insights into how actors govern, the role of the state relative to other actors, and the ways by which specific outcomes are achieved. They note further that the transition requires understanding whether and how actors make efforts to move toward deliberative processes and greater participation, or in search of ways to offload responsibility (Backstrand et al. 2010). In the context of forests, Giessen & Buttoud (2014) call for inquiring into decisions taken to manage forests, their execution, and resulting outcomes within a defined institutional and governance framework. In these respects, Larson and Soto (2008) argue that the environmental governance literature provides an analytical lens for

understanding how and why actors act to achieve conservation outcomes and on whose terms and conditions. In this regard, Lockwood et al. (2010) propose a strong focus on participation and learning alongside other issues such as legitimacy, transparency, accountability, inclusiveness, fairness, integration, capability, and adaptability.

2.3   Understanding Adaptive Collaborative Management

In the environmental governance literature, one participatory approach that is receiving increasing attention as a way of achieving the dual objective of conservation and community development in protected areas is Adaptive Collaborative Management- ACM (Whaley *&* Weatherhead 2016). ACM blends the participation attribute of Co-Management (CM) with the learning attribute of Adaptive Management (AM) to forge relationships between resource users and managers for the effective governance of resource systems (Olsson et al. 2007). Murphree (2004) advances three reasons for the employment of such approaches to manage natural resources (such as forests) in Africa, including: first, to increase local engagement in conservation actions; second, to address poverty reduction challenges through livelihood enhancement; and third, to develop appropriate institutions and organisations. Armitage et al. (2012) assert that these three objectives reflect the purposes of "good" environmental governance, which emphasize participation and learning to build effective institutions.

Dressler et al. (2010) argue, however, that ACM may end in less than ideal outcomes in practice based on the design and delivery approach used. In addition, some authors (e.g., Kull 2002; Jones & Murphree 2004) argue that the ACM literature on forests is replete with assumptions that sustainable forest management is most likely to occur where local users manage and derive benefits from forests. Nelson and Agrawal (2008) explain that the premise underlying this position is that vesting local users with rights to manage, use or own forest resources can help to address forest loss, which is attributed to centralized management regimes in African states.

These accounts emphasize that although ACM is touted as the way to go in natural resources management (Gardner et al. 2013), empirical evidence about its efficacy in FPAs is limited. Therefore, to bring some clarity to these perspectives and sharpen our understanding of what we mean by Adaptive Collaborative Management (ACM), the following sections review its two main strands, Collaborative Management (CM) and Adaptive Management (AM). The aim is to reveal some of the main fault lines that have emerged in the application of ACM to date, and describe where this thesis takes its key attributes- participation and learning- both conceptually and empirically.

2.3.1 Strands of Adaptive Collaborative Management

2.3.1.1   Collaborative (Co-) Management (CM)

The concept "collaboration" is used to refer to processes that involve people to explore their differences and mutual interests, and then take actions that are agreeable to all parties (Petheram et al. 2004). Gray (1989 p.5) argues that for a process to be "collaborative", it must transcend organized participation, since the goal of collaboration is to bring stakeholders together to develop shared goals and find strategies for achieving those goals. Therefore, collaboration itself is an emergent property, that is, it comes from the efforts of the participants, rather than a plan or objectives of an organization (Petheram et al. 2004). This contrasts with "cooperation" and "coordination", which do not progress as a process, given their static focus on inter-organizational relations. Petheram et al. (2004) suggest that in "collaborative management", the parties are involved in developing a process, including pre-negotiations and negotiations needed to enhance participation. Generally, collaborative management, known in short as "co-management", has been used to describe links between state governments and local communities (Armitage et al. 2007). It spans between a dualistic mode of power sharing involving governments and communities (Pinkerton 1989; Berkes et al. 1991) to others that

may involve a much wider group of participants drawn from government agencies, local

communities, civil society, and the private sector (Plummer & Fitzgibbon 2004). A seminal

study in this area is the work of Carlsson and Berkes (2005) which underscores that CM

involves consultation, collaboration, and delegation (see table 2.1), and may serve as an

exchange system (for sharing information and exchanging knowledge), a joint organization (for

shared decision-making), a state-nested system (with the state wielding absolute power), and a

community-nested system (with local stakeholders accorded the same rights as their state-level

counterparts).

	Consultative	**Collaborative**	**Delegated**	
Government has the most control	Government interacts often but makes all the decisions	Government and the stakeholders work closely and share decisions	Government lets formally organised users or stakeholders make decisions	People have the most control

Table 2.1 Types of co-management (ICLARM & IFM, 1998:107 Cited in Armitage et al. 2007)

Therefore, the concept of "power sharing" features prominently in descriptions of co-

management (Pinkerton 1989; Berkes et al. 1991; Pomeroy 1995; Castro & Nielsen 2001).

Pinkerton (2003 p.62-63) argues that "co-management is misnamed unless it involves at least

the right to participate in making key decisions", specifically about how a resource should be

used, by whom and to what extent. Power sharing is believed to increase local engagement in

governance processes, which, in turn, substantially improves the quality and condition of the

forest, over and above the levels at which a government might be able to do independently

(Angelsen & Wunder 2003). Otto et al. (2013) add that CM processes that share power have a

greater chance of influencing the way forests are managed, and do better at safeguarding and

diversifying local benefits. Pomeroy (1998) notes, however, that power sharing depends on

site-specific conditions, which also influence the nature of power, roles and authority that can

be shared. These perspectives speak to requirements for designing and delivering CM practices, including ways to plan a process that is appropriate to local conditions (Petheram et al. 2004). "Appropriateness" in this context, implies knowing what it takes to plan, to explore and to accommodate diverse interests, as well as finding ways to reach agreements for action (Lockwood 2010). This perspective emphasizes that no two processes for CM are similar, because they are designed to suit local circumstances (Cinner et al. 2012).

Co-management is put into practice in forest communities for various reasons. Gutiérrez et al. (2011) found that CM may be developed in response to shortfalls in centralized arrangements. Some authors (e.g., Jentoft 1989; Berkes 2002) note that CM is employed to increase legitimacy, or local acceptance of management decisions. CM approaches are also appealing because they offer to address biodiversity conservation challenges (Lele et al. 2010; Minang & van Noordwijk 2013) while solving livelihood and poverty reduction problems in forest communities (Ribot et al. 2010). Moreover, CM arrangements typically involve local communities to foster sustainable resource use given their proximity to forests and forest resources, their interest in the management of these resources for livelihood purposes, and their understanding of local conditions (Béné et al. 2009). Similarly, CM is preferred to centralized governance approaches because it allows user groups to formulate and apply their own rules and procedures for resource management (Coulibaly-Lingani et al. 2011). Other reasons include to: 1) increase the flow of resources to communities, as a way of addressing poverty reduction challenges (Brown 1999); 2) increase local awareness about and interest in forest conservation by providing ways to manage the forest to make a living (White & Martin 2002); 3) introduce discipline into management practices and offer checks and balances on otherwise unregulated public services (Brown 1999; Schumann 2007); 4) reduce conflicts and build trust between user groups and forest managers (Leys & Vanclay 2011; Redpath et al. 2013); and 5) enhance the effectiveness and equity of conservation actions, and provide a means of

influencing the decision-making processes that underwrite forest management (Castro &
Nielsen 2001).

Despite these important roles for CM in forest communities, the literature identifies many
drawbacks. For instance, despite implementation in Asia and Africa, local views are that CM
processes have generated limited benefits (Shackleton et al. 2002; Cinner et al. 2012; Ribot &
Larson 2013). Moreover, literature has noted that it can be difficult to promote CM in
communities that may not be interested in the long-term protection and maintenance of forests
and forest resources, because these communities may see deforestation to be of greater benefit
to local livelihoods than conservation (Tacconi 2007; Larson 2010). At the same time, some
communities may perceive sharing power and control over a common pool resource with
government and other resource managers as an opening for exploitation (Sunderlin et al. 2005;
Borrini-Feyerabend et al. 2013). Furthermore, in communities with established traditions and
social hierarchies, CM may engender the alienation of marginalized groups by entrenching
existing powers and privileges (Kumar et al. 2015). Hence, the process of building trust and
facilitating collaborative relationships in CM arrangements is often problematic due to past
experiences and perspectives about the role of forest managers in local governance practices
(Schreckenberg & Luttrell 2009).

2.3.1.2   Adaptive Management (AM)

Adaptive Management (AM) evolved in response to the shortfalls of Co-Management
(Armitage et al. 2007). In a technical context, adaptation (or adaptive management) usually
refers to a process, action, or outcome geared towards better coping with, managing, or
adjusting to some changing condition, stress, hazard, risk, or opportunity (Smit and Wandel
2006). Adaptation has been used both explicitly and implicitly in the political ecology literature
(e.g., Walker and Cooper 2011; Voß and Bornemann 2011), including in navigating

relationships between ecosystems and political economy, which is often treated as an issue of adaptive management of risks related to political and social power relations, resource use, and global economies (Blaikie and Brookfield, 1987; Sen, 1981; Walker 2005). The fundamental attribute of this field is its demonstration of how the adaptive capacity of individuals, households or communities is shaped and constrained by social, political, and economic processes at higher levels (Smit and Wandel 2006). Here, AM is treated as a manifestation of adaptive capacity, focusing on learning, information, and other resources to better deal with problematic exposures and sensitivities (Smit and Wandel 2006). The term is used to describe experiments with different policy ideas such that results from one situation are used to inform subsequent decisions made (Holling 1978; Walters 1986; Susskind et al. 2012). The emphasis is on formulating an effective policy, implementing it, adapting lessons over time, and making subsequent decisions on the basis of lessons learned (Ostrovskaya et al. 2013; Fernández-Giménez et al. 2015). In a local context, such forms of learning are based largely on experience-not necessarily excluding knowledge by literacy (Buck et al. 2001), with a focus on tailoring learning structures and processes to suit local conditions. Lee (1993) notes that learning through experience may involve continuously planning, executing, and monitoring local processes to improve policy practice. Within these contexts, Canter and Atkinson (2010) have conceptualized AM in view of three properties. They conclude that a management process (practice) can be said to be "adaptive" when it: 1) is systematic; 2) accounts for learning outcomes that improve management decisions; and 3) focuses on results to continuously assess and tailor processes to prevailing conditions (Canter & Atkinson 2010).

The ACM literature has distinguished two important models of AM: passive AM and active AM (McDonald-Madden et al. 2010; Williams 2011). Passive AM emerged from the concept of "sequential learning" (Bormann et al. 1999), which refers to the use of historical perspectives and experiences to determine the best strategy for governance. In such case, AM is based on

responses to previous policy and management instruments, though passive AM assumes that governance conditions are not significantly altered, applying ex post-facto analysis of perspectives to inform management choices (Stankey et al. 2005). While this kind of AM may cause ecosystem improvements, it is mostly unclear whether resulting outcomes are the effect of management interventions or external factors and conditions (Argent 2009). In contrast, active AM employs policy instruments as experiments to provide feedback on management actions, and test the relative effectiveness of various approaches rather than depend on one known strategy. This kind of AM emerges from the concept of "parallel learning" (Bormann et al. 2007), which refers to comparing and evaluating multiple procedures and policy instruments simultaneously, and integrating external influences into the process being governed (Pahl-Wostl 2009).

AM also has significant shortcomings. Literature shows that AM processes depict more rhetoric than reality, especially for explaining the links between learning processes and specific governance outcomes at different levels (Lee 1993). Lee (2001 p.4) has noted that "AM has been more influential, so far, as an idea than as a practical means of gaining insight into the behaviour of ecosystems utilized and inhabited by humans". This is partially attributable to inconsistencies in interpreting AM in the field, resulting in a lack of consensus about what is required for learning and how it can be achieved (Bown 2010). It could also be attributed to challenges to putting AM into practice because they require effective and sustained leadership (Allen & Gunderson 2011), effective participation (Schreiber et al. 2004), and functional social networks at the local level (Folke et al. 2005). Other problems for AM in practice include limitations in distinguishing stakeholder preferences and values- economic versus environmental, resource managers versus user groups (Kusel & Sturtevant 1996), the dependence on experimentation, and the inherent difficulty of testing hypotheses when the governance regime is nested in cultural, social, political and institutional conditions (Folke et

al. 2005). AM is also limited in the kind of participation it facilitates, which has led to notions of "integrated AM" that place participation at the heart of learning interventions (Buck et al. 2001), though many writers argue that the approach fails to address power imbalances and ensure responsibility for governance outcomes (Stringer et al. 2006).

2.3.1.3   A blend of the two strands- Adaptive Co-Management

The foregoing literature review shows that an extensive theoretical base has evolved for both co-management and adaptive management. It underscores that key attributes of CM (participation) and AM (learning) are central to the theory and practice of Adaptive Co-Management (ACM). The limitations of both CM and AM imply that merging the two concepts engenders an approach that is distinct in many senses. For instance, ACM establishes both vertical and horizontal relationships to facilitate participation and learning, and requires multiple iterations over significant periods of time (see table 2.2). ACM also works across multiple scales and levels, encompassing all stakeholders and strongly emphasizes building the capacity of all those involved (Berkes 2007). The result is a flexible system of resource governance that is suited to particular places and conditions, supported by, and working in line with, various structures at different scales (Buck et al. 2001; Olsson et al. 2004; Colfer 2005). It is believed that social-ecological uncertainty is best addressed through collaborative processes and the recognition that multiple sources and types of knowledge are required to solve resource management problems (Smit and Wandel 2006).

Feature	Collaborative Management (CM)	Adaptive Management (AM)	Adaptive Collaborative Management (ACM)
Focus on establishing linkages	Establishing vertical institutional linkages	Learning by doing in a scientific and deliberate way	Establishing horizontal and vertical linkages to carry out joint learning-by-doing
Temporal scope	Short- to medium-term: tends to produce snapshots	Medium-to long-term: multiple cycles of learning and adaptation	Medium to long-term: multiple cycles of learning and adaptation

Spatial scope	Bridging between local level and state level	Focus on managers' needs and relationships	Multi-scale, across all levels, with attention to needs and relationships of all partners
Focus on capacity building	Focus on resource users and communities	Focus on resource managers and decision makers	Focus on all actors

Table 2.2 Comparing CM, AM, and ACM (Berkes et al. 2007 p.309)

A commonly accepted definition of ACM is hard to find in the literature, so the concept is often defined in terms of its attributes (Ruitenbeek & Cartier 2001). In the broadest terms, ACM is understood as a blend of the linking attribute of CM (associated with collaboration) and the dynamic learning attribute of AM (Carlsson & Berkes 2005; Armitage et al. 2007). Olsson et al. (2004 p.75) conclude that "adaptive co-management systems are flexible community-based systems of resource management tailored to specific places and situations and supported by, and working with, various organizations at different levels". In the context of forestry, Colfer (2005 p.4) suggests that "ACM is characterized by conscious efforts among such groups to communicate, collaborate, negotiate and seek out opportunities to learn collectively about the impacts of their actions". In the scope of this research, the concept of ACM will be understood as "a value-adding approach whereby people who have interests in forest management agree to act together to plan, observe and learn from the implementation of their plans" (Colfer & Prabhu 2008 p.2).

Based on this definition, ACM takes on two important characterizations: first, "collaborative view" that stresses the relevance of participation to governance processes; and second, an "adaptive view" that focuses on learning processes, and their impacts on participation and governance outcomes (Colfer & Prabhu 2008). In other words, ACM can be distinguished along three themes: "a horizontal theme", which relates to relationships between stakeholders at the same level (such as between communities and organizations); "a vertical theme", which is concerned with relationships between stakeholders at different levels (such as government

agencies and local communities); and "a progressive (or iterative) theme", which underscores the importance of learning to the construction and maintenance of these relationships (Colfer & Prabhu 2008). Both interpretations reinforce the understanding that ACM is an approach to participatory governance, given its focus on shifting from centralized control to collaborative management practices (Plummer & FitzGibbon 2004). As such, ACM can be visualized as "a governance system involving networks of multiple heterogeneous actors across various scales which solve problems, make decisions and initiate actions" (Fennell et al. 2008 p.20). In this context, ACM represents a transition from government to governance (Plummer & Fennell 2009), and thus, provides a strategy for environmental governance involving interactions that seek to address societal challenges and create societal opportunities. In other words, ACM facilitates the formulation and employment of good governance principles to guide resource management interactions and support the institutions that enable them (Kooiman & Bavinck 2005 p.17).

Plummer and FitzGibbon (2004) argue that ACM exhibits attributes of "pluralism" because it involves actors from diverse spheres of society who may have varying interests, "communication and negotiation" because it allows shared understanding and agreement to develop through information sharing, "transactive decision-making" because it accommodates multiple sources of knowledge and manifestations of power in making and achieving decisions, and "learning and adaptation" because it provides opportunities for knowledge generation through which outcomes are jointly reviewed to properly adapt future decisions and actions. Therefore, it is obvious that much of the inspiration for and enthusiasm surrounding ACM emerges from expectations of and results for CM. Plummer & FitzGibbon (2004) synthesize these results to include enhanced decision-making which enhances equity and efficiency, enhanced capacity and empowerment at the local level, integration of multiple knowledge sources, and enhanced legitimization of objectives. Thus, in exploring ACM, the question often

asked is what role ACM plays in the allocation of tasks, exchanging knowledge, linking different levels and types of organizations, sharing risks and power, and reducing transaction costs (Carlsson & Berkes 2005). These questions are based on whether ACM increases the expectations of user groups (Folke et al. 2002), fails to promote efficiency and equity (Plummer & FitzGibbon 2004), lessens rule compliance and intensifies conflicts (Jentoft 2000), tilts the balance of power, and deepens existing marginalization (Castro & Nielsen 2001). The questions take ACM into the realm of governance, which is the central focus of this thesis- to understand the social arrangements through which rules, institutions and incentives are developed. Brown (2003) and Ostrom (2005) have argued that social arrangements influence ecosystem management outcomes, making their understanding a first step in the creation of sustainable communities and ecosystems. Armitage et al. (2009) concur that creating the social and institutional space for ecological interactions is a bigger challenge, because environmental resources are contested by multiple stakeholders and management processes and institutions are often internally divided. They call for new research to further support effective ACM interventions under these challenging social conditions, focusing on the thematic areas outlined in the next section (Armitage et al. 2009).

2.3.2 Thematic areas of Adaptive Collaborative Management

2.3.2.1   Institutions, incentives and governance

Understanding how institutions evolve and work generates useful insights for resource governance in diverse contexts (Ostrom et al. 2002). Factors such as group size and levels of homogeneity, reciprocity and trust in social dilemmas, benefit and cost distribution mechanisms, the existence of monitoring systems, and clearly defined resource system boundaries, are often underlined (Armitage et al. 2009). These understandings, however, derive mainly from the study of self-managed processes of common pool resources. Few published studies have examined the complexities of multi-stakeholder and multi-scaled governance

processes (e.g., Pinkerton 1994; Brown 2003), which indicates a significant need for further ACM research. In the context of ACM, the challenge of multi-scaled, or multi-level governance is recognised in terms of deliberative processes involving all stakeholders, redundant and layered institutions, and a mix of institutional types (Dietz et al. 2003). These conditions may take a decade or more to mature to the point where levels of trust and social capital underpin self-organizing systems of governance. The point is that interactions attributed to institutional arrangements for ACM are not necessarily fixed in time and space, which implies that governance processes should vary with context (Armitage et al. 2009).

2.3.2.2   Learning through complexity

A key limitation of command-and-control paradigms of resource management is the struggle to learn from social-ecological feedback to be able to tailor governance actions to local conditions (Gunderson & Holling 2002). ACM research considers learning to be a fundamental starting point, and goes further to require specificity in terms of learning objectives, mechanisms, barriers, and outcomes. What this means is that learning under conditions of complexity and uncertainty involves efforts to build trust through dialogue and deliberation. It also requires tapping from diverse strategies- whether experimental or experiential- to collect, decipher, and utilize social-ecological feedback (Armitage et al. 2009). In broad terms, learning strategies seek to develop flexible institutional arrangements and organizational structures that encourage and facilitate reflection and innovation (Cook et al. 2004). Thus, learning leads to the creation of a shared understanding of the consequences of actions and behaviors, and the possibilities for positive change that can emerge as a result of involvement in ACM processes (Armitage et al. 2009). What is apparent in this section is that ACM requires a model of learning that accounts for the social context, including who is learning, why, and linkages among learners. So, both individual and group learning outcomes are important, as well as how learning objectives and strategies are articulated.

2.3.2.3   Power asymmetries

As mentioned before, ACM-based governance processes focus on the social processes that encourage and facilitate trust building, conflict resolution, and social learning. These elements highlight the role of power in ACM, including its sources and manifestations, especially how it persists through control, resistance, and solidarity, as well as its influence on participation and learning. Therefore, establishing an ACM arrangement relies first upon a clear understanding of the social, economic, and other sources of power which influence society more broadly. This should be accompanied by an understanding of class, ethnicity, gender, and the other structuring dimensions of society, which limit flexibility and the sharing of governing authority (Armitage et al. 2009). Insights into these tendencies help an understanding of interests, values, responsibilities, and roles, which portray how stakeholders compete rather than collaborate in the management of common pool resources.

2.3.2.4   Assessment: monitoring, indicators and outcomes

"Assessment" in ACM explicitly places a priority on collecting and responding to feedback (Holling 1978). It is at the heart of delineating appropriate institutional responses to change, facilitating an adaptive approach, and learning at multiple levels (Bellamy et al. 2001). In many ACM situations, monitoring is used to position assessment, reflection, and learning in specific empirical contexts. Contextual specificity, however, makes it hard to develop and apply generalized blueprint solutions for monitoring (Armitage et al. 2009). Monitoring parameters must draw attention to both slow and fast variables (Gunderson & Holling 2002), and must lead to the selection of context-appropriate indicators based on ecosystem conditions, socioeconomic and livelihood outcomes, and process and institutional conditions (Armitage et al. 2009). This also requires matching indicators to the scale of the social-ecological system (Boyd & Charles 2006), and a concern for the role of different institutional arrangements in

determining what questions to ask, what outcomes to encourage, the choice of indicators used to assess outcomes, and the use of participatory processes for indicator development and monitoring (Prabhu et al. 2001; Garaway & Arthur 2004).

2.3.2.5   Linking to policy

ACM links scientists (researchers) with resource users, practitioners, and policy-makers through collaborative problem-solving. Yet, ACM processes are slow to develop, or will fail to develop at all, so care must be taken to create enabling policy conditions, including many of the conditions highlighted in the previous sections, such as more attention to assessment, directing additional funds to building the social sources of learning and adaptation, fostering flexible institutions and bureaucracies designed to work in a rapidly changing world, using the full range of knowledge sources, and explicitly considering the role of power. Where linkages to policy are fully established by suitably addressing the concerns above, the capacity for adaptation will be significantly enhanced, which will then foster social and ecological sustainability (see Armitage et al. 2009).

2.3.3 Characterizing the state of the ACM literature

Following the review of strands and thematic areas of ACM, this section characterizes the ACM literature in terms of context, components, and consequences, to understand which questions are relevant to the current study by identifying gaps in current understanding and analysis. The aim is to provide a rationale for the systematic analysis undertaken in this thesis, and describe the various levels at which studies of ACM have been focused, key elements garnering scholarly attention, and some important results from ACM implementation.

2.3.3.1   Characterization based on "context"

Regarding "context", the literature can be distinguished in terms of scale of ACM, geographic location of resource or ACM processes analyzed, and the type of resource under ACM-based governance. The scale of ACM interventions can be grouped into three: regional, national, and local. "Regional" is used to refer to cases of research describing ACM interventions impacting more than one country; "national" specifically refers to cases describing ACM practices within countries; and "local" describes case studies on interventions within a specific community or cluster of communities. Examples of studies examining ACM structures, processes, outcomes at a regional scale include: Schultz et al. (2011) who analyzed survey responses from 146 Biosphere Reserves in 55 countries to investigate how stakeholder participation and ACM are linked to management performance, which is an assessment of the utility of ACM in the context of conventional conservation and sustainable development; Pomeroy (1995) who analyzed the impact of ACM arrangements in contemporary fisheries management in Southeast Asia; Nielsen et al. (2004) who studied various cases of implementation in Southeast Asia and Southern Africa; Castro & Nielsen (2001) who drew case material from Northern Canada and South Asia to explore the role of conflict in generating and shaping ACM regimes; Sandström et al. (2009) who studied decentralization strategies for large carnivore management in the three countries of Fennoscandia (Finland, Norway, and Sweden); and Cinner et al. (2012) who explored the transition to decentralization in marine resource management systems in three East African countries.

At the national scale, the ACM literature has paid more empirical attention to topics such as decentralization, organizations, culture, corruption, scenario planning, and participation. Some notable examples include: Pomeroy & Berkes (1997) who discussed the role of national governments in enabling decentralization in the fisheries sector; Clifton (2003) who

demonstrated the range of institutional and cultural barriers to effective resource management in Indonesia's Marine Protected Areas (MPAs); Nielsen and Vedsmand (1997) who examined the role of Danish fishermen's organizations in fisheries management decision-making, showing differences in motivation, capacity, and effectiveness in relation to participation in fisheries co-management institutions; Granek and Brown (2005) who evaluated local participation in biodiversity conservation in the Comoros Islands; Wollenberg et al. (2000) who demonstrated the relevance of scenario planning to community forest management in Madagascar, including how effective monitoring improved responsiveness and collaboration among stakeholders; and Klooster (2000) who examined corruption in community-owned logging businesses in Mexico. These examples of ACM analysis at a national scale often include material from local communities. However, there are cases of ACM analysis that are focused on the local context such as Singleton (2000) who examined conditions under which ACM is likely to be successful, and be vested in public or private interests, using material from communities in the US Pacific Northwest; Cronkleton et al. (2012) who examined forest management rights and how they are transferred to community-level organizations; Ming'ate et al. (2014) who have examined the extent to which ACM improves the livelihoods of forest communities in Kenya; and Crona & Bodin (2010) who studied links between informal power structures, knowledge sharing and consensus building in a fishing community in East Africa. Generally, studies focused on the local scale have mostly been interested in topics such as enabling conditions, power structures, knowledge sharing, tenure, and livelihood outcomes.

Another contextual factor that can be used to distinguish the ACM literature is "location", which encompasses both the geographical location of the resource being studied and the location of ACM processes being analyzed. Many studies have been undertaken on resource systems in Asia, Africa, Europe, and North America. In Asia, studies of ACM have mainly focused on ethics, cross-level and cross-scale linkages, institutions, and governance. For

example, Fennell et al. (2008) presented experiences with ACM in Cambodia focusing on the ethicality of decisions and actions. Other notable examples include: Marschke & Nong (2003) who examined the design and delivery of the Participatory Management of Mangrove Resources (PMMR) project in Cambodia; and Ratner et al. (2012) who traced the evolution of ACM in Philippines and Vietnam, focusing on learning and adaptation in fisheries management processes. In the case of Africa, the literature has paid explicit attention to topics such as social networks, participation in relation to adaptive capacity, livelihoods, and power sharing. Some useful examples include: Crona & Bodin (2006) who mapped a social network used for knowledge exchange and communication related to natural resource extraction in village in coastal Kenya; Robinson & Berkes (2011) who demonstrated how multi-level participation led to increasing adaptive capacity among Gebara pastoralist communities in northern Kenya; and Ming'ate et al. (2014) who evaluated devolution and livelihood outcomes of co-management in the Arabuko-Sokoke Forest Reserve (ASFR) in Kenya.

The focal areas for Africa are not considerably different from the focus of studies undertaken on Europe, where the focus has largely been on knowledge integration, enabling conditions, decentralization, institutions, and transaction costs. Few examples illustrating this focus include: Rivera et al. (2014) who examined knowledge integration and adaptive capacity in relation to gooseneck barnacle fishery in Europe; and Linke and Bruckmeier (2015) who identified conditions of success for European fisheries co-management. Studies on North America, specifically Canada, the United States and Mexico have paid more attention to institutions, social learning, knowledge co-production, and adaptive capacity. Few examples include: Armitage et al. (2011) who examined the role of institutions in creating enabling conditions for social learning and adaptation; Dowsley (2009) who analyzed Traditional Ecological Knowledge (TEK) in the context of wildlife co-management systems in Canada;

and Berkes and Armitage (2010) who investigated adaptive capacity in the context of climate change adaptation in indigenous communities in Canada.

A further representation of context in the ACM literature relates to the "type of resource" analyzed by existing studies. The focus has largely been on wetlands (including mangroves), water resources, forests, land, and fisheries. Running across these domains of research are topics such as governance mechanisms, decentralization, participatory research, institutions, networks, social learning, tourism, effectiveness, livelihoods, knowledge, and partnerships. A few notable examples for research on wetlands include Olsson et al (2004) who analyzed the evolution of ACM in Ecomuseum Kristianstads Vattenrike wetland in Sweden; and Schultz et al. (2011) who analyzed the effectiveness of ACM practices in 146 Biosphere Reserves. Regarding water resources, the focus has mostly been on institutional prescriptions for water governance (e.g., Huitema et al. 2009), knowledge integration (e.g., Engle et al. 2011), and partnerships (e.g., Moorman et al. 2013). The case of forests is rather peculiar because considerations of participation, learning, power, and institutions are far less common. More empirical attention has been given to outcomes of forest governance processes in relation to tourism (Plummer & Fennell 2009) and human livelihoods (e.g., Mukul et al. 2012). In the case of land resources, many of the studies have analyzed land use change in the context of hardwood plantation forestry in Australia (e.g., Leys & Vanclay 2011). The most prominent of these resource types in the literature is fisheries, which has been analyzed in the context of social networks and organizations (e.g., Crona & Bodin 2006; Sandstrom & Rova 2010), governance (e.g., Silva et al. 2013), participatory research (e.g., Trimble & Berkes 2013), and devolution and power sharing (e.g., Cinner et al. 2012). The co-governance of fisheries is the only experience on Sierra Leone that has been documented and analyzed in the literature (e.g., Baio 2010; Khan & Sei 2015), though studies have not explicitly examined issues of participation, learning, and power in these systems. Therefore, this thesis provides an initial insight into the

paths, prospects and pitfalls of ACM in relation to participation, learning, and power sharing in participatory forest governance in Sierra Leone, and Africa generally.

2.3.3.2   **Characterization based on "components"**

Based on the literature review done above, it can be observed that many elements (components) of ACM are garnering attention. The more recurrent ones contained in this review include participation, learning, networks and organizations, adaptive capacity, power, leadership, incentives, knowledge, monitoring, institutions, accountability, and legitimacy. On participation, a large and growing body of literature has investigated ways in which governance systems can include and support a diverse array of actors and actions across scales (e.g., Singleton 2002; Dietz et al. 2003; Ansell & Gash, 2008 cited in Plummer et al. 2013). These studies appear to be interested in different concepts of 'agency', including the use of a diversity of actors to fill various roles in an ACM process (Plummer et al. 2013). However, the greatest portion of these studies focus on participation in fisheries systems and Marine Protected Areas (MPAs). For example, Smith (2012) investigated the factors that influence stakeholder participation in co-management arrangements in MPAs within the wider Caribbean, while Hogg et al. (2013) explored the prospects for participation and decentralization in MPAs in the European Mediterranean. The case is not different for Africa, where many studies of ACM have focused on participation in fisheries governance (e.g., Cinner et al. 2012). The few studies with a focus on forestry have paid more attention to transaction costs (e.g., Blore et al. 2013) and livelihood resilience (e.g., Akamani & Hall 2015), rather than delving into the workings of participation, including who participates, how, why (and why not), where, on whose terms, and to what extent.

A similar observation can be made for the literature on learning, which has mostly emphasized the importance of learning to ACM (e.g., Armitage et al. 2008) and implications for feedback

creation (e.g., Plummer & Armitage 2007), rather than providing empirical accounts of learning goals, mechanisms, and constraints, who learns, and what roles they play. The large volume of published studies on learning (e.g., Folke et al. 2002; Folke et al. 2005; Armitage 2008; Armitage et al. 2008; cited in Plummer et al. 2013) have contributed to conceptualizations of three typologies of learning, including social learning, which focuses on building and sharing experiences, ideas and knowledge through an iterative process of engagement and reflection; experiential learning, which stresses the importance of learning-by-doing, and focuses on building experience, reflection, abstraction, and experimentation; and transformative learning, which is concerned with ways by which perceptions change as a result of continuous reflection, communication, deliberation and negotiation. The gap in current levels of understanding of the nature of learning in ACM practices warrants further investigation, particularly pressing for forest protected areas in Africa, where interactions, structures, and outcomes of learning are understudied and poorly understood.

The next set of components garnering attention in the ACM literature include networks and organizations, adaptive capacity, and power. Studies of networks and organizations in ACM are far more common in the literature, with researchers showing a growing interest in themes such as bridging organizations (organizations linking many actors), learning in social networks, adaptive management, adaptation, legitimacy, and linkages within social networks. Examples include Hahn et al. (2006) who studied the role of bridging organizations in linking biodiversity conservation and local development in the Kristianstads Vattenrike Biosphere Reserve in Sweden; Crona & Parker (2012) who have examined socio-environmental conditions under which learning occurs in ACM organizations; Sandstrom & Rova (2010) who investigated the relationship between different kinds of co-management structures and adaptive management; and Sandström et al. (2014) who determined the specific factors that influence legitimacy in ACM networks and organizations. Regarding adaptive capacity, there has been a strong focus

on ways to integrate adaptation pathways into rural development planning (e.g., Butler et al. 2016), climate change adaptation (e.g., Plummer & Baird 2013), social-ecological resilience (e.g., Akamani & Hall 2015), urban resilience (e.g., Crowe et al. 2016), and the place for learning and ACM in integrated flood risk management (e.g., van Herk et al. 2015). In these cases, the farthest shift in published practice has been to discuss the applicability of ACM to climate change adaptation (and climate-compatible development) in developing countries. The most illuminating contribution on this theme, perhaps, has come from Plummer (2013) who argues that ACM could contribute to climate change adaptation by building adaptive capacity and effective institutions. His contributions are relevant to this research, given the relevance of forest governance processes (such as REDD+) to climate governance in Africa. The other component, power, has been studied mostly in relation to property rights, participation, and legitimacy. However, much of the interest from Africa has sprung up around power relations that facilitate and hinder fisheries management systems at various levels (e.g., Njaya et al. 2012; Russell & Dobson 2011), leaving the workings of power in other contexts (such as forests) relatively underexplored. A notable exception, though, is Cronkleton et al. (2012) who explored the transfer of rights and associated power in forest communities, which, however, does not discuss power relations that underlie participation and learning as intended in this thesis.

The final set of elements that have featured recurrently in the ACM literature include leadership, incentives, knowledge, monitoring, institutions, accountability, and legitimacy. Leadership research has paid close attention to various interactions, functions, and strategies that shape roles, rights, and responsibilities in resource management contexts. For example, Sutton & Rudd (2014) have identified key knowledge gaps of leadership in Community-based Fisheries Management (CBFM) by studying interactions between leaders, their connection with and beyond their communities, and the contexts within which they function. Again, leadership research in the context of forests is developing, and there are fewer examples to draw on for

Africa (e.g., Reid et al. 2004; Jumbe & Angelsen 2006). The next theme garnering attention is incentives, which has been explored in the context of addressing resource dependence, participation, benefits, and enabling conditions (with respect to institutions). For example, Gutiérrez et al. (2011) have explored incentives for fostering local interest and involvement in fisheries governance; and Jumbe and Angelsen (2006) have examined the nature of local economic benefits that resulted from the devolution of forest management in Malawi. An initial contribution in this area of ACM research is Hauck & Sowman (2003) which suggested conditions (incentives) for the effective implementation of fisheries co-management in South Africa. Furthermore, a considerable literature has grown up around the theme of knowledge (sources, types, and processes) and its exchange in ACM practices (see Backstrand 2003; Hahn et al. 2006; Blackcock & Carter, 2007; Berkes 2009 cited in Plummer et al. 2013). The largest share of these studies explores themes such as knowledge generation (and co-production), knowledge integration, and Traditional Ecological Knowledge (TEK). Few notable examples include Dale and Armitage (2011) who examined challenges to knowledge co-production and implications for learning and adaptation in Canada; Butler et al. (2012) who examined the role of power sharing in the application of TEK; and Robinson and Wallington (2012) who explored knowledge integration in co-management practices in Australia.

Monitoring is equally underexplored because many ACM initiatives are still developing, and it takes about 10 years for its measurable components such as participation and learning to be fully established (Berkes 2004). Studies in this area have paid more attention to the methodologies and tools for assessing ACM processes and outcomes (e.g., Conley & Moote 2003; Garaway & Arthur 2004; Ostrom 2007; and Plummer & Armitage 2007 cited in Plummer et al. 2013). Among these studies, the most pioneering contributions, perhaps, have been made by Cundill and Fabricius between 2006 and 2014 (see Fabricius et al. 2007; Cundill & Fabricius 2009; Fabricius & Cundill 2014). On institutions (specifically design), some literature can be

found. These studies explore issues of fit, scale and interplay in designing and delivering governance processes (see Gibson et al. 2000; Ostrom et al. 2002; Dietz et al. 2003; Pahl-Wostl et al. 2008; Young et al. 2008 cited in Plummer et al. 2013). The extant literature in this area can be broadly categorized into two (2) groups: the first group comprises research that highlight the beneficial effects of linkages and interactions between organizations, but which fail to consider the dynamic aspects of these links; while the second group recognizes the relevance of cross-scale and cross-level interactions, though the meaning attributed to these concepts in practice is unclear (Plummer et al. 2013). Finally, accountability and legitimacy have attracted a great deal of research (see Paavola 2007; Beisheim & Dingwerth 2008; Ballesteros et al. 2010 cited in Plummer et al. 2013) concerning two (2) specific themes: first, the consideration of ACM as involving accountability or producing accountability, which emphasize the need for actors to collectively accept the consequences of their decisions and actions; and second, the consideration of ACM as a way to achieve legitimacy, which includes ways by which stakeholders recognize the diverse interests in and make contributions to a governance process (Plummer et al. 2013).

2.3.3.3   Characterization based on "consequences"

The experiences documented and analyzed in relation to ACM implementation in many parts of the world, and for various purposes, have produced various outcomes. Therefore, outcomes (results indicating failure and success) of ACM interventions also provide an important variable for characterizing the state of the extant literature. Here, the review briefly highlights some of the most important contributions, especially for interventions in Africa. The "consequences" are grouped into two broad categories: the positive and negative outcomes of ACM documented and analysed in the literature. In terms of positive outcomes, findings such as the establishment of networks to initiate collective action (e.g., Crona & Bodin 2006), cross-scale linkages (e.g., Wilson et al. 2006), improved livelihoods (e.g., Ming'ate et al. 2014), adaptive capacity (e.g.,

Rivera et al. 2014), enhanced conditions for social learning (e.g., Armitage et al. 2011), reduced dependence on natural resources, increased incentives (e.g., Mukul et al. 2012), sustainable tourism (e.g., Plummer & Fennell 2009), and transfer of power to fishing communities (e.g., Campbell et al. 2013) have been recurrently reported. Conversely, studies that have delved into detrimental impacts of ACM have focused on unsatisfactory compromises between conservation and development (e.g., Schultz et al. 2011), inadequate rule enforcement (e.g., Granek & Brown 2005), limited transfer of power and authority (e.g., Sandstrom 2009), limited knowledge exchange (e.g., Crona & Bodin 2010), and centralized decision-making (e.g., Marín & Berkes 2010).

2.3.4 ACM implementation in Forest Protected Areas (FPAs)

Having characterized the state of current ACM knowledge to provide an understanding of what is currently known and what is understudied at a global scale, this section narrows down the review to an understanding of ACM implementation in FPAs- the setting of this research. ACM has been implemented in FPAs in Africa as an alternative to centralized governance arrangements (Colfer & Capistrano 2012). It is assumed that sharing power and authority with forest communities can facilitate participation in decision-making and community-based governance (Pagdee et al. 2006; Berkes 2010). The argument for applying participatory models of governance to forest conservation has grown in the literature, even though much of this takes the form of conceptual propositions rather than empirical analysis. For example, it is believed that participatory forest governance increases the flow of resources to local people and communities, thus addressing poverty reduction and benefit distribution challenges (Schreckenberg & Luttrell 2009). Besides, communal approaches to forest governance are thought to have the potential to increase community capitals, and hence, reduce uncertainty and vulnerability in forest communities (Thoms 2008). Similarly, it is claimed that ACM may help to introduce discipline into the management of forest resources that could otherwise remain

poorly regulated (Kofinas 2009), and foster legitimacy (Berkes 2002). Furthermore, it is thought that involving local people in the management of forests can improve the condition of the forest and forest resources in ways that resource managers may not be able to achieve independently (Mitchell 2013). In addition, the application of ACM in FPAs is expected to increase local participation, which promotes equity and institutional efficacy, and facilitates the sharing of roles, power and authority (Leys & Vanclay 2011).

The application of ACM to the governance of FPAs often begins with the organization of user groups in adjacent communities. The task of organization is normally undertaken by external parties (such as government agencies, NGOs etc), who establish various structures for engaging stakeholders and participants in the community (Akamani et al. 2015). In Sierra Leone, the design and delivery of the ACM project in the Gola Rainforest National Park (GRNP) was undertaken by a partnership involving the government, a national NGO (Conservation Society of Sierra Leone) and the Royal Society for the Protection of Birds (RSPB based in the UK) (Forestry Division 2009). The lack of total recognition of local participants as equal partners is not unique to Sierra Leone, as many examples across Africa show similar arrangements (Larson 2005). In this regard, it is often argued that organizing local structures and processes does not demonstrate local participation because the role played by external agents does not necessarily enhance a sense of commitment and ownership at the local level (Andersson 2013) As such, ACM implementation does not stop at "organization" of participants, but follow a long, iterative process of engagement and reflection at multiple levels (Scarlett 2013). A typical implementation process can take up to ten years, which implies that promised benefits are not easily achievable (Mason et al. 2010). Hence, ACM may be dismissed easily as failing to deliver promised outcomes, causing cynicism among local communities and governing organizations (Chuenpagdee & Jentoft 2007).

Ideally, stakeholders involved in ACM practices in FPAs should benefit from implementation processes, although some stakeholders with certain privileges may not fully embrace such new approaches to governance. These stakeholders may be fearful of losing power and other privileges, though other stakeholders may not embrace ACM because of thoughts that the process may not materialize (Hahn et al. 2006). Dealing with such interests and issues may pose a significant challenge to ACM implementation, given the requirement to involve stakeholders from diverse interests and multiple levels of organization (Armitage et al. 2009). Under such circumstances, external support, such as from government agencies, may help boost confidence in the process, as well as reduce risk (Olsson et al. 2004). However, governments may engender difficulties for practices that conflict with their core interests and potentially inhibit meaningful stakeholder participation (Chuenpagdee & Jentoft 2007). There may also be the risk of compromising community development benefits to achieve conservation objectives (Mason et al. 2010), thus undercutting local support for ACM efforts (Pomeroy et al. 2004). What this means for forest governance is that ACM arrangements require input, commitment, and cooperation from all stakeholders (Chuenpagdee & Jentoft 2007), though the literature suggests that local people and communities may not always be fully involved in planning, implementing, monitoring and evaluating ACM efforts (Sen & Raakjaer Nielsen 1996). Therefore, questions about the effectiveness of ACM institutions can be raised, which is one important area needing further research (Armitage et al 2007).

2.3.5 Options for effectiveness in ACM-based governance practices

Many writers have explored factors and conditions for effectiveness in ACM (Pomeroy et al. 2001; Dietz et al. 2003; Singh et al. 2011). A characterization from Butler et al (2016) is presented in table 2.3 below. Dietz et al. (2003), for example, have argued that effective ACM-based governance is achieved when resource use can be monitored and the information produced can be accessed and substantiated at a lesser cost. They note further that ACM

institutions are effective when resource users demonstrate rule compliance and support regular assessments, and when stakeholders continue regular face-to-face transactions (Dietz et al. 2003). Singleton (2000) suggests that for a state to establish an effective ACM arrangement, it must show commitment to clearly-specified goals and objectives and demonstrate flexibility to accommodate diverse perspectives and interests. At the same time, it must support local capacity building and demonstrate the ability and willingness to represent the interests of all parties involved (Mason et al. 2010). Akamani and Hall (2015) also suggest that ACM-based governance processes can be successful if the benefits promised are appropriate and adequate, and their means of distribution is efficient and equitable. Table 2.3 is a list of 10 conditions for successful ACM, which have been adapted by Butler et al (2016) as shown in table 2.4. In both cases, ACM ultimately engenders: 1) greater recognition of different needs and an emphasis on distributive arrangements among stakeholders; 2) continued effort to build on culturally embedded, formal and informal rules and norms; 3) formation of horizontal and vertical linkages and networks to foster trust building and social learning; 4) a wide variety of types and sources of knowledge, and the shared development of such knowledge among stakeholders; and 5) enhanced capacity among resource management organizations to respond proactively to uncertainty (Armitage et al 2009).

Condition of success	Explanation
Well-defined resource system	Systems characterized by relatively immobile (as opposed to highly migratory and/or transboundary) resource stocks are likely to generate fewer institutional challenges and conflicts, while creating an enabling environment for learning.
Small-scale resource use contexts	Small-scale systems will reduce the number contexts of competing interests, institutional complexities, and layers of organization. Larger-scale resource contexts (transboundary stocks, large watersheds) will exacerbate challenges.
Clear and identifiable set of social entities with shared interests	In situations where stakeholders have limited or no connection to "place", building linkages and trust social entities with shared will be problematic. In such situations, efforts by local/regional organizations to achieve better outcomes may be undermined by non-local economic and political forces.
Reasonably clear property rights to resources of concern (e.g. fisheries, forest)	Where rights or bundles of rights to resource use are reasonably clear (whether common property rights to resources of concern or individual), enhanced security of access and incentives may better facilitate governance innovation (e.g. fisheries, forest) and learning over the long term. Such rights need to be associated with corresponding responsibilities (e.g. for conservation practices, participation in resource management).

Access to adaptable portfolio of management measures	Participants in an ACM process must have flexibility to test and apply a diversity of management measures of management measures or tools to achieve desired outcomes. These measures may include licensing and quota setting, regulations, technological adjustments (e.g. gear size), education schemes, and so on. In other words, economic, regulatory, and collaborative tools should all be available.
Commitment to support a long-term institution-building process	Success is more likely where stakeholders accept the long-term nature of the process, and recognize long-term institution-building that a blueprint approach to institutions or management strategies is probably not advantageous. process Commitments of this type can provide a degree of relative stability in the context of numerous changes and stresses from within and outside the system.
Provision of training, capacity building, and resources for local-, regional-, and national-level stakeholders	Few stakeholder groups will possess all the necessary resources in an adaptive co-management building, and resources for context. At the local level, resources that facilitate collaboration and effective sharing of decision making power are required. Regional- and national-level entities must also be provided with the level stakeholders necessary resources.
Key leaders or individuals prepared to champion the process	Key individuals are needed to maintain a focus on collaboration and the creation of opportunities for reflection and learning. Ideally, these individuals will have a long-term connection to "place" and the process resource, or, within a bureaucracy, to policy and its implementation. Such individuals will be viewed as effective mediators in resolving conflict.
Openness of participants to share and draw upon a plurality of knowledge systems.	Both expert and non-expert knowledge can play productive and essential roles in problem identification, framing, and analysis. The tendency in most resource management contexts is to emphasize differences in knowledge systems. However, there are substantial contributions to social–ecological understanding, trust building, and learning, where the complementarities between formal, expert knowledge and non-expert knowledge are recognized.
National and regional policy explicitly supportive of collaborative management efforts	Explicit support for collaborative processes and multi-stakeholder engagement will enhance success. This support can be articulated through federal or state/provincial legislation or land claim agreements, and the willingness to distribute functions across organizational levels. Additionally, consistent support across policy sectors will enhance the likelihood of success, and encourage clear objectives, provision of resources, and the devolution of real power to local actors and user groups.

Table 2.3 Ten conditions for successful ACM (adapted from Armitage et al. 2009)

Attributes	Outcomes	Literature
Stakeholders engaged throughout the system	Holistic and integrated systems understanding; multi-scale stakeholders engaged in co-management	Armitage (2008); Armitage et al (2009)
Power dynamics addressed	Barriers to stakeholder representation understood and rectified	Armitage (2008)
Marginalized community members included	Resource users empowered in co-management; traditional ecological knowledge engaged in management	Armitage et al (2009); Berkes (2009)
Trust generated	Conflict resolution; bridging of stakeholders within and across scales	Armitage (2008); Armitage et al (2009)
Cross-scale social networks established	Social learning; double- and triple-loop learning; self-organization; resources mobilized for problem-solving and innovation	Plummer & Armitage (2007); Cundill & Fabricius (2010); Armitage et al (2009)
Leadership generated	Leaders emerge as 'policy entrepreneurs', providing an alternative vision, acting as agents of change, and brokering amongst stakeholders	Olsson et al (2004); Armitage et al (2009)

Political engagement	Windows of opportunity' for policy change exploited by leaders	Olsson et al (2004)
Monitoring and evaluation	Feedback enables reflexivity to complex system effects	Armitage et al (2009); Cundill & Fabricius (2009)

Table 2.4 Attributes and outcomes of successful ACM (adapted from Butler et al. 2016)

Additionally, in cases where the ACM process is controlled and managed by local communities, local institutions should meet four conditions to be effective, including (Singleton 2000 p.4): preferring sustainable resource management to exploitation and investing proceeds from governance in the community; having the capacity, the social and material resources, to address challenges to collective action that may be attributable to the design and delivery of institutional arrangements; anticipating and understanding the kinds of actions that encourage and facilitate sustainable resource use; and tapping information from multiple sources to develop rules and procedures. However, a narrower perspective provided by Jentoft (2000), which also describes effectiveness in the context of state-managed systems, is the existence of an agreement about sharing roles, power and authority. In this regard, Brown and Tompkins (2012) suggest that the ACM process must develop and follow rules and procedures for engaging all stakeholders, and ensure that such procedures match the political, economic, cultural, and social preferences of all settings. Pomeroy (2003) notes that for rule creation and application to be effective, basic issues of government action to establish supportive and enforceable legislation, policies and rights should be addressed. Pomeroy et al. (2001) suggest further that decisions and actions of this nature should clearly specify jurisdiction and control, specify roles and responsibilities of stakeholders, strengthen rule enforcement and local accountability procedures, and facilitate organization and action in relation to the needs and interests of all stakeholders.

Collectively, the above perspectives emphasize that the challenge in achieving successful ACM outcomes is to devise institutional arrangements that help to establish and maintain all the conditions outlined for success (Dietz et al. 2003). As such, Whaley and Weatherhead (2014)

argue that the prospects and pitfalls of an ACM arrangement largely depend on whether and how it functions as a viable institution. Many authors (e.g., Nielsen et al. 2004; Ostrom & Cox 2010; Chaffin et al. 2014) suggest that when institutions are not designed to fit a certain context, governance processes may fail to address problems of resource access and operate outside their scope of action. Similarly, Folke et al. (2007) argue that poor design of institutional arrangements could trigger new conflicts or cause old ones to escalate. This implies that although ACM institutions may function to share power and resources, they may effectively entrench the control of the most influential actors over rule enforcement, resource management, and benefit allocation and distribution (Kofinas 2009). Put differently, when institutions are poorly designed, they may further marginalize local people and communities rather than foster individual and collective empowerment (Fennell et al. 2008). As such, an all-encompassing condition for ACM success is the effective design and operationalization of robust and adaptive institutional arrangements (Plummer et al. 2012).

2.3.6 Gaps in the ACM literature

Based on the literature review done in this chapter, it is evident that ACM is being increasingly recognised as the way to go in simultaneously addressing conservation and community development challenges. Yet, relatively little data exists on its main achievements (prospects) and shortcomings (pitfalls), and the key issues practitioners and local communities face in FPAs. Although the use of the terms "participation" and "learning" has proliferated much of the ACM literature, close critical analysis of their meanings (nature and outcomes) in practice is far less common. Much of the normative construction of participation and learning in ACM has been used in a manner without any explicit empirical emphasis on the role institutions and power relations play in enabling or constraining them. While the ACM literature moves the concept of participation from the sidelines to the mainstream of environmental governance

debates (Morinville & Harris 2014), it leaves assumptions about whether increasing local engagement leads to the representation necessary for empowerment in practice (Mitchell 2005). For example, the ACM literature on forests is replete with assumptions that sustainable forest management is most likely to occur where local users manage and derive benefits from forests (Kull 2002; Jones & Murphree 2004).

The premise underlying this position is that vesting local users with rights to manage, use or own forest resources can help to address forest loss, which is attributed to centralized management regimes in African states (Nelson & Agrawal 2008). It is arguable, therefore, that the published literature does not clearly show how the promise of empowerment through participation is met by ACM initiatives in the field. Similarly, the nature of learning that occurs in FPAs, how it is facilitated, and under what terms and conditions, is poorly understood (Biggs et al. 2012). Moreover, there are gaps in current levels of understanding of the functionality of ACM institutions in achieving meaningful participation and collaborative learning. In this regard, less attention has been paid to governance issues, including the broader institutional setting within which ACM unfolds (Susskind et al. 2012; Matso 2012; Craig & Ruhl 2013). Likewise, little empirical attention has been paid to the workings of power in FPAs, including who decides what to do, how decisions are made, how roles are shared, and who or what influences resulting outcomes (Borrini-Feyerabend et al. 2013).

These are significant gaps that warrant further research, for which the growing stream of environmental governance literature may be particularly useful, because of its emphasis on institutions and their effectiveness (Kjaer 2004). The gap is an urgent one to fill given suggestions that ACM could provide a suitable mechanism for REDD+ governance and implementation in FPAs in Africa (Minang & van Noordwijk 2013; Larson & Petkova 2011). Therefore, this thesis explores the pathways, prospects, and pitfalls of ACM to understand the

nature of participation and learning that occurs, and the broader influence of formal and informal institutions, such as laws, policies, organizational structures, power relations, and practices that develop over the course of implementation, and the rules and procedures that are followed in the field (Huitema et al. 2009). In doing so, the thesis explores both institutional arrangements and governance procedures that shape social priorities in forest communities, including ways to recognize and solve problems, and the means through which collective action is facilitated. The thesis also explores the types of actors involved, their roles and responsibilities, the nature of interests formed and how they are safeguarded, the ways by which knowledge is produced and distributed and how this affects decision-making, and the challenges and costs related to working together with local communities to develop and pursue a shared vision (Vatn & Vedeld 2013). Altogether, the thesis contributes to environmental governance research examining the evolution, deployment, and merits of ACM institutions in terms of their role in addressing resource management challenges at different levels (Plummer & Armitage 2010).

2.4   Summary

This chapter has reviewed the ACM literature, distinguishing it along three interconnected perspectives: a horizontal perspective, relating to structures, processes and outcomes at one level; a vertical perspective, including multiple levels and actors; and a progressive (iterative) perspective, concerning learning practices stemming from and contributing to these various interactions (Colfer & Prabhu 2008). Moreover, the chapter demonstrates that although ACM is an attractive and widely promoted concept in the literature, it is hard to introduce and sustain in the field. In practice, especially in FPAs in Africa, ACM has been more influential as an environmental governance principle than as an effective approach to address conservation and poverty reduction challenges. Missing from the literature are knowledge and demonstration of how the process of ACM occurs in these settings (Huitema et al. 2009). For instance, the

literature on the nature of participation and learning in ACM-based governance efforts in forest communities is inconclusive on important structures, processes, and outcomes (Akamani & Hall 2015), indicating that there is limited evidence of the utility of ACM in African settings. The gap could be partially attributed to the relatively small number of case studies investigating ACM practices in forests, though the void extends beyond ACM to the more general field of participatory natural resources management. In this area, despite the growing appreciation of the relevance of participation and learning to environmental governance, less empirical attention has been given to the dynamic social and power relations that underlie collaborative management efforts (Nkhata et al. 2008).

As such, this thesis is an initial effort to gain insight into the mechanics and politics of ACM in the GRNP in Sierra Leone, aiming specifically to investigate the nature of participation and learning that occurs, and to explore the underlying social and power relations of importance to institutional performance in FPAs. Exploring these issues and relationships raises the prospect of understanding the institutional and contextual conditions that shape the dynamic process of ACM in forest settings in Africa, as well as the outcomes that result from implementation, which are important because of current prospects for the consideration of ACM as a governance mechanism for REDD+ (Minang & van Noordwijk 2013). The next chapter, therefore, moves on to outline the political ecology lens and key concepts underpinning this research, which are participation, learning, power, and institutions.

Chapter Three

Theoretical Framework and Key Concepts

3.1   Introduction

This chapter follows on from the previous chapter, which reviewed the literature on ACM. The chapter first outlines the theoretical lens- political ecology- that is used to frame this research, and moves on to consider in greater detail the concepts underpinning the analysis and discussion of the pathways, prospects, and pitfalls of ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone. The concepts informing this research are participation, learning, power, and institutions.

3.2   Political ecology

This thesis employs political ecology as a theoretical framework to explore the paths, prospects, and pitfalls of ACM practices in the GRNP in Sierra Leone. Political ecology evolved from the traditions of cultural ecology and political economy, which examine how human practices of resource use are influenced by social and power relations at multiple levels over time, and how these relations are shaped by the physical environment (Walker 1998). Although many definitions have been put forward (e.g., Forsyth 2003; Robbins 2012; Neumann 2014), this thesis uses the definition proposed by Wolverton et al. (2016), which is that political ecology

research is concerned with the interconnections among political, economic, and cultural processes and structures that aid an understanding of the ways in which resource management challenges are conceived and addressed. This definition views political ecology through a lens of "competition" rather than "transformation", as is the case with Neumann (2014). In the context of forest governance, political ecology has been used to frame five main types of research (Adams & Hutton 2007): 1) the use of conservation science as a tool for analysing nature and for prioritizing action (e.g., Mills et al. 2014); 2) the increasing scale and scope of criticism regarding the nature of social impacts engendered by conservation efforts (e.g., Buscher et al. 2012); 3) possibilities for improving and regulating the delivery of community development policies and procedures (e.g., Coria & Calfucura 2012) ; 4) the enduring power and influence of international conservation organisations (e.g., Holmes & Antipode 2010); and 5) the increasing influence of neoliberal thinking, specifically in corporate organizational structures and practices of local NGOs (e.g., Fletcher 2010).

In general, political ecology provides a useful framework for exploring the evolution and outcomes of human-nature interactions, focusing specifically on the underlying influence of institutions and power relations (Peet et al. 2010). In doing so, political ecology provides political explanations of environmental change because it deconstructs positions and manifestations of power within a specific resource management context (Robbins 2004 p.12). Moreover, by providing distinct explanations of human-society interactions, political ecology contributes to a deeper understanding of resource management approaches by exploring how access, use, and control of resources are determined, negotiated, and contested within various political spaces (Peet & Watts 1996). Therefore, the conceptual approach of political ecology has significant implications for understanding the social relations and power structures often associated with ACM practices in FPAs (Berkes 2010). This is because the social and political narratives of ACM are facilitated through decisions taken by institutions at different levels,

which set the agenda for participation and learning, drive the process, and determine (and influence) possible outcomes (Nepal & Saarinen 2016). Therefore, it follows that the key issues in political ecology and ACM are participation, power, learning, and institutions.

3.2.1   Participation and power

A fundamental notion in the political ecology literature is that participation, which describes the relationship between actors and their links with their environment, is shaped by power relations (Robbins 2012). Power relations are thought to be considerably unequal because different participants wield different power capabilities in terms of access to and use of environmental resources (Bryant 1997; Humphries 2013; Doyle et al. 2015). Power, in this context, refers to "the control that one party has over the environment of another party" (Bunker 1985 p.14). This implies that to understand the nature of participation in a resource management context, it is necessary to understand the ways in which one actor (or participant) seeks to exert influence over the environment of other participants, examine how power relations are manifested, and explain the conditions that shape resistance to power in these settings (Bryant & Bailey 1997; Bodin & Prell 2011).

A participant may exert influence on the environment of other participants by controlling access to diverse resources such as land, forests etc, with an aim to control benefits obtained from their exploitation (Bryant 1997; Colfer 2010; Edmunds & Wollenberg 2013). Moreover, a participant can exert control over the environment of others by controlling the social prioritization of environmental projects (Otto et al. 2013). In this circumstance, some participants may work with state agencies to influence the allocation of financial and human resources to projects that are of interest to them (Mansuri & Rao 2013). Another way by which participants exert control over the environment of others is through indirect discursive means, which involves regulating the ideas and material practices of others (Bryant 1997; Goldman et

al. 2011). This literature suggests that "ideas are never innocent, but either reinforce or challenge existing social and economic arrangements" (Schmink & Wood 1987 p.51). The implication is that power is a battle of ideas concerning the use of the environment, because participants usually seek to legitimize their self-interests over the collective (common) good (Bryant 1997; Dryzek 2013).

Efforts to control the environment of others can encourage weak participants to resist management practices they consider detrimental to their interests. Weaker participants may be encouraged to resist their stronger counterparts by questioning the legitimacy of powerful participants (Borrini-Feyerabend et al. 2013). The question of legitimacy emerges in the discussion of the links between participation and power because implementers of conservation projects (such as state agencies) typically seek popular legitimacy through their efforts. At the same time, powerful non-state actors are mostly inclined to substantiate their stake in governance processes based on their self-interest (Bryant 1997; Robinson 2011). These dynamics of power and how they are manifested within a participation space, explain why conservation actions that are expected to protect the interests of all marginal participants through fair and equitable allocation of power and resources often run into serious difficulties, or fail altogether (Cooke & Kothari 2001; Brown. & Tompkins. 2012). This calls for careful analysis of the power struggles and resistances that characterize socio-political relations when managing common pool resources (Okereke & Bulkeley 2007; Okereke 2015), to understand how programmes are performing especially where knowledge and resource constraints increase power asymmetry among key stakeholders. Therefore, with a political ecology lens, this research seeks to understand the nature of participation in ACM practices by exploring the manifestations of power within forest environments and the effect on the interests, actions, and interactions of those involved. The focus on the local context is deliberate, because the local level is where the impacts of power relations are felt (Okereke & Bulkeley 2007).

3.2.2   Learning and knowledge use

Another key theme in the political ecology literature is learning and knowledge use (Gunderson 2001; Forsyth 2003; Robbins 2012). Learning is very much bound with power and participation because learning is reflected in the way actors perceive and represent their environment based on the lenses of culture, past experiences, and other perspectives (Bryant 1997; Peterson et al. 2010). As such, learning and knowledge about the environment is "situated"; that is, it is generated in, and driven by certain perspectives, environmental and socio-economic factors, and social structures (Lawhon & Murphy 2012). Such knowledge and learning may also be situated in politics, because the existence of diverse environmental perspectives may depict historical conflicts between social actors and their individual attempts to gain legitimacy ((Bryant 1997; Krasny et al. 2013). This means that the way knowledge is distributed can shape human interactions, which, practically, makes the environment a "political entity" that social actors can create through discourse to attain goals they may have set for themselves- sometimes unconsciously (Swyngedouw 2004). In other words, the kind of knowledge that is produced, and the ways in which it may be legitimized and authorized, are central to the ways in which environmental problems are construed and composed (Peet et al. 2010). Therefore, political ecology recognizes the importance of learning to relations of power within spaces of participation, whether in the context of state-led conservation and development projects (e.g., Blaikie & Muldavin 2004), or local (or community-based) practices (e.g., Isager & Ivarsson 2002).

In the context of this research, political ecology provides a valuable framework for investigating the nature of learning in ACM-based governance practices, focusing on the ways in which actors' power relations, discourses (knowledge), strategies, and interactions shape the value and the role of the environment. By considering learning and knowledge use, political ecology

provides insights into the diverse perspectives and power relations that shape certain socio-environmental dynamics (Paulson et al. 2003; Robbins 2012), which may mean that political ecology demonstrates the ways by which human and environmental forms of interaction can produce new forms of knowledge, organization, and interaction (Dryzek 2013). Furthermore, using political ecology to consider learning as a unit of the analysis undertaken in this research, the thesis draws attention to the relationships between power, diverse environmental discourses and perspectives, and patterns of environmental change (Bryant 1997; Plummer & Armitage 2010; Lawhon & Murphy 2012).

3.2.3   Institutions

The preceding review shows that political ecology asks not only what kinds of social relations influence how people use natural resources, but also asks how different groups of people are impacted in different ways (Walker 1998). Thus, a basic premise of political ecology is the recognition that a certain community of practice is shaped by unequal distribution of costs and benefits associated with environmental change, which are manifestations of hegemonic and entrenched power exercises often executed by institutions (Nepal & Saarinen 2016). In exploring the nature of participation and learning in ACM, there is, therefore, a need to explore the role institutions play in directing, legitimizing and exercising power and control (Forsyth 2003). In FPAs, state institutions play a key role in molding the conduct and limitation of an individual's or group's range of possible actions (Nepal & Saarinen 2016). In addition, NGOs play a key role in the management of FPAs, especially in developing and implementing people-centred initiatives (Zimmerer & Bassett 2003). Hence, the political ecology lens used in this research is relevant to understanding how institutions determine access and control of resources, as well as the motives and strategies of participants involved and the nature of empowerment that may result (Walker & Hurley 2004; Bixler et al. 2015).

3.3   Key concepts

The last section highlights the importance of participation, learning, power, and institutions in political ecology analysis. This section is devoted to unpacking these key concepts in detail to understand how and what kinds of social relations of power and dominance engender environmental governance challenges, as well as how different groups of people are affected in different ways (Akamani 2012). Firstly, this thesis investigates the nature of participation and learning in ACM, making participation and learning important concepts for the analysis. Secondly, because an understanding of the nature of participation and learning underscores "who decides what to do, how decisions are made, how roles are shared, and who is, or should be held accountable for resulting outcomes" (Borrini-Feyerabend et al. 2013), power is central to exploring ACM practices (Plummer & Armitage 2007; Armitage et al. 2008). Thirdly, because the research explores the prospects and pitfalls of ACM practices, considering participation, learning, and power relations, it is also critical to explore the impact of different institutions on the state and sustainability of governance processes (Huitema et al. 2009). Overall, the research lens presented in this chapter, as well as literature reviewed in chapter two, contribute to testing the hypotheses posed in chapter one, which are that: 1) the nature of participation and learning in ACM practices reflects the diverse sources, conditions, and ramifications of power relations in FPAs; and 2) the nature of participation and learning in ACM reflect the design and strategic interests of institutional arrangements in FPAs.

3.3.1   Participation

Participation is the first and most critical issue addressed in the different conceptual lenses for analyzing and describing ACM arrangements (Plummer & Armitage 2007; Emerson et al. 2012; Plummer et al. 2012). The concept has proliferated during the past decade and has become a hallmark of communal approaches to natural resources management (Parkins & Mitchell 2005).

Although defining participation remains a continuing challenge, it is generally conceived as a normative process that brings diverse stakeholders together to define important issues and forge mutual interests (Lewicki et al. 2003). In practice, participation involves giving local communities some control over the management of natural resources (Dressler et al. 2010), defining the course of governance, and sharing information about important arrangements (Gebremedhin & Theron 2007). Moreover, participation involves engaging and consulting all those that care about a specific issue and proposing ways by which they can actively contribute to the process (Burt et al. 2006). Many terminologies have been used to describe participation, such as collaboration, cooperation, co-management, and community, which convey the sentiment of sharing rights, roles, and authority (Plummer & Fennell 2007). Based on Reed (2008), participation can either be "normative", stressing the need to involve people in the making of decisions that affect them, or "pragmatic", providing a means to an end. In both senses, participation is justified based on factors such as "public acceptance", "decision quality" (Thomas 1993), "fairness", "equity" (Habermas 1984), and "capacity" to contribute to management processes (Webler & Tuler 2000). Additionally, the object of participation can be illuminated in terms of whether a process is "research-driven" or "development-driven" (Okali et al. 1994); and whether it is "planner-centered", focusing on achieving goals set by an organization, or "people-centered", focusing on empowering individuals and groups to attain their own and community-wide goals.

Participation can be conceived further as recognition of the need to involve diverse sets of actors, as well as new perspectives on actor roles and responsibilities (such as the role of the state in shifting from holder of expertise and decision-maker to decision or knowledge broker) (Yaffee & Wondolleck 2000). The justification for participation of a wider array of non-state actors includes increased legitimacy, efficient allocation of resources, costs and benefits, and enhanced access to diverse knowledge sources and expertise (Backstrand et al. 2010).

Therefore, participation obliges the careful consideration of incentives (financial and decision-making power, knowledge) that shape diverse interests (Armitage et al. 2012). The process requires clearly defined roles and interactions because ambiguity of roles and poorly delineated responsibilities lead to inadequately implemented functions (Backstrand et al. 2010). Likewise, the overlap of roles can be beneficial to participation (Dietz et al. 2003) because it raises the prospects that necessary actions will be completed. In ensuring all this, participation serves as a medium for negotiating the many manifestations of power among actors and the possible consequences for conservation (Armitage et al. 2012). Ribot and Larson (2005) have suggested that negotiations of power work best where formal policy and regulatory support from the state are provided. An enabling policy improves acceptance of distributed powers to non-state actors, resolves problems regarding equity and distributive conflicts, and enhances accountability and legitimacy (Armitage et al. 2012).

The concept of participation has captivated both exponents and opponents. Exponents mainly argue for local involvement throughout the process of participation, from planning, to implementation, and decision-making (Reed et al. 2009). Some advocates (e.g., Schultz et al. 2011; Luyet et al. 2012) argue that early involvement of stakeholders enhances the quality and sustainability of management decisions. Others (e.g., Bryson et al. 2013; Caves et al. 2013) believe that timely stakeholder participation leads to effective management decisions, as it allows participants to capture detailed information on local conditions, and effectively plan for potential challenges. Opponents like Hickey and Mohan (2005) argue that whereas participation encourages and facilitates engagement, it fails to resolve issues of power and politics that underwrite such processes. Lund and Saito-Jensen (2013) argue that participation draws people from unequal positions of power, which opens a process to elite capture and control. Nelson & Wright (1995) also argue that participation entrenches power imbalances, and, therefore, precludes minority voices from being heard. Overall, the common ground appears to be that

participation should be influenced and controlled by those participating, as well as involve decisions that are not taken prior to their involvement (Reed 2008). In this regard, understanding what exactly people are asked to participate in, who participates, how, for what purpose, and to what extent is a crucial step towards dismissing or confirming some of these perspectives (Cohen & Uphoff 1980). Therefore, this thesis explores the nature of participation in ACM to understand what exactly is at stake when participation is advocated and facilitated in forest communities (Cornwall 2008; Plummer & Taylor 2013).

3.3.1.1   Who participates?

One of the first steps in analysing participation in ACM practices is often to identify who has the right to access and use a common resource, and thus, who should be represented in the governance arrangement (Plummer & Armitage 2007; Ostrom & Cox 2010). In line with this literature, it will be necessary to carefully explore the question of "who participates", as well as who is excluded and who exclude themselves in ACM practices in the case study. In other words, there is need to consider this question to provide insights into who the stakeholders are, who is involved and in what capacity, who seeks involvement and why, what competences are brought to the process, what demands are raised, and what ideas are used to pursue their interests (Chuenpagdee & Jentoft 2007).

However, identifying stakeholders is not straightforward, and there is a difference of opinion over who or what exactly a stakeholder is (Reed et al. 2009). Some theories advance a narrower and more instrumental definition of stakeholders being individuals or groups "without whose support the organization would cease to exist" (Bowie 1988 p.112). Other definitions take a broader and more normative stance, seeing a stakeholder as "any naturally occurring entity that is affected by organizational performance" (Starik 1995). Stakeholders have also been distinguished in relation to people who affect, or are affected by a specific action or decision

(Freeman 1994; Freeman 2010). Those who influence decisions or actions are active stakeholders, while those who are influenced by such actions are considered passive (Grimble & Wellard 1997). In this regard, a stakeholder is an individual or group affected by and with the capacity to considerably influence (either directly or indirectly) the subject of interest (Engi & Glicken 1995 p.1). From a forestry perspective, this definition describes users that have long-term tenure rights to the resource (Ostrom 2005 p.259).

However, this definition pays little attention to other individuals located around the resource who may also be impacted by its use and management (Edwards & Steins 1999). An alternative view proposes that a co-management process is legitimized and improved if all actors who have a long-term stake in the resource are represented in its management (Jentoft 2003). This definition extends the range of stakeholders to include periodic or random users of the resource (such as tourists), since ACM seeks to provide a deliberative arena for problem solving (Sandstrom 2009). The back and forth that emerges with the conceptualization of who or what exactly a stakeholder is can be partly attributed to the lack of insight into what comprises a legitimate stake (Reed et al. 2009) and much of the extant literature does not explain the difference between legitimate and illegitimate stakeholders (Friedman & Miles 2002). As such, the selection of stakeholders is a contentious part of collaborative governance efforts, given, particularly, that issues regarding who is included and who is excluded remain poorly understood (Holmes & Scoones 2000). With some approaches such as the Common Property Resource-based (CPR) view, it is easier to identify who should be included or excluded, though it excludes a wider group of stakeholders and may potentially undermine the legitimacy of the institutional arrangement. An inclusive approach, such as ACM, may provide a useful alternative, though the greater the number and diversity of stakeholders, the greater the challenge for these actors to achieve intended results. Thus, the approach adopted to identify stakeholders can significantly influence key aspects of ACM arrangements, including their

scale, management objectives, and sharing of roles and power among actors (Sandstrom 2009).

In this light, various practical suggestions have been made. Murray Li (2007) has proposed a "collaborative approach", which is based on the argument that when participation is correctly arranged, it enhances acceptance. A collaborative approach entails collaborating with all stakeholders in problem analysis, proposal development, and monitoring (Murray Li 2007). Other approaches to stakeholder analysis include open dialogues and roundtables, though Gillespie (2012) cautions that these approaches increase the number of multi-party deliberations while allowing key decisions to be made elsewhere by others. Put differently, dialogues and roundtables can reach a consensus when the process is properly organized (Sultana & Thompson 2004 p.82 cited in Faysse 2006 p.222), which, however, does not mean that identifying stakeholders and getting them to openly discuss issues increases the chance of achieving equitable, consensus-based outcomes (Gillespie 2012).

3.3.1.2   How and why does participation occur?

Following the conceptualization of who or what exactly stakeholders are, distinctions need to be made about how and on what basis these stakeholders engage to make sense of what participation entails in local initiatives (Redpath et al. 2013). It is possible, upon closer scrutiny of a governance arrangement, that claims to have involved all stakeholders may boil down to a few conversations with community leaders, or calling people to a public meeting, which only the most active residents attend. As such, while it is crucial to emphasize that stakeholders be engaged at all stages in the process, it is equally important to understand what is contained within the governance process, and what operates beyond its observable bounds (Cornwall 2008; Muro & Jeffrey 2012). For this purpose, numerous typologies of participation have been proposed. The most commonly discussed typology is the "ladder of participation" (see figure 3.1) proposed by Arnstein in 1969, which organizes participation into different levels (rungs)

ranging from citizen control, in which people exhibit control over participatory processes, to manipulation, in which project developers and implementers are more influential and manipulate other participants. In the ladder, the higher rungs indicate levels that are more empowering to those involved, while the lower rungs represent actors with limited ability to shape actual decisions and actions (Arnstein 1969). Yet, power is given to participants occupying the higher rungs of the ladder, so their participation is conditioned by those giving power (Alejandro Leal 2007).

Citizen Control Delegated Power Partnership	Citizen Power
Consultation Informing Placation	Tokenism
Therapy Manipulation	Non Participation
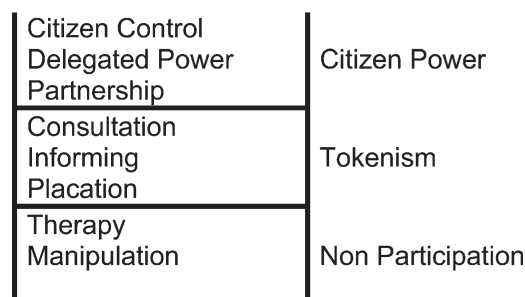
Figure 3.1 Ladder of citizen participation (Adapted from Arnstein 1969)

Many other typologies for public participation have emerged from the analysis of Arnstein's ladder, including Wilcox (1994) that explains five different purposes for participation, and Pretty (1995) that presents a typology of participation across different levels (see table 3.1). The typology proposed by Pretty (1995) presents some of the professed objectives of those who promote participatory approaches in community development. "Interactive participation" considers ways by which local stakeholders take control over decisions to gain stake in managing structures and resources, while "self-mobilization" includes ways by which local groups take initiatives independently of external parties to retain control over resources (Cornwall 2008). Both typologies proposed by Arnstein (1969) and Pretty (1995) move participation from a discourse about control by authorities to control by citizens, though citizen control goes much farther than self-mobilization to include ways to challenge existing

distributions of wealth and power (Cornwall 2008). Hence, while Pretty's (1995) typology

underscores that understanding the sentiments of those who adopt and practice participatory

approaches is crucial, Arnstein's (1969) ladder emphasizes that participation is largely about

power and control (Cornwall 2008).

Type	Characteristics of each type
Manipulative participation	Participation is simply a pretense, with "people's" representatives on official boards, but who are un-elected and have no power.
Passive participation	People participate by being told what has been decided or has already happened. It involves unilateral announcements by an administration or project management without any listening to people's responses. The information being shared belongs only to external professionals.
Participation by consultation	People participate by being consulted or by answering questions. External agents define problems and information-gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.
Participation for material incentives	People participate by contributing resources, for example, labour, in return for food, cash or other material incentives. Farmers may provide the fields and labour, but are involved in neither experimentation nor the process of learning. It is very common to see this 'called' participation, yet people have no stake in prolonging technologies or practices when the incentives end.
Functional participation	Participation used by external agencies to achieve project goals, especially reduced costs. People may participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision-making, but tends to arise only after major decisions have already been made by external agents. At worst, local people may still only be co-opted to serve external goals.
Interactive participation	People participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structured learning processes. As groups take control over local decisions and determine how available resources are used, so they have a stake in maintaining structures or practices.
Self-mobilization	People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used. Self-mobilization can spread if government and NGOs provide an enabling framework of support. Such self-initiated mobilization may or may not challenge existing distributions of wealth and power.

Table 3.1 Typology of participation (Adapted from Pretty 1995)

Another typology, put forward by (White 1996), provides important insights into the different

interests at stake in participatory processes (see table 3.2). The typology functions less as a ladder and more as a way of knowing how people use their roles in participatory processes, White's (1996) typology provides a helpful approach to understanding conflicting ideas about how or why participation is employed at different stages in a process. As such, White's (1996) work moves participation towards more "genuine" engagement, though in practice, her ideas may become ambiguous. For example, participation through information sharing may constrain more active engagement, although access to and transparency over information raises the prospect of collective action in examining the consistency of theory with practice. At the same time, transformative participation may fail to match local uses for participation because "empowerment" is construed as "do-it-yourself", which not only allows authorities to renounce their responsibility, but also engenders and intensifies resistance (Cornwall 2008).

Type	What participation means to the implementing agency	What participation means for those on the receiving end	What participation is for
Nominal	Legitimation – to show they are doing something	Inclusion – to retain some access to potential benefits	Display
Instrumental	Efficiency – to limit funders' input, draw on community contributions and make projects more cost-effective	Cost – of time spent on project-related labour and other activities	A means to achieve cost-effectiveness and local facilities
Representative	Sustainability – to avoid creating dependency	Leverage – to influence the shape the project takes and its management	To give people a voice in determining their own development
Transformative	Empowerment – to enable people to make their own decisions, work out what to do and how to act	Empowerment – to be able to decide and act for themselves	Both as a means and an end, a continuing dynamic

Table 3.2 Typology of interests (Adapted from White 1996 p.7-9)

A further typology put forward by Green & Hunton-Clarke (2003) identifies three levels of participation for organizations: 1) "informative participation" describes processes that involve sharing information to inform stakeholders of plans. Stakeholder participation at this level is passive as those involved are only required to receive information. The organization determines how stakeholders are informed and what they can know; 2) "consultative participation"

describes processes that involve knowing the views and perspectives all stakeholders hold on an issue or an organization's proposals. It often involves a survey research, which feeds back to inform and influence plans, decisions, and actions. While the information generated highlights potential challenges or priority areas, it is limiting in terms of the extent to which stakeholders can influence management decisions; 3) "decisional participation" describes the levels at which stakeholders participate in making decisions and taking actions. In such cases, the organization involves stakeholders from the outset of the process, thus more views are considered at inception and any conflicting objectives addressed. It is believed that decisions resulting from this kind of participation are more likely to be socially acceptable because stakeholders will have been involved in every stage of the process (see Green & Hunton-Clarke 2003).

Although the typologies described above draw from Arnstein's (1969) ladder of participation, they do not necessarily question its implications. For instance, the hierarchical nature of the ladder suggests that the higher rungs should be preferred to lower rungs (Arnstein 1969; Johnson et al. 2004), which does not allow participation to reflect prevailing local conditions (Treby & Clark 2004). For this reason, a "wheel of participation" (Davidson 1998; Treby & Clark 2004) has been proposed as an alternative to the ladder of citizen participation (see Arnstein 1969). The wheel (see figure 3.2) suggests that different levels of participation are likely to be appropriate in different contexts, depending on set objectives, stakeholder capacity (Richards et al 2004; Tippett et al. 2007), and the stage of the process (Marshall & Roberts 1997). More broadly, proponents of the "wheel of participation" argue that seeking and achieving effective participation depends largely on the recognition of the context of participants in relation to the issues that need to be addressed (Davidson 1998).
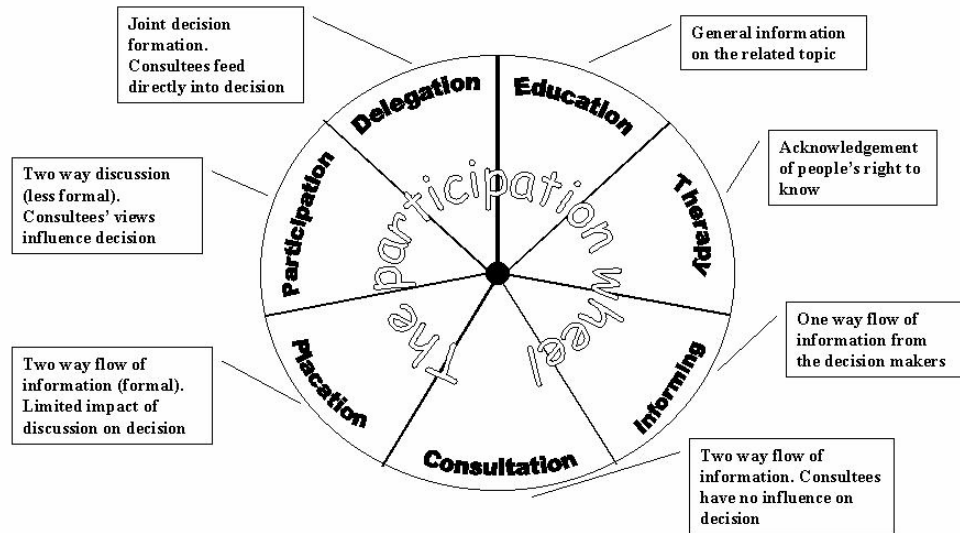
Figure 3.2 Wheel of participation (Treby 1999 p.311 cited in Treby & Clark 2004 p.365)

This research adopts this conception (the wheel) of participation, giving more attention to the nature rather than the degree or level of engagement (Rowe & Frewer 2000). The aim is to identify different types of stakeholder engagement based on the flow of resources and manifestations of power (Rowe & Frewer 2000) to understand whether and how stakeholders engage and exchange resources through dialogue or negotiation (Reed 2008). Moreover, this conceptualization of participation allows for gaining an understanding of ways by which stakeholders build consensus, engage in delivery of implementation plans, and learn from the effectiveness of participation in practice (Tippett et al. 2007).

3.3.1.3   Why participation does not occur?

Although the typologies discussed in the preceding section explain how and why participation occur, providing reasons for developing participatory processes that ensure that all stakeholders are included, less attention is paid to "why participation does not occur". On this, Cornwall (2008) has provided very interesting perspectives. She argues that the assumption that getting the mechanisms and methodologies right will achieve meaningful participation may be

erroneous, because people may have various reasons to participate or not in a process. One such reason for non-participation is that people cannot take part because of the timing and duration of participatory activities, which may count out those who work, those who have families to feed, and those who cannot justify spending more time outside the household (Cornwall 2008). Time, for example, is one crucial influence on the participation of poor individuals and households in a process, since time is also needed for farming and other livelihood activities (Maskey et al. 2006; Ribot et al. 2010). Besides, poor households may not spare time to participate if a process mainly benefits relatively wealthy households, who are also socially better-off and more connected to leaders within a community (Agrawal & Gupta 2005; Colfer 2010). Another reason may be the organization of participatory activities (such as meetings) in spaces that are culturally associated with groups to which they do not belong (such as secret societies), or activities they are unfamiliar and uncomfortable with (Cornwall 2008). For example, the effect that an empty school classroom may have on the minds of local people may be a good reason for non-participation in participatory workshops (Hinton 1995).

Furthermore, "self-exclusion" from participatory activities can be attributed to a lack of confidence resulting from the experience of being silenced by more powerful voices or fear of reprisals. People may choose not to participate not only because they have nothing to contribute, but also because their ideas and knowledge may not be taken seriously by those in power (Cornwall 2008). As such, it is more common to see older members of a community contributing to participatory events, and far less common for women to contribute and engage as much as men (Maskey et al. 2006). Cornwall (2008) argues that the concept of participation has been wrongly premised on the assumption that everyone would participate if they could, which barely recognizes the choice not to participate. This implies that in cases where people lack, or have little sense of belonging to a community, they are less inclined to contribute to "community affairs" because the costs of taking part often exceeds the benefits.

Another reason for non-participation may be based on previous experiences, which may be that previous initiatives may have supported ideas and preferences that correspond with their own agenda. As such, people may think that their priorities are less important, so the choice to participate will depend largely on transparency at the outset about what specific actors can and cannot do (Cornwall 2008; Mansuri et al. 2013; Ratner et al. 2013). Therefore, the strategy for participation determines whether a process of engagement would lead to more self-exclusion, or whether it addresses the imbalances that account for the lack of interest and involvement. The approach (strategy) to participation is shaped by the nature of laws, policies, rights and authority structures in place, and how they enable greater social awareness, autonomy over decision-making, and self-reliance (Pomeroy et al. 2001).

3.3.1.4   The participation space

The question of "who participates", as well as who is excluded and who exclude themselves, inevitably lead to questions about the spaces in which different kinds of participation occur. Participation occurs within "spaces", categorized by Cornwall (2004) and Gaventa (2004) into closed, invited, and claimed spaces. "Closed spaces" involve a limited number of actors and stakeholders (Gaventa 2006). "Invited spaces" emerge when efforts are made to include more actors (such as resource users) by the main actors involved in a governance process (such as government agencies) (Cornwall 2002). Although invited spaces expand the "participatory sphere" (Cornwall et al. 2011), they may be configured to meet the needs and serve the interests of key stakeholders (in the closed space), and may not transcend "cooperation" or "coordination" (Cornwall & Shankland 2013). Invited spaces may also be affected by the same issues of power common to closed spaces. In community meetings, for example, existing traditions may constrain some members (e.g., children, women) from speaking freely about certain issues (Agrawal 2001). Under such circumstances, invited spaces may break into "claimed spaces", which are created by less influential stakeholders to mobilize the community

against the interests of the more powerful ones (Gaventa 2006). Such spaces (such as those created by protest groups) attract individuals or groups that share mutual interests and common identities (Cornwall 2002), and may advance to "sites of resistance" where these individuals and groups conceive collective action in response to the powers and influences that underwrite management practices in local communities (Kohn 2000).

The construction and function of spaces show how they are shaped and driven by power and social relations that enclose and permeate them (Cornwall 2002). In the context of power, spaces are conceived as "…dynamic humanly constructed means of control…" depicting some form of domination (Gaventa 2006), which shapes the limits of participatory spheres, influence what is possible within them, who may enter, and which interests, identities and discourses are admissible (Gaventa 2006; Tallontire et al. 2014). Therefore, stakeholders who play a role in the creation of a certain space are more likely to be most influential within it, and those with influence and control over one space may not necessarily have control over others (Gaventa 2006). Still, it is possible for stakeholders within invited spaces to gain some control and a sense of the legitimacy of their interests through meaningful participation (Kohn 2000). In this regard, the analysis of the nature participation in ACM focuses on the workings of different spaces for participation, including who invites people, who is excluded, why, which interests are served, and how is power (authority) acquired and exercised.

3.3.1.5   To what extent does participation occur?

In exploring the nature of participation, it is also useful to examine the extent to which participation occurs. Farrington and Bebbington (1993) suggest two characterizations of "extent", which include a "deep" participatory process that involves stakeholders at all levels of organization, and a "broad" process that may involve a wide range of stakeholders but fundamentally shallow because stakeholders are only informed or consulted. These

characterizations provide an understanding of the degree of participation, which Reed (2008) has distinguished along normative and pragmatic claims (of participation success). "Normative claims" emphasize benefits for equity, premised on the notion that participation reduces the chance for peripheral actors to be marginalized in decision-making (Reed 2008). Such claims typically focus on the extent to which public trust is increased (Richards et al. 2004), opportunities to generate knowledge are created (Blackstock et al. 2007), local capacity to use new knowledge is developed (Okali et al 1994), and diverse views and needs are recognized (Richards et al. 2004). On the other hand, "pragmatic claims" emphasize the quality and sustainability of management decisions, including the rate of adoption and diffusion among target groups and their appropriateness for the local context (Martin & Sherington 1997). High quality decisions are based on more complete information about the local context (Koontz & Thomas 2006; Newig 2007), which depends on trust between stakeholders and opportunities for joint problem solving (Stringer et al. 2006).

The extent to which stakeholders can participate may be undermined by various factors and conditions. For instance, the nature of participation encouraged and facilitated may reinforce existing privileges and group dynamics that limit views from minority voices (Nelson & Wright 1995; Cullen et al. 2014). In addition, participation may be undermined by the existence of non-negotiable positions, or stakeholders with "veto power" that shape the extent to which the process can empower those involved (Reed 2008). Furthermore, the extent of stakeholder participation may be undermined by the lack of sufficient expertise to engage in mostly technical participatory processes (Fischer & Young 2007; Davies & White 2012). These conditions create a "dysfunctional consensus" (Cooke 2001 p.19) and a perception that participation offers little reward or capacity to influence decisions (Burton et al 2004). It also engenders cynicism and tension that could paralyze local engagement and place stakeholder relations in considerable risk (Reed 2008; Evans 2012).

To achieve the appropriate end (or extent) for stakeholder participation, Parkins and Mitchell (2005) have suggested the following six directions. Firstly, it is necessary to "emphasize outcomes", which include emphasis on shared decision-making and control (Gray et al. 2001) and balancing competing interests to give all stakeholders in the process a fair chance of shaping the outcome (Parkins & Mitchell 2005). Secondly, it is important to "emphasize process", which requires making the participation process spacious and allowing so that stakeholders can maintain an active interest and share the hope of influencing the outcome (Conroy & Peterson 2013). Such hopes may be strengthened by fair and consistent procedures agreed upon by all stakeholders (Parkins & Mitchell 2005; Bryson et al. 2013). Ideally, participation spheres should encourage free-flowing dialogue aimed at generating realistic and well-informed opinions, or "communication that induces reflection upon preferences in a non-coercive fashion" (Dryzek 2000 p.2). Thirdly, the process should pay attention to "interest-based representation" (Parkins & Mitchell 2005), seeking to address the question "do the participants represent all significant sectors of the community?" (Carr & Halvorsen 2001 p.110). Guarding interest in participation should not be limited to those with both a stake in and knowledge of the process, but span local, non-local, lay, expert, diffused, and concentrated interests (Overdevest 2000; Mascarenhas & Scarce 2004), including those with education, incomes, and forest-related training or not (Parkins & Mitchell 2005).

Fourthly, participatory processes should be attentive to external forms of exclusion "that keep some individuals or groups out of the fora of debate or processes of decision-making, or which allow some individuals or groups dominative control over what happens…" (Young 2000 p.52). Participation should also consider ways to address "internal exclusion" which occurs "even when individuals and groups are nominally included" (Young 2000 p.53). Such forms of exclusion occur when participation is organized through representatives and around specific narratives, which may be due to cultural factors (local power structures, language barriers etc),

time constraints, or strategic motives (inadequate sharing of and access to information may work to a group's advantage. The fifth consideration is "trust" in face-to-face relationships and individual associations (Parkins & Mitchell 2005), which emphasizes the importance of building collaborative relationships in participatory processes (Moore 1994; Berkes 2010). Distrust may develop where there is a high dependence on expert input because of increasing knowledge requirements, and the inability of decision-makers (including experts) to solve the expanding range of community problems. Therefore, trust at the interpersonal level shapes institutional trust (sixth factor) because stakeholders need to trust procedures for engagement at their level to want to be involved and invest their time and energy in institutional processes (Parkins & Mitchell 2005). These conditions considerably shape the nature and extent of participation occurring within local communities.

3.3.2   Learning

In the ACM literature, learning has a significant bearing on the effectiveness of participation in practice, because decisions and actions emerge that have substantial impacts on how and why people participate (Nkhata & Breen 2010). Learning encompasses the capacity to understand the governance context and find ways through which to appropriately act (McCool et al. 2013 p.15). It includes ways by which stakeholders acknowledge prevailing beliefs (and interests) and update management practices based on new evidence, and experience (Newig et al. 2016 p.354). As such, learning in ACM entails acquiring new evidence to set goals and formulate rules, as well as share in experiences that shape local conditions for governance (Biggs et al. 2011). It forms a fundamental part of ACM practices because it produces outcomes that have an effect beyond the scope of a project or programme (van Herk et al. 2015), which may be designed to suit a specific context and provide location-specific knowledge of interactions, processes, and outcomes (Rijke et al. 2012).

Learning is an important attribute of ACM, given that institutions at different levels are often weak to support multi-stakeholder participatory processes (Armitage et al. 2008). The literature draws attention to the concepts of "learning communities", which facilitate learning through partnerships (Kilpatrick et al. 2003), and "communities of practice", which facilitate learning through regular interactions developed in practice (Wenger et al. 2002). The emphasis is on drawing from multiple sources of knowledge to engender better social and ecological outcomes (Pohl et al. 2010). Therefore, the focus in ACM is on "co-production of knowledge" to draw upon diverse perspectives and experiences and generate more holistic understandings of context (Armitage et al. 2011). For forest managers, this means encouraging and facilitating decision-making processes that enhance meaningful participation, and which do not prefer scientific (expert) understanding to traditional knowledge (Armitage et al. 2012). Although this shows the extent to which the significance of learning as a normative goal and process is documented in the ACM literature, vague notions of learning have frequently been expressed in the absence of empirical data to indicate whether, how, why, when, and the extent to which learning occurs (Armitage et al. 2008).

Therefore, this thesis addresses the gap in current knowledge regarding the nature of learning in ACM by differentiating the types of learning that occur such as learning to contribute to conservation efforts or learning to challenge the actions that underwrite conservation practices (Cundill et al. 2012), and how formal and informal structures facilitate learning outcomes (Plummer & Armitage 2010; Lebel et al. 2010). As such, the research focuses on learning by whom, how, why, and to what extent to show the relationship between the power of stakeholders and their levels of participation, and learning goals, mechanisms, and roles.

3.3.2.1   Learning for whom?

Who learns in ACM arrangements is a question that naturally emerges when the nature of

participation is explored (Diduck 2004). It is important to know "who learns" because despite

the apparent benefits of ACM practices, much less is known about who participates and how

different stakeholders acquire the right or capacity to participate in a learning process (Armitage

et al. 2008). The literature suggests that learning is carried out mainly by individuals (in groups)

and decision-makers (policy stakeholders). Learning undertaken by individuals (in groups) is

known as "community learning" (Reed 2010; Koontz 2014), while learning by policy

stakeholders is termed "policy learning" (Newig et al. 2016).

Community learning is undertaken to create rules and decrease reliance upon external sources

of information and resources (Ifejika Speranza 2010). This form of learning occurs in

community organizations (or groups), which depict how a community is organized, learning

goals of resource users, and the nature of influence group interaction has on the direction of

management decisions (Berkes 2009). A typical learning group (or network) plays a vital role

in mobilizing individuals with diverse capabilities and perspectives (Koontz et al. 2015),

implying that local networks (or organizations) are open and accessible. Such informality

affects the ability of groups to mobilize new kinds of knowledge, foster collaborative

relationships, and activate access to capitals (Pahl-Wostl 2009; Folke et al. 2009). Although

informality pulls negative energy into groups (Boyd & Folke eds 2011), the kind of leadership

may be a useful deterrent. In groups, leaders set out courses of action and provide energy and

direction for engagement (Pomeroy et al. 2001; Boal & Schultz 2007). As such, it is necessary

to draw leaders from the ranks of the community, and ensure that those selected are respected

by their peers. At the same time, leaders should be trained for and educated about their roles in

facilitating collective action (Pomeroy et al. 2001).

In divergence from community learning, policy learning involves actors in policy and decision-

making positions who use processes of learning to feedback information into management

decisions (Newig et al. 2016). Policy learning seeks to understand the context of policy implementation to provide lessons that inform changes in management structures and practices (Gilardi & Radaelli 2012). It is an approach to knowledge integration, involving the rich experiences and know-how of policy actors (and experts) and the knowledge of local stakeholders (Robinson et al. 2011). Moreover, policy learning links scientific principles with local realities (Oliver et al. 2012; Pahl-Wostl et al. 2013; Fazey et al. 2012) by responding to results from monitoring and evaluation activities undertaken in local communities. As such, policy learning enables decision and policy-makers to incorporate lessons into new actions and modify arrangements for effective practice (Mercer et al. 2012; Tengö et al. 2014). However, stakeholders with direct access to information and knowledge generated through policy learning may use it to build their image and extend control over others- a tendency that Long (1995 p.185 cited in Pomeroy et al. 2001) considers both "managerialist" and "interventionist". Such attempts can significantly weaken partnerships and partners' trust in and ownership of the process (Pomeroy et al. 2001).

What emerges from an understanding of "whom" ACM learning activities target (and empower) is that equal attention should be given to learning techniques, structures, and environment. That way, formal and informal organizations participating in ACM can be identified, as well as how they create the "political space" necessary for multi-stakeholder learning (Armitage et al. 2008). Achieving the ideal political space is difficult, given differences in worldviews, values, and systems of culture (Natcher et al. 2005), and the role of "external agents" in facilitating learning (Davidson-Hunt & Michael O'Flaherty 2007). In this thesis, I seek to understand the different kinds of learning that occur and the specific kinds that lead to more significant learning experiences, which implies accounting for the variety, implications, and outcomes of learning in a specific context (Armitage et al. 2008).

3.3.2.2   Typologies of learning

Three types of learning proliferate the ACM literature: social learning, experiential learning, and transformative learning (see table 3.3). By far, social learning is the most examined learning type, conceptualized as a process of social change through which people learn from each other in ways that benefit the wider community (or social-ecological system) (Pahl-Wostl 2006). There is a general lack of clarity on the conceptual meaning of social learning (Wals & van der Leij 2007), which Pahl-Wostl (2006) attributes to three factors. Firstly, social learning is mostly confused with the conditions for successful social learning, such as stakeholder participation (Pahl-Wostl 2006; Mostert et al. 2007; Kuper et al. 2009). It is erroneous to assume that participation inevitably leads to social learning (Bull et al. 2008), because social learning can take place without an active role in decision-making processes. Given the conflation of social learning and participation (Fernandez-Gimenez et al. 2008; Pahl-Wostl et al. 2008), it is important to account for whether projects simply facilitate participation, or ensure social learning impacts (Pahl-Wostl 2006).

Secondly, the concept of social learning is often conflated with its potential outcomes (Pahl-wostl et al. 2007), which means that learning processes should be distinguished from the wide range of outcomes that may be produced (such as changes in attitudes and understanding, improvements in resource management, enhanced trust, stakeholder empowerment etc) (Pahl-Wostl 2006). In this regard, the focus should be on whether social learning constitutes "sustainable learning", which Pahl-Wostl et al. (2008) use to refer to "developing new identities, as well as institutions and individual capacities that are more socially and ecologically robust with the common goal of sustainability". The issue highlighted in this conceptualization of social learning is that a clear distinction of social learning from its

outcomes is necessary because some processes (such as the delivery of monetary incentives) may produce the same outcomes without learning taking place (Pahl-Wostl 2006).

Thirdly, little distinction exists between individual and wider social learning processes, which implies that although learning occurs in an individual through changes in that individual's perceptions of the world and relationships within it (Fazey & Martonl 2002), learning processes involve social interactions with others, occurring at group, community, or societal scales (Pahl-Wostl 2006). This lack of clarity between individual and social learning limits investigations into the actual use of social learning in social-ecological systems, and raises intriguing questions about whether such learning occurs, to what extent, between whom, when, and how (Armitage et al. 2008). Therefore, it is important to account for group learning processes to understand the mechanisms through which it occurs, and to determine if the goals of learning interventions and participants are achieved (Pahl-Wostl 2006).

The next learning type that has been examined in the ACM literature is experiential learning. Experiential learning is critical to resource management processes because learners explore the benefits in working together to address mutual challenges and see merit in learning from each other's experiences (Wollenberg 2001). Such learning may occur for many reasons. For instance, learners may join community-based organizations to build knowledge about certain techniques and technologies that aid in forming and pursuing livelihoods. Also, sharing experiences with others may help align institutional practices with local preferences (Koontz et al. 2015) because it enables the capacity necessary to share and transfer knowledge for shaping management decisions (Armitage et al. 2008). As such, decision-makers are expected to pay attention to how learning evolves from experience and the nature of outcomes that result. By examining the nature of learning in ACM, this thesis provides insights into the ways by which

governance processes foster shared understanding and action by encouraging and facilitating interactions and experience sharing (Armitage et al. 2008).

The final learning type is transformative learning, which focuses on the ways by which learning causes shifts in preferences, attitudes, and practices (Vulturius & Swartling 2013). Transformative learning involves gaining new information and skills, and developing a new understanding by "making sense" of knowledge gained (Muro & Jeffrey 2008). Such learning can either be instrumental where learning helps individuals to better achieve their objectives; or communicative where improvements in knowledge lead to a better understanding of their own preferences, interests, and actions (Diduck et al. 2012). Change in perceptions and actions because of learning is a prominent subject in the literature. Diduck (2010) for example, has noted that learning experiences can cause shifts not only in knowledge, but also in beliefs, perceptions, and attitudes. In a similar vein, Vulturius and Swartling (2013) write that when local people and communities learn to transform, they change their practices, preferences, and behaviour. As such, through transformative learning, individuals can validate new experiences to shape their perceptions and actions (Mezirow 2000). To understand these dynamics, this thesis examines transformative learning in terms of changes in local perceptions of conservation, conservation benefits, and existing sanctions. In doing so, the thesis provides insights into progress made toward learning outcomes intended by the ACM process, and whether opportunities are created for new experiences, perceptions, and practices to evolve.

Learning theories	Key characteristics	Major literature
Social learning	Learning as a process of iterative reflection that occurs when we share our experiences, ideas and environments with others. Social learning includes single-loop (correcting errors from routines), double-loop (correcting errors by examining values and policies) and triple-loop learning (designing governance norms and protocols). Modelled on group learning processes	Argyris & Schon (1978); Leeuwis & Pyburn (2002); Keen et al (2005)
Experiential learning	Learning as a process of creating knowledge through the transformation of experience, learning-by-doing. This iterative	Kolb (1984); Keen & Mahanty (2006)

	learning cycle has four stages: concrete experience, reflective observation, abstract conceptualization, active experimentation. Largely modelled on individual learning processes, but applied to group processes	
Transformative learning	Learning as a reflective process that enables an individual's perceptions and consciousness to be altered. Transformative learning includes instrumental (task- oriented, problem-solving actions to improve performance of current activities) and communicative (ability of individuals to examine and reinterpret meanings, intentions and values associated with actions and activities) learning. Largely modelled on individual learning processes	Mezirow (1995, 1996, 2000)

Table 3.3 Typologies of learning (Adapted from Armitage et al. 2008 p.88)

3.3.2.3   Learning goals, mechanisms and roles

Learning goals

Clearly articulated learning goals is critical to effective ACM in resource systems (Innes & Booher 1999; Connick & Innes 2003; Armitage et al. 2011) thus analyzing intended goals for learning against outcomes is an important consideration in this thesis. The extent to which goals set for learning by individuals and institutions matches resulting outcomes depends largely on the attention given to learning in the design and delivery of ACM processes (Armitage et al. 2008). It is important to consider that individuals and groups involved with ACM-based governance processes may engage in learning activities for many reasons (to achieve different goals). For instance, some stakeholders may find learning a "good idea", which presents learning in a vague but important normative light. Others may learn for instrumental reasons, such as to tap opportunities for new or alternative harvesting techniques, or pursue livelihood approaches that may prove economically beneficial. Learning may also be a response to social-ecological change, with participants realizing that new approaches are required to deal with change or uncertainty. Such a goal often surfaces when stakeholders realize that a new "way of doing things" is required to avoid livelihood disruption and resource depletion (Armitage et al. 2008). Whereas these goals indicate the diversity of interests that may be contained within a

learning effort, the literature has given little attention to clarifying and specifying learning goals and expectations in ACM practice, which is necessary for effective policy-making and practice. By examining the nature of learning in ACM, this research also seeks to understand the basis of learning in greater detail.

Mechanisms to support learning

In understanding the goals for learning in forest communities, it is also crucial to analyze the mechanisms that support learning, or the mode through which learning goals are achieved (Pahl-Wostl 2006; Reed et al. 2010). One mode through which learning occurs is public deliberation, which includes various efforts to communicate, increase understanding, collectively reflect on problems, and proffer solutions (Schusler 2003; Leys & Vanclay 2011). Deliberation can take many forms including community meetings, training workshops, field schools, exchange visits, study tours etc, which may inspire collective action or drive exclusion, enhance learning and democratic practices (such as in leadership selection), and aid in adapting decisions already made (Cundill & Rodela 2012). Through deliberation, participants can discover values and experiences they share with others, and develop new views, values, and experiences (Schusler 2003). Such processes help local communities to agree on targets for collective action, define the things they value most about the community, and to identify goals and commitments that transcend their own interests (Innes & Booher 2010). Public deliberation can also create opportunities for learning that increases the knowledge available for effective ACM, by helping individuals to change their understanding of issues, challenges, opportunities, and the value of their own experiences and ideas relative to others (Raymond et al. 2010). Moreover, deliberative processes may serve a transformative purpose by creating new relationships, enhancing cooperative behaviour, and transforming negative attitudes and perceptions (Biggs et al. 2010). These changes occur as participants learn about the interests,

trustworthiness and commitment of others, and develop new ways and norms of interaction that can improve their capacity for collective action (Diduck 2010; Bodin & Prell 2011).

Collectively, mechanisms that support learning (such as meetings, workshops etc) can be used to help participants recognize that their interests are as legitimate as those of others (Crona & Parker 2012), which does not imply a change in personal positions (or self-interests), but a change in attitudes toward the views and opinions others may hold (Reed et al. 2010; Lebel et al. 2010). Despite the important role for these mechanisms in the ACM literature, they have been far less commonly and effectively employed in practice. This research, therefore, provides important insights into the modes through which learning occur, including whether they are deliberative, and what incentives and disincentives are engendered through their employment in forest communities.

Learning roles

Focusing attention on the goals and modes of learning inevitably raises questions about the facilitation of learning through the performance of certain roles (Armitage et al. 2011). Argote (2013) distinguishes learning roles into front-line participants who lead in knowledge generation because of their know-how of issues, middle participants who connect stakeholders at the front-line and senior levels, and senior participants who provide the normative setting for decision-making and action, and craft strategies for institutional practices. Moreover, Senge (2014) distinguishes three types of leadership roles in learning processes, including: local line leaders that apply new ideas and enforce new decisions; internal networkers or community builders that spread new solutions and nurture new ideas and relationships; and executive leaders who guide change processes, allocate financial resources and set normative frames for learning-related action. A similar characterization has been put forward by Nadler & Tushman

(1999) who group learners into idea generators (who generate ideas), internal champions (who apply these ideas to practical settings), boundary spanners or gatekeepers (who link multiple information and knowledge sources to aid in exchanging ideas generated), and sponsors or mentors (who stimulate and protect new ideas and provide the resources for learning engagement).

These three typologies suggest the same set of learning roles, including: producing and applying new knowledge, connecting multiple knowledge sources, disseminating knowledge through networks, and fostering learning by developing institutional strategies to allocate and monitor required resources (Phillipson et al. 2012; Crona & Parker 2012). As such, the facilitation of learning activities in resource systems may require the performance of specific roles that can be played by government agencies, donor agencies, NGOs, community-based organizations, local leaders, and researchers. This research considers these various roles and their relationships with learning types, goals, mechanisms, and outcomes.

3.3.2.4   Impact of learning

In exploring the nature of learning in ACM, it is also necessary to examine the impacts (outcomes) of learning (Armitage et al. 2011). For instance, learning may lead to changes in perceptions and actions, as well as trust building, mutual recognition, and shared understanding of goals (Ison et al. 2007; Cundill 2010; Leys & Vanclay 2011). As such, for learning to be said to have occurred, it is useful to describe specific changes in the level of understanding of participants, which, ideally, should go beyond individuals and small groups to become entrenched within a wider community (Pahl-Wostl 2006). The implication is that it is more plausible for individuals belonging to social units (such as communities, institutions, and organizations) to learn, as opposed to individuals learning on their own (Armitage et al. 2008). Social networks can shape and drive people's opinions and views (Chapin et al. 2010) through

social interactions (Newig et al. 2010) and influences by the wider structure within which they may be embedded (Prell et al 2010).

Therefore, it is conceivable that learning leads to changes in networks and organizations, and broader societal and institutional structures (Pahl-Wostl 2006). Rist et al. 2007 (p.23) writes that learning involves a process through which "different actors can deliberate and negotiate rules, norms, and power relations", which are outcomes achieved through workshops and trainings organized for resource users (Pahl-Wostl 2006). This literature establishes a connection between political ecology and learning research, suggesting that learning not only shapes institutional practices and interpersonal relationships, but also influences established norms and power dynamics within the social networks in which individuals relate (Newig et al. 2010; Prell et al. 2010). Learning also drives new beliefs, experiences, and worldviews concerning specific management processes and outcomes (Evely et al. 2011; Fazey et al. 2012). As such, in exploring the impact of learning in forest communities, it is necessary to explore learning outcomes that have a bearing on both individual and institutional practices, perceptions, decisions, actions, and relationships.

3.3.3   Power

An investigation into the nature of participation and learning in ACM inevitably leads to questions about how power is shared and exercised (Borrini-Feyerabend et al. 2013). Questions such as who is involved, how they are involved, and on whose terms such involvement is created are bound to be asked (Brett 2003; Mitchell 2013). (Pinkerton 2003 p.62-63), for example, maintains that "co-management is misnamed unless it involves the right to participate in making key decisions about how the resource should be used, by whom, and to what extent". As such, power is an important variable in exploring the nature of participation and learning in ACM, making it the result of an ACM process (how power is exercised) rather than an

organizing condition (Gillespie 2012). The concept of power does not lend itself to simplistic definitions, despite being the topic of decades of academic research (Winter 1996). A Weberian notion of power (Weber 1947 p.152) includes the "probability that one actor within a social relationship would be able to carry out his own will despite resistance". Power may also relate to the capacity to engender or resist change (Lukes 2005), which essentially distinguishes power based on domination and hegemony. Domination includes the exercise of power as force and coercion, while hegemony involves the exercise of power in cultural and ideological spaces through consent (Gramsci 1971).

3.3.3.1   Dimensions of power

Stemming from the perspectives above are the following dimensions of power: 1) "power as a resource" (Thomas 2011); 2) "power as coercion"; 3) "power as constraint"; 4) "power as consent production"; and 5) "power as a relationship" (Raik et al. 2008).

Power as a resource

The notion of power as a resource exists in two forms (Thomas 2011): a thin perspective that describes power with respect to resources, as opposed to structures of domination and subordination. Such a perspective implies that to have power is to have access to many kinds of resources, which conceptually links power to the notion of distribution. The second form, a thick perspective, considers power as something over and above resources, which constitute the means of power. This view describes power wielded by one group relative to another based on the capacity to bring about certain ends, which simply emphasizes that power can be possessed.

Power as coercion

Power as coercion implies that "A has power over B to the extent of getting B to do something that B would otherwise not do" (Dahl 1957 p.203). This is the most common discussion of

power in the literature on protected areas because of the "fences and fines" approach that was implemented in many developing countries, which facilitated forced removals, fear and torture, and restricted access to resources (Hitchcock 2002). In this regard, exploring the exercise and influences of power requires studying social agents in decision-making to understand what new values and experiences emerge with coercive decisions and actions in resource systems (Raik et al. 2008).

Power as a constraint

Power as constraint (see Bachrach & Baratz 1970) involves the exercise of power by A to constrain the actions or potential actions of B, which could also mean that an individual may create or reinforce social and political values and institutional procedures that limit the scope of a governance process to the consideration of only matters that are inoffensive to others (Raik et al. 2008). As such, others may be proscribed from taking any steps that could be detrimental to the preferences of those with power and control (Bachrach & Baratz 1970 p.7). Thus, power is not only a way to control decision-making, it is also exercised to enhance inaction on issues or organize bias. A view of power as constraint requires exploring how some institutional practices may systematically arrange bias to skew a process in the interest of a certain group over all others. Although these dimensions of power (as coercion and constraint) provide insights into the use of power, they do not adequately account for the social-structural processes that shape human relationships and interests (Raik et al. 2008).

Power as consent production

The fourth dimension, power as consent production, considers power as emanating from structural forces, rather than residing with individuals (Clegg 1989). This notion asserts that "A exercises power over B when A affects B in a manner contrary to B's interests" (Lukes 2005 p.37), which means that individuals exercise power over others based on their position in a

certain social structure. As such, this dimension of power accounts for the social structural production of consent and norms, emphasizing that the status quo is sustained by the practices of institutions and not through the actions of individuals (Raik et al. 2008). This is because societal forces influence individual interests, and individuals "only strive for those things that the defenders of the status quo want them to strive for…" (Braynion 2004 p.455). Hence, the fourth dimension of power transcends the observable essences of power as coercion and constraint because it accounts for institutions that shape how interests are expressed, though a strong focus on structures may ignore individually exercised power and discount expressions of agency (Raik et al 2008).

Power as a relationship

In this case, a realist view is taken that understands the workings of power based on relationships between individual agency (human agency) and social structure. The idea is that social structures both hinder and facilitate human agency, and are engendered through human relationships (Raik et al. 2008). It also conceives that the exercise of power is dependent on social structures but not determined by them, because social structures have an element of continuity but are not immutable (Isaac 1987). The implication is that "actors are involved in the continuous reproduction of structural properties through systematic practices…in turn, structural properties influence individual behaviour and are beyond the direct influence or cognition of individual actors" (Fogarty & Ravenscroft 2000 p.417). In other words, power structures facilitate and hinder human agency (Hayward 2000) in the same way as the exercise of power by actors enhances the role of power structures (Winter 1996). Therefore, this dimension of power conceives that power is the capacity to act in line with pre-determined, structured social relationships (Raik et al. 2008).

Empowerment

Running through these dimensions of power is the concept of empowerment, which emphasizes that being involved in a process does not imply having a voice, or being able to express yourself without concerns about not being listened to or fear of punishment (Cornwall 2008). Giving stakeholders the influence they desire transcends ways of capturing what people say (or want to say); it involves conscious efforts "from above" and "from below" (Gaventa & Robinson 1998). From above, effective participation depends on broader institutional reforms and the political will to translate commitment into concrete actions, or move participants from "involvement" to "influence" (Cornwall 2008), whereas from below, meaningful participation occurs with the existence of strategies to build and support collective action (Houtzager & Pattenden 1999). Based on these perspectives, empowerment refers to giving or providing power to others (Pigg 2002), which can be expanded to mean "the ability to make choices with and without sufficient power…" (Kabeer 1999 p.437). Ability here could refer to skills, attitudes, social and political relationships, finances etc that "…are acquired through a multiplicity of social relationships conducted in various institutional domains…and may take the form of actual allocations as well as future claims and expectations" (Kabeer 1999 p.437).

Considering these dimensions of power in the analysis of the nature of participation and learning in ACM, this thesis explores the workings of power between multiple stakeholders in the participatory forest governance process in the GRNP, as well as related consequences for implementation. For instance, by exploring the nature of learning in ACM, this research examines the role of power in influencing learning outcomes, which is crucial in the analysis of whether learning occurs because of social interaction or not. The idea is that the power dynamics implicit in mobilizing different knowledge holders can be a critical influence on resulting learning outcomes (Pahl-Wostl 2006). Therefore, the power dynamics that shape the ability of people and organizations to effectively engage in ACM practices will be explored and

understood in greater detail.

3.3.4   Institutions

As underscored in the preceding section, power in ACM is considered the result of a collaborative governance process rather than as an organizing condition (Raik et al. 2008). In this regard, participants contribute to a collaborative process of problem-solving through deliberation and negotiation facilitated by specific structures (Carlsson & Berkes 2005). This perspective focuses ACM more on function (or on utility) rather than on the existence of formal and informal structures, which leads to the next key concept examined in this research-institutions. The term "institutions" is used to refer to "the rules of the game in a society, or more formally (…) the humanly devised constraints that shape human interaction (…) and reduce uncertainty by providing a structure to everyday life" (North 1990 p.3). Leach et al (1997 p.5) see institutions as "regularized patterns of behaviour between individuals and groups in a society". Cleaver (2012 p.8) extends the definition to include "arrangements between people which are reproduced and regularized across time and space and which are subject to constant processes of evolution and change". Institutions, in the context of ACM, refer to "arrangements where responsibility for resource management is shared between the government and user groups" (Sen & Raakjaer Nielsen 1996 p.406). As such, ACM itself is an institution (Schultz et al. 2011; Chuenpagdee & Song 2012) that can be examined to gain an understanding of how resources are governed (Sandstrom & Rova 2010; Gupta et al. 2010), "how people get access to resources, how much they can access, when, for how long, and access to which resources" (Nunan et al. 2015 p.204).

Therefore, by examining institutional practices in ACM, this thesis contributes to research examining how individuals and groups of individuals influence whose voice matters in decision-making, what kinds of practices are accepted despite formal decisions and rules, how

decision-makers respond to the needs of local people and communities, and how such actions are affected by social interactions, power relations, gender norms, and other contextual conditions (Hall et al. 2014; Nunan et al. 2015). The thesis attempts to answer an enduring question about the utility of ACM institutions in the context of participation and learning (Plummer & Armitage 2007), since it is often assumed that institutions are a necessary but insufficient condition for successful resource management (Dinar et al. 2005). The utility of ACM institutions can be explored in relation to three factors: polycentricity (the sharing and exercise of power), participation, and learning as follows.

3.3.4.1   Polycentricity, participation and learning

Polycentricity implies that an ACM institution or system should have many centres of power (polycentric) rather than one means of control (monocentric) (Huitema et al. 2009). A polycentric system of governance exists where "political authority is dispersed to separately constituted bodies with overlapping jurisdictions that do not stand in hierarchical relationship to each other" (Skelcher 2005 p.89). What keeps ACM-based governance practices apart from state forestry are their polycentric nature, that is, they operate at different levels while ensuring division of authority (overlap in tasks), and a more intricate set of relationships (McGinnis 2000) and political spaces (Hajer 2003). By ensuring division of authority, ACM institutions enhance the self-governing capacity of local communities, which enables local communities to address their own challenges using their own skills and knowledge (Dietz et al. 2003; Ostrom 2005). In empirical terms, it is important to show whether and how ACM may be superior to state forestry because of its polycentric nature, and it is necessary to understand the issues that emerge with the division of authority and development of relationships in relation to the nature of interactions that occur (Huitema et al. 2009).

Participation in the context of institutions could refer to many things, ranging from consultation,

information sharing, joint decision-making etc. The literature proclaims participation using both normative and practical arguments. For example, participation is thought to improve decision-making by increasing access to information and other resources (power, benefits etc). Similarly, participation increases public knowledge of the management matters at stake, enhances transparency and accountability, and facilitates effective coordination and communication (Huitema et al. 2009). However, participation in institutional practices may have drawbacks. For example, there may be a lack of clarity concerning the role of stakeholders in a process (Mostert et al. 2007). In addition, participation may not be relevant for the stakeholders that are required to engage with and contribute to a process, because decisions are taken unilaterally, and actions may not represent the interests of all stakeholders (Huitema et al. 2009). As such, in exploring the utility of ACM institutions, it is useful to examine the choices and assumptions that stakeholders make for participation, and the efficacy of various structures in delivering on these objectives in practice.

A similar account for learning is needed, noting that ACM practices are mostly designed and delivered based on incomplete and uncertain information, and all governance processes are learning experiments (Pahl-Wostl 2006; Huitema et al. 2009). In this context, learning functions as a "boundary object" bringing stakeholders from multiple interests together (Huitema et al. 2009) to learn from and with each other across distinct perspectives and experiences (Lejano & Ingram 2009). Seeing ACM this way, from an institutional perspective, also conceives effectiveness in terms of capacities that result from learning to address uncertainty and change. Moreover, institutions may be deemed ineffective if they delegate more power to policy stakeholders and experts, who may not necessarily have all the information necessary for successful resource governance (Huitema et al. 2009). These suggestions match with the concept and practice of ACM, considering its strong focus on meaningful participation, collaborative learning, and power sharing (Stringer et al. 2006).

3.4   Summary

This chapter began by describing the political ecology lens through which the pathways, prospects, and pitfalls of ACM have been explored in this thesis. Political ecology not only examines the ways by which power and politics shape and drive the distribution of benefits and harms of human-induced environmental change (Lawhon & Murphy 2012), or how social relations of power and domination cause environmental governance challenges, but also asks how different groups of people are affected in different ways (Walker 1998). The chapter went on to present the concepts informing this thesis, which are participation, learning, power, and institutions. Using this approach, this thesis develops an understanding of the ways in which participation spaces are used, controlled, and co-opted in practice (Cornwall 2002). It explores who decides what to do, how decisions are made, how roles are shared, and who is, or should be held accountable for resulting outcomes" (Borrini-Feyerabend et al. 2013). Taken together, this research demonstrates how individuals and groups of individuals influence whose voice matters in decision-making, what kinds of practices are accepted despite formal decisions and rules, how decision-makers respond to the needs of local people and communities, and how such actions are affected by social interactions, power relations, gender norms, and other contextual conditions (Hall et al. 2014; Nunan et al. 2015). The next chapter provides a contextual background to this research.

Chapter Four

Adaptive Collaborative Management Practices in Sierra Leone

4.1   Introduction

This chapter provides the contextual background to the research. It begins with an overview of the forest sector in Sierra Leone, including key policy instruments, stakeholders and challenges to effective governance. The chapter goes on to introduce the research location, the Gola Rainforest National Park (GRNP), where an Adaptive Collaborative Management (ACM) programme for forest management was designed and delivered between 2002 and 2012. The chapter focuses on the reasons for designing the programme, the steps taken to institutionalize the implementation process, and the influence of the policy environment.

4.2   About Sierra Leone

Sierra Leone lies on the Atlantic coast of West Africa between the Republic of Liberia to the south and the Republic of Guinea to the northeast. It is split into four administrative regions (map 4.1), including the Western Area (recognized as former British colony), and the Northern, Eastern, and Southern Provinces (identified as former British protectorate). The country operates a parliamentary system, with pre-independence English common law and post-independence statutory law applied in the Western Area, and a dual system of general and

customary law applied in the provinces (Conway & O'Sullivan 2011). There are about 16 ethnic groups, 14 districts and 149 chiefdoms, which apply laws that may not be formally documented, but recognised as enforceable laws within the present national legal framework. Governance in the country falls within local and national arrangements, with national processes administered through an executive led by a President, and local processes administered through Paramount Chiefs and their delegates.

Figure 4.1 Administrative map of Sierra Leone (source: UNEP 2010)

Paramount Chiefs (PCs in short) became empowered as the sole authority of local government in the newly created Sierra Leone protectorate in 1896. The PCs and the sub-chiefs and headmen under them effectively remained the only institution of local government until the

World Bank sponsored the creation of a system of elected local councils in 2004 (CLGF 2011). These chiefs are elected for life by a "tribal authority" made up of local notables- mostly individuals from the designated ruling families. Ruling families are the elite created and given exclusive right to rule by the British at the launch of the system in 1896 (Acemoglu et al. 2013). Richards (2005) argues that customary institutions regulated by chiefs, especially those with an influence over marriage systems and youth labour, have long been the cause of inequality and resistance in rural areas. Similarly, Maconachie (2010) points out that the power and privilege enjoyed by chiefs in resource-rich areas have been strengthened through patrimonial relationships with politicians and their strong brokerage role in the artisanal sector. Under these conditions, rural subjects have been left with little or no space to participate in decision-making over local resources. It is even believed that many of the youth that joined rebel forces during the civil war were those rural subjects who had endured years of oppression and injustice under a rural gerontocracy led by chiefs.

In 2002, Sierra Leone emerged from a decade-long civil war, preceded by a long period of corrupt governance practices, which nearly broke down existing governance structures (Reno 1995; Richards 1996). These had profound impacts on the country's economy and essential social services. For example, the United Nations (UN) ranked Sierra Leone 181st out of 188 countries in its 2015 Human Development Report (HDR), placing the country at 8th out of 10 countries with the lowest Human Development Indices (HDI) in Africa (UNDP 2015). 71% of all poverty is found in rural areas (PRSP 2005) and life expectancy is 47 years. The under-5 mortality rate is 174 out of every 1000 children, the fourth worst rate in the world (UNICEF 2010). The country also has an adult literacy rate of 41% (UNICEF 2010), and a Global Hunger Index (GHI) score of 25.2, the 71st score out of 81 countries (IFPRI 2011). With a population of over six million, only 49% have access to improved sources of drinking water, 26% of which live in rural areas (UNICEF 2010). These are indications of absolute poverty, which the

government attributes to the lack of adequate investment in education, health, energy, and sanitation; lack of technology, inputs, and markets for agricultural extension and agribusiness; low income and employment opportunities; the ten-year civil war and its destruction of essential infrastructure; and social challenges such as gender disparity, youth empowerment issues, and the size of rural families (IMF 2005).

The decentralization programme in 2004 led to a proliferation of donor-driven policies and programmes, which sought to strengthen civil society and open up new democratic spaces for citizen engagement. An optimistic interpretation of these developments might suggest that the central government is committed to shifting the its responsibilities over natural resources and development processes to local government institutions (such as councils and paramount chiefs). It even appeared at the time that the passage of the Local Government Act was an attempt to rectify histories of social differentiation and uneven social development. Maconachie (2010) indicates that decentralized natural resource management reforms have added an additional layer of institutional complexity because new formalized spaces for citizen participation have increasingly overlapped with the traditional structures of the Native Administration (NA), further obscuring the roles and responsibilities of the various local authorities involved in decision-making, and weakening downward accountability.

Natural resources affected by the decentralization programme include forests, fisheries, mineral resources, land resources, water resources and other environmental resources. Sierra Leone's rainforests, mangroves and savannah forests host a high level of endemic and (internationally) rare and threatened species. These "critical ecosystems" are mostly found in the Western part of the Upper Guinea Forest Ecosystem (UGFE), noted in the World Wildlife Fund's (WWF) 'Global 200' list of critical regions for conservation, and Conservation International's list of 34 global biodiversity hotspots (Brown & Crawford 2012). The forest cover is estimated at

2,725,821 hectares, making up to 38% of the nation's total land area. Moist, semi-deciduous forests are found in the central and southern parts of the country, while tropical rainforests are found in the Eastern Province and Western Area (the REDD Desk 2012). More than 70% of this is believed to have been converted to savannah and farmlands (GoSL 2010), indicating the scale of deforestation in the country. Much of the forest loss was recorded between 1990 and 2010, when about 20,000 hectares was lost annually (FAO 2015). Drivers of deforestation include slash and burn, mining (artisanal and large-scale), logging (commercial), and land leases for agro-investments (see GoSL 2010; USAID 2010; UNEP 2010; RSPB 2013). Reno (1995) and Richards (1996) also attribute forest loss to many years of centralized management, weak policies, inappropriate institutions, and corruption. A useful example is the Strategic Plan for forestry, which allocated no funds to forest protection between 2012 and 2014 (Showers 2012 p.12). Another example is the understaffed nature of the Forestry Division, where no new staff has been hired in the last 10 years (FAO 2010).

Despite these management challenges in the forest sector, forest conservation continues to attract a lot of interest from researchers and policy-makers alike. This is because, locally, forest conservation provides economic benefits to forest communities, which contributes to the government's poverty alleviation goals. Internationally, forest conservation delivers climate benefits, specifically REDD+ (Eco-securities 2008). Forest conservation also attracts donor support, which is of importance to a sector that cannot fund its own projects. For example, the Government of Sierra Leone (GoSL) allocated a meagre budget of $110,000 to the Forestry Division in 2011 for the protection of all 48 forest reserves across the country (RSPB 2013). The government lacks a sustainable funding strategy, which has had impacts on conservation and community development work in forest protected areas across the country (see BCP project proposal 2009 cited in RSPB 2013).

4.2.1   Policy instruments for forest governance

To address some of the challenges identified in the previous section, several attempts have been made to formulate and implement effective forest governance policies (see table 4.1). One can begin with a study undertaken by Lane-Poole in 1911, which flagged the alarming rate of forest loss, about 99%, lost mostly to the trade in timber and other wood products (Lane-Poole 1911). This led to the establishment of the country's first forest institution in 1912, the Forestry Division (FD) (Cole 1968), and the adoption of the 1912 Forest Act (GoSL 1912). The act sought, among many issues, to provide operational rules for creating protected areas, and show the wider public that there were benefits in forest conservation. Nonetheless, capacity and funding constraints led to the amalgamation of the Forestry and Agriculture Departments in 1922, which lessened policy pressure on forest exploitation (MacGregor 1942). After a period of severe exploitation, the 1946 forest act was adopted, which called for decentralizing forest administration and providing development benefits to forest communities (GoSL 1946).

Timeline	Policy outcome(s)
1911	Lan Poole report on the forest estate is published
1912	First forest institution, the Forestry Division, is established. The 1912 Forest Act is formulated, resulting from recommendations made in the Lan Poole report.
1922	Amalgamation of the Forestry and Agriculture Departments
1929	Separation of the Forestry and Agriculture Departments
1946	Adoption of a new Forest Act calling for decentralization and community benefits
1960	White paper is published by colonial administration emphasizing the benefits in balancing community-conservation interests
1961	Shift from forest management to trade in timber and other wood products
1963	Amalgamation of the Forestry and Agriculture Departments under the Ministry of Agriculture, Natural Resources and Forestry (MANRF)
1964	A strategic plan is developed for the implementation of the 1946 Forest Act
1972	Adoption of a Wildlife Conservation Act
1980	Country-wide assessment of the forest estate by the FAO
1986	Implementation of a Green Revolution Programme (GRP) to address land use issues related to agricultural extension and forest loss
1988	Adoption of a new forest act, and the implementation of fuelwood projects funded by FAO, UNDP, Plan International and the Rokel Leaf Tobacco Development Company (RLTDC).
1990	Adoption of the National Tropical Forestry Action Plan (NTFAP)
1992	Adoption of the National Environment Policy (NEP)
1996	Ratification of the UN Convention on Biological Diversity (UNCBD)
2002	Establishment of the Environment Protection Agency (EPA)
2005	Establishment of the National Commission on Environment and Forestry (NaCEF)

2010	Forest and wildlife Conservation Policies calling for collaborative forest management are adopted, and the EPA act is amended to broaden the scope of its mandate. A national strategy for designing and delivering REDD+ is proposed.
2011	Draft Forest and Wildlife Conservation Acts are proposed, which upgrade the 1988 Forest Act and 1972 Wildlife Conservation Act respectively
2012	The National Protected Area Authority (NPAA) and Conservation Trust Fund Act is adopted
2014	A biodiversity strategy and action plan is prepared with support from EPA; NPAA commences operations across the country
2015	Workshops held for the adoption of a new Forest Act, a Wildlife Conservation Act, a Wetlands Conservation Act, and an amendment to the NPAA Act

Table 4.1 Important timelines in forest policy formulation and implementation in Sierra Leone

The 1946 forest act failed as other policy instruments before it, because of perceptions that it will order the displacement of communities that relied upon forest livelihoods (Konteh 1997). In response, the colonial administration published a white paper to alert stakeholders on the alarming rates of deforestation, as well as the significance of balancing conservation-community interests. The call drew far less attention, as what followed were many dubious deals that expanded the trade in wood products, and reinforced privileges enjoyed by government officials and local elites (GoSL 1974). A significant shift came with a country-wide assessment of forest resources by the FAO in 1980, which recommended new operational procedures, specifically the adoption of a collaborative forest management strategy (FAO 1982). The resulting act, the 1988 Forest Act, outlined approaches for concession agreements, land leases and reforestation. Further support came with the adoption of a National Tropical Forestry Action Plan (NTFAP) in 1990, and a National Environment Policy (NEP) in 1992. Both instruments emphasized the usefulness of simultaneously addressing community development and forest conservation imperatives through effective governance structures and policy enforcement (MLHE 1992).

This step essentially facilitated a focus on "community participation and learning" in legal frameworks that followed the 1988 Forest Act, namely the 1998 Forest Act, 2004 Forest Policy, 2010 Forest Policy, the 2010 Conservation and Wildlife Policy, the draft 2011 Forest Act, the

draft 2011 Wildlife Conservation Act, the 2015 Forest Act, the 2015 Wildlife Conservation

Act, and the 2015 Wetlands Conservation Act (see box 4.1 below). For example, the 2004

Forest Policy supports the sustainable development and exploitation of forests and wildlife for

the material, cultural and aesthetic benefits of adjacent local communities. It includes a section

on community-based forest management, which strongly emphasizes the empowerment of local

communities to manage forests and wildlife together with government agencies such as the

Forestry Division (CEMMATS 2004).

Box 4.1 Key policy instruments for forest governance in Sierra Leone

- The Forestry Policy (2010) promotes a co-management approach to forest governance involving the state, its partners and local communities, and precisely describes the roles these actors and stakeholders should play in the process. Similarly, the Conservation and Wildlife Policy (2010) promotes the sharing of wildlife management rights, roles and responsibilities with actors and stakeholders at different levels of organization, and provides a legal framework for ecotourism (GoSL 2010).
- The draft Forestry and Conservation and Wildlife Acts (2011) emerged as plans for action for enforcing these earlier laws and regulations, but particularly to upgrade the Forest Act (1988) and the Wildlife Conservation Act (1972) respectively. The drafts were also meant to provide a legal framework for guiding the implementation of international conventions like the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species (CITES) and the United Nations Framework Convention on Climate Change (UNFCCC).
- To pay more attention to forest conservation issues in protected areas (where much of the resource governance takes place in the country), a National Protected Area Authority (NPAA) was formed through the National Protected Area Authority and Conservation Trust Fund Act (2012). This was followed closely by series of workshops in November 2015 to review and validate improved versions of earlier acts, now named the Forestry Act (2015) and Wildlife Conservation Act (2015). The new legislations promise to further institutionalize collaborative governance procedures, with an explicit focus on community participation and learning. Together with the Wetlands Conservation Act (2015), the proposed legislations seek to ensure that local actors have as much power, influence and control as other stakeholders, and promotes the conversion of forest areas into economically beneficial goods and services, especially for poor and dependent local communities.
- These legislations offer support to plans set out in the Poverty Reduction Strategy Paper (PRSP 1: 2009-2012), dubbed the 'Agenda for Change', in which forests feature as a major resource for present-day and future economic growth, and the maintenance of the social quality of life of citizens. They also support the 'Agenda for Prosperity' (PRSP 2: 2013-2018) that emphasizes the role for forest resources in ensuring climate-resilient development and pro-poor growth (see the REDD Desk 2012).

4.2.2   Key actors, stakeholders and institutions

The task of developing and operationalizing forest policy rests with different institutions,

including the Forestry Division (FD), the National Protected Area Authority (NPAA), and the

Environment Protection Agency (EPA). Such processes typically draw stakeholders from Non-

Governmental Organisations {such as Conservation Society of Sierra Leone (CSSL), Environmental Forum for Action (ENFORAC), Environmental Foundation for Africa (EFA), WeltHungerHilfe (WHH)}; donor agencies (such as UN agencies, EU Delegation etc); and forest communities (such as local leaders, residents etc). Figure 4.2 illustrates the stakeholder network for forest governance in the country, highlighting "strong" and "weak" linkages. The figure portrays the lack of coordination between key actors and institutions, which also implies the lack of a coherent strategy that defines the boundaries of institutional roles and authority. For example, The Ministry of Mines and Mineral Resources (MMMR) can use the Mines and Minerals Act (2009) to justify the authorization of mining in protected areas, which existing forest policies and laws do not permit. These are significant challenges that also bear on the implementation of policy in forest communities.
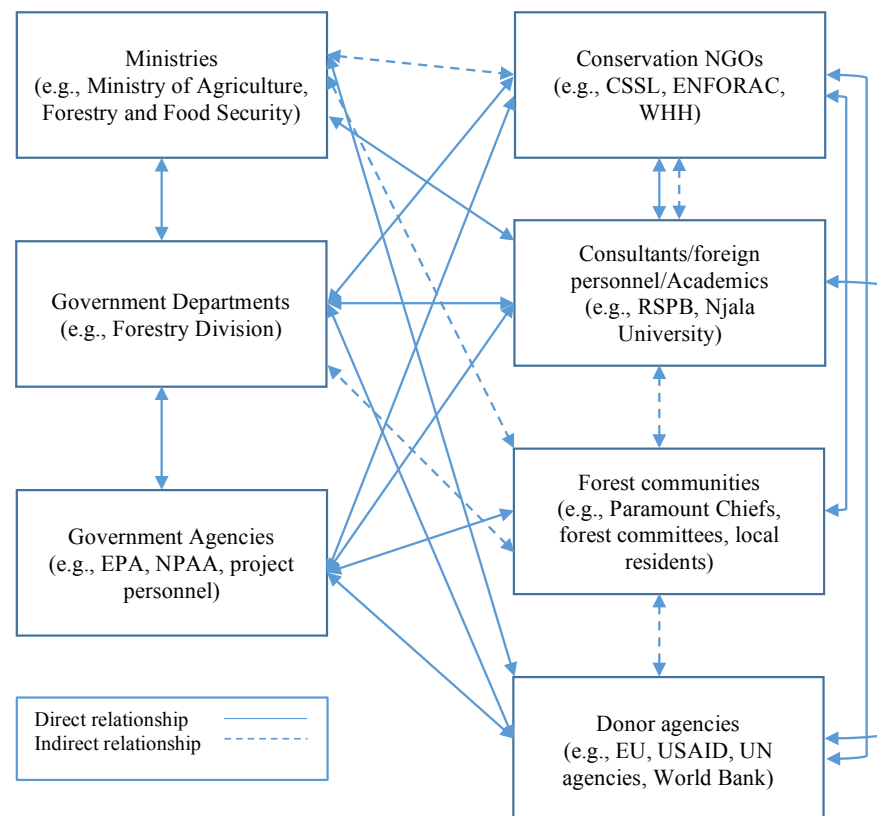
Figure 4.2 The stakeholder network for forest governance in Sierra Leone (source: Researcher)

4.2.2.1   Government organisations

Forestry Division (FD)

Forestry Division (FD) in the Ministry of Agriculture, Forestry and Food Security (MAFFS) is the main institution for forest conservation in the country. In 2008, a restructuring process split FD into three sub-divisions, known commonly as the 3Cs: Commercial Forestry, which is concerned with regulating trade in forest products; Community Forestry, which focuses on creating and managing Community Conserved Areas (CCAs); and Conservation and Wildlife, which is concerned with protecting the forest estate across the country. The division is headed by a Director of Forestry (described as "Chief Conservator" in the 1988 Forest Act and 1989 Forest Regulations) who oversees the protection of forests, including issuing permits to public and private operators within forests (such as loggers), signing concession agreements on behalf of government (as in the case of the collaborative forest management project examined in this thesis), and implementing forest policy in conservation areas (see table 4.2).

Conservation Area	Area (hectares)	Category	Ecosystem type	Proposed or existing status
Loma Mountains Forest Reserve	33,201	National Park	Montane	National Park
Tingi Hills Forest Reserve	10,519	Game Reserve	Montane	Game Reserve
Gola Rainforest National Park	76,100	National Park	Rainforest	National Park
Kambui Hills	21,228	Forest Reserve	Rainforest	Forest Reserve
Kangari Hills	8,573	Game Reserve	Rainforest	Game Reserve
Tiwai Island	1,200	Game Sanctuary	Rainforest	Game Sanctuary
Western Area National Park	17,688	National Park	Rainforest	National Park
Nimini South Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Dodo Hills Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Bo Plains	2,600	Game Sanctuary	Savanna	Game Sanctuary
Kuru Hills Forest Reserve		Game Reserve	Savanna	Game Reserve
Outamba-Kilimi National Park	110,900	National Park	Savanna	National Park
Bagru-Moteva Creek		Game Reserve	Wetland	Game Reserve
Bonthe Mangrove Swamp	10,100	Strict Nature Reserve (SNR)	Wetland	SNR
Bumpe Mangrove Swamp	4,900	Game Sanctuary		Game Sanctuary
Kpaka (Pujehun)	2,500	Game Reserve	Wetland	Game Reserve
Lake Mabesi	7,500	National Park	Wetland	National Park
Lake Mape	7,500	National Park	Wetland	National Park
Lake Sonfon	8,072	National Park	Wetland	National Park
Mamunta-Mayoso	1,000	Game Sanctuary	Wetland	Game Sanctuary
Sewa-Waanje	10,000	Game Reserve	Wetland	Game Reserve
Sulima Mangrove Swamp	2,600	SNR	Wetland	SNR

Yawri Bay	33,605	Game Reserve	Wetland	Game Reserve
Nimini North Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Gboi Hills Forest Reserve #1		Forest Reserve	Rainforest	Forest Reserve
Gboi Hills Forest Reserve #2		Forest Reserve	Rainforest	Forest Reserve
Lalay Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Gori Hills Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Tonkolili Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Tama Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Farangbaia Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Wara Wara Hills Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Malal Hills Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Kasewe Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Bojene Hills Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
South Kambui Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Moyamba Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Waterloo Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Singamba Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Port Loko Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Occra Hills Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Mongheri Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Tabe Forest Reserve		Forest Reserve	Rainforest	Forest Reserve
Yelibuya Island	3,900	SNR	Wetland	SNR
Sierra Leone River Estuary	259,000	Important Bird Area (IBA)	Wetland	IBA

Table 4.2 List of conservation areas in Sierra Leone (source: World Bank 2006 p.156)

In recent legislations (such as the 2010 Forestry Policy), and mainly because of the apparent lack of trust in the management and technical leadership of the FD, the role of local communities is being increasingly recognised. Local participation in forest governance practices, as well as learning from doing so, are now considered cost-efficient and effective ways of managing protected areas and ensuring greater distribution of benefits. Therefore, the provision of greater incentives and support for community participation and learning in the management of forests is now a major priority for the FD and its partners (USAID 2007). 22% of the forests being jointly managed are found in 48 forest reserves and conservation areas (Brown & Crawford 2012); 1% on community-owned or Chiefdom land; and 23% within a wetland and Marine Protected Area (Chemonics et al 2007; ARD 2010). However, a recent UNEP report (UNEP 2015) places the number of conservation areas in the country at 50, as shown in Figure 4.3 and classified in table 4.3 below.
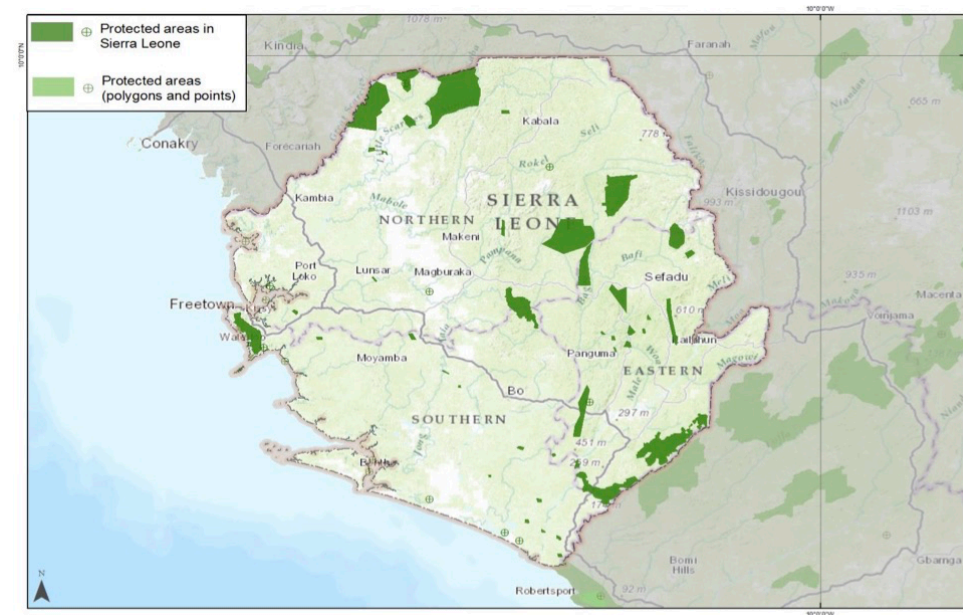
Figure 4.3 Protected and other conservation areas in Sierra Leone (source: UNEP 2015)

Property	Classification	Quantity
Realm	Terrestrial	42
	Marine	8
Status	Designated	43
	Proposed	7
Regional protected areas	Marine protected area	0
	Site of community importance	0
	Special protected area	0
International protected areas	UNESCO world heritage sites	0
	Wetlands of international importance (RAMSAR sites)	1
National protected areas: IUCN management category	Strict nature reserve	0
	National park	5
	Habitat/species management area	1
	Protected landscape or seascape	1

Table 4.3 Classification of conservation areas in Sierra Leone (source: UNEP 2015)

National Protected Area Authority (NPAA)

A recent act (the National Protected Area Authority and Conservation Trust Fund) enacted in 2012, led to the establishment of a National Protected Area Authority (NPAA). Its specific mandate is "to promote biodiversity conservation, wildlife management, research, and sale of ecosystem services in national protected areas, and to provide for other related matters" (Part 3 of the Act). The NPAA was formally constituted in 2014 "to exercise oversight authority over

national parks and protected areas designated for conservation purposes" (Part 3 section 12.1 of the Act). The agency is also mandated "to promote REDD+ projects in Sierra Leone" (Part 3 section 12.2f of the Act), evaluate and approve management plans and budgets for protected areas (Part 3 section 12.2 p.5 of the Act), develop laws and generate incentives for collaborative forest management (Part 3 section 12 p.1 of the Act), among other objectives. It has taken over the Conservation and Wildlife arm of the FD, as explained by a staff interviewed at the NPAA office in Freetown below. However, both institutions (FD and NPAA) continue to collaborate on policy development and implementation efforts, including the REDD+ capacity development project, and the development and validation of the 2015 Acts for Forestry, Wildlife Conservation and Wetlands Conservation.

Environment Protection Agency (EPA)

EPA plays a crucial role in forest management and broader environmental governance actions. It started in 2000, though formal institutionalization came with the enactment of the EPA Act in 2008, and much further through an amendment in 2010. The EPA cooperates with the FD and NPAA on many issues related to environmental regulation in forest protected areas, more specifically for carbon financing in the forest sector. It also liaises with the FD and NPAA to ensure that companies that obtain concessions in forest areas undertake Environmental Impact Assessments (EIA). Contributions from the EPA were fundamental to the design and validation of the 2015 Acts for Forestry, Wildlife Conservation and Wetland Conservation. Furthermore, EPA serves as the focal agency for the UN Framework on Climate Change (UNFCCC), the UN Convention for Biological Diversity, and all Global Environment Facility (GEF) interventions. It recently constituted a National Secretariat for Climate Change (NSCC), which is responsible for directing climate-related policy work, including leading negotiations at Conferences of Parties (COPs). The agency is also implementing an EU-funded environmental governance

project to review laws and policies for the governance of environmental resources and climate change (The REDD Desk 2012).

4.2.2.2   Non-Governmental Organizations (NGOs)

Sierra Leone also has many NGOs that focus on policy influencing, project implementation, and environmental education. One that is playing a crucial role among these national NGOs is Conservation Society of Sierra Leone (CSSL). CSSL remains one of the prominent conservation NGOs in the country since its establishment in 1986. It is a major stakeholder in the Gola Forest Programme (GFP), which is a partnership also involving the Government of Sierra Leone and the Royal Society for the Protection of Birds (based in the UK). Additionally, CSSL has led many conservation education initiatives, including recently, a Wildlife Clubs of Africa project that formed School Nature Clubs across the country. Together with being a Birdlife member, and an active member of the Environmental Forum for Action (ENFORAC), CSSL also hosts the Environmental Justice Foundation (EJF), which works with the government and coastal communities to address issues related to unlawful and unreported fishing practices (The REDD Desk 2012). Other notable examples of national NGOs contributing to projects in the forest sector include the Environmental Foundation for Africa (EFA) and Green Scenery. These NGOs are likely to join future awareness raising campaigns and be invited to contribute to national debates on REDD+.

4.2.2.3   International development agencies

Another important actor is the international development community, comprising bilateral, multilateral and donor bodies [such as foreign embassies; the World Bank; the United States Agency for International Development (USAID); agencies of the United Nations (e.g., UN Development Programme; UN Environment Programme, Food and Agriculture Organization (FAO) etc); Birdlife International; Centre for International Forestry Research etc (CIFOR),

European Union (EU), United States Forest Service- International Programmes (USFS-IP) etc].

They mainly provide financial and technical support to the government (see box 4.2 for

examples), which continues to grapple with ineffective management of protected areas, and the

related problems of encroachment, deforestation and poaching (Koker 2011). They also support

local NGOs [such as a Green Africa (GA) that received a 1-year Global Environmental Facility

(GEF) small grant for activities in the Gola Rainforest National Park (GRNP); Green Scenery

(GS); Environmental Foundation for Africa (EFA); Environmental Forum for Action

(ENFORAC) etc] and international NGOs [such as WeltHungerHilfe (WHH) that received EU

support for a 3-year conservation project in the Western Area National Park (WANP)], which

continue to search new sources of funding for community development and conservation work

in forest protected areas across the country (RSPB 2013).

Box 4.2 Examples of donor investments in the forest sector in Sierra Leone

Various Integrated Conservation and Development Projects (ICDPs) focused on forest conservation have been
implemented in Sierra Leone. A few examples supported by donor agencies in the past decade include:

- A 5-year (2010-2015) $24 million Biodiversity Conservation Project (BCP) funded by the World Bank,
  which focuses on stopping land degradation, biodiversity loss and deforestation, by building the capacity of
  local, sub-national and national institutions (World Bank 2010).
- A USAID programme titled 'Creating an Enabling Policy Environment in Sierra Leone (CEPESL)' that
  provided technical support to national and local institutions for forest policy formulation and
  implementation. USAID also funded a 4-year (2008-2012) $13.2 million project called Promoting
  Agriculture, Governance and Environment (PAGE) that focused on developing local partnerships for forest
  co-management. Through the partnerships, PAGE established a platform for knowledge exchange and policy
  influencing (ARD 2010).
- A programme implemented by UN Development Programme (UNDP), Global Environment Facility (GEF),
  UN Food and Agriculture Organization (FAO) and local partners. The $1.2 million, 6-year capacity building
  project (2008-2013) targeted national and local institutions for improving community learning and
  participation in forest management decision-making (UNDP 2007).

4.2.2.4   Local (forest) communities

Stakeholders in forest communities are most affected by the implementation of forest policy.

They are located near the conservation areas mentioned in the previous sections, and depend

primarily on forest resources for monetary and non-monetary benefits (Magis 2010; Akamani

2012). Forest resources are utilized to meet household needs, or bolster commercial investments

(Nakakaawa et al. 2015). A typical (local) community comprises leaders or elites (mainly Paramount Chiefs and their delegates), and residents. Local leaders exert the most influence and control, given the nature of their relationships with government and project-level actors, and the privileges accorded by chieftaincy institutions in rural areas (such as receiving royalties from forest-related activities). Residents comprise landholding families (represented by a family head) that own the land on which a certain forest estate may be established, which gives them right to various compensations and benefits. Residents also comprise others who don't have landholding rights, and who only have access to collective benefits (such as infrastructure development).

4.2.3   Adaptive Collaborative Management in Sierra Leone

The mix of actors and actions described in the preceding sections demonstrate the increasing recognition for Adaptive Collaborative Management (ACM) as a suitable method for reconciling the goals of conservation and development in Sierra Leone. ACM has garnered attention because of growing awareness that the long-term sustainability of conservation areas relies heavily upon the meaningful participation and knowledge of local communities because of their unique and mutual relationships with these settings (World Bank 2010). ACM has been adopted for the governance and implementation of forest management programmes across the country to provide the necessary strategic and operational tools and experiences to enhance management effectiveness in FPAs. Examples include ACM interventions in the Western Area National Park (WANP), Outamba-Kilimi National Park (OKNP) and the Gola Rainforest National Park (GRNP). To adopt an ACM-based governance approach, careful analysis of the FPA's potential threats and causes of forest loss is done, as well as the socio-economic and ecological outputs of the process. Six broad criteria are considered, including (World Bank 2010): 1) species diversity, number of threatened and endemic species (species of global importance, distribution of flagship species etc); 2) representativeness of PA (habitat types,

uniqueness of vegetation etc); 3) critical function of the PA (ecological functions, resource acquisition by forest communities etc); 4) legal status of PA (nature of legislation in place and possibilities for sharing roles, power and authority); 5) severity and category of threats facing the PA (including both anthropogenic and those driven by anthropogenic influence); and 6) gaps in knowledge base and socio-economic utility (opportunities for knowledge generation, transfer and use, and alternative livelihood support).

4.2.3.1   Goals for Adaptive Collaborative Management

Specific goals

ACM interventions are designed to reform institutional frameworks and legislation that govern forest management practices across the country. The specific goals include to enhance an environment for the successful design and delivery of protected area management plans and projects; build capacity for mainstreaming forest management into development planning at the sub-national and local levels; broaden the participation of NGOs, CBOs and forest communities at the sub-national and local levels; create effective mechanisms for fair and equitable distribution of benefits; and ensure synergies and operational effectiveness within and between public and private agencies that are responsible (or concerned about) forest governance in FPAs (World Bank 2010). Moreover, ACM interventions are designed to build capacities for the effective management of FPAs by: 1) strengthening the scientific and knowledge base through on-site training workshops and farmer field schools; 2) developing and using innovative tools and methodologies for monitoring, evaluation and learning; and 3) developing information networks for exchanging information with stakeholders at different levels. Three key outcomes are expected from these interventions including: 1) improved management of conservation areas; 2) improved knowledge and skills; and 3) provision of sustainable (alternative) livelihoods.

Concerning the improvement of conservation areas, the objective of ACM practices is to provide the necessary policy and institutional support to improve management effectiveness of high-biodiversity areas. Activities mostly include participatory studies of threats to and opportunities for conservation, as well as social benefits to provide to adjacent local communities. Information obtained from these studies are used to develop management plans for the biodiversity areas and buffer environments. This is followed by the actual implementation of management plans through targeted investments for protecting the local biodiversity, enforcing laws and policies, determining new boundaries, mapping, zoning and gazettement, and undertaking site-specific conservation practices such as soil erosion control and forest rehabilitation and restoration. Moreover, to generate and transfer knowledge and skills, ACM interventions seek to raise the awareness and increase the know-how of stakeholders and beneficiaries at all levels and to enhance their capabilities to participate meaningfully at the appropriate level of the management process. Knowledge gained is used to maximize management effectiveness while improving local socio-economic conditions through improved and innovative livelihood activities. At the local level, ACM practices seek to broaden and strengthen local constituencies for forest management through the formation, development and strengthening of interest and site support groups. Furthermore, ACM interventions provide alternative livelihoods to reduce local dependence on forest resource exploitation. ACM practices provide local communities with resources to develop alternative sources of income, thus expanding opportunities for environmentally-sound agribusiness, jobs, and poverty reduction (World Bank 2010).

Broader goals

Beyond the specific goals highlighted above, ACM practices are also designed to achieve three broad goals, including: 1) poverty reduction; 2) decentralization; and 3) institutional development. Poverty reduction focuses on using forest conservation actions to achieve

national targets for poverty reduction as enshrined in the Poverty Reduction Strategy Paper (PRSP). The PRSP focuses on eliminating food insecurity, reducing unemployment and providing basic social services (schools, health facilities, water supply, good roads etc). In the case of decentralization, ACM interventions seek to provide local authorities substantial autonomy in financial and human resource management, and communities with a platform to actively participate in making, implementing and tracking forest management decisions. Decentralization through ACM practices focuses on helping to establish a functioning institutional arrangement at the landscape level to improve participation, learning and accountability. Regarding institutional development, ACM practices motivate the formulation and implementation of a range of policies, laws and regulations that help to address challenges to forest management in PAs. Examples include the 2010 Forest Policy and 2015 Forest Act. These instruments are used to maintain the integrity of critical ecosystems across the country, while guaranteeing meaningful local participation through involvement in planning and implementation, capacity building, incentive measures, communications and outreach, and research (World Bank 2010).

4.2.3.2   Structures for Adaptive Collaborative Management

The Government of Sierra Leone (GoSL) through the Forestry Division (and now the NPAA) takes lead in the design and implementation of ACM interventions, though technical and financial support is provided by international development agencies. An example is the Biodiversity Conservation Programme (BCP) that was implemented by the Forestry Division (FD) with technical and financial support from the World Bank. However, in some conservation areas such as the GRNP, international conservation NGOs (such as the RSPB) lead on both the design of local initiatives and the day-to-day management of resulting projects (Forestry Division 2009). The GRNP is managed through a partnership involving the GoSL, RSPB and CSSL (RSPB 2013), which provides a useful lens for exploring the politics and mechanics of

ACM practices that involve local, national and international actors. Being the focus of this research, the emergence and operationalization of ACM practices in the GRNP have been described in a separate section (see section 4.3.1).

Generally, the design and implementation of ACM interventions involve a wide range of stakeholders at the community, chiefdom, district, national and international levels, tapping into the capacities of community groups, NGOs (such as Green Africa, WHH, CSSL, RSPB), scientific and academic institutions (such as Njala University) and government agencies (such as NPAA). Collaboration among these stakeholders is operationalized through partnership and concession agreements, which primarily seek to include as many stakeholders as possible and enhance meaningful involvement (World Bank 2010). A partnership and concession agreement informs a stakeholder engagement plan, as well as approaches to implementation and benefit-sharing. Actual implementation work involves establishing a programme management team (or unit), which coordinates the activities of several committees, sub-committees and working groups at the sub-national and local levels. A programme management unit (such as the Gola Programme Office in Kenema) provides administrative and technical support, including planning, implementing and monitoring projects. A Team Leader (TL) is appointed jointly by partners involved in the ACM process to lead the programme management unit in the overall coordination, implementation and tracking of field activities. The TL liaises with technical personnel, women and youth groups, traditional authorities, local councils etc throughout the life cycle of an ACM intervention.

4.2.3.3   Barriers to Adaptive Collaborative Management

Existing documentation on ACM-based governance practices point to three main barriers to successful implementation in FPAs (e.g., World Bank 2006; Forestry Division 2009; GoSL 2010; RSPB 2013): 1) systemic weakness in conservation legislation and inadequate capacity

for their implementation; 2) ineffective management partnerships; 3) insufficient and unsustainable sources of funding; 4) insufficient public awareness and poor information (knowledge) management; and 5) inadequate and inappropriate incentives for livelihood improvement. On the systemic weakness of conservation policies and procedures and the incapacity for effective enforcement, it is evident that although many laws and policies have been formulated (see section 4.2.1), these instruments lack strength because they are mostly out of tune with current best practices and approaches to forest conservation. Moreover, laws and policies are flouted with impunity and plagued by weak governance and accountability structures. The Forestry Division, for example, is woefully equipped, understaffed and operating with a budget that is both inadequate and without focus on the development needs of forest communities. There is the issue of human, technical and financial capacity, which deters existing institutional arrangements from adequately achieving targets they set out to achieve through projects and programmes in FPAs. More worrisome is the lack of capacity among government agencies to design, implement and monitor forest policies and programmes, as well as ensure effective management and rule compliance at the landscape level. The World Bank (2010) recognizes capacity deficiency as a major challenge to ACM-based governance practices in Sierra Leone, highlighting also that the private sector lacks the required capacity to contribute to forest governance in the country. Therefore, capacity limitations undercut possibilities for outsourcing management responsibilities to the private sector, or possibilities for a public-private partnership. International conservation NGOs (such as RSPB) and donor agencies (such as EU) have committed resources to address these limitations, and have been actively involved in the formulation and implementation of new laws, policies and procedures.

As mentioned already, partnerships for effective management practices are lacking in the sector. Government agencies mostly assume full, unchallenged responsibility for the governance of forests and forest resources, which is thought to have alienated other

stakeholders, severed partnerships and jeopardized active cross-level participation. The World

Bank (2010) notes that the on-reserve, policing-type approach to governance in FPAs, and the

open access management of off-reserve areas have not produced the desired results. The shift

to ACM is attributed partly to attempts to address these challenges, including to share roles and

responsibilities for forest management with other stakeholders. However, the poor design of

partnerships and the differential capacities and powers of stakeholders have resulted in mistrust

among partners and a dysfunctional consensus. Knowledge at the landscape level is also not

effectively tapped because of institutional trust and coordination issues. Relatedly, the

limitations to ACM implementation have persisted because of insufficient and unsustainable

sources of funding. Budgets proposed over the years have been insufficient to simultaneously

address conservation and community development challenges (Showers 2012). Funding

sources are also unreliable because the government rarely earmarks funds for ACM practices,

leaving interventions with short-term funding channeled through international development

agencies (FAO 2010). The shift to REDD+ is part of efforts to find additional ways to fund

forest management interventions that reconcile the goals of conservation and development in

FPAs (Global Witness 2010).

Another challenge is insufficient public awareness and poor information (knowledge)

management, which explains the lack of attitude concern for forest management and

appreciation for the role of stakeholders contributing to management processes. There is a

dearth of information on the nature of learning facilitated by ACM practices in FPAs, as well

as the general perception of the performance of ICDPs across the country. There is little

understanding generally for the environment-development nexus at various levels, which shows

why achieving broad-based stakeholder participation in conservation actions is still a

significant challenge. Research on the country's ecological systems, natural resources and

governance practices in the forest sector is scanty, old, unreliable and mostly inaccessible

(World Bank 2010; GoSL 2010). When available, they are saved and shared in ways that make their analysis painstakingly difficult. As such, the design of ACM interventions has been undermined by the lack of complete information on the local context, leading to inadequate and inappropriate incentives for livelihood improvement. Sierra Leone is one of the poorest nations in the world and majority of the poor people live in rural communities, depending heavily on adjacent natural resources (especially forests). Although actors in the sector have made attempts to address poverty and rural development challenges using various forms of incentives (agriculture development and extension activities, financial microcredit etc), the questions of adequacy and appropriateness remain.

4.3   Research setting: geography & polity

Following the description of the policy and institutional context, and barriers and triggers to the design and implementation of ACM-based governance programmes in FPAs across the country, this section describes the research setting- the Gola Rainforest National Park (GRNP), and steps taken to design and implement an ACM-based strategy for forest governance. The choice of the GRNP for this research is based partly on the interest it has drawn globally for its biodiversity, and results from the implementation of an ACM-based forest governance programme between 2002 and 2012 (Hipkiss 2007), which has provided lessons to similar interventions across the country (World Bank 2010). The Gola Forest is the largest remaining area of the Upper Guinea Forests in Sierra Leone (see Figure 4.4), and supports an outstanding diversity of wildlife, important ecosystem services (such as for watershed protection and climate stabilization), and huge potential for ecological tourism (ecotourism) and Non-Timber Forest Products – NTFPs (Forestry Division 2009).
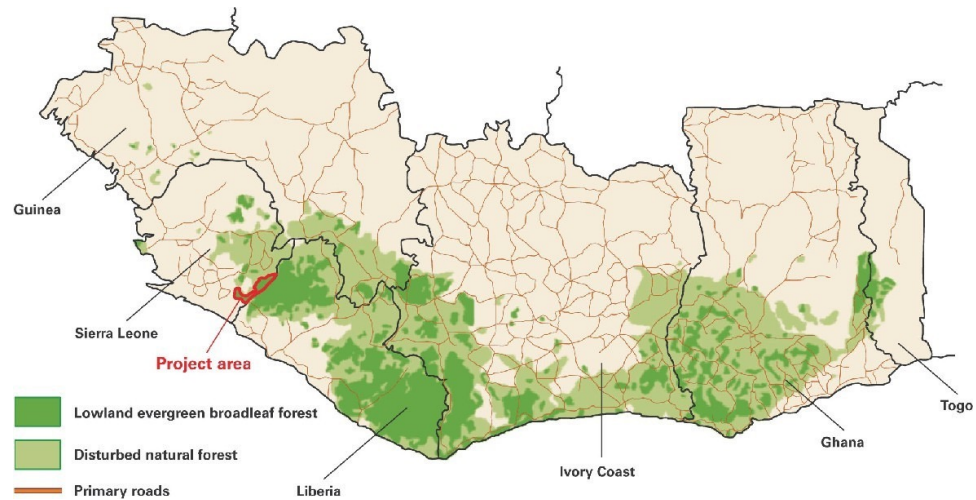
Figure 4.4 Location of the project area within the UGFE (CI 1999 cited in RSPB 2013)

The Gola Forest was first gazetted as a forest reserve (Gola Forest Reserve) between 1926 and 1930, but gained official recognition as a National Park (Gola Rainforest National Park) in 2010 (Crawford & Jörg 2011). Figure 4.5 below shows the old forest reserve and new extensions for the National Park. The Government of Sierra Leone (GoSL) obtained the right to manage the GRNP upon the creation of the forest reserve, and followed due process in the creation of the national park in late 2010 (Fofanah 2012). This included demarcating the park together with local communities and taking steps to address the grievances that emerged (Marris et al 2013). Landowners based in adjacent forest communities are still recognised as having access and use rights (Witkowski et al. 2012), and are compensated through a benefits-sharing agreement signed with the government (Forestry Division 2013). The agreement prohibits activities such as farming, mining, logging and hunting within the protected area (Fofanah 2012), and provides livelihood incentives to offset disincentives created through the establishment and management of the protected area (Witkowski et al. 2012).
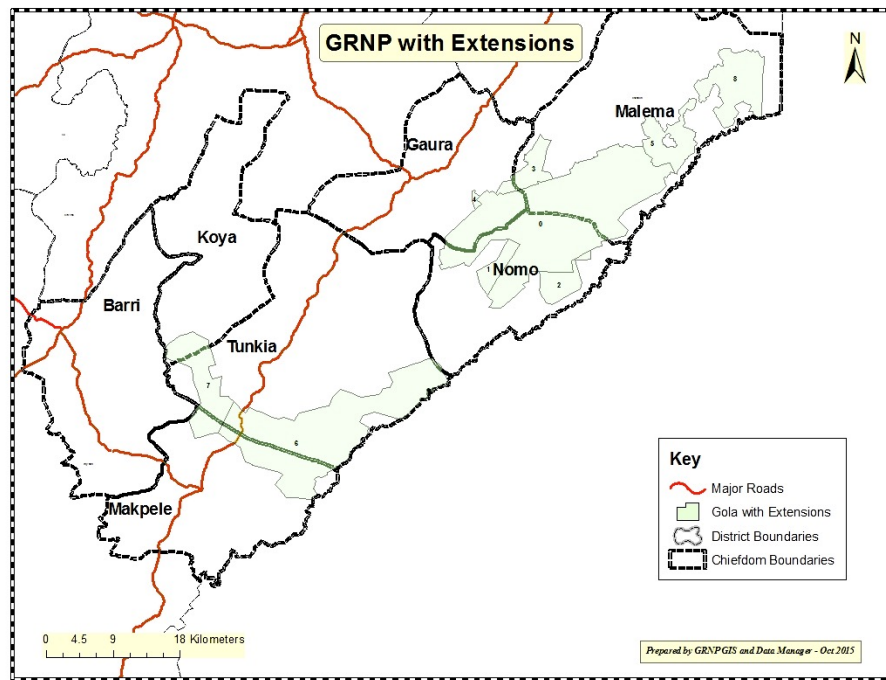
Figure 4.5 Gola forest reserve with new extensions for the national park (source: Gola Forest Programme)

Within Sierra Leone, the GRNP is found in the southeast, about 30km from the third largest capital Kenema, and 260km east of the nation's capital Freetown (see Figure 4.6). The park spans three districts (Kailahun, Kenema and Pujehun) and three blocks (Gola South, Gola Central and Gola North), giving a total of 71,024 hectares (RSPB 2013; see Figure 4.7). The current population is 23,500 residents (Bulte et al. 2013) living in 114 communities across 7 chiefdoms- Malema, Gaura, Nomo, Tunkia, Koya, Barri and Makpele (Witkowski et al. 2012). Majority of residents (about 86 percent) are Mende, though there are other ethnic groups such as the Fula, Gula, Kissi and Temne. The former (Mende) are mostly land owners, and are called "actual residents"; while the latter are known as "strangers" for not owning forestland (Bulte et al. 2013). Both groups live together in either large towns of up to 1200 individuals, or hamlets of up to 10 individuals (RSPB 2013).

Figure 4.6 Location of the Gola Rainforest National Park in Sierra Leone (source: RSPB 2013)
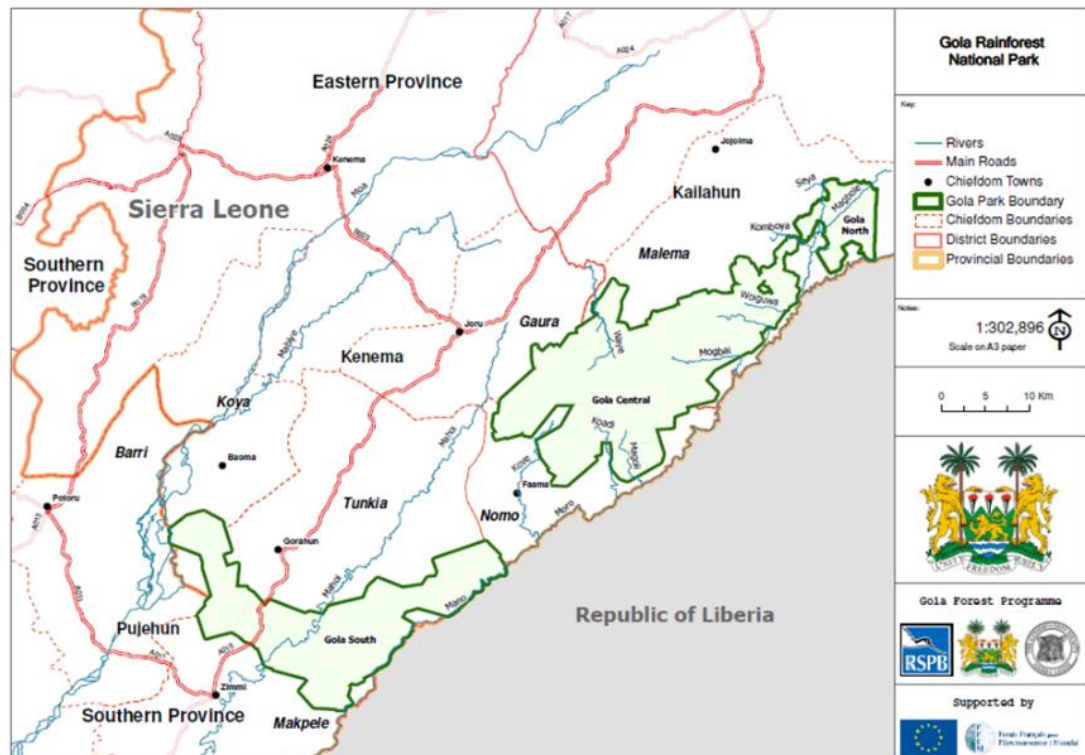
Figure 4.7 Blocks and chiefdoms within the Gola Rainforest National Park (source: RSPB 2013)

The GRNP covers important catchment areas for the Moro, Mano, Mahoi and Moa rivers, which are the main sources of water in adjacent local communities (see Figure 4.8). The north-eastern and central parts of the park are drained by the Moro river, while the eastern part is drained by the Mano river through a series of small rivers and streams. Moreover, the central part is drained by the Mahoi river through a network of small streams, while the western part is drained into streams that feed into the connecting Moa river (RSPB 2013). Furthermore, the GRNP contains varied geomorphologic characteristics (see Figure 4.9). For example, the central part contains a more rugged terrain and isolated rocky outcrops, some of which exceed 130m in length and 22 percent exceed 330m in elevation. The highest elevation in this part of the park is 427m known as Sangie Mountain. Similarly, slopes of up to 45 degrees are found in the northern and eastern parts of the park, while the southern part contains a much lower and more uniform spread of slopes and mountains. The highest elevation in this part of the park is Bagla Hills at 330m in the east (RSPB 2013).
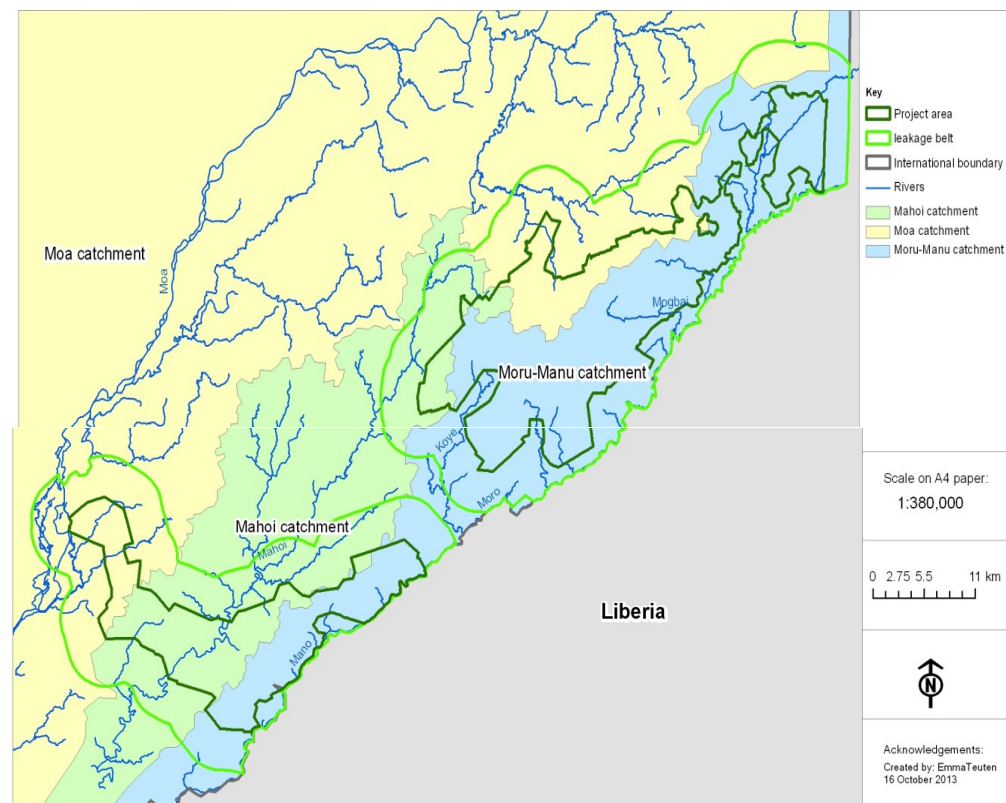
Figure 4.8 Watersheds in the GRNP (RSPB 2013)
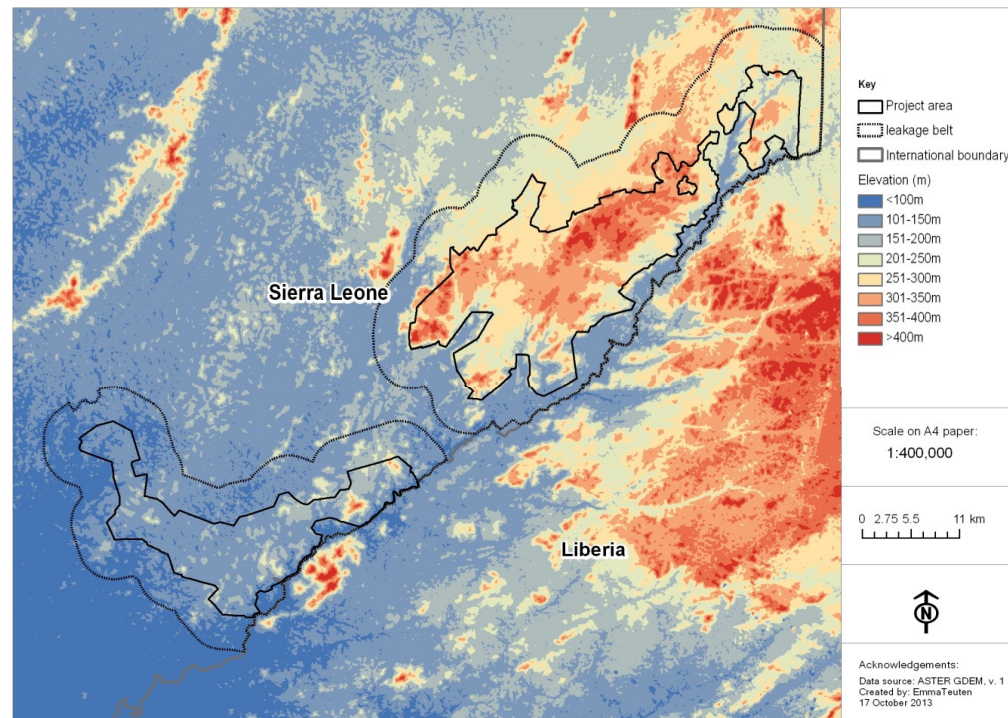
Figure 4.9 Geomorphology of the GRNP (RSPB 2013)

A primary concern in the park is deforestation caused by shifting cultivation, logging and artisanal mining (Witkowski et al. 2012). These drivers of deforestation existed before formal conservation activities began in the 2000s. Farming encroachment, for example, continued as farmers sought to expand their activities, given the lack of clear boundaries at the time. Farmers also felt little costs for encroaching, given the lack of management presence on the ground (Witkowski 2012). Moreover, farmers sought to re-exert their landholding rights by farming in the forest reserve (Davies & Richards 1991 p.29). New settlements and farms also emerged within the reserve during the war, as people sought safe places to live (Witkowski 2012). These activities have persisted to date despite new rules and enforcement mechanisms (see Figure 4.10), having serious effects on local biodiversity (Klop et al. 2010), including the White-necked Picathartes (Monticelli et al. 2011), primate and duiker populations (Kümpel et al. 2008), and pygmy hippopotami (Koroma 2012 cited in Garteh 2013).
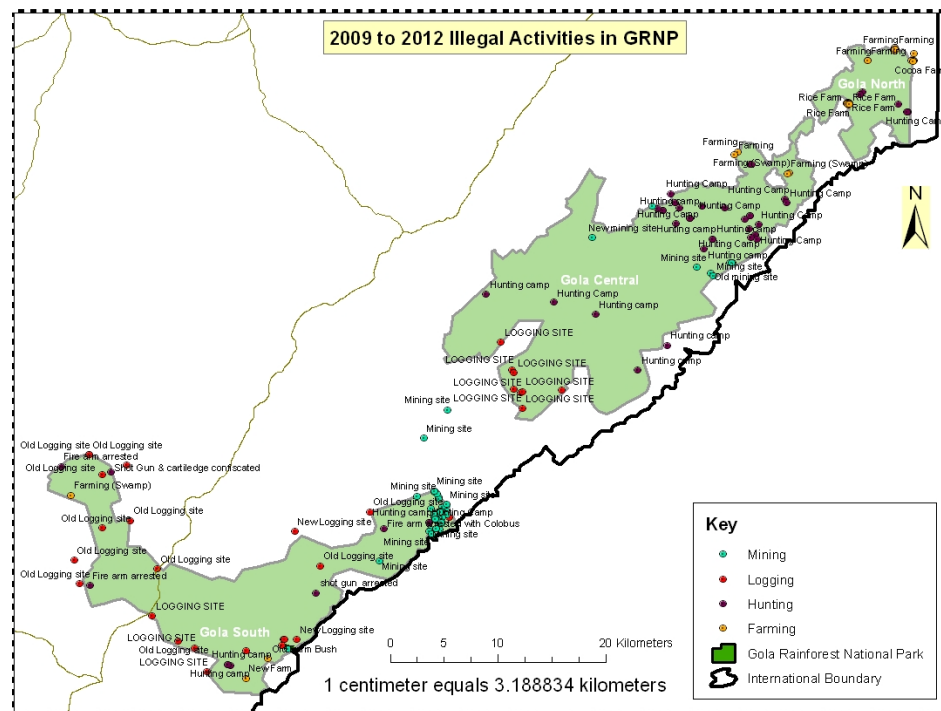
Figure 4.10 Illegal activities within the Gola Rainforest National Park (source: RSPB 2013)

4.3.1   Adaptive Collaborative Management in the GRNP

Although the use of the terms "Co-Management" and "Adaptive Management" can be traced back to the Forestry Act of 1988, the first practical discussion of An ACM-based forest governance model can be traced back to 2002, when representatives of the Royal Society for the protection of Birds (RSPB UK), Conservation Society of Sierra Leone (CSSL) and the Government of Sierra Leone met to discuss ways of reinstating the Gola Forest Programme (GFP), a partnership that had been in place before the war for the conservation of the GRNP. The meeting gave birth to a Conservation Concession Agreement (CCA) for Adaptive Collaborative Management (ACM) (see box 4.3; and see a copy of the signed CCA in appendix A), which laid out short, medium, and long-term plans for conserving the Gola rainforest together with local communities (see chapter 6).

The CCA was based on the recognition of the global importance of the forest reserve, the

alarming rate of forest loss due to overuse of forests and forest resources as the only means of

survival during the war, the potential of increased logging and poaching activities, and a general

interest to conserve forest biodiversity from local, national and international organizations

(CCA 2002 p.3). To commence work for implementing the ACM-based CCA, the GFP received

$US 25,000 from the Global Conservation Fund (GCF) of Conservation International (CI) for

research on the potentials for conservation in the reserve. The study included a consultation

exercise that involved stakeholders from all affected interests, which also led to a socio-

economic survey and cost-benefit analysis (Forestry Division 2009).

Box 4.3 Content of the 2007 Conservation Concession Agreement for ACM (Forestry Division 2009 p.47)

The concession agreement for adaptive collaborative forest management included:
- A *vision* "to conserve the integrity of the Gola Forest in perpetuity, ensuring that local people living around the Gola Forests will have enhanced livelihoods because of income generating schemes which remove the need for unsustainable use of the Gola Forest resources";
- A commitment to: the implementation of a *Management Plan,* the designation of Gola as a national park, building the capacity of staff in government agencies, and establishing a designated *Trust Fund*;
- The establishment of a *Management Committee* with members drawn from each of the partners and a representative of the 7 chiefdoms, to make all decisions necessary to achieve agreed aims and objectives;
- The appointment of a *Project Leader* by RSPB for the management of the project and the administration of funds in conjunction with national partners;
- The recruitment of a *Protected Area Manager* with overall responsibility for the Gola Forest and its protection
- An operations procedure for recruiting project personnel, directing financial transactions, and procuring and disposing equipment/assets;
- Cash and development benefits to be delivered to forest communities and local institutions as enshrined in a *community benefits and payments agreement;* and
- Operational procedures for resolving conflicts involving project staff, local communities etc.

The resultant project entitled "Pioneering an Innovative Conservation Approach in Sierra

Leone's Gola Forest" was launched by the President of Sierra Leone in 2005, and publicized at

national workshops, two international conferences in Cameroon in 2005 (Birdlife International

Conference of Africa partners) and at the Convention on Biological Diversity COP7 in Brazil,

in 2006 (Tubbs et al. 2015). Implementation followed a management plan delivered over two

separate phases, including: an initial phase (2002 to 2007) with most of the funding from GCF

($US 450,000) and the Darwin Initiative (£100,000); and a final phase (2007 to 2012) with

funding from the European Union (EU) and FFEM (Euro 4.2 million) (RSPB 2013). The aim

of the ACM process was to increase local engagement with conservation actions through

increased support for participation, learning and livelihood benefits. The support provided was

enshrined in a benefit-sharing agreement (known previously as community benefits and

payments agreement), which was signed by Paramount Chiefs and Councilors on behalf of local

communities (see appendix B and box 4.4).

Box 4.4 Content of the 2007 benefit-sharing agreement for ACM (Forestry Division 2009 p.55-57)

The benefit-sharing agreement for adaptive collaborative forest management included a total annual allocation of $122,500 for community benefits and payments, distributed as follows:
- An annual allocation of $1000 paid bi-annually to Paramount Chiefs
- An annual allocation of $10,000 to each of the 7 Chiefdoms to support community projects and programmes
- An annual allocation of $1000 to each of the three District Councils covering the Gola forest (Kailahun, Kenema and Pujehun)
- An annual allocation of $28,000 paid to landowners in each of the seven Chiefdoms through Chiefdom authorities.
- An annual allocation of $1000 is allocated to each of the seven Chiefdoms to assist in organizing the distribution of funds for landholding families
- A once-off allocation of $35,000 to communities adjacent to the forest for livelihood-related investments
- An annual allocation of $7,500 in educational scholarships for all seven Chiefdoms

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The purpose of these payments was fourfold: 1) to compensate communities for the loss of

potential royalties and other benefits that could have been secured from commercial logging

and other forms of commercial exploitation; 2) to compensate communities for any

inconvenience caused by the protection of the Gola Forest, including the loss of certain access

and use rights, as well as for damage caused by wildlife; 3) to encourage and facilitate economic

activities by local communities that reduce the pressure to exploit forest resources; and 4) to

reward local communities for their assistance in protecting the forest, ensuring rule compliance

and controlling and preventing illegal activities (Gola Forest Conservation Concession

Community Benefits and Payments Agreement 2007 p.4-5).

A key policy process assumed to have been triggered by ACM-based governance efforts is

CEPESL (Creating an Enabling Policy Environment in Sierra Leone), designed by the US Agency for International Development (USAID) in 2008 to offer technical assistance to the Forestry Division. CEPESL's work led to the formulation of four policy instruments including the 2010 Forest Policy, the 2011 Forest Act, the 2010 Wildlife Conservation Policy, and the 2011 Wildlife Conservation Act. The 2010 policies for forestry and wildlife conservation were instrumental in the pursuit of ACM-based governance processes across the country, specifically in the Kambui Nature Reserve in the east (GoSL 2010). In the context of on-going REDD-readiness processes in Sierra Leone (see box 4.5), many plans and projects for participation, learning and livelihood benefits are being modelled after ACM-based interventions across the country. There is an increasing call for a more decentralized, beyond-forest, and people-oriented approach to designing, implementing and governing local REDD+ projects, which makes the analysis undertaken in this research both timely and relevant. The aim is to fill the gap in current levels of understanding about the utility of ACM by exploring its achievements and shortcomings in relation to participation and learning in two case sites in the GRNP, and the broader influence of institutional arrangements and power relations. Therefore, the research specifically provides lessons for governing and implementing the Gola REDD+ project, and the REDD-readiness process in Sierra Leone more broadly.

Box 4.5 REDD-readiness in Sierra Leone

REDD+ first emerged in Sierra Leone with the ratification of the Kyoto Protocol in 2006. This was followed by the establishment of a National Secretariat for Climate Change (NSCC) in 2012 to develop a framework for implementing the Clean Development Mechanism (CDM). REDD-readiness officially commenced in 2013 with funding for a REDD+ capacity building project provided by the EU, with the primary goal being to build local capacity and enhance awareness about REDD+ benefits. Consultation, training and educations efforts are on-going targeting a wide range of stakeholders, with NGOs such as CSSL, Environmental Foundation for Africa (EFA) and Green Scenery expected to contribute to future outreach efforts and technical processes. The REDD-readiness process is delivered through a Project Steering Committee (PSC) comprising key government agencies, NGOs and the private sector. The PSC is supported by an Expert Working Group (EWG) and a Technical Assistance Team (TAT) providing support in various technical aspects (The REDD Desk 2012).

The Gola REDD+ project

The Gola REDD+ project is the first and only REDD+ pilot project in Sierra Leone, and the first in West Africa. The project area covers 69,714 hectares of tropical rainforest and a leakage belt containing local communities in the seven Chiefdoms bordering the park (see Figure 4.11). There are approximately 373 communities and 130,478 people in the project area, according to the national population census done in 2004 (RSPB 2013). The project has an expected life span of 30 years (August 1, 2012 to July 31, 2042) and a potential stock of 4,394,315 tonnes of carbon during the first 10 years of implementation (RSPB 2013). Baseline studies show that between €62.7 million and €101.9 million could be made from over a period of twenty years of sale of carbon credit from the Gola REDD+ project alone (Global Witness 2010), which will expectedly increase community development benefits, and expand biodiversity conservation efforts (Klop et al. 2008). The main governance structure is the "Gola Rainforest Conservation LG" (see Figure 4.12), a company constituted by past partners in the Gola Forest Programme (RSPB, CSSL and GoSL), and other stakeholders playing various roles as described in table 4.4 (RSPB 2013).
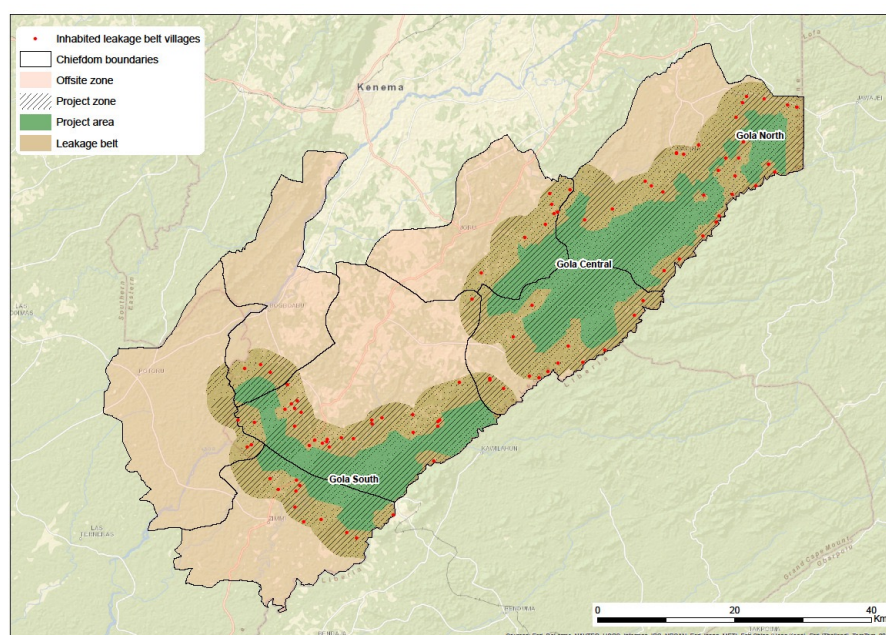
Figure 4.11 REDD+ project area including leakage belt and the offsite zone (RSPB 2013)
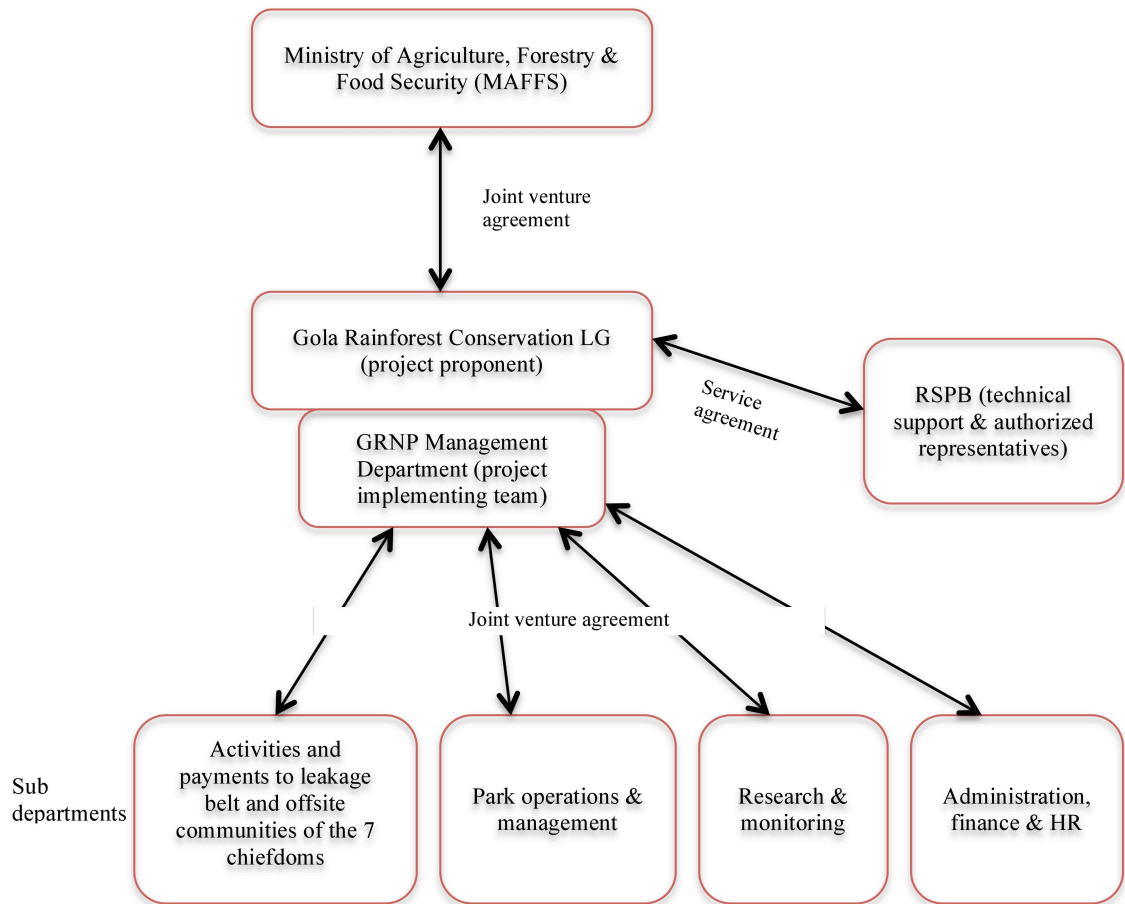
Figure 4.12 Structure of Gola Rainforest Conservation LG (source: RSPB 2013 p.112)

Institution	Description	Role(s) in the REDD+ project
The Forestry Division, Ministry of Agriculture, Forestry and Food Security (MAFFS-Government of Sierra Leone)	MAFFS has three divisions, namely: crops, livestock and forestry. The Forestry division is the lead institution in the management and protection of forest resources across Sierra Leone (see section 3.4.1). However, the conservation role for the FD has been moved to the National Protected Area Authority (NPAA) (see section 53.4.2)	FD is a core member of the Gola Rainforest Conservation (GRC) LG, with a representative at board meetings. Its primary responsibilities include to ensure that the Government does not take any actions that are likely to compromise the project, support law enforcement, and undertake periodic monitoring and assessments as necessary.
The Royal Society for the Protection of Birds (RSPB)	RSPB is a UK based conservation organization, which currently oversees conservation projects in 52 countries in Africa, Asia and Europe in partnership with local birdlife partners, national governments, universities, other non-governmental organizations and committed individuals to promote research-based wildlife conservation.	RSPB is another core member of the GRC LG, with a representation on the board. It provides technical support, including leading on the development of documentation required to validate and verify the project under VCS and CCB standards and marketing and negotiating the sale of any carbon credits.
Conservation Society of Sierra Leone	CSSL is a national NGO that uses advocacy, education, site action and research to	CSSL also has a representative that sits in board meetings, being another

(CSSL)	promote natural resources management. It is a local birdlife partner and was a founding partner to conservation work in the Gola Forest (see section 5.3.2.4 in chapter 5).	core member. Its main role is to provide support to the delivery of community education initiatives
Paramount Chiefs (Traditional Authorities)	Paramount chiefs generally play a governance and administrative role in the provinces in Sierra Leone. There are 7 paramount chiefs from the 7 Chiefdoms in the project zone.	Although the project works with a diversity of local stakeholders, a representative selected by the paramount chiefs sits in board meetings, and represents local interests in project governance. The main role involves ensuring local engagement and support for the project (rule compliance and cooperative behaviour).
Winrock International	Winrock International is well known in the global environment and climate change arena for being a leading and trusted source of information on greenhouse gas assessment in agriculture, forestry, and other land uses.	WI provided technical support during project formulation, especially in the development of the mapping and modeling elements of the project
Cambridge-Wageningen Group	This research group includes members from the Universities of Cambridge (UK) and Wageningen (Netherlands), who bring more than 40 years of social science research experience on Sierra Leone to the project. The group has been actively involved in the project since 2010.	The research group helped design the community consultation procedures, and developed the surveys and standard operating procedures for monitoring the impact of the project on communities in the project zone'
Climate Focus	Climate Focus provides consultant services in international and national climate law, policies, project design and finance.	CF contributed to the analysis of the legal context, including the development of a legal structure for the project.
Green Africa	Green Africa (GA) is a local NGO that seeks to defeat poverty and hunger in a sustainable manner, using education and agriculture. GA has a long-standing link with local communities within and outside the project zone.	GA served as a third party for the project's grievance mechanism, and continues to support the conflict management mission of the project.
WeltHungerHilfe	WeltHungerHilfe (WHH) works to promote human rights, sustainable development, food security and the preservation of the environment. WHH was the lead implementing organization for the 5-year EU-funded Western Area Peninsula Conservation project.	WHH actively supports the design and delivery of alternative livelihood strategies for the project.

Table 4.4 Institutional arrangement for the Gola REDD+ project (RSPB 2013 p.113)

4.4   Summary

This chapter has provided a contextual background to the thesis, including a description of key

management challenges in the forest sector, and policy instruments that have been adopted to

address them. The chapter has also described ACM-based governance practices in Sierra Leone, highlighting specific and broad goals, institutional arrangements and barriers. It has also described the research setting, the Gola Rainforest National Park (GRNP), and the evolution and delivery of an ACM-based forest governance programme between 2002 and 2012. The chapter further highlighted the relevance of lessons from this research for the design, governance and implementation of the Gola REDD+ project, and the REDD-readiness process in Sierra Leone more broadly. Therefore, this chapter lays the groundwork for the analysis undertaken in this thesis, to explore the paths, prospects and pitfalls of ACM in the GRNP, more specifically the nature of participation and learning that occurs, and the underlying influence of institutions and power relations. The next chapter describes the methodology and methods used in this research, which include household and practitioner surveys, key informant interviews, focus groups, and documentary analysis.

Chapter Five

Research Methodology

5.1   Introduction

This chapter describes and discusses the methodology and methods used in this research. The first part presents an overview of the philosophical orientation and research design, including research questions to be addressed and research approach to be followed. This part also describes the full range of methods and procedures used to address the research questions in greater detail, which are: surveys, documentary analysis, key-informant interviews, and focus group discussions. The second part moves on to describe methods used to analyze, interpret, report, and validate data, ethical issues considered at various stages of data collection, analysis, and reporting, and shortcomings of the research design.

5.2   Philosophical orientation

As with other political ecology research, this thesis is based on an interpretivist epistemology and social constructivist ontology. In practice, this means that when exploring a concept such as ACM, this research embraces the idea that concepts such as participation, learning, power and institutions do not exist prior to or independent of the social actors who engender and give meanings to them (Adger et al. 2001; Nygren & Rikoon 2008). Knowledge and meaningful

reality are constructed through interactions between humans and their world, and developed and transmitted within a social setting (Crotty 1998 p.42). Thus, the social world can only be understood through the views of individuals who are interacting in it (Cohen et al. 2007 p.19). In this regard, interpretivism aims to draw attention to social forces and structures, to provide an understanding of issues from an individual's perspective, explore interactions among individuals, as well as the historical and cultural contexts that they populate (Creswell 2009 p.8).

"Case study" is one methodology that follows this philosophical orientation because it employs various methods and procedures (such as open-ended interviews, focus groups, open-ended questionnaires, open-ended observations, role-playing etc) to elicit and understand individual constructs through interaction between participants and researchers, with participants being depended on as much as possible (Creswell 2009 p.8). This suggests that interpretivist theory takes on a critical realist view, which permits the use of mixed methods and procedures as appropriate to the research questions (Teddlie & Tashakkori 2009; Denzin & Lincoln 2011). Besides, interpretive research generates understanding from the data, not without or before its collection (Cohen et al. 2007 p.22). Research questions are kept broad, yielding insights of behaviour, explaining actions from the participant's perspective, and not making any attempts to dominate the process (Scotland 2012).

Following the above lead, and from a political ecology perspective, the objective of navigating the pathways, prospects, and pitfalls of ACM resides with the connections between different interfaces (such as forest users and managers), rather than in a linkage between user groups and forest resources (Zimmerer & Bassett 2003). As such, the research recognizes that different actors exist at different levels who define social and power relations in different ways and for different purposes (Robbins 2012). To understand and explain this requires the exploration of

different issues for ACM, including who participates (and learns), how, why (and why not), where, on whose terms, and to what extent. This approach provides insights into the mechanics and politics of ACM-based governance practices, and the perspectives that give it form and meaning in FPAs (Bryant 1998).

5.3   Research design

5.3.1   Research questions

The central research question addressed in this thesis is: *what are the pathways, prospects, and pitfalls of Adaptive Collaborative Management (ACM) in the GRNP in Sierra Leone?* This question is examined in relation to the nature of participation and learning that occurs, as well as the underlying influence of institutions and power relations. As such, to address the primary research question, the following research sub-questions will be addressed:

3) What is the nature of participation and learning in ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone?

4) In what ways do structural conditions (power relations and institutions) influence the effectiveness of ACM practices in FPAs?

5.3.2   Research approach

This thesis uses a blend of qualitative and quantitative methods (see figure 5.1) to achieve both breadth and depth of understanding of the subject studied, and to facilitate ease of data validation (Johnson et al. 2007). It therefore uses mixed methods in the types of research questions addressed, as well as mixed procedures in collecting, analyzing and interpreting data (Tashakkori & Teddlie 2009). Fewer research on ACM (e.g., Dale & Armitage 2011) has leaned towards mixed methods, though concepts such as participation and learning require the

combined insights of several procedures to provide a deeper understanding of the research

problem, and a more practical, persuasive and robust interpretation of related findings (Robson

& McCartan 2016). Mixed methods afford deeper insights into complex interactions involving

many stakeholders at different levels in a way that a single approach cannot effectively provide

(Schell 1992; Zachariadis et al. 2013).
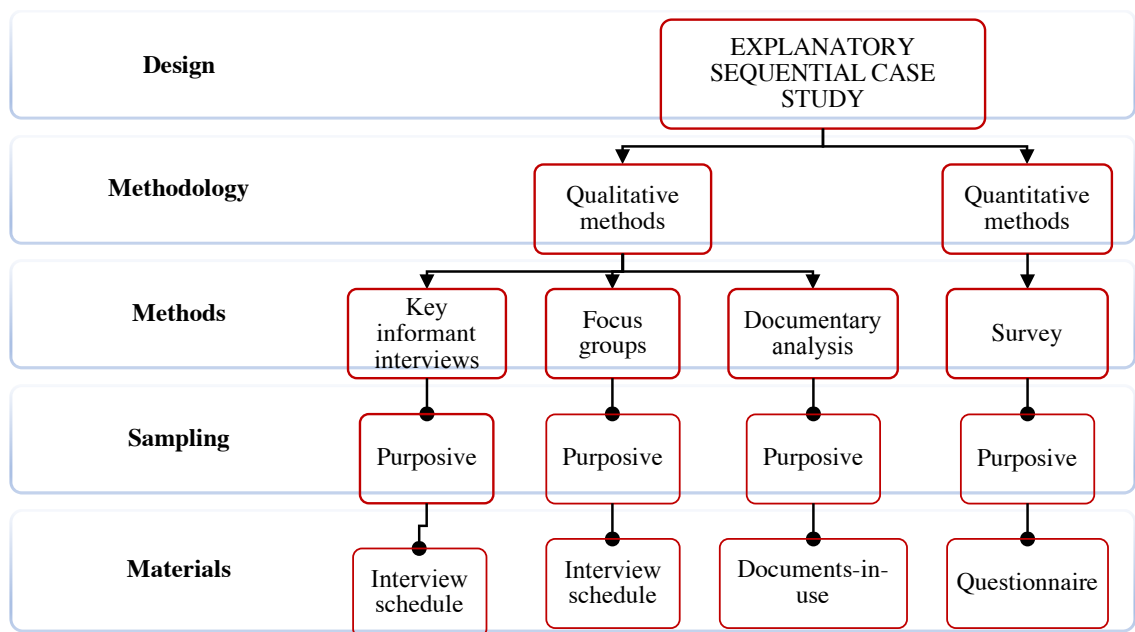
Figure 5.1 The combination of methods and procedures used in this research

In this research, a purposive sampling strategy is employed for qualitative data collection to

complement a broader quantitative sample, which ensures a balance between increasing

inference quality and generalizability (Palinkas et al. 2015). A single method that focuses only

on a broad view of the research problem may decrease internal validity at the expense of

external validity (Kemper et al. 2003; Yin 2013). In general, purposive sampling entails

selecting individuals and groups of individuals that are knowledgeable about a research

phenomenon (Creswell & Plano Clark 2011). Therefore, the selection of informants is based

on the availability and willingness to participate, the ability to communicate experiences and

perceptions in an articulate, expressive and reflective manner (Bernard 2011), and the need to make the most effective use of limited resources (Patton 2002).

The mixed method research design best suited for this study is an explanatory sequential case study (see figure 5.2), or qualitative follow-up design (Teddlie & Tashakkori 2009), which entails using qualitative data to extend and supplement data generated using quantitative research methods (Clark & Creswell 2011). Its main advantage is the ease of employment in the field, as data collection phases are kept separate, and allowed to unfold gradually and predictably (Bryman 2016), though findings are mixed during analysis to provide a balanced account of the research problem (Creswell 2014). A sequential explanatory case study ensures that all aspects of the research problem are included in the analysis and that any one aspect is thoroughly explored (Creswell 2014). This is because the research approach sequentially or simultaneously expands and narrows the field of view, using information from various informants at various levels (Palinkas et al. 2015).
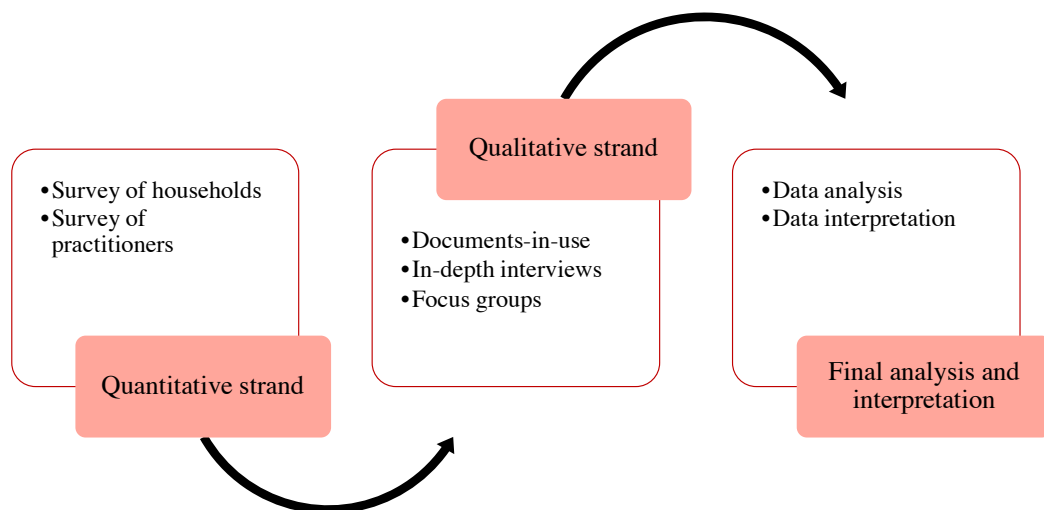
Figure 5.2 Diagram of strands in the explanatory sequential case study

Therefore, the examination of participation and learning in ACM is not limited to informants who had key roles in the implementation process, but also includes the experiences and

activities of others that may have performed other roles. In other words, the research involved those knowledgeable and able to communicate what they know or have experienced in relation to ACM practices in the GRNP, thus increasing the depth of understanding of the research problem (Bernard 2011). This two-phased approach allowed informants to respond to questions posed in the quantitative phase, and allowed for in-depth discussion of emergent themes. Likewise, the research design provided the opportunity to analyze survey results and tailor subsequent qualitative instruments to follow-up on specific themes (Palinkas et al. 2015).

Generally, case studies have mostly been used to generate context-dependent knowledge on ACM (Magis 2010; Ross & Berkes 2014), including the underlying social and power issues of importance to effective governance, which more generalized research may neglect (Flyvbjerg 2006). Therefore, a case study approach is a more practical way of gaining a detailed understanding of the research problem, by exploring both the concepts of the research and the contexts within which they occur (Yin 1994). Conley and Moote (2003) note that case studies contribute to developing theory about participatory governance efforts, as well as identifying specific issues and dynamics that necessitate further research. The case explored in this study is ACM-based governance practices in the GRNP in Sierra Leone, to analyze the nature of participation and learning that occurs, resulting outcomes, and the underlying influence of institutions and power relations. This clarifies the type of data that is required, as well as potential sources from which such data may be sought (Yin 2013; Creswell 2014).

5.3.3   Selection of fieldwork locations (case sites)

Two forest communities (Lalehun and Nemahungoima) were purposively selected following consultations with key organizational and community informants. They are both located within

the GRNP (see section 4.3 in chapter 4), and participated in ACM practices between 2002 and 2012, which makes them suitable for addressing the research questions posed in this thesis (Ritchie et al. 2013 p.113). The choice of these two critical samples (Bryman 2012; Creswell 2013) is based principally on conceptual reasons, specifically, their suitability for analyzing the concepts underpinning this research (Eisenhardt & Graebner 2007), rather than representativeness (Miles & Huberman 1994). Therefore, the research involved those knowledgeable and able to communicate what they know or have experienced in relation to ACM practices in the GRNP in an articulate, expressive and reflective manner, thus increasing the depth of understanding of the research problem (Bernard 2011). The danger with this approach is that the researcher has to exercise judgment on the reliability and competency of the informants. Therefore, the researcher took steps to be certain of the knowledge and skill of key informants, and to ensure that data collected was meaningful and valid (see Tongco 2007). This also meant being alert for possible biases on the part of informants, which have been described in the latter part of this chapter.

The first fieldwork location (Lalehun) is located about 40km from Kenema in Gaura Chiefdom, Sembehun Section, which is bordered by Nomo and Malema Chiefdoms. It was founded in 1745, and is the quickest entry into the Gola Central block of the GRNP. Lalehun hosts the park's only ecotourism lodge, and has a network of trails for trekking and camping, and viewing rare wildlife such as the African Buffalo, Gola Malimbe, and Picathartes. Gaura Chiefdom has a population of 17,361 (8428 males and 8933 females) per the 2004 census, most which are Mendes (96.3 percent), Muslims (96.4 percent), and farmers (88.5 percent). A significant majority lack access to public toilets (14 percent have access), and live in mud houses (82.3 percent) with no electricity (Bulte et al. 2013). The second fieldwork location (Nemahungoima) is located about 75km from Kenema in Tunkia Chiefdom, Gorahun Section, which is bordered by Koya, Barri and Makpele Chiefdoms. It was founded in 1939 and is the quickest entry into

the Gola South block of the GRNP. Nemahungoima hosts Sileti Training Camp for forest guards, and has a network of trails for trekking and camping, and viewing rare wildlife such as the Diana Monkey, and Black and White Colobus Monkeys. Tunkia Chiefdom is one of the most populated Chiefdoms in the project area, with a population of 21,330 (10,134 males and 11,196 females), per the 2004 census. The chiefdom also has some of the most diverse village settlements, with only 78.1 percent belonging to the Mende (the dominant) ethnic group, and much better housing (60.3 percent of houses have mud walls). Furthermore, 85.4 percent of the local population are Muslims; 81.8 percent are farmers; and 30.9 percent are literate (Bulte et al 2013).

The two fieldwork locations (see Figure 5.3) are broadly organized at village level, though households coordinate daily activities through a head that is mostly male. Chiefs are the main power structures at the community, locality and chiefdom levels, with responsibilities ranging from settling disputes to distributing benefits. Literacy levels are low, which is attributed mainly to the lack of educational facilities and high tuition costs. Both locations are accessible by road, though markets for trading farm produce are lacking (Bulte et al 2013; RSPB 2013). Rice cultivation is the main source of household income, with new farms developed each year (of an average size of 3 acres) (Witkowski et al 2012). There are community-based organizations (or self-help groups) that help with labour, social support, and microcredit, which residents use to meet their different needs (Bulte et al. 2013). Access to non-farm sources of income, however, is considered a major factor in increasing reports of mining and logging, which in addition to fishing, charcoal burning and fuelwood harvesting, are activities undertaken to cushion agricultural income (Fairhead & Leach 1996). Therefore, forest dependence is high, with some products harvested to weave baskets, carve household utensils, and prepare herbs (Davies & Richards 1991).
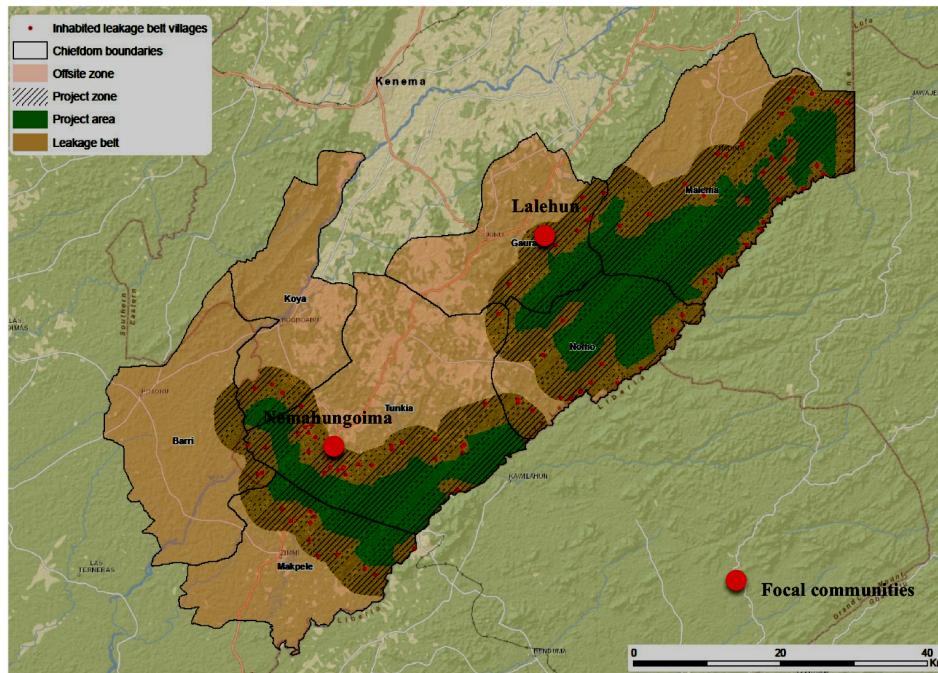
Figure 5.3 Fieldwork locations (case sites) in the GRNP in Sierra Leone (adapted from RSPB 2013)

5.4 Data collection methods and procedures

As mentioned before, both qualitative and qualitative instruments were used in the collection

of data, in the order specified in the previous section. That is, quantitative data was collected

first, to identify the different interest groups (in the case sites) to be included in the qualitative

data collection process (interviews and focus groups). As such, the qualitative aspects, which

were dominant, were used to triangulate results from the quantitative aspects as described in

the following sections. Altogether, the methods and procedures used in this research aim to

maximize efficiency and validity (Morse & Niehaus 2009), with qualitative instruments used

to achieve depth of understanding and quantitative procedures used to achieve breadth (Patton

2002). Using both methodologies placed primary emphasis on saturation- i.e. obtaining

comprehensive data by continuing to sample until no new substantive information is required

(Miles & Huberman 1994) and generalizability- i.e. ensuring that data collected is

representative of the population from which the sample was drawn (Palinkas et al. 2015). Table

5.1 below lists the timing of data collection activities undertaken for this research. The main stage of fieldwork was carried out in Sierra Leone over a period of ten months from October 2015 to July 2016 (6 months of which was spent in the two communities).

Research activities	Dates
Survey of 70 households in two communities in the GRNP Interviews with key community informants (n=23) Review of documents-in-use	October to December 2015
Skype interviews with select practitioners based in Freetown Survey of 23 practitioners via an email attached questionnaire	January 2016 to March 2016
Interviews with key organizational informants (n=23) Focus group discussions (n=4 groups; 40 participants)	April to June 2016
Skype interview with RSPB Director in the UK	July 2016

Table 5.1 Timing of data collection

5.4.1   Quantitative methods

Surveys were used in this thesis to provide numeric descriptions of trends, attitudes or opinions of both household heads and organisational informants (Creswell 2014 p.155). They were useful for collecting structured numerical data to identify differences between cases (Seale 2004), and extend confidence about the representativeness of sampling procedures (Silverman 2013), especially with the high illiteracy rates in the two fieldwork locations (Neuman 2011). A questionnaire was used to generate comparable responses (Bryman 2016) from series of face-to-face (personal) interviews (Ott & Longnecker 2015), using easily comprehensible open and closed questions on the concepts informing this research (participation, learning etc), and drawn mainly from documents on the research problem and context. The reliability of the instrument was enhanced by the types of questions posed, and pre-tests carried out before fieldwork (Bryman 2016).

5.4.1.1   Survey of households

Household informants (n=70) were purposively sampled following a procedure used in Angelsen (2011), which considers the rule of thumb ratio of 20 to 30 households for a population of 100 to 500 households. A small sample was chosen because of the expected difficulty to obtain information, given the low literacy rate in the setting (RSPB 2013), but also to allow adequate time to be spent on explaining questions to informants. Primary inclusion criteria were participation in the project, ascertained through knowledge of key local structures and processes. Male-headed households were dominantly featured, as key informants (e.g., chiefs, head man) thought it would be culturally insensitive to involve women even in the absence of male heads. In a culture dominated by men, because land is owned mainly by male household heads, women seldom participate in community actions (including meetings), which makes largely uninformed about processes of local conservation and development. Nonetheless, few female-headed households were included to enhance representativeness (Babbie 2015), and because of their high dependence on forest resources (Cavendish 2000) and low socio-economic status (Vedeld et al. 2004). Consulting with local leaders over the choice of households is justified by their role in allocating benefits and mediating conflicts in these communities (Bolin & Tassa 2012).

Two cohorts of household informants were interviewed, drawn from two forest communities (see section 5.3.3). Of the initial cohort (n=35), 66 percent (n=23) were male and 34 percent (n=12) female. All the participants were aged between 20 and 59 at the beginning of the study, with 14 percent (n=5) aged between 20 and 29 years, 43 percent (n=15) between 30 and 39 years, 29 percent (n=10) between 40 and 49 years, and 14 percent (n=5) between 50 and 59 years. 80 percent of the informants in this cohort (n=28) were born in Lalehun, while 20 percent (n=7) were born elsewhere. Similarly, 63 percent (n=22) of the final cohort of 35 informants

were male, while 37 percent (n=13) were female. 11 percent (n=4) were aged between 20 and

29 years, 32 percent (n=11) between 30 and 39 years, 46 percent (n=16) between 40 and 49

years, and 11 percent (n=4) between 50 and 59 years. 83 percent (n=29) of the informants in

this cohort were born in Nemahungoima, while 17 percent (n=6) were born elsewhere. A

graphical illustration of these data is presented below (figures 5.4 to 5.6).
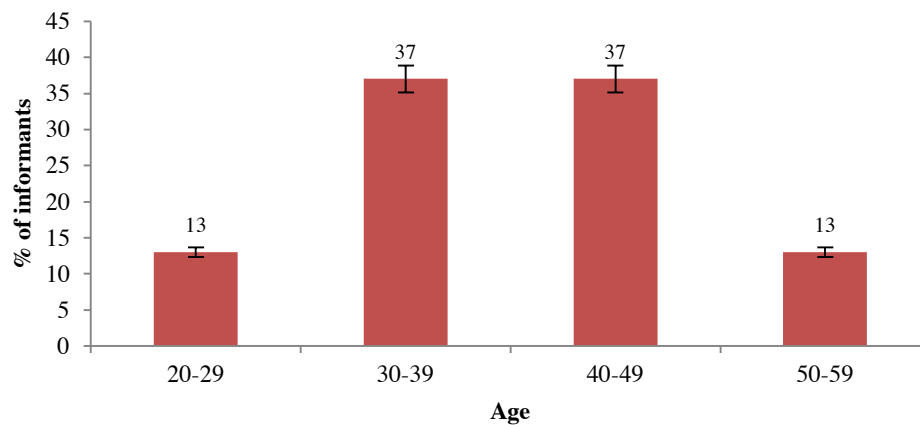
Figure 5.4 Diversity of household informants based on age (SPSS output)
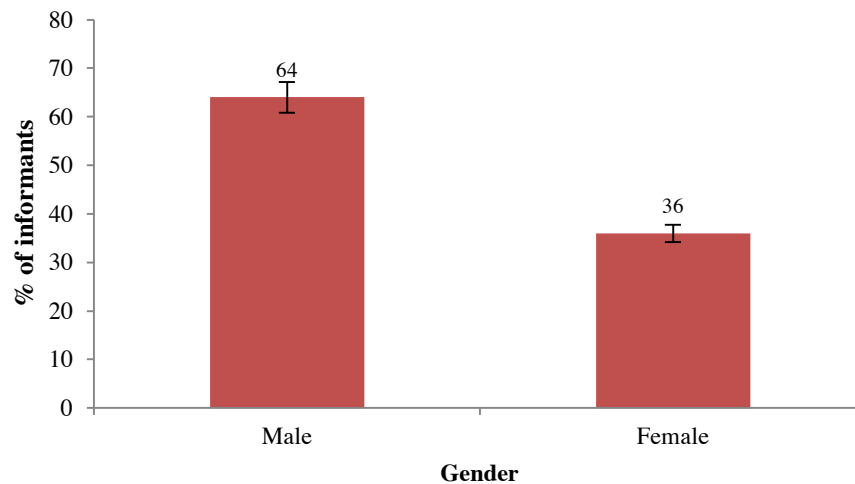
Figure 5.5 Diversity of household informants based on gender (SPSS output)
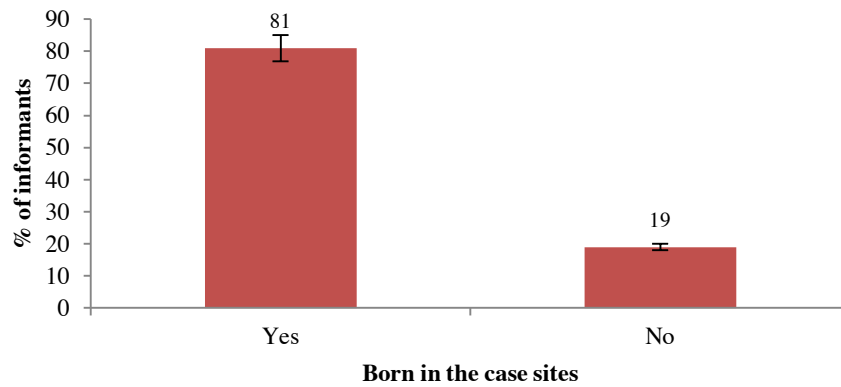
Figure 5.6 Diversity of household informants based on place of birth (SPSS output)

In the analysis, most of the data from these two cohorts was synthesized based on a procedure in Roberts and Binder (2009), which shows how to blend datasets when the sample size for each case is small, when the convergence in the data is high, and where increasing the number of observations also increases accuracy. Generally, survey datasets sourced from different locations can be blended when: 1) data from each location is limited in some sense to comprehensively address the research questions; 2) increasing the number of cases increases accuracy and reduces sampling errors; and 3) data are comparable in terms of similarities in individual accounts of issues explored using similar methods (Schenker & Raghunathan 2007). Crona & Bodin (2011) have highlighted a similar experience in their work, noting that it is possible for informants to be linked to others of their kind (whether kind means age, gender, or social class), which suggests that informants in one location can demonstrate an understanding of a certain issue in much the same way as others in another location.

5.4.1.2   Survey of organizational informants

To triangulate data from the household survey, organisational informants (n=23) constituting the ACM "ego-network" (Bodin & Prell 2011) were purposively selected and interviewed. An ego-network includes actors that coordinate and network structures and processes toward a certain purpose and at different levels (Teddlie & Tashakkori 2009:175). Thus, using a snowball

sampling technique (Bryman 2016), key actors within the ACM ego-network were identified, including government agencies (n=9), consultants (n=2), academic and research institutions (n=2), NGOs (n=3), donor agencies (n=3) and project personnel (n=4). The primary inclusion criterion was knowledge of documents and processes relating to the concepts underpinning this research. The informants were selected based on the assumption that they possess knowledge and experience with the topic of interest (i.e., the nature and outcomes of participation and learning in ACM practices in the GRNP, and the influence of institutions and power relations), and therefore, can provide information that is both detailed (depth) and generalizable (breadth) (Palinkas et al. 2015).

The cohort was split into two groups based on years of experience (overall conservation practice), and scope of practice (influence within and beyond the forest sector). Regarding experience, 22 percent of the informants (n=5) reported 5 to 10 years of practice, 48 percent (n=11) reported 10 to 15 years, 22 percent (n=5) reported 20 to 25 years, and 8 percent (n=2) reported more than 25 years. In terms of scope of practice, 4 percent (n=1) reported work at the local level only, 74 percent (n=17) reported work at the national level, 9 percent (n=2) reported work at both national and regional levels, 4 percent (n=1) reported work at the national and international levels only, and 9 percent (n=2) reported work at all levels (local, national, regional, and international). Combined, 61 percent of this cohort had training in relevant collaborative forest management principles and approaches, and were actively involved in the implementation process, while 39 percent made the high-level decisions, and held substantial experience in governance principles related to conservation actions in protected areas across the country. An illustration of these statistical data is presented below (in figures 5.7 and 5.8).
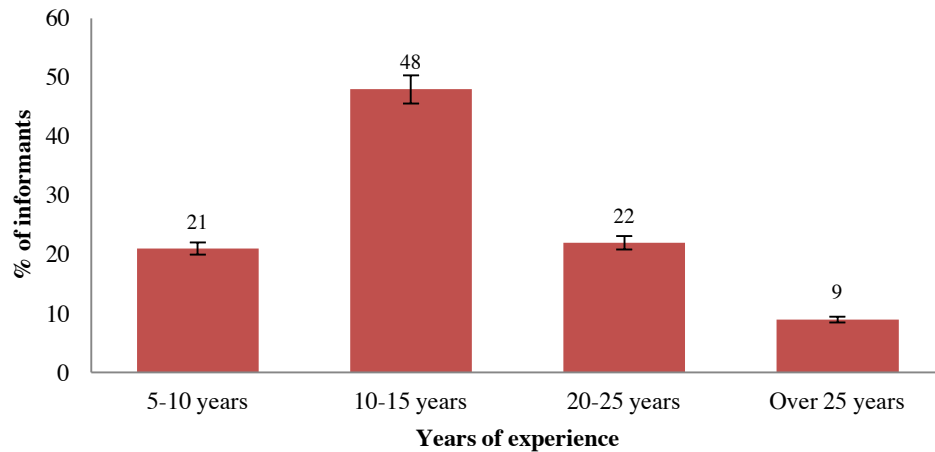
Figure 5.7 Diversity of organizational informants based on years of experience (SPSS output)
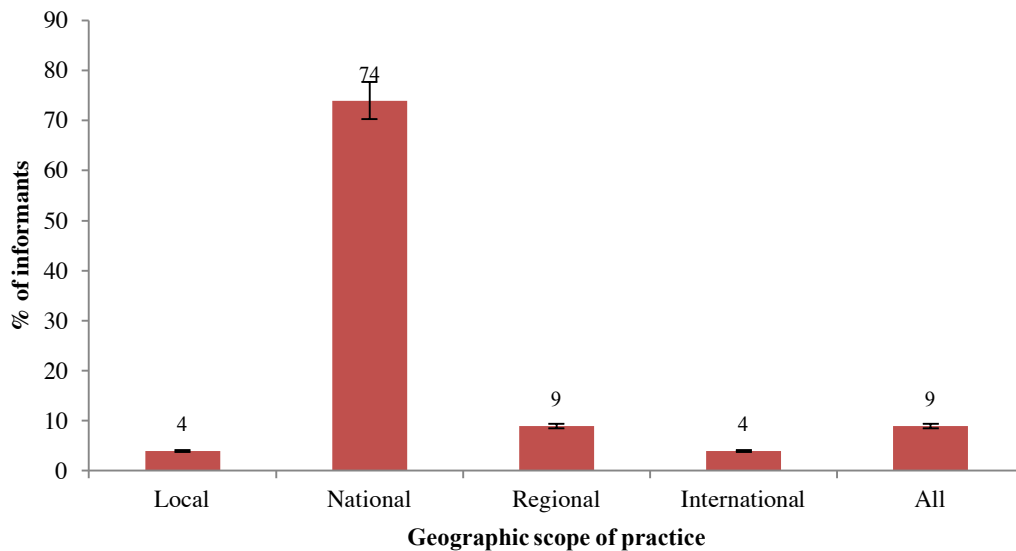
Figure 5.8 Diversity of organizational informants based on geographic scope of practice (SPSS output)

The views of this cohort were sourced using an attached email questionnaire (Bryman 2016), which informants preferred because it increases anonymity (Schmidt 1997). Besides, an attached email questionnaire affords informants the option to elaborate on answers as they consider appropriate, and without the influence of the researcher (Benson & Stone 2013). As in the questionnaire employed for surveying household informants, the suitability of the attached email questionnaire was enhanced through series of virtual and face-to-face pre-tests and the phrasing of questions (Bryman 2016). Moreover, both questionnaires used a 4-point

Likert scale (see appendices C and D), with entries "TOTALLY AGREE", "SOMEWHAT AGREE", "DISAGREE", and "CAN'T TELL", coded 1, 2, 3, and 4 respectively. Furthermore, the questionnaires covered topics such as the nature of participation in planning and implementation, the nature of community and policy learning, impacts of participation and learning on livelihoods and knowledge capabilities, and influence of institutions and power structures. The questions were mostly close-ended, following a skip pattern based on the pace of informants and the nature of responses provided (Blair et al. 2013).

5.4.2   Qualitative methods

Data from the initial quantitative (survey) phase of the research were triangulated through a second phase of qualitative research using documentary analysis; in-depth, key informant interviews; and focus groups (Creswell 2014; Bryman 2016). A second phase of data collection was particularly useful in filling the gaps left by the initial phase, since survey research generates data that is broad rather than deep, and may not reveal the depth of views and experiences of the research subjects (Clough & Nutbrown 2012). Beyond the advantage of obtaining further in-depth information on the research context (Needleman & Needleman 1996; Padgett 2016), qualitative methods are less reliant on large sample sizes, and thus, allow more time to be spent with informants to explore their understanding of the research problem and the underlying issues of importance (Genzuk 2003; Maxwell 2013).

5.4.2.1   Documentary analysis

Survey data were triangulated through a systematic literature review of studies that provided information on the Adaptive Collaborative Management process in the GRNP in Sierra Leone, as well as cases of implementation in other parts of Africa. The search criteria included "documents-in-use" (Prior 2008), such as funding proposals; policies, laws and regulations; progress reports; implementation plans and agreements; press releases; and baseline studies.

Articles on ACM in other sectors (such as fisheries) were also considered, to trace history and compare structures, processes and outcomes (e.g., Baio 2010; Khan & Sei 2015). Overall, the analysis of documents-in-use revealed the meanings attributed to participation, learning and resilience in the research and country contexts (Bell et al. 2014 p.132), and aided in identifying key stakeholders for the key informant interviews (Bowen 2009). The review was also useful in understanding the connections between key structures and processes, including roles, responsibilities, and mechanisms for communication, feedback and benefit distribution (White & Marsh 2006; Kohlbacher 2006).

A general search for articles on the key concepts analysed in this thesis (see chapter 3) was also conducted to understand existing arguments and identify gaps that this research can fill (see chapter 2). Article references were searched from 2006 until December 2016 following steps suggested in Snelson (2016)- see figure 5.9. This involved using key words such as "co-management", "Africa", "ICDPs", "forest protected areas", "institutions", "adaptive management", "participation", "learning", and "power" to find relevant publications in various databases (with date of publication mostly >2007). The databases considered were CentAUR, JSTOR, Sage Journals, ScienceDirect, Taylor & Francis Online, Web of Science, and Wiley Online Library. For example, a search in Web of Science yielded 30 articles, while a search in ScienceDirect yielded 65 articles. Journal articles and books from own Mendeley library were also added, reviewing abstracts and full-text copies to determine eligibility for the analysis undertaken in this research. Documents were included if they emphasized a focus on ACM practices in FPAs, applied a mixed methodology, or used either qualitative or quantitative methods, and were available from a peer-reviewed source (Snelson 2016).
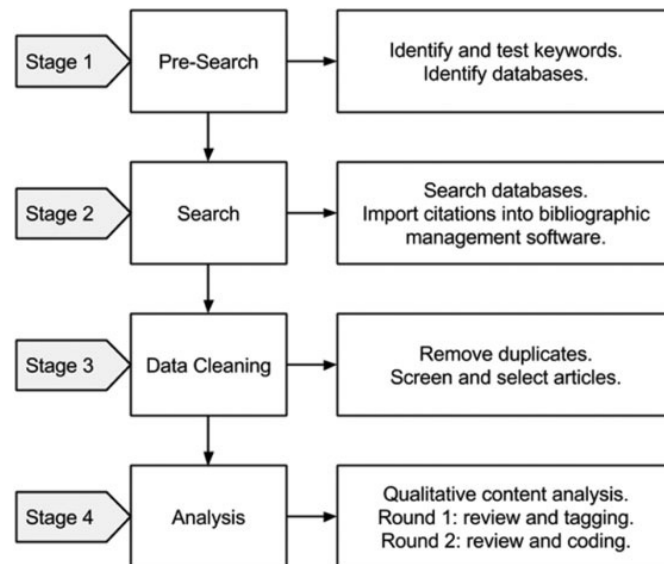
Figure 5.9 Stages in the analysis of literature and documents-in-use (adapted from Snelson 2016)

5.4.2.2   In-depth (key informant) interviews

Following the documentary analysis, findings were further triangulated with a purposive sample of 46 key informants recruited from institutions (n=23) and fieldwork locations (n=23). Key informants at the institutional level included representatives of government agencies (such as FD and NPAA), donor agencies, project personnel, academic and research institutions (such as Njala University), and NGOs (such as CSSL, Green Africa etc). These actors were at the top of the forest conservation process in the country, and may have influenced the course of management decisions for ACM implementation in some way. Key community informants included local leaders (such as chiefs, headmen etc), local government officials (district and local councilors, ward committee members etc), and members of community organizations (labour clubs, savings schemes etc). These informants were selected from the larger sample of informants in the initial surveys (Palinkas et al. 2015) because they demonstrated knowledge of the issues explored in this research and played crucial roles at the community, locality, Chiefdom and District levels (Harvey 2011).

A semi-structured, key informant interview approach enabled informants to freely provide information on the issues that were explored. The progression of key informant questioning included opening, transition, and closing questions (see appendices E and F). The questions were kept broad to allow informants to provide as much information as possible, and to re-orient the process toward those new and relevant concerns that emerged (Dicicco-Bloom *&* Crabtree 2006). The process was also kept informal to be able to verify claims made and compare across cases, which ensured that data entries were accurate, and information supplementing earlier data were collected (Yin 2009; 2013). Despite these quality control measures, problems were still encountered. For example, some community informants were uncomfortable with questions on the accountability of Chiefs (Arthur et al. 2012), while some organisational informants raised concerns about the legitimacy of some of the views expressed in earlier phases of the research. These fears were assuaged by explaining the purpose of the research, including its ethical considerations, and the opportunity it afforded for triangulating views from different phases of data collection (Yin 2009; 2013).

5.4.2.3   Focus groups

Both survey and interview data were further triangulated with focus groups (n=4) including community informants (n=2 groups with 20 participants in total) and organisational informants (n=2 groups with 20 participants in total). Participants for these groups were recruited purposively, including local stakeholders (such as local leaders, actual residents or heads of landholding families, and strangers[1]), and policy stakeholders (such as government officials, donor agencies, forestry consultants, international and local NGOs, and project personnel). These participants were considered the most informed about ACM practices in the GRNP, and conservation (generally) across the country (Berg 2004; Stewart & Shamdasani 2014). They

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[1] "Strangers (as opposed to actual residents) are those born outside the Chiefdom, whose land and civic rights derive only through their protection by a citizen", that is, those who belong to land-owning families (Bulte et al 2013 p.11).

were mainly considered information-rich cases because of their experience with conservation practices in the research setting (Palinkas et al. 2015).

Group discussions commenced with an explanation of the objectives of the study, followed by introductions and a discussion of a list of topics drawn from earlier phases of data collection. A similar progression of questioning, like that used for key informant interviews, was used for focus group discussions, including opening, transition, and closing questions (see appendices G and H). This approach was a useful way of tapping into the knowledge, interests and perspectives of informants (Krueger & Casey 2009), and a more practical way to address the biases of surveys and key informant interviews, which employed a face-to-face technique that does not allow informants to challenge claims made by others (Krueger & Casey 2014). Besides, bringing diversity to a research process through group discussions involving participants from different backgrounds, enhances both the validity and generalizability of data and interpretations (Polit & Beck 2004). A major drawback with this approach, however, was the difficulty in moderating discussion sessions, given the diversity of informants that were interviewed in one room (Krueger & Casey 2014). This was considerably stemmed by the rapport between the researcher and participants, who thought that the moderator's non-participation in the project was critical to keeping a fair-minded and neutral position on views they expressed about the issues explored (DiCicco-Bloom & Cabtree 2006).

5.5   Data analysis and interpretation

Data analysis in this context, refers to ways by which data collected is given 'order, structure and meaning (Huberman & Miles 2002). What this means, according to O'Leary (2004), is that at the data analysis stage, the researcher continuously moves between the information gathered and the questions, objectives, conceptual approach and methodology of an investigation. In this research, data analysis followed a convergent parallel design, which is one of the most well-

known approaches to mixed-methods data analysis (Creswell & Plano Clark 2011). The analysis involved blending quantitative and qualitative data to explore the research problem from multiple angles, by first reflecting on the research lens (existing knowledge), and then exploring important areas of convergence and divergence (Yin 2009). It entailed an iterative exploration of processes and outcomes observed and documented during both phases of the research to identify "plausible causal connections". This took the form of drawing out themes and patterns across data, as well as "surprises" that helped describe complex relationships and experiences (Miles et al. 2013).

Although data analysis involved blending quantitative and qualitative data to provide a deeper understanding of the research context, qualitative data were featured more dominantly in the interpretations, since the thesis employed a "qualitative follow-up" design (see section 5.3.2). Johnson et al. (2007) argues that a qualitative-dominant mixed analysis takes a critical realist stance, which believes that the inclusion of quantitative data can enrich the analysis and interpretation of qualitative findings. In the context of this research, this means that the qualitative dataset was used to supplement and extend data from the quantitative phase of the research (Teddlie & Tashakkori 2009), to provide a rounded illustration of informant views on the nature and outcomes of participation and learning in ACM practices in the GRNP, and the underlying influence of institutions and power relations. The diagram in figure 5.10 illustrates the convergence of strands of quantitative and qualitative data during the analysis and interpretation phases of this research.
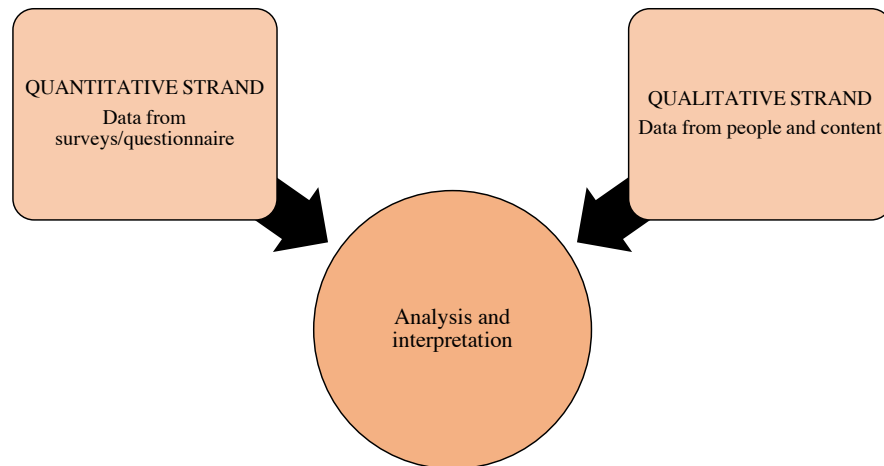
Figure 5.10 Diagram of convergent parallel strands in data analysis and interpretation

5.5.1   Quantitative data analysis

Quantitative data analysis involved cross-checking survey data to identify missing values, and remove errors and ambiguities (Singh 2007). Following the assignment of codes to the Likert Scale used in both the household questionnaire (for survey of household informants) and attached email questionnaire (for survey of organisational informants), the numeric data was analyzed using various statistical techniques, including descriptive and inferential statistics (Gravetter & Wallnau 2016). Descriptive techniques were used to summarize findings into easily translatable graphs, tables, means and correlations, while inferential techniques offered an effective way of understanding and better interpreting the data by comparing cases to identify important patterns and relationships (Teddlie & Tashakkori 2009). Inferential statistical techniques particularly involved analyzing statistical significance (the significance of data analyzed using descriptive statistics) using analysis of variance and t-tests as appropriate (Urdan 2016). Overall, the analyses of quantitative data (statistical analyses) were performed using a statistical package (SPSS version 21)- see section 5.5.3.

5.5.2   Qualitative data analysis

Qualitative data analysis involved analysing narrative data generated through interviews and focus groups, including data saved in audio, photo and video formats (Flick et al. 2013). The analysis identified emergent themes and patterns, thus, sorting data into categories (Patton 2002), which included cases with similar content (Teddlie & Tashakkori 2009) to establish implicit connections between informant views and experiences (Huberman & Miles 2002). The whole process of qualitative analysis entailed an iterative review of notes (manuscript) to understand the contexts embedded in the data (Miles et al. 2013), and search for relationships, including emphasis, repeating views and connecting claims (Johnson & Onwuegbuzie 2004). Unwanted data were removed from the connections established (Aronson 1995) to focus the analysis on the research questions addressed in this thesis (Miles & Huberman 1994). Overall, the NVivo software (version 11.4.0- see section 5.5.3) was useful for enumerating the frequency of themes within a sample, the percentage of themes associated with a given category of respondents, or the percentage of people selecting specific themes (Onwuegbuzie & Teddlie 2003). Final data were reported using illustrative quotes (Patton 2005), coding sources as follows: "INT-ORG/IX[2]" and "INT-COM/IX" for organisational and community informants respectively; "FG-LHN/PX" and "FG-NGM/PX" for focus group participants in Lalehun and Nemahungoima respectively; and "FG3-ORG/PX" and "FG4-ORG/PX" for participants in focus groups with key institutions.

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[2] "X" represents the number/code assigned to each of the informants included in this study. The codes are 1 to 23 for key informant interviews (indicating 23 informants in each personal interview phase) and 1-10 for focus groups (indicating 10 participants in each group interview phase).

5.5.3   Use of software packages

Numeric (survey or quantitative) data analyses were performed using a statistical package (SPSS version 21) obtained from the University Library. SPSS (Statistical Package for Social Scientists) was helpful in cross-checking quantitative data to identify missing values and remove errors (Sotiriadou et al. 2014; Creswell 2014; Bryman 2016). Data obtained from the survey of households and organizational informants were first sorted and coded by hand in an excel spreadsheet before entering into SPSS to analyze descriptive and inferential statistics, as described in section 5.5.1 above. The analysis of data included the selection of a suitable statistical technique from a range of available options (Pallant 2013). Figure 5.11 below is a screenshot of quantitative data analysis undertaken in SPSS.
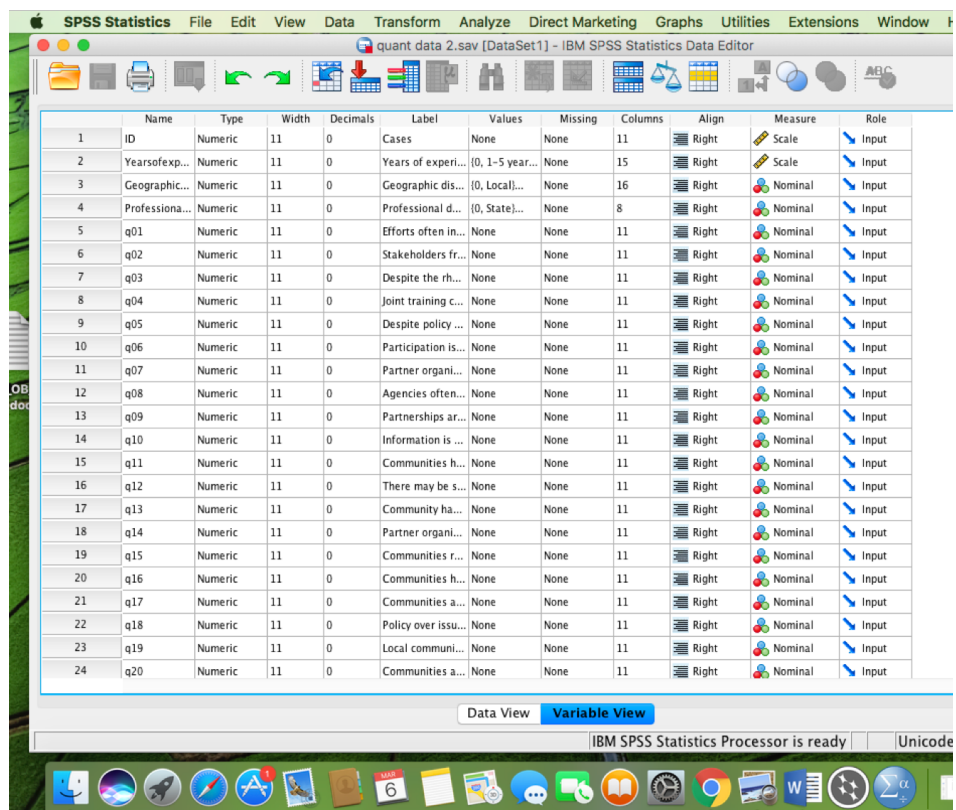
Figure 5.11 Screenshot of quantitative data analysis in SPSS (version 21)

Similarly, narrative (or qualitative) data were analyzed for codes or themes using NVivo (version 11.4.0). NVivo is the most frequently used software for analysing and interpreting qualitative data (Jones & Diment 2010). The software was useful in managing and organizing data, identifying patterns and associations, gleaning insights, and drawing conclusions (Bazeley & Jackson 2013). The analysis included the generation of codes derived from data obtained through interviews and focus groups, which were then grouped into categories to identify emergent themes (Leech & Onwuegbuzie 2011), as described in section 5.5.2. Figure 5.12 below is a screenshot of qualitative data analysis undertaken in NVivo.
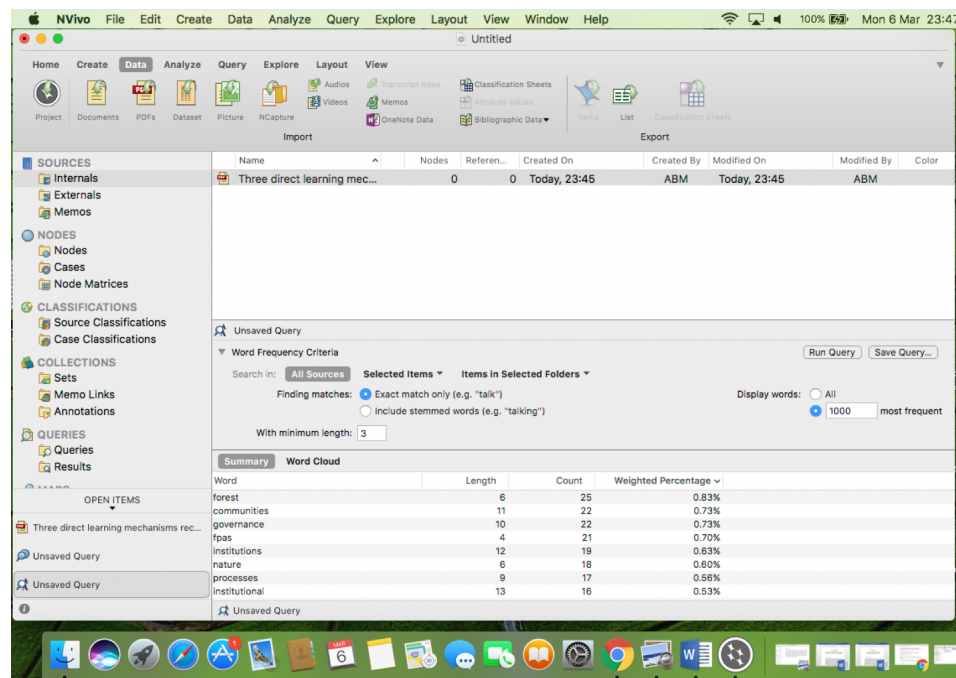
Figure 5.12 Screenshot of qualitative data analysis in NVivo (version 11.4.0)

5.6   Validation of data

Data validation entailed triangulation, direct quotations, and member checks. Triangulation (Cohen et al. 2007) was done throughout data collection by comparing data from different sources (surveys, interviews, documents and focus groups). It is appropriate for mixed methods

research (Patton 2002) because it double-checks data collected (Yin 2009 p.115) to sound additional views on the research context and the experiences rooted in it (Berg 2004). Direct quotations give access to raw interview data, which highlight important views on key issues explored in this thesis (Cohen et al. 2013). Member checks entailed using informants to verify information provided by others in the same location, or elsewhere (Teddlie & Tashakkori 2009), which addressed ethical concerns and omissions (Lietz et al. 2006) and enhanced data accuracy (Bernard 2011). Other measures included spending more time explaining questions (Creswell & Miller 2000), and using Research Assistants[3] to independently administer interview instruments, and thematically analyze a random selection of manuscripts (Bryman 2016 p.206). Research Assistants build trust in a research process and show the genuineness and relevance of a study (Kumar 2014), which also enhances the credibility of field data (Axinn & Pearce 2006). Besides, Research Assistants are useful for undertaking "labor-intensive" case study research, which could cause significant stress for a "lone researcher". This is because case studies require more energy to accomplish, given the need to find, sift, and analyze a larger volume of evidence, ensuring that data gathered is of the same analytical value as those obtained using different methods (Miles 1979).

5.7   Ethical considerations

All measures to address human ethics were approved by the University Research Ethics Committee (see University of Reading 2012 and appendix I). Approval from informants was sought using a consent form (see appendix J), which included an explanation of the purpose of the research (Oliver 2010), and assurances to ensure anonymity and confidentiality (Kumar 2014 p.286-288). However, a written consent form proved inapplicable to informants in the fieldwork locations (household informants especially), given the low levels of literacy.

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[3] Two research assistants without any prior connection to or knowledge of the communities and principal implementing agent (RSPB) were recruited from the School of Environmental Sciences at Njala University in Sierra Leone.

Accordingly, the researcher was flexible about the social situation in which consent was obtained (Davies 2008), requesting informants to verbally state consent by introducing themselves and indicating their willingness to participate (DePoy & Gitlin 2016). Taking steps to adapt consent requirements to conditions in the field also required paying special attention to the special rights of a mix of individuals such as those with disability and learning difficulties, the elderly, and women (Tarleton & Ward 2005; Kroll et al. 2007), which were informant characteristics that were not fully revealed by the sampling criteria used. As such, data collection involved using procedures that avoided harm (Marshall & Rossman 2014), such as getting "process consent[4]" (Muir & Mason 2012) avoiding upsetting questions, and using an appropriate tone of voice and gestures (Kumar 2014 p.286). At the same time, clearance was sought before photos were taken, and those informants affected were told how access to the material will be managed and how long it will be kept (Bell 2014 p.184). Photos were particularly useful in analyzing and discussing the main themes of this research, because they afford access to the research context in ways that interviews or group discussions do not always accomplish (Banks 2001). Further measures were taken to give the institutions and people that contributed to the generation of data the chance to reflect on the findings and ascertain the extent to which ethical procedures were followed (Bell 2014:185).

5.8   Research design: limitations and reflections

5.8.1   Use of an interpretive paradigm

Although the interpretive paradigm is sensitive to individual meanings that may not be captured within broader generalizations (Samdahl, 1999 p.119), it has limitations. First, interpretive research methodologies are subjective, implying that data varies from person to person, though

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[4] Seeking consent was treated as a process, keeping in mind that informants can decide to give consent and have regrets and a change of heart afterwards (Muir & Mason 2012). Process consent is particularly suitable for case studies using multiple methods and procedures to collect and analyse data (Ramcharan & Cutcliffe 2001; Dewing 2007).

this is not necessarily true for some case study approaches (Rolfe 2006 p.305). Second, validity adding criteria such as triangulation and member checking are broadly considered ineffective because they assume a primary objective that can be converged upon (Angen 2000 p.384). Third, there are limitations to data transferability and generalizability because interpretive research produces highly contextualized qualitative data. Fourth, the autonomy and privacy of respondents can be compromised because interpretive research uses methods and procedures that are more intimate and open-ended (Howe & Moses 1999, p. 40). Each of these limitations have been addressed in this study. For example, steps were taken to ensure anonymity and confidentiality and to extend data validation beyond triangulation. Additionally, steps were taken to fully inform respondents about the purpose of the study to seek "an informed consent", thus limiting the extent to which the researcher could impose his own subjective interpretations upon them. Furthermore, a summary of findings was produced and shared with key respondents to give them full ownership of data, including to decide on the general direction that the research takes and which information to make public (see Scotland 2012).

5.8.2   Sampling and case study approach

Although the methodology used in this thesis was appropriate for addressing the research questions and testing hypotheses posed in Chapter 1, some shortcomings could be identified. Purposive sampling was used in determining the fieldwork sites, applying the researcher's knowledge in determining participants for the research. As such, one major drawback of the research design is that the analysis is based on informants' perceptions, which could be subjective or objective, and open to recall bias (Greene 2007). Also, a Hawthorne effect is likely (McCambridge et al 2014), though the research design and the use of Research Assistants may have minimized such risks. Another problem with this approach is its vulnerability to social desirability bias (Grimm 2010), as informants may have given socially desirable responses, rather than what truly reflected their feelings and circumstances. Additionally, critics refer to

possibilities of courtesy bias, as certain accounts may be understated, or overstated, though the consistency across the analysed data shows that this may not have been the case (Mertens 2014). Critics have also argued that a case study approach diminishes the potential for generalizing results (Teddlie & Tashakkori 2009), though using a sequential explanatory design affords insights into a breadth of generalizable issues related to participation, learning, power and institutions (Lawler 1985; Smart & Paulsen 2011; Cohen et al. 2013). Besides, case studies are suitable for generalizing specific results in relation to a specific thesis (Yin 1994), because it mostly follows procedures that address concerns about generalizability at different stages of the research (Yin 1981).

5.8.3   Researcher's positionality

Positionality, according to Burawoy (2009 p.204), usually means two things: 1) the standpoint from which the researcher approaches the study; and 2) the researcher's "embodiment and biography" (age, gender, race, origin, education, language etc). The researcher was a black African (a Sierra Leonean- Mende by tribe) conducting research in a Mende region in Sierra Leone. So, there is little or no likelihood that the researcher's "embodiment" influenced local perceptions about the study. Besides, the researcher's "biography" could not serve to influence policies or support communities in the location of the research. This is not to say that the researcher was totally removed from the research situation because this is nearly impossible and not entirely desirable (DeWalt & DeWalt 2010). Rather, the researcher's position as an "outsider" meant greater access to informants who would rarely share their opinions on the project and its implementers. The blend of qualitative and quantitative methods used meant that respondents engaged one another, as well as the researcher.

5.9 Summary

This chapter has described the methodology and methods used in this research. For each of the methods (qualitative and quantitative) used, a description of data collection tools and techniques was provided, followed by constraints encountered in their administration in the field. Furthermore, procedures for analyzing both qualitative and quantitative data were explained, and steps taken to ensure data quality and human ethics were described. Finally, key sources of bias were identified, and measures taken to address them presented. Overall, this chapter marks the end of the conceptual part of this thesis, which clarifies the study's research position within the political ecology literature, and describes key concepts included in the analysis. Therefore, these chapters have laid the groundwork for the presentation and discussion of results from empirical research done on ACM practices in the GRNP in Sierra Leone. Analyses of the nature of participation in Adaptive Collaborative Management (ACM) and the results obtained from them are described in the next chapter.

Chapter Six

Nature of Participation in Adaptive Collaborative Management

6.1   Introduction

This chapter presents the main findings of research undertaken to understand the nature of participation in ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone. Findings for participation are presented under the themes: who participates; how does participation occur; why does participation occur; why participation does not occur; and impacts (outcomes) of participation. An examination of participation in this manner aids an understanding of the mechanics and politics of the Adaptive Collaborative Management (ACM) process, specifically, "who decides what to do, how such decisions are made, how roles are shared in the making of these decisions, and who is, or should be held responsible for resulting outcomes" (Borrini-Feyerabend et al. 2013 p.19). Data from surveys; in-depth, key informant interviews; content (documents-in-use); and focus groups were analysed.

6.2   Who participates?

6.2.1   Who are the key stakeholders?

The key stakeholders in the ACM process can be grouped broadly into implementers and beneficiaries. Implementers are part of the Gola Forest Programme (GFP), which includes the

Government of Sierra Leone (GoSL), Royal Society for the Protection of Birds (RSPB) and Conservation Society of Sierra Leone (CSSL). The GFP[5] is a 25-year partnership with the responsibility to govern and coordinate various structures and processes for ACM in the GRNP in Sierra Leone (Tubbs et al. 2015). Its role specifically includes the conservation of forests and forest resources on which the livelihoods of "beneficiaries" depend. In this regard, "beneficiaries" refer to users of the resources being conserved- the farmers, loggers etc- that Ostrom (1990) considers "appropriators". They are drawn from local communities adjacent to the GRNP, so they include all those that participated in the ACM process and whose choices caused resource management challenges that stimulated governance responses (Lubell 2004).

6.2.1.1   Government of Sierra Leone (GoSL)

The GoSL was represented by the Forestry Division (see section 4.2.2 in chapter 4) in the GFP. Its role in the ACM process included enacting and amending forestry laws, regulations, and policies that provided the enabling policy environment for effective participation in practice. More generally, based on Schedule 3 of the 2007 partnership agreement for the Gola Forest Conservation Concession Programme (GFCCP), the Forestry Division (FD) was required to: "take all action necessary to designate the Gola forest as a National Park; take all legal actions necessary to prevent encroachment or other activities which may affect local biodiversity or hinder the implementation of the management plan; promote awareness of the project within the government and the whole country, seeking the affiliation of other relevant national and local institutions; provide office space for the project and for consultants to the programme; contribute where appropriate and in collaboration with other partners to efforts to raise funds

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[5] The GFP is operationalized through a Management Team comprising about 150 employees grouped into four units: Finance and Administration, comprising accountants and bookkeepers; Research, comprising GIS technicians; Park Operations, comprising staff working in each of the three blocks of the park; and Community Development, comprising staff in charge of training, education, and livelihood support. Each unit is headed by a Superintendent that reports directly to a Protected Area Manager whose responsibility includes working with the Project Leader and other staff to develop management plans, operational procedures (such as budgets) and progress reports (RSPB 2013).

and further assistance in order to achieve the long term aims of the project…" (Forestry

Division 2009). An official at the FD summarized these roles as follows:

> "Whatever we do… enforcing rules, delivering benefits, protecting the forest...everything is
> made possible because there are laws to the effect. You cannot implement a project like this
> without institutional support. In fact, no one takes you seriously in the communities without
> firm laws that can bite. If the policy environment isn't enabling, we will be fighting a lost battle
> because no one will listen or cooperate. That's why we are seeking to create a balance, so
> community participants see that the laws protect and favour them too. That way, we will make
> them more willing to participate and conserve" (INT-ORG/I6)

The central role performed by the FD in the ACM process was complemented by other

representatives of the GoSL, including Members of Parliament (MP), Provincial Secretaries

(PS), and Councillors. MP representatives contributed to processes in the five constituencies

covered by the programme, PSs represented the two regions of the GRNP (east and south),

District Councils represented the three councils in Kenema, Kailahun, and Pujehun, while

Councillors represented the eleven wards surrounding the project area. The inclusion of

government actors in ACM processes is considered an incentive for stakeholder engagement at

the policy level (Pomeroy et al. 2001), though in the context of ACM practices in the GRNP,

many comments referred to the obstacles they created to broad-based participation.

> "The forestry laws in this country give absolute power to the government. There's nowhere in
> these laws that recommends sharing power and authority with community actors and you still
> call it collaborative management. It's all about enforcement; simply treating community
> participants like criminals, not partners whose involvement and ideas can significantly shape
> our efforts. Why won't they resist and sabotage the project. We don't give them the recognition
> they deserve. And this approach to making and implementing laws has persisted for many
> decades…tell me the results because you know better" (FG3-ORG/P2)

> "They will block anything relating to transferring power to local communities. Maybe they fear
> that by losing authority, they would lose stake in decision-making and benefits. They, however,
> fail to see the bigger picture of what disempowerment causes- tension, resentment, sabotage and
> conflicts" (FG4-ORG/P5)

6.2.1.2   Royal Society for the Protection of Birds (RSPB)

RSPB[6] played a lead role in developing, implementing and governing ACM practices in the GRNP. It was deeply involved in the management of both technical and financial aspects of the process, including the appointment of a Project Leader (PL) who supported the Protected Area Manager (PAM) in the day-to-day management of staff and activities. More generally, the 2007 partnership agreement required RSPB to: "provide, financial and material assistance, including the training of key personnel to enable them to implement agreed activities within the project; contribute where appropriate to fund raising to achieve the long-term aims of the project; provide the publication of reports and scientific work and exchange of information on the conservation and management of tropical forests, their flora and fauna, within and outside Sierra Leone; have overall financial management authority and responsibilities for the term of this agreement" (Forestry Division 2009).

> "RSPB was the backbone of the ACM process in the GRNP. They practically called the shots partly because they had more capacity than their national counterparts, and because they sourced funding for the process. They were very influential in terms of the nature of activities implemented at the local level. Many of their decisions were never reviewed or overridden by government agencies, so they decided what mattered, so to speak" (INT-ORG/I22)

Despite these important roles, many comments referred to RSPB's insensitivity to changing conditions at the local level. Many informants thought that because RSPB has been in the GRNP for more than two decades, there is always a tendency to treat local communities as a bounded and homogeneous geographical unit. An official in the FD noted that RSPB uses the increasing homogeneity of local priorities, perspectives, and institutions as a reason for adopting a "common approach" to engaging local communities, thus ignoring the diverse perspectives and experiences at the local level. The idea that international conservation NGOs fail to fully account for local interests and perspectives in the design and delivery of ACM

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[6] RSPB is a UK-based Birdlife partner that oversees a portfolio of conservation projects in 52 countries in Africa, Asia, and Europe to promote biodiversity conservation and scientific research.

practices is in keeping with Hulme & Murphree (2001) who suggest that when conservation

actions are pioneered by experts, donors and international conservation NGOs, they may fail to

fully understand the changing interests and perspectives at the landscape level, and fail

essentially, to achieve intended goals and objectives. An adequate validation of this suggestion

is provided in the succeeding sections of this chapter.

> "RSPB has been here for more than two decades so they are used to addressing the same
> problems. They fail to understand, however, that local communities evolve, so benefits for
> participation must evolve too. Look at the governance arrangement, the benefit-sharing
> agreement, project approaches and evaluation procedures. Everything has remained the same as
> when the programme started. What changes now and then is the Project Leader and few senior
> staff who leave at the end of their contracts, or after they are sacked" (FG3-ORG/P7)

> "When you rely too much on a stranger, who does not understand the preferences of your clients,
> to choose the sauce for the day, they should expect to be served food they loathe. The project
> relied too much on experts; many of whom were here for the first time. We were sure that the
> measures these experts suggested would fail, and they did…sometimes beyond our
> imaginations. They told us hunting and logging will stop because forest guards were employed,
> and because they have found effective ways of dealing with the problem, but they were wrong.
> These activities have a long history, and they can only be addressed if we agree among
> ourselves, not through coercive means" (FG1-LHN/P3)

6.2.1.3   Conservation Society of Sierra Leone (CSSL)

CSSL (see section 4.2.2 in chapter 4) also played a critical role in the ACM process. It was

required to "contribute skills and knowledge to the ACM project, seconding staff where

appropriate; contribute where appropriate to fund raising; continue with national and

international advocacy in gathering support for the Gola project in particular, and for the

environment and biodiversity in general; raise awareness on the project to target audiences in

the country as a whole to the younger generation through School Nature Clubs (SNC) and the

Environmental Forum for Action (ENFORAC)…" (Forestry Division 2009). Moreover, CSSL

was included for its long-term contribution to addressing environment-development challenges

in Sierra Leone, mostly through communications and media outreach and forest-based

livelihood projects. CSSL's role in the ACM process signaled the commitment of government

and its international partners to engage and develop Civil Society Organisations (CSOs) for

conservation and local development. Furthermore, CSSL's role in the process encouraged other national environmental NGOs to cooperate with the GoSL and its partners in designing and delivering ACM practices across the country. Yet, the inclusion of CSOs is considered an additional burden on funds available for conservation, because more funds are being redirected to institutional purposes (administration and coordination).

> "The inclusion of CSSL as a key stakeholder in the programme shows the commitment of the government and RSPB to building the capacity of national NGOs. Apart from CSSL, we now have a host of national organisations working on various things. Green Africa is doing well in coordinating the new grievance mechanism and is working with other organisations to implement community initiatives across the park" (FG3-ORG/P10)

> "Sometimes you go to see a friend expecting to be served tea but you get rice. What we started (the project) with- the expectations- are different to now. The NGOs and CBOs we have taken on are helpful, but the budgets are stretched out already. We are worried about coordinating and sustaining these efforts, especially as we are at a transition to REDD" (FG4-ORG/P5)

6.2.1.4   Beneficiaries (local communities)

As mentioned in the opening section, beneficiaries of ACM practices were drawn from the 114 communities adjacent to the GRNP. These local communities broadly include "leaders" and "residents". Leaders include the chiefs, head men and all those holding positions in the community, while residents include those occupying households found in the setting. Leaders served as community representatives throughout the ACM process, as described in sections 6.2.3 and 6.2.4, while residents participated in activities implemented in their respective communities. Individual participants were selected to participate in the project based on landholding rights (Bulte et al 2013), so benefits were tied primarily to land ownership. Benefits that were tied to cash payments were accessed by landowners, while collective benefits were accessed by both those with rights to land and those without. Generally, beneficiaries of ACM practices were those that historically and lawfully enjoyed rights of access and use before the ACM process (Forestry Division 2009). Some comments on the approach to selecting local stakeholders for the ACM process are provided below.

"Land ownership principally determined those who held key roles in the ACM process. It also determined the kind of benefit one accessed because cash payments were only made to landowners. However, even those that owned land had to be included in the Land Register prepared to benefit. The Land Register was prepared by the project in concert with the chiefs, which basically shows that the chiefs in these communities determine who owns land, and who receives cash payments from the project" (INT-ORG/I12)

"Roles are determined by landholding rights, like cash benefits are. For us that relied upon the common benefit pool, it was a struggle indeed. When the project delivered to us directly, there were no issues with access, but when it involved village leaders, it either never reaches us or does reach in less the actual measure. Landowners were protected more than others in the ACM process though they benefited from collective resources" (FG2-NGM/P8)

The ACM literature has critiqued the approach used for stakeholder selection in the GRNP. For instance, Herbst (2014) argues that this approach gives men in rural African communities more control over the process because of their privileged access to and control over land in these settings. Colfer (2010) notes that making land ownership a condition for meaningful participation excludes minority groups such as women who already enjoy less authority than other residents in forest communities. In other words, individuals that lack rights to land in FPAs will also be less perceptive of the benefits of participation in these settings (Larson 2010). Moreover, Watts (2008) suggests that because land is a factor of production for living resources and a source of employment, power and wealth, its use as a requirement for participation undermines the effectiveness of ACM practices, because it increases the authority and influence of those who hold sufficient rights. This implies that those individuals that lack rights to land in forest communities may also lack economic, social, cultural and political incentives to meaningfully participate in ACM practices (Brunckhorst 2010).

6.2.2   Inclusion of minority groups

In many cases, informants suggested that minorities such as women and youth were excluded from stakeholder selection processes and did not receive the benefits of protection given to others. Many comments pointed to cultural limitations, including that some husbands did not allow their wives or female relatives to be vocal at meetings, or join other women in advocating for broader social recognition, including for election into public office (such as chieftaincy and

group leadership roles). Therefore, women lacked confidence to challenge issues raised by their

male counterparts, because they were either less informed, or were required by culture (such as

the secret society) to submit to the male folks even where they had genuinely different ideas

and interests. The findings are consistent with data analysed in Agrawal (2001), which suggests

that traditions can constrain women from speaking freely about certain issues, and thus undercut

their chances of meaningfully participating in resource governance processes. The findings

further support the idea of Maskey et al. (2006) who attribute the exclusion of minority groups

in participatory resource management processes to a lack of confidence and capacity to

effectively engage others on matters of common interest.

> "Yes, women had direct contact with some of the employees of the project, but their involvement did not transcend attending meetings or demonstrating at the community farms. Perhaps, we required special skills and knowledge to infiltrate the governance structure, or engage beyond our community and mobilize other households around a cause of resistance, which men have excelled at over the years" (FG1-LHN/P8)

> "Women were excluded in stakeholder identification processes. Maybe it is because there was no major decision-making body in the project that a woman headed, or one that gave special attention to women. Even for the group duties that were assigned, we were treated like the men; same hard work, but less opportunity to ask questions (FG2-NGM/P3).

> "I was always scared to say anything in the presence of my husband. Outside the religious and cultural value that I uphold, people here are quick to think that you are a witch if you are too vocal; some even think that by hanging around other women you are trying to start or hide an affair. The costs to us for participating are greater than the benefits" (INT-COM/I23)

Some organisational informants argued that to include minority groups (such as women) and

local communities more broadly, implementers of the ACM process developed a Concession

Framework (CF) in 2002. The design of a CF led to the signing of a Local Communities

Cooperation Agreement (LCCA) in 2003 (see appendix K). The agreement included a plan for

engaging broadly across local communities, including residents from all occupations (such as

farmers, labourers, craftsmen, and fishermen) and groupings [social groups (such as savings

associations), religious groups (Christian and Muslim), and cultural groups (such as secret

societies]. Inclusion of participants through the LCCA was based on the recognition that local

livelihoods were threatened by ACM policy implementation, including through the

enforcement of rules against activities such as mining, logging and poaching.

> "We developed a CF in 2002 out of a concern about the need for broad-based local engagement in conservation actions in the GRNP, and the need to provide alternative sources of benefits to local communities. Therefore, right from the start of the ACM programme, the implementers saw benefits in meaningful community participation and considered ways by which minority groups could be included using a multi-stakeholder approach" (INT-ORG/I20)

> "The LCCA emerged from careful discussions of the components of the CF with all stakeholders, so it represented an agreement that there was an urgent need to conserve forest resources in the GRNP and that all concerned parties must be included. It also proposed that a conservation-development model was the best option for achieving forest conservation and meeting needs for community development" (INT-ORG/I18)

Still, the inclusion of local participants, especially minority groups, was considered a forced

choice by many informants. One informant in Lalehun suggested that those without rights to

land (or minority groups that did not receive cash payments) were required to contribute to

community work, such as providing labour on the chief's farm or joining others to brush the

road. That way, individuals gained the recognition of local leaders and got earmarked for

special rewards (such as to attend a training workshop where cash transport is provided).

> "Agreed that going to a road show required no special requests. Yet, to be selected by village leaders to represent the village in a meeting in the chiefdom headquarter town or to coordinate specific efforts in the community, you needed to be in their good books" (FG1-LHN/P6)

> "Of course, you need to be part of some of the project structures to access certain benefits. We are talking about a project that had specific deliverables. Achieving anything relied on the nature of local support and engagement, which, in turn, invited benefits and incentives. There have been concerns about providing more support to receptive communities, which might be true or not…the fact is, this is work in progress" (INT-ORG/I13)

Moreover, many household informants in Lalehun indicated that minority groups did not have

a stake in the ACM process because they were landless (97 percent totally agree). A large

majority of household informants in Nemahungoima (80 percent) also reported that minority

groups were given limited control of ACM activities because the process was primarily

designed to benefit those who owned the land on which the forest estate was established.

Likewise, the lack of rights to land meant that minority groups (such as women) did not have a

role in decision-making, which, altogether, demonstrates that for landless residents of forest

communities, participation in ACM practices does not lead to effective influence and control.

This finding corroborates the idea of Cornwall (2008) who suggested that participation in a resource management context can only be effective when involvement evolves into influence.
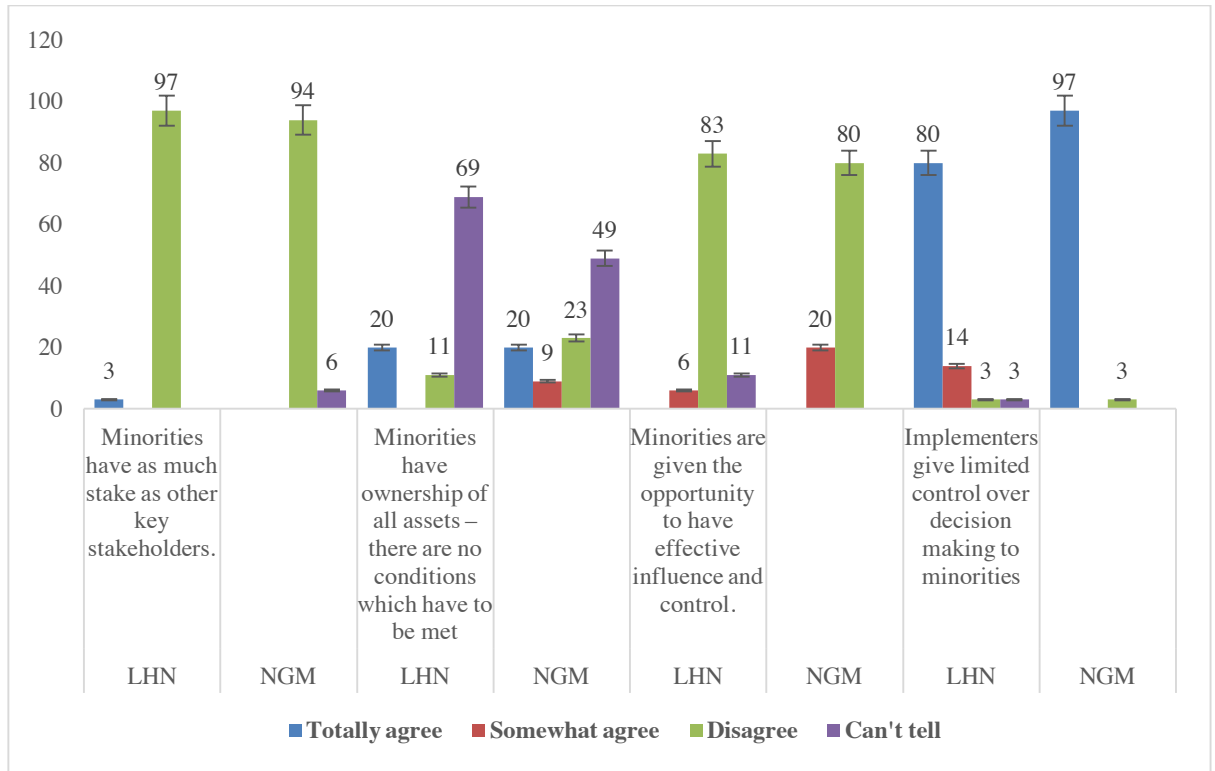
Figure 6.1 Community perceptions of the inclusion of minority group in ACM practices (SPSS output)

The points shared by household informants in Lalehun and Nemahungoima also correlated with views held by most organisational informants surveyed. For instance, informants noted that whereas minorities (such as women and youth) could benefit from collective resources provided through ACM practices, active and continuous involvement was a necessary pre-condition for such support (52 percent agree). Moreover, although minorities could manage their own activities (such as those organized through savings associations, labour clubs etc), they were required to undertake activities that did not conflict with the conservation objectives of the programme (39 percent totally agree; 30 percent somewhat agree). The argument here is that unlike landowners, minority groups lacked the opportunity to negotiate both the way benefits from the project could be accessed, and how such benefits could be used. These results seem to

be consistent with Deininger and Byerlee (2011) who found that participation from a position of landlessness yields both unsustainable and inequitable outcomes (benefits).
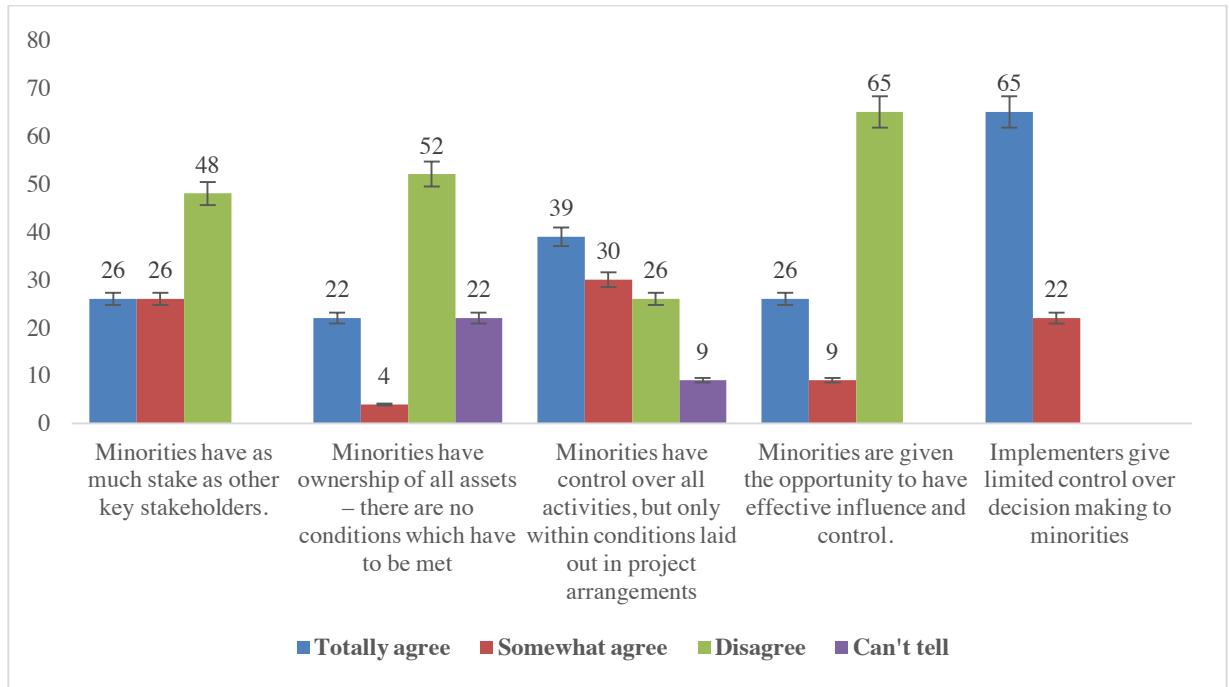
Figure 6.2 Practitioner perceptions of the inclusion of minority groups in ACM practices (SPSS output)

6.2.3   Inclusion & influence of local leaders

The findings presented in the preceding section suggest that residents (especially minority groups) were left unprotected by approaches to stakeholder selection in the ACM process. In this regard, many informants argued that more consideration was given to local leaders[7] who played key roles in decision-making, such as representing local communities on all major committees set up by the programme. The lowest layer of government in Sierra Leone is occupied by traditional leaders, or "chiefs". Chiefs raise taxes, control the local judicial system, and allocate land- the most valuable natural resource in rural areas.

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[7] Among local leaders (such as chiefs, headman etc), the most influential are the Chiefs, including Town, Section, and Paramount Chiefs. Town Chiefs preside over village meetings, making them major channels of communication between implementers, other local Leaders and forest communities. Section Chiefs mediate issues relating to a cluster of communities, while Paramount Chiefs are the highest decision-making authority at the Chiefdom level (Mokuwa et al 2011).

Institution of chiefs in Sierra Leone: history and power dynamics

To describe the involvement and influence of chiefs in ACM practices in the GRNP, a brief account of the history and dynamics of chieftaincy institutions in Sierra Leone is necessary (see Acemoglu et al. 2014). The colony of Sierra Leone was established in 1788, mainly as a settlement for freed slaves from the Americas and the Caribbean. In 1896, Governor Cardew singly decided to establish a protectorate, stating that "native chiefs" who initially had full political autonomy were now subject to the colonial administration in Freetown. Colonial authorities proceeded to establish a system of indirect rule by introducing a housing or "hut" tax in 1898. Although the new tax regime led to a violent conflict, the central government was successful in suppressing opposition, establishing the chieftaincy institution over the next decade. This gave paramount chiefs the authority to arbitrate land and legal disputes, collect tax revenue, and look over the general welfare of their people. Furthermore, the colonial government established a formal system of succession in the chieftaincy in which paramount chiefs rule for life and are elected by vote of the Tribal Authority (TA)- a group comprising the chiefdom elite (Chiefdom Speaker and other members of the Chiefdom Council). The 2009 Chieftaincy Act provides that there must be one member of the TA for every 20 taxpayers, though these taxpayers don't elect members of the TA or the paramount chief). The act also makes the ruling family the unit of political competition within the chiefdom, stating that only members of the ruling family are eligible to stand for election. Before the 2009 act, elections were administered under a customary law that maintained the same fundamental principle of "ruling family eligibility".

Indirect rule created new opportunities for chiefs to seek rents and control local economic activity. The most egregious opportunity, perhaps, was the passage of the Provinces Land Act in 1927. The law, which forbids transaction of land by "non-natives" and places ultimate

ownership of all land in the hands of the paramount chief, is still in force today. For this reason, chiefs are eligible for direct payments of royalties or "surface rents", which has created the chance for chiefs to seek rents from both private and public organizations. For instance, chiefs have used their authority as custodians of land to impose elaborate tax measures, and demand lease payments to be made for the development of infrastructure (roads, schools etc). Rent-seeking opportunities have also been created by the chiefs' role to deliver local public goods from the tax revenue they collect. Likewise, chiefs preside over civil courts, which adjudicate land ownership and matrimonial disputes. At the same time, chiefs have exploited their power through the government's recognition of their authority to coerce subjects into "community work". Compulsory labour has been a frequent cause of covert resistance and open dissent in rural communities, but the central government has yet to introduce measures to address individual concerns.

Involvement and influence of chiefs in ACM

The influence of local leaders derived mainly from their control over land and labour in the communities, which also gave them considerable control over the local economy. These results further support the idea of Unruh & Turay (2006) who found local leaders to be influential in rural communities in Sierra Leone because of their rights to land and labour. The results are also consistent with previous studies that consider land a source of power (Krott et al. 2014), an important social asset, an economic collateral for gaining financial support (Zenteno et al. 2013; Green & Haines 2015), and a means for gaining cultural identity in forest communities (Larson 2010).

> "The project knew that to establish and keep a presence, the chiefs were a good tool to use. They have exploited this to their advantage. You just cannot break grounds when you live among these chiefs, with their far-reaching connections and unchecked power and authority" (INT-COM/I5)

> "Land in this community is everything. Chieftaincy families own the most lands, so they are more influential. Some people lease land from chiefs to farm for a certain season and pay at the

end of every harvest season. Others trade labour on the chief's farm to gain access to farmlands they can use for a certain period. Therefore, local leaders are influential and those that do not come from chieftaincy families can hardly oppose them" (INT-COM/I8)

Comments concerning the inclusion of local leaders as key stakeholders in the ACM process referred mostly to a normative rationale, as many informants considered the leadership of chiefs, for example, a good idea for increasing local support and engagement. Others felt that including local leaders made ACM practices culturally compatible and helped to concentrate the vastly diffused interests and perspectives at the local level (because implementers dealt more directly with a focal person than everyone).

> "The tradition demands that when you first come to our settlements, you go to the chief to explain the purpose of your visit, so he arranges everything you need for a comfortable stay. They are therefore the lifeline of communities; the bridge between previous and current generations. Who best to represent us in the project than them" (INT-COM/I19)

> "You cannot work in a local setting without the chiefs. You also cannot work through everyone-moni nor dae for dat (the money isn't available in Krio). Giving decision-making power to everyone risks building too many weak bridges that will collapse eventually, leaving the project in the wild" (INT-ORG/I12)

> "The chiefs are also members of these communities. You certainly cannot say treating them specially for being traditional authorities creates power imbalances. Yes, I agree that it is empowering, but it is not just done in forest protected areas. Besides, seeing the chiefs take on key roles is a tremendous achievement for the project, because it shows our commitment to decentralizing governance and strengthening local institutions" (FG3-ORG/P7)

A related comment referred to the lack of funds to involve everyone in the community, and that it was helpful to tap the experiences and preferences of local communities through their leaders. Beside the lack of resources, some organizational informants suggested that not every individual had time to participate in the ways expected of local leaders (representatives), especially in making time to attend and participate in far-away events. These results further support the idea of Cohen & Uphoff (1980 p.224) who suggested that direct participation of all individuals in project processes may be hard to achieve in rural communities, because required resources and appropriate infrastructure may be lacking, and individuals may find significant difficulty in travelling to far-away functions.

> "We don't have the resources to involve every member of the community in every step of the process. We should work through representatives who ideally should be the chiefs, because they

hold rights to land and labour. Rather than vilifying them for giving up their time to ensure quality work and more benefits for their Chiefdoms, we should celebrate them and support them in their respective roles in the project" (INT-ORG/P23)

Moreover, local leaders claimed a permanent spot as decision-makers in ACM practices because many practitioners feared that initiatives could lose momentum if these leaders delegated to others (65 percent totally agree). Delegation in this context involves transferring functions downwards to Town and Section Chiefs, such as presiding over meetings, receiving guests, attending workshops and more besides. On a general note, informants perceived that ACM practices required sustained leadership to be successful (96 percent totally agree), to limit the number of role players in the governance process and maximize impact (influence and reach) through the inclusion of the most influential individuals at the local level.
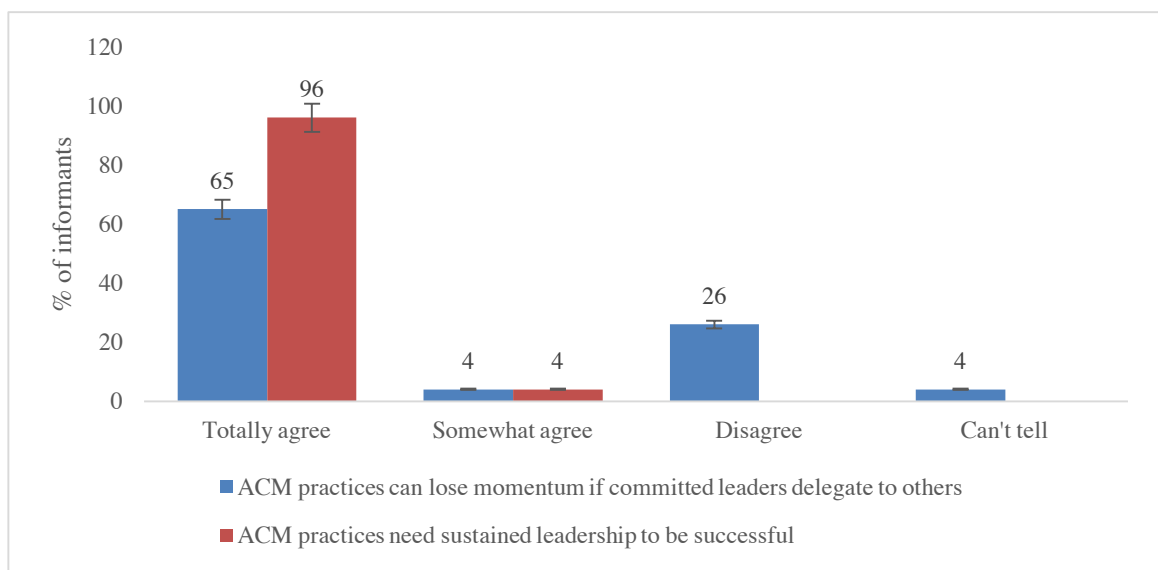
Figure 6.3 Practitioner perceptions of working with local leaders in ACM process (SPSS output)

Therefore, local leaders held more stake in ACM practices than all other participants at the local level. Figure 6.4 illustrates the overwhelming consensus among household and organisational informants surveyed that local leaders were the most influential at this level.
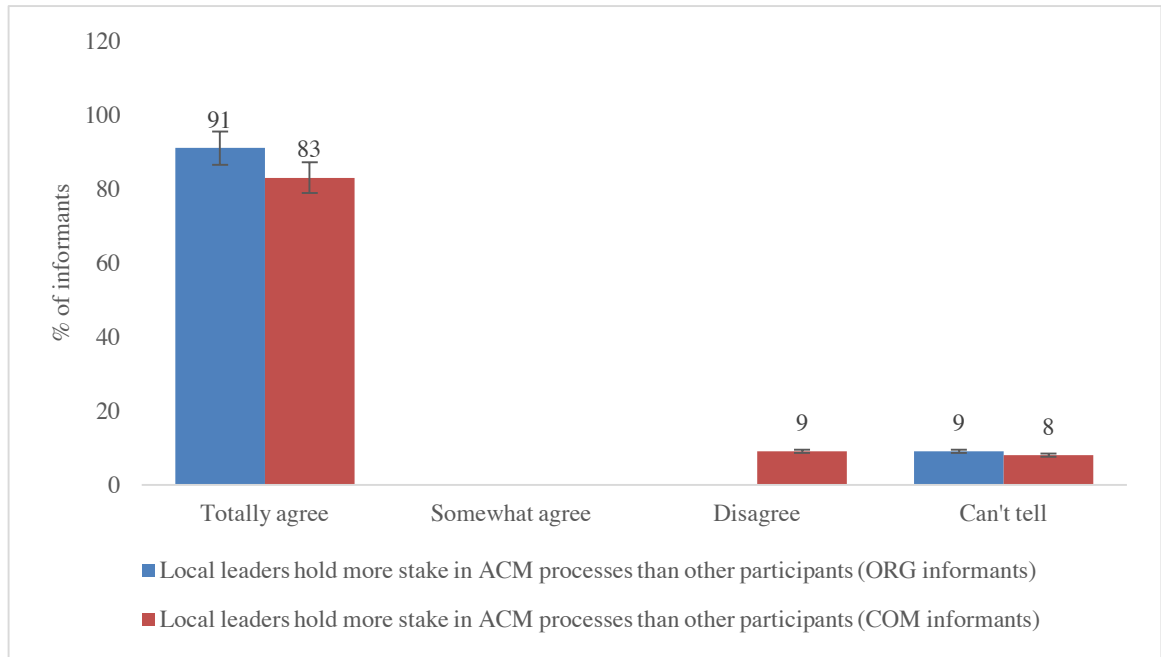
Figure 6.4 Perceptions of the influence of local leaders in ACM process (SPSS output)

Given the nature of their influence, local leaders were dreaded by both landowners and landless residents in participating communities. For example, residents expressed concerns about raising issues or objecting to decisions taken by others in the community and the project, because doing so in the presence of chiefs singled them out for reproach and a loss of essential benefits. As such, the influence of local leaders had significant implications for the nature of participation that occurred in ACM practices in the GRNP.

> "In a meeting without the chiefs, like we are doing now, everyone can speak freely about burning issues. But when they around, and mostly when decisions that affect us are taken, we fear that merely raising our voices could be considered insubordination. Here, it is much better not benefiting from the project than arguing with the chief in public, because you may lose your right to farm lands, and may be isolated by others in the community. So, we give what the chiefs demand. We worry that this will continue because many don't even have term limits, nor do they account for their actions" (INT-COM/I19)

To put the "fear" of local leaders into perspective, Uvin (2008) asserts that if local people are asked to vote to choose their representatives, even with misgivings about accountability and transparency, they may feel pressure to select the chiefs or people that chief's favour. This

agrees with Acemoglu et al. (2013 p.32) who showed that in Sierra Leone, "if residents say they respect the authority of the chiefs, they are not indicating that they are effective at delivering goods and services, or at representing the interests of the wider community, rather they are showing how locked they are into relationships of dependence with local leaders".

6.2.4 Issues of representation & accountability

The inclusion and influence of local leaders gave rise to comments that other residents were politically disempowered and administratively alienated from effectively participating in ACM practices. Many thought that the centralization of roles and authority allowed local leaders to function arbitrarily without effective checks and balances.

> "They were selected without public input so they did whatever they wanted. No one dared challenge them because they had the backing of the government. Our right to determine what mattered for us was taken away on the pretext that they were our chiefs, so they were better positioned to represent us" (INT-COM/I14)

Many comments also referred to the total lack of quality representation on the various decision-making entities that local leaders served. For example, local leaders that played roles in ACM processes were either self-selected (such as Paramount Chiefs) or selected by the project, so residents generally perceived that local leaders were unable to represent the interests of all participants. Many informants felt that the approach to "representative selection" made room for only those with the institutional backing to take advantage of the participation space, while all other participants continued to demand for voice and stake from below. This is in accord with recent studies (e.g., Ribot et al. 2010) indicating that where the approach to stakeholder participation excludes all ideas and interests in the collective choice of representatives, it leads to problems of inclusion and representation.

> "Without a seat at the table, it was difficult, if not impossible, for our voices to be heard. We could not influence the course of the process because local leaders who were selected by the project received preferential treatment" (FG2-NGM/P3).

> "Our representatives in the decision-making committees came half way through on our expectations. Some of the incentives they advocated for were just not adequate. And some of

> the burning issues, crop-raiding and other forms of wildlife-induced damage, were ignored. It's still up in the air and our hope for a turnaround is fading" (FG1-LHN/P7)

In addition to poor representation, many comments referred to corruption and accountability. Regarding corruption, an informant in Lalehun suggested that local leaders were resented for their history of moving collective resources to private purposes. Informants generally reported that some local leaders still benefit from illegal forest activities (such as logging), and therefore, continue to place a burden on poor residents who pay the most for these activities as a share of their household income. One informant in Nemahungoima reported that local leaders have a history of diverting funds meant for collective purposes, which significantly undercut the effectiveness and acceptance of ACM practices on the ground. These results match the observation of Prud'homme (1995) that placing a high degree of discretion in the hands of local leaders encourages corruption. The findings are also consistent with other research (e.g., Labonte 2012) which found that local leaders can use their positions to shape, control and manipulate local resource management processes in their favour to the extent of controlling resources meant for whole communities.

> "Representation in the programme was poor because local leaders did not seek to improve conditions for direct engagement with implementers. We are talking about corrupt men who only care about their pockets. They even have hands in some of the logging and mining activities going on, but keep a double standard as stewards of the forest" (FG1-LHN/P2)

> "The Paramount Chief has diverted funds meant for local development many times. He even went ahead to sign an agreement with a mining company without consulting with landowners. I resent him personally because he knows we struggle to make ends meet in the village, but all of this means nothing to him when he advocates on our behalf" (FG2-NGM/P6)

Concerning accountability, many comments referred to the lack of mechanisms for downward accountability in the ACM process. Although local leaders were required to submit accounts and a narrative report to implementers on the use of funds allocated to local communities (p.7 of the 2007 Community Benefits and Payments Agreement), there was no formal mechanism for these leaders to provide such information to the communities they represented. The lack of formal mechanisms for accountability at the local level did not encourage and allow residents

to hold leaders accountable for their role in the ACM process. This finding confirms the

association between accountability and participation as observed in previous studies (e.g.,

White et al. 1994). White et al. (1994) have argued that when actors restrict access to

information that may enhance local understanding of what happens in the ACM process, they

effectively stifle accountability and meaningful participation.

> "You look back sometimes and think about what it means to be betrayed by people entrusted
> with protecting and promoting our collective interests. They tell you one thing in meetings, and
> go on to do something totally different in Kenema (location of park's main office). It's a sad
> situation…our selected representatives rarely think outside their own boxes. Luckily for them,
> they are not obliged to account to us on their activities in the project" (FG1-LHN/P4)

When asked whether residents demanded accountability of local leaders, many interesting

perspectives were shared. A focus group participant in Nemahungoima explained that they did

not demand accountability of their representatives because of fear of being reproached by the

secret society and other groups within the community. Moreover, some informants felt that the

laws and policies promoted by the GRNP did not provide a mechanism for downward

accountability (and measures such as replacing representatives, or conducting democratic

elections to select representatives). Furthermore, some comments referred to the lifetime

chieftaincy status of Paramount Chiefs, which they feel is the reason for poor representation

and lack of accountability. This result corroborates the ideas of Kamoto et al. (2013) who

suggested that the absence of downward accountability mechanisms, and lifetime positions held

by some local leaders, can push local communities to accept the corruption of their

representatives and seek far less accountability than they would under different conditions.

> "Participation was our way of assessing the progress of the project and acting to address
> shortfalls. We didn't want it to be imposed from above. Sadly, many things were ordered from
> above, with some key decisions made to keep the chiefs happy, keep them in place, and keep
> the protected area up and running. Sadly, there is nothing we can do about it, because they don't
> account to us, and tradition demands that they rule for a lifetime" (FG2-NGM/P1)

> "Can we remove the chief like that (asking others in the group…everybody laughs)? We have
> not thought about that, but we feel the project should work through the younger generation. We
> can have a separate structure and reduce the dependence on old folks who have nothing to lose"
> (FG1-LHN/P4)

"You are asking if it is possible to remove the chief (sighs)? It is possible, but it is like asking me to engage a lion in a fight without my cutlass and charms. You just cannot do it. You will be ridiculed…even exiled by the same people you plan with. It has never been done…I might not see it in a lifetime" (FG2-NGM/P9)

"The chiefs in some of these Chiefdoms are constantly on the watch for opponents to the project, especially those bold enough to demand accountability, because they fear they would help nurture resistance. For them, the project is a means of livelihood, so they do everything in their power to remain relevant to the implementing partners" (INT-COM/I14)

6.3   How does participation occur?

6.3.1   Participation in planning

To plan the ACM process, a two-and-a-half-year consultation activity was undertaken (starting in 2003), including meetings with communities to understand the local context and work out a plan for improving community relations and determining benefits. A management committee was then constituted, including implementing partners named in section 6.2.1, and a representative of the seven chiefdoms bordering the park. The committee met at least twice a year to make decisions necessary to achieve the agreed aims of the project. Various committees (such as the Forest Management Committee), working groups (such as research teams), and community-based organizations (such as savings associations) were also formed. These structures and processes were coordinated by project personnel based at the project's Head Office in Kenema (the capital of Eastern Sierra Leone). Generally, planning followed the following steps: selection of suitable communities; awareness raising and information sharing; determination of stakeholders' interests, including the GoSL, Paramount Chiefs, and communities; collection of baseline data (e.g., on land tenure/use, socio-economic issues, forestry and wildlife inventory); development of a Forest Management Plan (FMP); and organization of trainings to develop human and organizational capacity for the implementation of activities included in the FMP (Forestry Division 2009).

6.3.1.1   Approach to consultation

Community consultation as an element of planning arose in several of the discussions. All informants acknowledged that community consultation is an important requirement of the formative stage of ACM practices. Comments specifically referred to the value of allowing local participants to provide input to ACM strategies as well as to inform all stakeholders of their intended consequences. These results further support the idea of (Larson & Petkova 2011) who suggested that an early and substantive dialogue with local communities and an effort to reach mutually beneficial agreement on how governance practices should work, is needed to engage the interest of affected and knowledgeable groups and is more likely to produce results that can be accepted by (or can benefit) a broad constituency.

> "When you consult local communities at the right time, you can be sure of gaining their attention and support. Any process requiring participation of residents in local communities must begin with effective consultation, with the terms and conditions determined with these residents, so that they can work to absolutely own the resulting process" (INT-ORG/I3)

Despite the consensus regarding the significance of proper and effective local consultation in planning ACM practices, the approach used by implementers was questioned by most informants. The main concern was that consultation was a one-off exercise, and levels of involvement were overall quite low and dependent on implementers and local leaders.

> "They organized community meetings to understand the local situation and find out what the main expectations were, but the sessions were not to be used to guide the project because the true purpose and orientation had been decided between them (implementers) and community representatives, who were mainly the Paramount Chiefs" (INT-COM/I2)

> "We can go on for the whole day, but no one will tell you the process had the community in mind. Right from when the project was conceived, community engagement was merely a way of introducing everyone to the realities of the process…the ideas, priorities, and rights of local communities never really mattered" (INT-COM/I6)

Many comments referred to specific concerns about the consultation approach as follows. A focus group participant stated that although residents partook in defining the geographical area[8]

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[8] The area of the Forest Conservation Concession included the entire area within the legal boundaries of the three Gola Forest Reserves, specifically: Gola North and its extensions (approximately 45,853 hectares), Gola West (approximately 6,216

to be covered by the project, the final decision on the actual area to protect happened without local input. Another informant reported that the aims and objectives of the project were not determined through consultation, as implementing agencies arbitrarily decided what was good for conservation and local communities, with the same choices made for all communities despite differences in interests and perspectives. These results further support the idea of Reed (2008) who suggested that in resource management contexts, there is always a tendency for implementers to use participation in planning processes to meet the "planner's objectives" rather than include and address "people's concerns".

> "We were powerless spectators in the process. Anyway, we had speculated that our voices were never going to be heard. The park had a clear vision, clear aims and objectives, which nobody amongst us could have influenced given the support they have from the chiefs, councilors and the government" (FG2-NGM/P3)

> "Ok, (let's be honest here), some of our brothers joined in demarcating the boundary for the project, but this did not accord them power or influence over decisions. They were only involved to show local support for the process. In the end, they decided the nature of payments to make for our lands without talking to us about our needs. So, we appear to be happy when we are not" (FG2-NGM/P4)

In a similar vein, community informants indicated that implementers determined the kinds of local committees to establish (such as the Forest Management Committee), as well as the sub-committees and working groups that supported them (such as the Chiefdom Development Committee). Comments relating to this issue referred mostly to steps implementers take to develop procedures for consultation without due recourse to the opinions and preferences of residents in participating communities. This result is consistent with Petheram et al. (2004) who suggest that planning in ACM-based governance practices may not be "emergent", that is, they do not always come from the efforts of local participants; rather, they follow plans of action developed by implementers and selected local representatives.

> "Who in the community had a choice to make about project selection? Absolutely no one. (let me tell you this) our role here is to listen to whatever we are told even if it means doing so at someone else's benefit. The chiefs and their allies (park authorities) prepare the food and serve themselves first' (INT-COM/I3)"

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hectares), and Gola East (approximately 22,844 hectares). The total area of these reserves is approximately 74,903 hectares or 74.9 square kilometres (Community Benefits & Payments Agreement 2007 p.2).

"They (project staff) invited us to meetings to elect people to serve in the committees and we spent the night deciding that we should reward people based on their commitment and selflessness. But the way they addressed us that day made us realize that it was not our call to make. It was clearly a selection process that we were called upon to witness and legitimize, but to demonstrate that all that mattered was having the backing of the chiefs" (INT-COM/I10)

Furthermore, survey data (figure 6.5) on the approach to consultation correlates with the qualitative information presented so far, with the overwhelming majority of informants (52 percent of organisational and 91 percent of community informants) indicating discontent. Majority of household informants in Lalehun (91 percent) agreed that local participants were not involved in setting the rules and agenda for consultation. Likewise, 89 percent of household informants in Nemahungoima were of the view that consultation followed procedures developed mostly by implementers. Comments that were made by several of the informants surveyed were that local involvement in consultation activities was inadequate, and those that planned and coordinated the process were far removed from the target communities themselves.
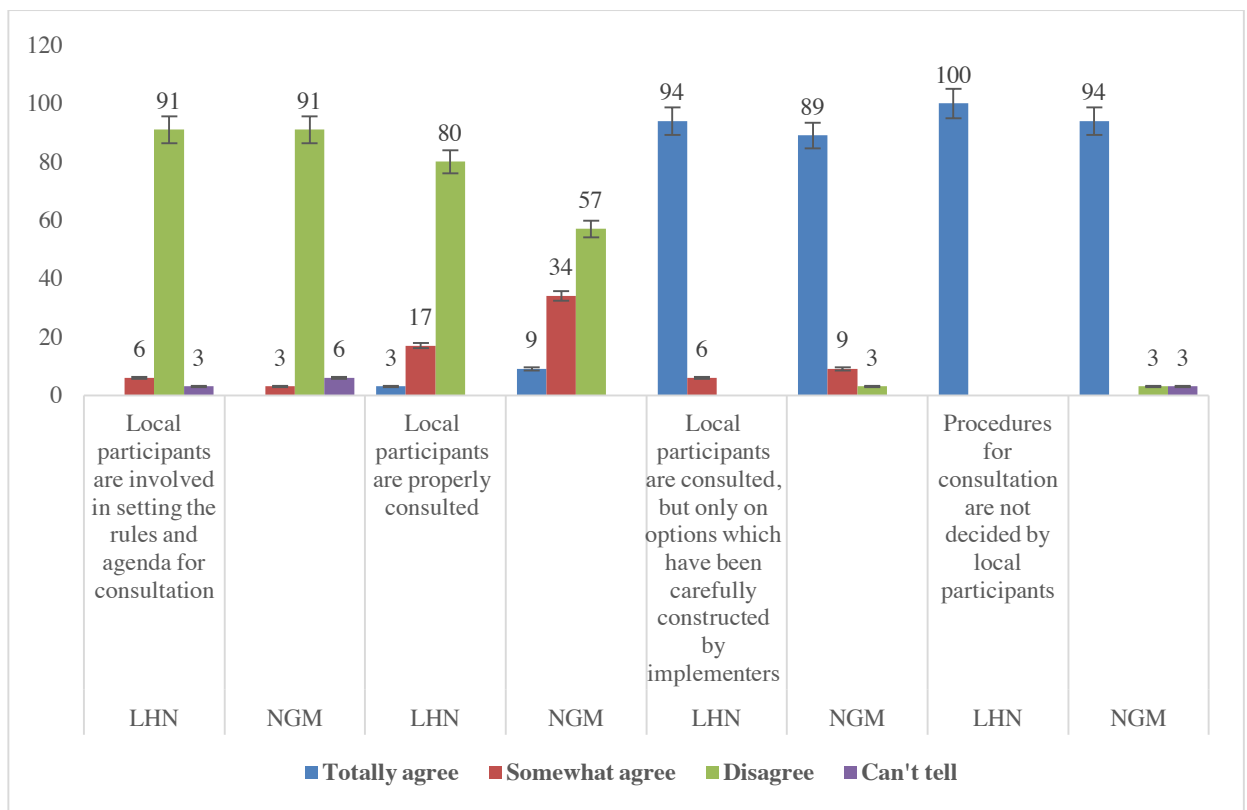
Figure 6.5 Community perceptions of local involvement in consultation for ACM (SPSS output)

A picture like the one illustrated in figure 6.5 also emerged from the survey of organisational informants (figure 6.6), with majority conceding that although consultation occurred, local participants were not directly involved in developing procedures used.
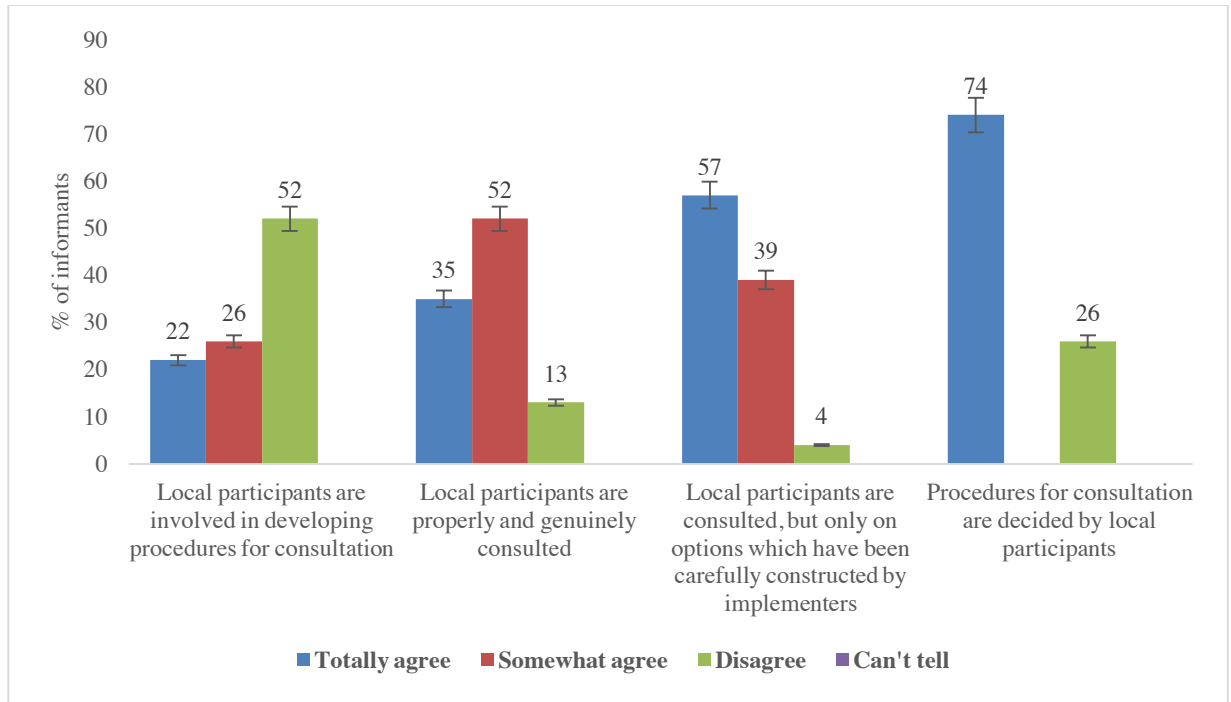
Figure 6.6 Practitioner perceptions of local involvement in consultation for ACM (SPSS output)

However, a common view among organizational informants was that it was impossible to involve every community member in planning ACM practices because of funding and capacity constraints. Some comments referred to the risk of overburdening the process with new goals that may not have been initially intended, and that cannot be addressed with the funds available. This result seems to be consistent with other research (e.g., du Toit et al. 2004) which found that including many voices and interests in governance planning can undercut the quality of management decisions, because it diminishes the role and influence of experts who have the capacity and experience to direct the process.

> "We had to by-pass local communities when we wanted to do certain things. To develop the management plan, for example, we engaged more of stakeholders who had the capacity, because

it was more expensive engaging local stakeholders. The challenge is that you must first educate them before they can meaningfully participate. In that manner, we lose time and resources, which we can use for more constructive engagement with policy stakeholders, the large majority of whom already understand the local context" (FG3-ORG/P3)

"(I agree that) local and expert knowledge were not effectively integrated. And you know it's difficult to achieve that. Again (I think that) although consulting local knowledge sources can provide benefits for the community and conservation, sometimes, it is more rewarding to carefully analyze the disincentives such engagement may generate" (INT-ORG/I16)

"The more you talk to them, the more you are tempted to make promises you cannot fulfill. It is much better to promise less and do more, rather than promise more and do less. It is better for us to keep the process simple and imagine that our actions provide a space in which different interests, values and ideas are situated" (FG4-ORG/P5)

6.3.1.2   Issues of transparency & commitment

Issues of transparency and commitment also arose in several of the discussions relating to participation in ACM planning. Many comments referred to the lack of broad involvement in consultation because the process was not clear on rights, responsibilities and associated benefits. Some informants felt therefore that there was a lack of commitment to involve local participants in all planning activities. There were mixed sentiments about whether implementers invested sufficient time, money and energy in involving local participants, and whether procedures adopted were appropriate to local conditions (see figure 6.7).

"Doing project selection without local input is like asking to sleep in my house and not asking where I hide my cutlass, which you might need to defend yourself against a thief. We have been here for years; we know the issues, and whose influence can help the project; so, our input in project design cannot be measured in view of technical capacity" (FG1-LHN/P8)

"Saying we should understand the process before contributing is ridiculous. You cannot come from the city and assume you understand my tradition and the forest better. When we tried to engage the process and they couldn't let us, so we decided to sabotage every step they took. They are still struggling to deal with the resentment and resistance" (FG2-NGM/P7)

Moreover, comments regarding commitment and transparency referred to the technical nature of the planning process. Many informants reported that procedures for planning (including questions asked) were kept technical, which encouraged little public input because of the capacity challenges at the local level. Figure 6.7 shows that procedures for planning were not appropriate to local conditions, because, for example, the structures employed for consultation

(such as using international consultants) were strange to participating communities. Those surveyed felt that using consultants was a strange idea because it required talking through a list of questions on a form that they did not propose, and that they were unsure about what was being recorded since many could not read and write. Therefore, many informants could not tell whether the tools and approaches used for consultation were relevant or not.
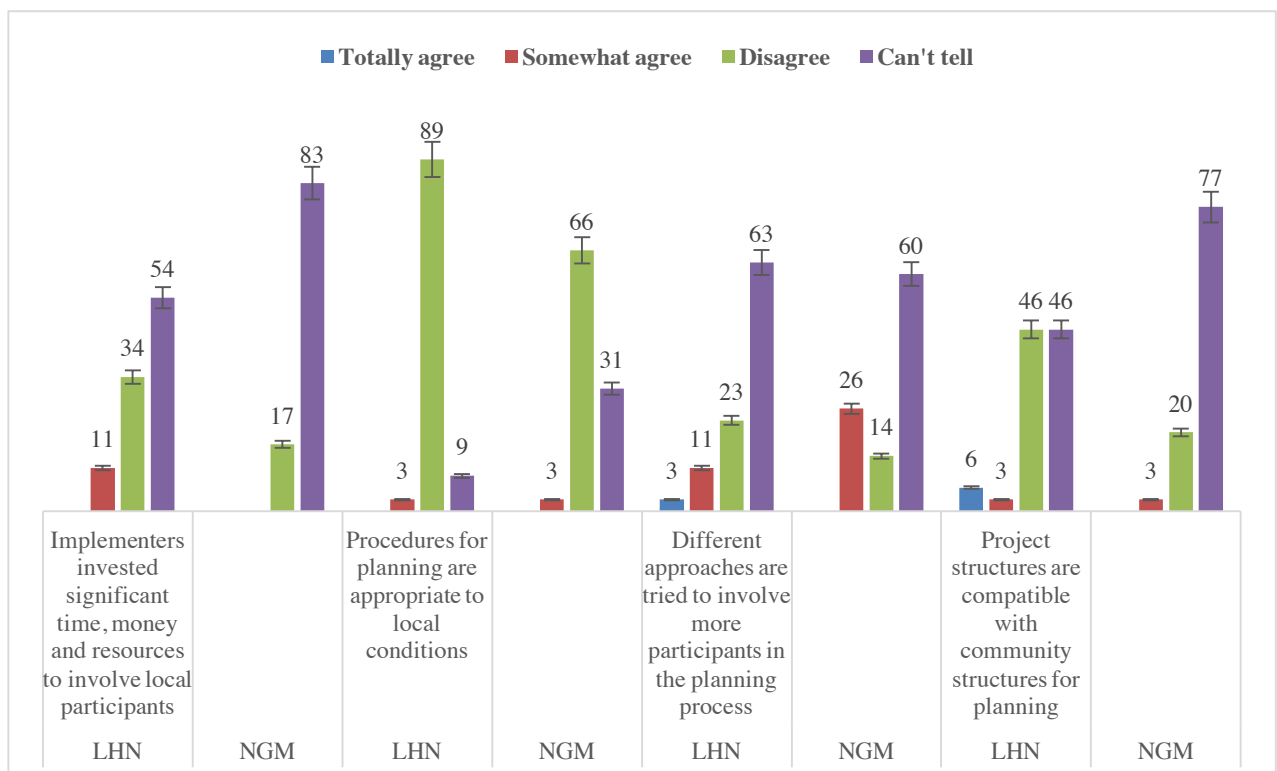
Figure 6.7 Community perceptions of "commitment and clarity" in ACM planning (SPSS output)

However, some organizational informants argued that despite the strong focus on local leaders, and difficulties in consulting across participating communities, clear objectives for local involvement were set out at the start of the planning process, including the use of different approaches to maximize local involvement (48 percent totally agree; 43 percent somewhat agree) and the openness of implementing institutions to local options for achieving broad engagement. However, a significant number of informants (between 9 to 30 percent) indicated negative responses to statements put to them about the level of transparency in and commitment

to planning processes. Others could simply not find an example of steps taken by implementers to ensure clarity on local rights and roles in ACM practices, as well as a formalized commitment to achieve them. These comments are illustrated in figure 6.8 below.
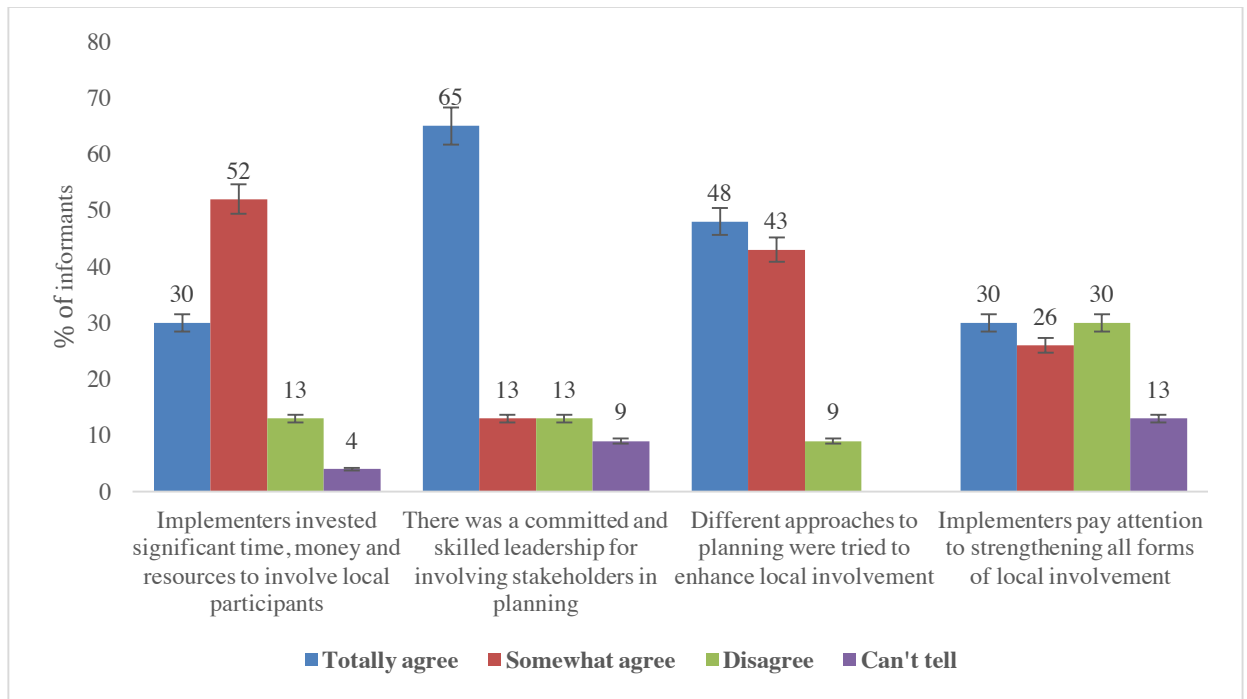
Figure 6.8 Practitioner perceptions of "commitment" in ACM planning process (SPSS output)

6.3.2   Participation in implementation

ACM implementation was envisioned in relation to: 1) a short-term goal (first 2 years) of placing a moratorium on further degradation of forest resources and mobilizing funds to support local livelihood initiatives and information sharing; 2) a medium-term goal (2-20 years) of establishing an appropriate management structure and further expanding community development efforts; and 3) a long-term goal (20years+) of ensuring sustainable access to enhanced livelihoods through income-generating schemes, and achieving sustainable forest conservation (2002 Gola Conservation Concession Framework p.3-4 in Forestry Division 2009). To actualize these visions, two initial 5-year Forest Management Plans (FMP- 2002 to 2007 and 2007 to 2012) were developed, which provided "(…) a review of the background

information relating to the forest in terms of its physical, biological, and cultural aspects; (…)

key values and issues/threats; and (…) series of activities that are the minimum management

actions required for high quality and sustainable management (…)" (Forest Division 2009

p.XI). The first two objectives and related management actions in the FMPs for conservation

and community development are presented in tables 6.1 and 6.2 respectively.

Conservation Goal: To maintain, and where appropriate enhance, the existing 74,000ha of tropical moist lowland high evergreen forest so that it continues to support the full range of functioning ecological processes typical of the habitat and the stable or increasing populations of all key species found at the site, in perpetuity.

Objective 1.1: To upgrade the status of the Gola Forest Reserve to that of a National Park

Issues or rationale: The aim of the Gola Forest Programme is to have the Gola Forest declared as the second of Sierra Leone's National Parks thus increasing its protection status. To achieve this, the correct legal process needs to be followed and it is important that all stakeholders comply with this process, are fully committed and understand their obligations.

Activity 1.1.1: Lobby the Government of Sierra Leone to declare the Gola Forest a National Park
Activity 1.1.2: Assist with the preparation and submission of the appropriate documentation to support upgrading of the Gola Forest to a National Park
Activity 1.1.3: Work with all stakeholders to ensure that all legal processes are followed to establish the National Park by 2011

Management actions

No.	Action	Responsibility	Others	Timing	Priority
1.1.1.1	Regular liaison with NaCEF, Forestry Division etc	CSSL (Advocacy)	PL RSPB	Year 1-3	High
1.1.2.1	Provision of technical information and technical advice as necessary	CSSL (Advocacy, technical)	PL PAM	Year 1-3	High
1.1.3.1	Regular meetings with all stakeholders, especially local government and community representatives	CSSL (Advocacy)	NaCEF (Land Resettlement Officer) GFP- CD	Year 1-3	High
1.1.3.2	Follow due process and monitor	Director FD	CSSL RSPB	Year 1-3	High
1.1.3.3	Review the intermediate zone legislation with respect to its impact on the creation of the National Park	CSSL (Law Review)	MAFFS Local Communities	Year 1-4	High

Objective 1.2: To protect and preserve all key species and habitats

Issues or rationale: Site designation on its own does not guarantee the long-term survival of key species and habitats. Many require active management or protection measures and there must be based on sound scientific information. Many of these measures will be site-specific but for some species, particularly those with dispersed populations that cannot be effectively conserved just within protected areas, the development and implementation of local, national and regional legislation or management guidelines may be the most effective option.

Activity 1.2.1: Develop and implement appropriate management activities as recommended from the results of ongoing and future ecological studies
Activity 1.2.2: Liaise with the Cabinet and Law Review Commission to amend existing legislation to increase the level of protection of key species throughout the country
Activity 1.2.3: Assess the occurrence, distribution and abundance of known or potential invasive alien biota and introduce control and elimination measures where appropriate and practical.

Management actions

No.	Action	Responsibility	Others	Timing	Priority
1.2.1.1	Ensure that all potentially damaging activities in and around the forest are reduced/mitigated to avoid negative	GFP- PO and CD	Local communities (FMCs) CSSL	Year 1-5	High

	impacts on the conservation of key species/habitats				
1.2.2.1	Increase the legal protection of key species by improving their protection status nationally through lobbying	CSSL (Advocacy)	MAFFS Law Review Commission	Year 2-3	Medium
1.2.3.1	Determine the occurrence of invasive species	GFP- RM		Year 1-5	Low
1.2.3.2	Where necessary implement control or eradication measures	GFP- PO		Year 2-5	Medium

Table 6.1 First two objectives for forest conservation in the FMP for Phase 2 of ACM practices

Community Development Goal: To ensure the Gola communities benefit from, and participate in, the protection and management of the Gola Forest in perpetuity while minimizing negative impacts on forests.

Objective 2.1: To provide ongoing sustainable livelihood development support to local communities

Issues or rationale: A principle underpinning the Gola Forest Programme is the provision of funding for the implementation of small scale development projects in the communities surrounding the forest

Activity 2.1.1: Through mechanisms detailed in the Benefit Sharing Agreement, provide ongoing annual funding for each of the seven chiefdoms surrounding the forest to implement livelihood development initiatives

Activity 2.1.2: Development and implement mechanisms for collecting and distributing income from all fee generating activities taking place within the protected area to local communities

Management actions

No.	Action	Responsibility	Others	Timing	Priority
2.1.1.1	Provide annual financial support for improved livelihood development initiatives by local communities	CSSL RSPB MAFFS	PL PAM GFP (Project Officer)	Year 1-5	High
2.1.1.2	Identify and provide appropriate training of local community members in the skills required for the implementation of selected development projects	GFP- CD (Training)	KINGO District Councils	Year 1-5	High
2.1.1.3	Establish effective and transparent monitoring of expenditure of support payments	GFP	FMCs District Councils Auditors	Year 1-5	High
2.1.1.4	Establish monitoring mechanisms to evaluate the effectiveness of development initiatives	CSSL (Socio-economic study)	GFP (Project Officer) District Councils	Year 1-5	High
2.1.1.5	Identify rightful landowners and true Forest Edge Communities (FEC)	PS PL	FD GFP	Year 1-2	High
2.1.2.1	Develop and implement an equitable fee charging and disbursement mechanism	CSSL Communities	PL MAFFS	Year 2-5	Medium

Objective 2.2: To provide employment and training opportunities for local communities

Issues or rationale: Local community support for conservation is essential for the long-term success of the programme. A key element in gaining and maintaining this support is through the provision of tangible benefits to community members, in addition to the benefit funds. This can be best be provided by the direct involvement of members of the communities in forest management and conservation activities. In addition to income generation, such involvement also provides opportunities for community members to gain training and experience that can be applied both in the Gola Forest and at other protected areas in Sierra Leone as the national network of protected areas develops.

Activity 2.2.1: Maximize employment opportunities for members of local communities

Activity 2.2.2: Provide training opportunities for community members, both within the Gola in-house training programmes and specifically aimed at the communities in livelihood projects and activities

Management actions

No.	Action	Responsibility	Others	Timing	Priority
2.2.1.1	Actively recruit local community members to fill suitable posts within the project	GFP (management)	Communities	Year 1-5	Medium

2.2.2.1	Provide appropriate training to new staff from communities	GFP (training)	Consultants	Year 1-5	Medium
2.2.2.2	Identify and promote to local communities appropriate national/regional courses	GFP (training)	Partners Academic institutes	Year 1-5	Low

Table 6.2 First two objectives for community development in the FMP for phase 2 of ACM

Key activities included in the FMPs were livelihood initiatives (agro-forestry activities such as soil conservation, organic farming, beekeeping etc); biodiversity surveys (such as localized surveys of NTFP use); environmental education (such as road shows, site exchange visits etc); and capacity building activities (such as workshops and farm demonstrations). These activities were designed to reinforce each other, though narratives about mistimed involvement were recurrent (see section 6.3.2.1).

> "The FMPs included activities for both forest conservation and community development such as bee keeping, biodiversity surveys and conservation, infrastructure development etc…These activities were management actions taken to support four specific programme areas: conservation and protection; community development and outreach; research and monitoring; and finance and administration" (INT-ORG/I19)

Moreover, although the range of activities were expansive, they did not return the concrete benefits that were expected of participation, because the process was tied to specific objectives. As such, activities that offered new knowledge (such as farm demonstrations) and that offered spare benefits (such as financial credit) invited more participation, while those that targeted specific beneficiaries (such as cash payments to landholding families) attracted much less interest and participation. Participation was also higher in activities that did not make involvement in one process a pre-condition for involvement in others. For example, participation was higher in road shows that were open to the whole community than in soil conservation activities that required participation in specific activities (such as farm demonstrations), or membership in farm associations (see chapter 7).

> "I participated in many activities to be able to benefit from other activities. The opportunities were there to join clubs, and contribute to various aspects of the project, but the influence and control that such involvement accorded was limited. People were more attracted to quick benefits, and activities that required much less of their time, labour and resources. The project

found a brilliant way of keeping our interest in the process; they said if you don't come to the Farmer Field School, you won't get farm inputs. So, benefits were tied to sustained participation in the process, which helped the project reach many more people, but increased resentment about wasting more time for less benefits" (INT-COM/I15).

Furthermore, by thoroughly following the FMP, some community informants claimed that many important concerns that emerged after initial consultation processes were disregarded (such as compensation for wildlife-induced damage). Many community informants shared the point that because they lacked roles in decision-making, they also lacked control over the design of the FMP, including the type of activities supported, when initiatives started, where they were implemented, and the nature of financing that they received.

> "With no compensation for wildlife-induced damage, or measures to stop the menace, we are fully aware now that our problems don't bother park authorities. But they do whatever the chiefs tell them, because they have influence and power. We are reacting by hunting the animals down because we know that acting that way will draw their attention to our concerns. We know poaching bothers them a lot because they fear it will open the door to other activities" (FG2-NGM/P7)

> "Everything worked the way the implementing team had planned. They even decided who was represented in the project, the number of representatives the communities had, where activities were implemented and who benefited" (FG2-NGM/P8)

Additionally, by only reviewing the FMP every five years (Forestry Division 2009), focus group participants in Nemahungoima were concerned that the implementation process did not afford the opportunity to object to proposals made by the project, or ask questions on certain topics (like the budget) in community meetings.

> "Nothing in the project happened with exhaustive community-level discussion. Everything was a forced choice. What they called transfer of power and authority in the project was simply government control from a distance" (INT-ORG/I21)

> "They (park authorities) decided it all. They decided how, when and how often community meetings were conducted and by whom. They were in absolute control" (FG2-NGM/P8)

> "(Let me put it this way) we lived in a situation that provided no opportunity to object to proposals made by the project, or even ask certain questions in community meetings. What would you do if you were in our shoes? Remain silent, of course" (FG2-NGM/P7)

At the same time, many comments referred to the insensitivity of the FMP to local conditions (preferences and practices). For example, focus group data from Nemahungoima revealed that

the FMPs developed for both phases of ACM implementation (in 2003 and 2007) failed to

include compensation for wildlife-induced damage, and implementing partners took no steps

to engage communities on ways to address the problem. Another comment referred to the

decision to construct an ecotourism lodge in Lalehun that stood empty most of the time, despite

calls for an increase in livelihood benefits and other economic opportunities.

> "We have our own dreams. The chiefs can say what they want, but many of them live in the big towns. We cannot continue this way…something needs to change. If the project wants to keep our trust and engage us properly, they ought to look at other ways of relating with the chiefs on matters that concern whole communities" (FG2-NGM/P9)

> "With no compensation for wildlife-induced damage, or measures to stop the menace, we are fully aware now that our problems don't bother park authorities. But they do whatever the chiefs tell them, because they have influence and power. We are reacting by hunting the animals down because we know that acting that way will draw their attention to our concerns. We know poaching bothers them a lot because they fear it will open the door to other activities" (FG2-NGM/P7)

> "Imagine they (park authorities) constructed accommodation that stands empty most of the time. We see few white men coming to occupy the lodge and take pictures of the wildlife. We believe the money could have been used to provide drinking water or health facilities for the community. But who am I to ask…someone may be benefiting from this enterprise" (FG2-NGM/P2)

> "This is how it worked. We imagined the kind of benefits we wanted and found out in the morning that the chiefs had reached out to the project on their thoughts about local preferences that night. Terrifying sometimes, don't you think? This chief power has prevailed for so long, and it has remained so because we decided to be silent" (FG2-NGM/P6)

Despite these concerns, some organizational informants argued that local participation in

implementation processes were adequate because the project operated in ways that best

addressed the needs of local communities, including allowing various organisations (savings

associations, farming cooperatives etc see section 7.2.1 in chapter 7) to operate with a view to

involving more people in the ACM process. One informant suggested that local participants

had the free choice to determine the membership composition of the groups they joined, agree

on meeting procedures, and select their own leadership.

> "Schools, bridges and feeder roads have been constructed. The children are now back in school, market opportunities are opening, and groups for knowledge exchange have been established. These are benefits you get from a people-first project approach. I am happy that the communities accept this approach, and are getting involved with it" (INT-ORG/I22)

> "Because of our concentration on community empowerment and biodiversity conservation, new partnerships are emerging between groups that once seemed unlikely bedfellows" (FG4-ORG/P8)

> "Sites where equal attention is given to forestry and livelihoods improvement, like the Gola Rainforest National Park, governance delivers good results. We have paid equal attention to both extremes- community and conservation- and we are working hard to balance our interests with those of our hosts" (INT-ORG/I16)

However, other organizational informants asserted that the FMP was designed to keep the stake implementing partners held in the ACM process (in terms of determining participation and benefits). One informant even argued that implementing partners held more stake in implementation because they were the most financially and technically capable in the process, which was partly enabled by the way the FMP was designed, implemented and monitored.

> "Funding is the leverage the park has used since its creation. NGOs and government agencies cannot fully interfere because they get their cut from the cake. It is the same with the communities. They depend on the benefits so their voices are suppressed. Mostly, those that provide the funds are the most vocal…they make the important decisions and nobody raises an issue. If they withdraw their funding and expertise, it will be a fight in the rain. This strategy should change if we want to balance the various interests in the project area" (INT-ORG/I4)

6.3.2.1   Timing & frequency of participation

Timing and frequency of participation as issues concerning ACM implementation arose in several of the discussions. Three common issues were reported, including the frequency of meetings, quality of interactions between implementers and beneficiaries, and who made the decisions in this regard. On the first issue, many comments referred to infrequent meetings for implementation, claiming that meetings were cancelled many times due to the long waiting periods and low attendance. Majority of household informants (85 percent in Lalehun and 88 percent in Nemahungoima) indicated that they did not participate in more than three meetings over the course of the implementation process. An average of 89 percent of women reported no participation in meetings organized due to household chores, commercial activities and cultural limitations. The common concern was that the nature of participation in ACM practices was undermined by the timing and frequency of implementation activities, which were overall quite

low and dependent on roles performed by implementers and local leaders. Moreover,

interactions between implementers and participating communities was also irregular, with one

informant in Lalehun claiming that the Protected Area Manager (PAM) at the time never visited

their community over the course of implementation. Organisational informants generally

suggested that activities were implemented based on plans laid out in the FMPs.

> "We work based on laid out plans and regulations. We also cannot involve everyone throughout
> the process, given the diversity of views in these settings and lack of resources. We also have
> conservation work to do in addition to delivering community benefits, so we need time to plan
> and act appropriately. We need time, resources, and a committed group of people to deliver the
> business of the project, to educate communities, to overcome distrust, and increase benefits"
> (INT-ORG/I2)

Further comments referred to decisions taken by implementers to determine the timing and

frequency of activities, including, for example, arrangements for training workshops (time,

venue, content of learning materials, facilitation, number of participants, token for participation

etc) that were pre-determined by implementers.

> "We were involved when our services were needed. When it was time to share farming inputs,
> we had to wait for the chiefs to first decide on the beneficiaries and agree on the conditions and
> terms. When it was a workshop, we were informed beforehand because sometimes we had to
> travel to other communities to attend. But I can tell you without hesitation that activities that
> involved us right from the start got the best of our support, while those that only observed
> protocol by calling for our involvement, received lip service" (INT-COM/I22)

However, the timing for participation in activities that required local labour (such as farm

demonstrations) were not externally determined. The timing and frequency of activities such as

road brushing, working on the chief's farm, construction etc were determined internally by local

leaders. Participation in activities such as meetings, rotating farm labour, distribution of farm

implements etc were determined by individuals and household heads based on the value of

benefits offered. Household heads decided whom among family members engaged in what type

of activity in the farming season, as well as whom to exclude (those ill, wives, children etc)

from what type of community work, or group activities supported by the project.

> "I decided who in my household participated in community activities. I believed it was a waste
> of time, because sometimes you should wait for several hours before they show up. We needed

money to support family, so it was not easy using the little time we had for farming and other income-generating activities for the project that was more of talk than benefits" (FG2-NGM/P3)

6.4 Why does participation (not) occur?

6.4.1 Basis of (reasons for) participation

All informants were asked about the reasons for participation in ACM practices and comments referred to many reasons, as follows. Firstly, participation was considered a way to reach others (build relationships with others) in the community and provide support where needed. Households helped other households in the construction of new homes; farmers shared information on new crop varieties and techniques with those that solicited farming advice; and households provided social and financial support to others in times of bereavement and festivity. The result shows that participation in ACM increases the recognition and support of others' needs and views to facilitate collaborative problem-solving. The result is in accord with studies (e.g., Wollenberg 2001) indicating that local people find merit in collaborating beyond their households to share experiences, learn new skills and build relationships, which affords a way to collectively respond to mutual concerns.

> "In a village like this, we all know one another. We know the carpenters, masons, cooks…we know those who are always willing to help, and those who show little interest in others. You must fit into one of those categories to be able to live here. Once you are known for one thing, everyone seeks help when they are in need…and others will be more open to your requests" (FG2-NGM/P8)

> "When we get together on the community farm, we get talking right away…. that is when we meet others during the day because we are always on our farms at such times…just hearing their stories reduces the pressure on oneself because you know you are not isolated in your situation. The good thing is that there is always a chance to get the older folks to share their experience, which makes us believe we can solve our problems without calling on strangers" (FG1-LHN/P4)

Participation also occurred because of local dependence on forests and forest resources. Implementers promoted a notion that local livelihoods would be greatly affected without conservation actions, which is one of many "without conservation scenarios" that proponents of the Gola REDD+ project have painted (RSPB 2013). Proponents of the programme believe

that without conservation, residents would re-engage in unsound farming practices and illegal

activities such as hunting, logging and mining (Witkowski et al. 2012) that would narrow down

existing livelihood support options to few insecure sources of income. The result shows that in

resource-challenged settings, local participants are generally unable to negotiate terms and

conditions for participation with other vested interests. This result is in line with those of Castro

and Nielsen (2001) who suggested that in cases of resource and capacity constraints, local

communities participating in ACM practices may be exposed to deception despite their legal,

political, and moral grounds to effectively participate and mutually benefit from governance

processes. The deception in this case lies in the promise of livelihood and other economic

benefits that were not delivered in most instances, as described below.

> "We chose to live near the forest for easy access to the resources we need. It is our overcoat,
> so any action to protect it gets our support. But this gave the project a blank cheque, because
> they knew we could not do without the project. And the fear that private companies would come,
> destroy the forests and leave us shattered also hunted us. We settled for the devil that we know,
> though there were issues we knew they would never address" (FG1-LHN/P2)

As mentioned before, benefits promised to residents did not always materialize. For example,

promises to create more jobs and provide an incentive for brushing the roads leading to the

Ecotourism Lodge in Lalehun never materialized. Under these circumstances, the location of

the community was a major factor in deciding next steps. Residents in Nemahungoima saw

their location on the main roads leading to Zimmi in Makpele Chiefdom (a town toward the

Liberian border), Gorahun and Gegbwema (the two largest towns in Tunkia Chiefdom) and

Kenema (the provincial headquarter town) as an incentive that made selling fuelwood and

charcoal a lucrative business. They participated in ACM activities that offered microcredit and

other forms of microloans to source capital for the business. Essentially, participation in ACM

practices was a way to deal with challenges presented by the lack and delay of promised

benefits, and an attempt to reduce dependence on conservation benefits.

> "Every farm here produces fuelwood they use for cooking in the homes or sell to make extra
> income. The larger your farmland for that season, the more money you can make. Sometimes,
> you need labour to transport the wood to the street, and proceeds from previous sales or loans

from the village club can be helpful" (INT-COM/I21)

More comments referred to opportunities created by leadership in groups set up by ACM practices. One key informant reported that leaders in community groups were a primary target of individuals seeking "middlemen" for their logging and mining operations in the park. This is because external investors thought that leaders of youth groups, for example, could readily provide the kind of labour they needed for their investments in the community.

> "Commercial loggers give us jobs and pay better than what we receive from the project. My role as head of one of the labour groups put me in contact with potential investors who wanted me to mobilize labour and serve as a middleman. As a middleman, you get everything from money to household gifts, construction materials and even a motorbike" (INT-COM/I12)

Additional opportunities included access to a marketspace for selling local products such as baskets weaved from rattan core. Basket weaving (using rattan core) is a major livelihood activity in the communities and residents used participation in ACM practices to establish and maintain contact with potential buyers in their community, the locality and even tourists.

> "Lalehun is known for its nicely braided rattan core baskets. With the Ecotourism Lodge right next door, residents have access to tourists and visitors who want a souvenir to take along. So, you can see that whereas fees for camping and trekking do not go into our pockets, we are able to make a living by just being supportive to the project and hospitable to its guests" (FG1-LHN/P8)

Besides, participation in ACM provided the cash residents needed to pay for livestock and fodder to be able to switch to a pastoral livelihood and respect the existing hunting ban.

> "You know there is a ban on hunting and bush meat trade, so our option is livestock. But goat, sheep and cow are very expensive, and the conditions here are not ideal for raising them. I changed my mind when I joined the village Osusu (savings association). Members bought and raised livestock because they afforded to pay people to source fodder, and get veterinary support. The good news is you make a decent living from selling livestock to those with special occasions to celebrate like marriage, naming, funeral or initiation ceremonies" (INT-COM/I9)

The reasons presented above underscore the attempts local participants make to deal with challenges of resource scarcity and lack (or delay of) promised conservation benefits. Many comments made in this regard referred to the diversification of livelihood and economic benefits to reduce dependence on incentives provided through ACM practices. For example,

some informants referred to skills and knowledge acquired through participation in ACM to deal with the pest problem and improve soil fertility, and increase farm productivity and agricultural income. Others referred to new relationships created that provide a market for selling surplus production; as well as for acquiring land, farming implements, and livestock. These accounts are in keeping with Robinson and Berkes (2011) who suggest that participation in multi-level governance practices is a way to increase the flow of resources to residents of resource-challenged settings. Such resources, according to Cohen and Uphoff (1980) may be personal, social or economic benefits, though residents may primarily seek personal benefits such as social identity, self-esteem and a sense of efficacy. It was observed that despite the quest to provide for their households, residents were excited about helping others meet their own needs (such as giving farming advice to those that solicited).

> "At some point, we realized that our involvement in the project also meant doing ourselves good. I feel proud that I have served as a forest guard, because I have had the chance to protect what belongs to all of us. I thank Gola authorities for making it possible" (FG1-LHN/P10)

> "On the demonstration farm, you meet people from the village and nearby villages. We are taught techniques that we can apply to our farms so that we can make income in addition to our annual farm income. The mentality joining others builds is that you are always competing to produce more of a certain crop so that others can come to loan from your seed bank and return with interest. While you make money through that, the satisfaction in helping others is also great. Sometimes you are tempted to give away some of the rice during the lean season, when some households survive on paw-paw and cassava leaves. The demonstration farm has made me selfless and helpful to others in my community" (FG2-NGM/P5)

> "Before the current livelihood interventions, we depended entirely on our coffee and cacao plantations to make the income needed to pay for healthcare, schooling and food. But the whole cash crop thing is a gamble. Things get better this year, and get worse next year. So, one cannot depend on that. But with the project, diverse income-generating and learning activities were supported, which meant finally making that extra income that we struggled to make in the past" (FG2-NGM/P4)

In addition to dealing with dependence and resource scarcity, more comments on the reasons for participation referred to the conviction that conservation was a way to preserve scarce resources, such as the sacred forest where secret societies (such as the Poro for men, and Sande for women) initiated the young into adulthood. Most informants expressed fear that non-participation in ACM practices would have exposed the forest to exploitation, especially areas

that define the ancestry, norms and culture of their communities.

> "Secret societies are major factors in the protection of this forest. People are afraid to go into sacred forests, which is just one way we have avoided large-scale exploitation. Now that the project is here, and they welcome the idea of keeping these sacred forests, we will do our best to help them achieve their objectives" (INT-COM/I2)

In addition to sacred forests, residents also sought to protect other scarce community resources through participation in ACM practices. These included herbs, bamboo, sticks and grass (used for construction) that had grown scarce due to the rush to reconstruct houses after the war. Many comments suggested that the ACM programme provided a lapse period for revitalizing lost Non-Timber Forest Products (NTFP), which was one of many practical reasons for their choice to settle close to the forest. This finding is consistent with those of Watts (2008) who found that where the authority and responsibility for the use of forest resources are unclear, an individual profit-making attitude develops that places significant strain on common pool resources such as fuelwood, timber and non-wood forest products. The results further support the idea of Pomeroy et al. (2001) and Ojha et al. (2013), who suggest that concerns about resource scarcity and its impact on survival, economic livelihood and food security, can prompt local people to participate in ACM practices.

> "The forest is the main source of sticks, ropes and grass, which we use to construct our homes. Areas that have been felled and cultivated have been slow to regenerate, and these materials have all been lost. Now you must go deep into the forest to get bamboo and sticks. I believe we are still able to get them, despite the obstacles, because of this project" (FG2-NMG/P1)

Therefore, for these residents, participation in ACM practices helped to introduce discipline and checks that avoided massive exploitation of land and forest resources. However, the protection of ancestral land was also motivated by the hike in sale prices, as many residents thought that had forestlands not been used to establish the forest estate, it would have been difficult for poor residents to own land after the war. The reason is that many residents became aware of the value of land after spending time in nearby towns and villages to escape the rebels. What this finding implies is that participation in ACM practices not only provided a balance in

resource use, it also created an impression of an income balance between poor and wealthy

households, though the situation was different (with the annual cash payments that landowners

received while benefiting from collective resources).

> "After we relocated from Kenema where we took cover from rebels, lands that once got loaned
> to you for the farming season for few bushels of rice were now going for cash payments. People
> had known the value of money. With most of the lands placed under protection, the remaining
> land cannot be sold because everyone needs their own piece to make a living. The project
> created a balance between us poor ones who could not have afforded to buy farm land and those
> who owned much more than they needed for farming. This is true, though they still get more
> benefits from the project than us" (FG1-LHN/P3)

Yet, reeling from disappointment that past conservation practices did not meet most of these

objectives, residents sought refuge in participation to find a voice in and influence the outcome

of ACM practices. Participation provided the understanding residents needed about

management processes, including rules, procedures and institutional arrangements. It also

offered ways to draw attention to local challenges that seemed ignored by conservation

authorities, as participants knew what to do to call the attention of implementers to the plight

of participating communities. While the separate actions staged to resolve issues at the local

level were overall unsuccessful, participation in ACM practices helped ensure a sense of equity

and shared control. This result agrees with Schumann's (2007) finding which showed that

participation in ACM provides the leverage local communities need to bargain for power, and

to offer checks and balances on otherwise unregulated management transactions. The result

also supports previous research (e.g., Schultz et al. 2011; Leys & Vanclay 2011) which suggest

that participation improves local resources (such as knowledge), which, in turn, are applied to

enhance the effectiveness and sustainability of management practices.

> "When the project set off, the chiefs were very cooperative and busy too, as they did their best
> to fetch benefits for their subjects. As the project progressed, they paid more attention to filling
> their pockets. They made requests outside of what the project supported and jeopardized
> collective benefits. Because of that, many people took the back seat, resurfacing only when
> tension and conflict loomed. Some of those that continued their participation got jobs; others
> were invited to few workshops…which put them a step closer to the decision-makers" (INT-
> ORG/I18)

> "Most benefits didn't reach us. It was the chiefs that got the best of the cake. When we protested,
> they told us that even the trees in our plantations we cannot claim, because they were not planted
> by us. For us that relied upon collective benefits, it was a struggle indeed. When the project

delivered to us directly, there were no issues with access, but when it involved village leaders, it either never reached us or did reach in less the intended or promised measure. At that point, we thought this should stop. The hunters among us started hunting, farming encroachment increased…every means of sabotage was used. Only knowing that the project cared about stopping poaching gave us something to bargain with- the more we hunted, the more frequently they visited, and eventually addressed some of our concerns" (INT-COM/I15).

6.4.2   Barriers to participation

Although ACM practices made important progress in some respects, many barriers to participation were evident. These challenges were embedded in a set of contextual and institutional conditions including culture, age, gender, time, wealth status, family size, ethnicity, prehistories of cynicism and resentment, and the implementation approach. What is striking is that the barriers relate mainly to the power wielded by individuals or groups relative to all others, rather than the quest to enhance economic incentives. Overall, this section describes the barriers to participation in ACM practices in the GRNP in Sierra Leone, noting the implications for the effectiveness of the broader governance process.

6.4.2.1   Contextual barriers to participation

The first barrier was culture, which limited the participation of minority groups such as women and youth. Existing traditional institutions did not provide the space women needed to develop themselves and actively participate and benefit in the process. Many comments referred to the lack of opportunities to speak freely in meetings, for example, or take leadership roles, because such actions were deemed to be in contradiction of existing norms and beliefs. Other comments referred to the lack of rights to land, even though women were more dependent on forest resources, and their everyday decisions relating to the kinds of forest products to harvest significantly affected conservation actions.

> "You really learn good things in these groups, but you cannot apply them because you don't own land…and your husband does not even listen to your ideas about trying something new. Much of what we learn are applied to backyard gardens in the village. There, you have sheep and chicken that eat up everything, so it's a waste of time and money" (FG1-LHN/P6)

From the description of culture as a limitation above, it follows that age and gender were critical barriers to participation in ACM. Regarding age, it was found that representation was provided by local leaders who were older and more influential (or wealthier). An important finding, therefore, is that older people participated and benefited more than younger residents because they owned land, had closer ties with the chiefs (were in the Chiefdom Council- the governing body in the Chiefdom, for example) and mostly headed secret societies. These results differ from those presented in Ngugi et al (2003) which suggest that older people are less likely to play roles in participatory management processes, but they are consistent with Maskey et al. (2006) which showed that older people participate more actively in ACM practices because they are the ones in power, or relate more closely with those holding such positions. The results further support the idea of Campbell et al. (2001) who argues that older people participate more actively because they hold rights to objects that command influence (such as land) and head institutions (such as secret societies) that can adapt participation in ways that allow them to externalize costs while harnessing benefits.

> "Old people have stronger ties with the chiefs. Some are even older than the chief, and there are others that the chief shares lineage with. They sit in the council and are respected members of the secret society. There's nothing the chief does without consulting them, so they get their share of whatever benefit the chief receives. In their presence, we don't say anything. Our tradition demands that you don't say a word in the presence of the elderly. Their control of everything in the project made some people decide not to participate" (INT-COM/I4)

Concerning gender, many comments referred to barriers created by other women and barriers created by culture, religion and other societal limitations. It was found that activities were implemented that targeted women exclusively, such as a savings club in Lalehun that only admitted women, and the Green Africa project in Nemahungoima that supported vegetable gardening and poultry farming for women. Yet, in the delivery of these activities, some women had limited opportunities to participate. For example, single women (and single parents) felt excluded in groups that mostly admitted married women, and those without children felt ostracized in groups that provided financial support towards raising children, because they

could not demand accountability of their leaders, as it would mean condescension of some sort.

Moreover, some women (especially strangers who moved to the village after marrying a

resident) felt sidelined in groups that had more women from the "Sande society" (the secret

society for women), because objecting to certain decisions meant contempt of the secret society.

Complementing these limitations was the lack of right to land, which constrained participation

in farm demonstrations that required land to apply new knowledge and skills gained. Being

landless also effectively made women a minority group without a chance to raise their voices

or influence the outcome of management practices.

> "We are powerless in the communities. Even to farm on a piece of your family land requires your husband's approval. When he dies, you lose everything he leaves behind (land, houses) to his relatives. You are even forced to return to your parents, if another man can't find a man to settle with in the village. They don't even care about the kids. But these are traditions we have tolerated and nurtured. We despise other women that are not married, don't have children, or that have not joined the "sande". We associate many of these things to witchcraft. It has affected the way we think and how we support one another. It has also dented the confidence we need to stand up to the vices of men and claim our own spaces in the community" (INT-COM/I10)

> "We supported organic vegetable gardening (in garden egg, pepper) and poultry farming in Nemahungoima. These are activities that men mostly leave to women, so we had to exclusively target women. We observed that they spoke more openly about their problems in the absence of their husbands and other men in the community. This made certain that the patriarchal system is still strong, which also suggests that there is no way you can get women to be actively involved when the focus is on the wider community" (INT-ORG/I19)

Another barrier to participation in ACM practices was time, which was a key reason for "self-

exclusion" (Cornwall 2008). Many comments referred to the fear to allocate time needed for

farm work to ACM activities because promised benefits did not always materialize. Also,

comments referred to the benefits derived from land ownership underscoring that those that

relied upon collective resources needed more time for farm work and other household activities.

One such activity was spending time (and bonding) with members of the household, as well as

with relatives in the community and nearby locality. Furthermore, comments indicated that non-

participation in ACM activities gave some residents the freedom to relate more widely and

freely across existing factions in the community. Overall, the results suggest that individuals in

local communities decide to participate or not based on their own real costs and the benefits

they stand to gain in return. Therefore, in accordance with Pomeroy et al. (2007), the choice to

participate in ACM may not be taken where the costs in terms of time and labour are high (or

the opportunity costs are low).

> "You won't always have time for community work, and failing to participate incurs a fine. You
> lose the time you need to address your own needs, and lose the little you are able save to fines.
> We endure a lot to benefit from this project, but we can only continue giving our support because
> we live here and cannot escape the chiefs" (FG1-LHN/P3)

> "Five years back farming was disturbed by low rainfall. We did not anticipate it, so it took time
> to put the bits together again. I won't let that happen again. Now we (my wife and I) spend more
> time on the farm to produce as much as we need, using only the evenings to talk to the kids
> about school. We had a hard time because we split our time between community and household
> activities. I also struggled to seek help because some people went as far as accusing me of
> supporting a certain decision or group that they were opposed to. Just choosing not to participate
> has given me the freedom to talk to and seek help from everybody" (FG2-NGM/P7)

> "Our culture demands that we pass on knowledge, money, land…everything to our kids- the
> next generation. As we now sit in the moonlight to talk family matters together, our bonding
> has improved, issues that once bred conflicts have been resolved, and our view of other members
> of the community has changed. Now we see our household as being part of a wider community
> and shared purpose. We solve our problems, not rush to the chief who demands money for every
> sitting. We now have time for ourselves, because we are not involved in the project" (INT-
> COM/I4)

A further barrier to participation in ACM was wealth status. Wealth and prestige in participating

communities were tied to rights to land and labour, or what Bledsoe (1980) calls "wealth in

people". Land ownership was a typical feature of chiefs and other local leaders who performed

key roles in decision-making. Implicitly, poor households and minority groups (landless

residents) could not participate (or benefit) as much as the wealthier households did, because

many of the activities (such as farm demonstrations) required land to apply new knowledge and

skills developed. The implication is that households that are socially and financially better-off

have a greater chance of being included in ACM practices because they have higher incomes

(or won more land) and access to those in power, which corroborates the ideas of Agrawal and

Gupta (2005).

> "The benefit-sharing agreement was clear on who benefits in cash and in-kind. You receive
> cash payments for owning land in the community. Even that, you need to have been included in
> the Land Register prepared by the project in concert with the chiefs. This should tell you that
> the chiefs determined who owned land, and who received cash payments from the project. They
> knew that determining payments based on land ownership would bring them a large cut of the
> benefits, because they own virtually all the land" (INT-ORG/I12)

> "The benefit-sharing agreement was clear. You either receive individual cash payments for owning land or you accessed a collective pool" (FG3-PRACS/P4)

> "For us that relied upon the common benefit pool, it was a struggle indeed. When the project delivered to us directly, there were no issues with access, but when it involved village leaders, it either never reaches us or does reach in less the actual measure' (FG2-NGM/P8)

Family size was also a barrier to participation in ACM practices. Although households that had larger family sizes benefited from participation more than others, "size" also meant more time for farm work for landless households. Some comments referred to the commitment of more labour and time than smaller households, which occupied the time and labour they needed to undertake household activities (such as farming). As such, although the result is in accord with other research (e.g., Agrawal & Gupta 2005; Aryal & Angelsen 2006) indicating that large families benefit more from their participation in ACM practices, this research extends current understanding by noting that family size also increases the opportunity costs for participation and decreases benefits from activities requiring individual participation.

> "I have 6 boys and 4 girls, and the boys are all mature now. They all belong to different groups and contribute to multiple savings clubs. One of them bought a motorbike with the credit he received from one of the groups, and he transports people to nearby communities to make additional income. At least, we are all able to contribute to the sustenance of our household" (FG1-LHN/P2)

> "I have 8 children, so I cannot join in every aspect of community work…When you cannot feed your children, it is like telling a new bedtime story for the first time when no one actually lends an ear. You lose control over your family when they know they must toil individually to make ends meet. With the project around, our sources of livelihood are limited, and the chance that my wife would leave me because I am no longer the man she knew is an ever-increasing prospect. I just have to keep working hard and giving them a reason to believe in me" (FG2-NGM/P6)

The last barrier to participation in ACM is ethnicity. Many comments referred to opportunities created for landowners (such as annual cash payments) who were mostly from the Mende ethnic group (the majority ethnic group in the area). Whereas the discrimination was not shown through public eviction from meetings or community work, some informants felt that deciding who received cash payments based on land ownership was unfair to landless residents (known as "strangers" who mostly belonged to minority ethnic groups). The association between

ethnicity and the nature of participation that occurs in resource management contexts confirms

Glennerster et al's (2013) results on ethnic bonds in Sierra Leone. Their research showed that

"while ethnic diversity does not impede local collective action (…), it would be wrong to

conclude that ethnic identity is unimportant in contemporary Sierra Leonean society'

(Glennerster et al. 2013 p.313). They have also noted in an earlier study that "(…) Sierra

Leoneans strongly prefer to move to areas where their own ethnic group is numerous, perhaps

to benefit from ethnic job networks, informal insurance, or patronage from co-ethnic chiefs'

(Glennerster et al. 2010 p.5).

> "You did not need to be evicted from public meetings and activities to know that village leaders
> worked more closely with their tribesmen. I wondered many times why others were selected for
> community work and I sit home to look after my kiosk. And having an indigene wife who
> belonged to a landholding family did not save our interests either…she sometimes felt it made
> sense facing the authorities, but I preferred staying silent to avoid jeopardizing my business"
> (FG2-NGM/P10)

6.4.2.2   Institutional barriers to participation

The first institutional barrier is a history of cynicism and resentment emerging from policies

and practices that have negatively influenced the political and economic relationship between

the state and local communities. Many comments referred to representative selection (inclusion

of local leaders as representatives) and the growing discontent about their performance and

unchecked influence. More comments compared ACM practices to previous centralized

approaches, claiming that ACM only added a slight gloss on participation to mollify critics,

while forcing local communities to internalize the coercive missions of a state-nested

conservation practice. The concerns included that issues such as quota representation,

inadequate and inappropriate benefits, and unilateral decision-making were still evident. These

results are consistent with other research (e.g., Kamoto et al. 2013) which found that where

local participants have negative perspectives about past experiences, they may be less willing

to engage in and contribute to ACM practices.

"I cannot support anything that the chief supports. I am fully convinced that he only seeks personal gain in this process. So, continuing to use chiefs to represent us and disseminate important information about the project or collect feedback jeopardizes the engagement that is needed for that to happen. Not many of us here believe in these chiefs anymore" (INT-COM/I9)

"The project is a masked devil that keeps changing its clothing and not the mask. We are struggling with the same issues that we had when the project started. We know this new one is just an old wine in a new bottle; just the same old devil now altering dance steps to deceive us" (FG1-LHN/P5)

"They have been here since I was a boy; yet, those dealing in wildlife products remain unfettered. Why do you have to keep a ban in place when you know you cannot effectively enforce it. They expect us all to be living fences against these illegal activities, but some of us are not motivated enough to interfere with the trade" (FG1-LHN/P3)

Another barrier to participation in ACM practices is the implementation approach. The issues (figure 6.9) include the strong emphasis on conservation in national policies and laws, the lack of flexibility to address conditions that improve local engagement after the FMPs are developed, the need to deliver specific outcomes at the local level even though local conditions may not be appropriate, and the lack of laws and policies in support of meaningful and continuous local involvement in ACM practices. Specific examples of these limitations have been described in chapter 4 and earlier sections of this chapter.
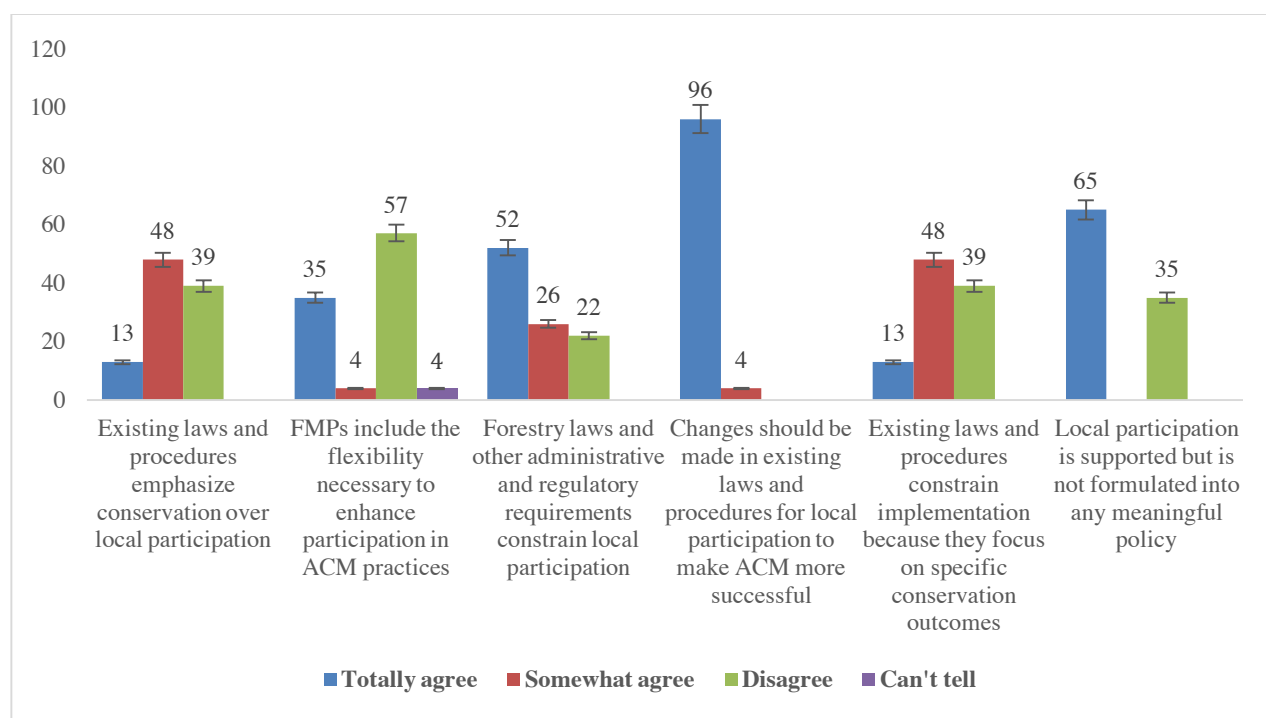
Figure 6.9 Practitioner perceptions of the ACM implementation approach (SPSS output)

Based on the chart, many comments referred to the lack of clear sections in existing laws and FMPs regarding ways to increase local influence and control to increase the sustainability and effectiveness of management practices. Some organizational informants argued that ACM practices are not successful partly because existing policy frameworks are unclear on planned steps to clarify and secure rights and associated benefits and responsibilities related to ACM implementation. Many comments acknowledged the usefulness of a clear implementation framework to gaining local support and engaging local people for both their benefit and the conservation of the forest estate.

> "Local communities today are so big and diverse that they do not fit into the governance regimes operationalized at the local level. Existing laws and policies treat communities as policy objects, not subjects who must have a say in what must change or continue. It is high time we understood that insofar as different people in forest communities demonstrate different attitudes and knowledge, their priorities and ideas are bound to be as different as the approach implementers would deploy" (INT-ORG/I10)

Following from the survey data is also the point that although laws and procedures were needed to protect the forest estate, many informants shared the point that they served less noble purposes, including treating local leaders preferentially, adopting harsher measures for dealing with defaulters (loggers, poachers etc) existing laws and procedures, while at the same time maintaining the same kind and scale of benefits offered.

> "Participation was our way of assessing the progress of the project and acting to address shortfalls. We didn't want it to be imposed from above. Sadly, many things were ordered from above, with some key decisions made to keep the chiefs happy, keep them in place, and keep the protected area up and running. Sadly, there is nothing we can do about it, because they don't account to us, and tradition demands that they rule for a lifetime" (FG2-NGM/P1)

Related to these comments is the coercive nature of the implementation approach. Many comments referred to the trial of defaulters in the formal court system, rather than through the "barri" or customary system of levying fines in the form of cash, livestock, or labour. Other comments referred to the use of project vehicles to transport defaulters to Kenema (provincial headquarter town), indicating a compromise between law enforcement agencies (such as the Sierra Leone Police-SLP) and implementers to force cooperative behaviour and rule

compliance. Moreover, comments referred to a lack of understanding of who can seek judicial or administrative action, and the complex and time-consuming procedures. These results describe the extent to which the implementation approach can constrain local participation in ACM of because of a lack of agreement on what constitutes legitimate rules and procedures for fostering cooperative behaviour and compliance. The results are in keeping with Pomeroy (2007) who emphasized the relevance of constituting rules together with local communities to foster trust, cooperation and compliance. They are also consistent with Pomeroy et al's (2004) research which showed that participation in ACM is reinforced or undermined by the way rules are developed and applied, ensuring that resulting procedures and regulations are enforceable by both resource users and managers.

> "We see them dressed up in green and all we remember is the devastating war we went through because that was the attire the combatants had. They patrol the forests and make us feel like prisoners in our own towns. That itself is a cause for conflict because we deliberately break the law sometimes to see what they can do. You cannot be asking for our goodwill and still make us feel like criminals who would damage what is theirs because they don't understand the benefits of keeping it". (FG2-NGM/P4)

> (To tell you what we go through in their hands sometimes) …if you are unlucky to be arrested here today, you are finished. You will be lucky to be interrogated by the police, because mostly, you are thrown in jail right away until the community can find your bail money. We cannot go to court because it is expensive to hire a lawyer and stay around in the city till the very prolonged process is over (FG1-LHN/P8).

> "And the project connives with the Police by providing their vehicles to transport those arrested to Kenema. They are part of this enterprise, but what can we do when our own (national) systems can't protect us. Nothing is fair because we are poor" (FG1-LHN/P6)

Related also is the lack of mechanisms for downward accountability, as described in section 6.2.4. Weak accountability at the local level was considered by many informants as a key barrier to participation in ACM practices. More comments referred to the persistence of accountability issues because of the lack of access to information on key procedures and rules, and the general lack of dialogue on the appropriateness of these procedures and regulations. Many claimed that consultation occurred after implementation had already started (such as the demarcation of the forest estate) when it was too late to include local

ideas, perspectives and priorities. Overall, the comments referred to the level of secrecy and

bureaucracy in ACM practices and the implications for local participation.

> "You cannot place a thief in charge of your barn. That is what we have done over the years.
> These people are so corrupt that their only focus is what keeps the financial support for the
> project coming. Even more disturbing is that they don't account to us. We are not trees; we have
> a life to care for and children to feed, so we must be involved early and continuously in processes
> that affect our lives" (FG1-LHN/P2)

> "Yet, the chiefs think we don't deserve to be treated any better. And sadly, the project and
> national offers assigned here collude with them to oppress us. You can do your best to engage
> them, but nothing concrete results with the level of secrecy and bureaucracy" (FG2-NGM/P6)

6.4.2.3   Issues of benefit distribution

While comments made about benefit distribution could be presented under contextual or

institutional barriers, I have separated the analysis to give a clearer understanding of these issues

and their implications for participation in ACM practices. Altogether, when informants were

asked whether benefits were distributed equally, a majority responded negatively. Comments

concerning benefit distribution referred to the tangibility, probability (predictability),

immediacy and divisibility of benefits. In terms of tangibility, many comments referred to the

strong emphasis on "soft benefits" such as trainings in Farmer Field Schools (same as farm

demonstrations) without following up with adequate supplies of tools, seed inputs and harvest

(and post-harvest) technologies (such as milling machines, drying floors, storage facilities).

Documents reviewed (e.g., Bulte et al. 2013) show no community in the GRNP with access to

a drying floor, although more than 80% of the local population are farmers. The common

perception, therefore, was that ACM practices gave the appearance that residents were being

lured with unrelated benefits while taking steps toward forest conservation. The results are in

line with those of previous studies (e.g., Hauck & Sowman 2003)which showed that local

communities can commit to using resources sustainably and taking a long-term position on their

management when benefits offered are tangible.

> "If you give me SLL1000 now and go down the road after few minutes, you will see me

> smoking at that kiosk. That's what happens to the hard benefits we get from the project and other NGOs. We have started telling them that it is the skills training and other longer-term benefits that we are after, because we will still be here after all this comes to a halt" (FG2-NGM/P3)

> "We have talked to community participants who feel project activities didn't meet their needs. Some mention that the farming methods they practice have not been entirely productive, but there's the pressure to do what everybody else is doing…and because they are required to do the same things over and over, they have become unwilling to try some of the new ideas the project has proposed. I think the project should just go back to the drawing board and work out a plan that reflects the different interests at the community level, so that all subsequent interventions will address this issue of fit" (FG3-ORG/P8)

Regarding the probability of benefits, comments referred to the unpredictable nature of benefits provided through ACM practices. One informant claimed that benefits were delayed (such as cash payments, tools for farm demonstrations etc), and in some cases, not delivered at all. These circumstances added to a long-standing uncertainty about the rewards to be gained from participation in local conservation activities, which was one of many reasons for not dedicating time used for farm work to conservation activities. The results show that the unpredictable nature of benefits created room for cynicism and disappointment that gradually undercut local interest and involvement in ACM practices.

> "They come here and give us what they want. We have endured for many years thinking things will improve. Few others who have ventured out to find alternative means of livelihood have returned to tell interesting success stories. We have chosen to stay and look on while the chiefs and park authorities build homes in the city. They just continue to fool us" (FG1-LHN/P3)

> "I decided who in my household participated in community activities. I believed it was a waste of time, because sometimes you wait for several hours before they show up. We needed money to support family, so it was not easy using the little time we had for farming and other income-generating activities for the project that was more of talk than benefits" (FG2-NGM/P3)

Concerning the immediacy of benefits, comments referred to delays encountered over the course of ACM implementation. Some informants pointed to delays in providing tools to Farm Management Associations (FMAs) in Nemahungoima and the resulting misconception and disappointment. More comments referred to the unwillingness of local participants to engage in implementation activities because of unmet expectations. The results corroborate the ideas of McConney et al. (2003) who showed that local participants choose to contribute to ACM practices because of promises of some level of personal and immediate gain.

> "People were more attracted to quick benefits, and activities that required much less of their time and labour. The project found a brilliant way of keeping our interest in the process; they said if you don't come to farm demonstrations, you won't get farm inputs. So, benefits were tied to active participation in the process, which helped the project reach many people while increasing resentment about wasting more time for less benefits" (INT-COM/I15).

> "Last year the inputs came after the rains had ceased. Sometimes they come a long time before the farming season starts and other times they supply poor quality. Some households even consumed their supplies during the hunger season and went into the planting season on crop loans from other households. And some of us see this as a waste of the time we need to spend on our own farms, and with our families. We cannot cope with its demanding nature too…we are used to doing what we know and at the best times possible…now, even the peer pressure pushes you into trying a new crop variety on your farm. It's an awful situation really" (FG2-NGM/P3)

About divisibility, many comments referred to the way benefit-sharing decisions were taken, including that residents played peripheral roles in determining and distributing benefits. These informants argued that local leaders that performed key roles in the process received more benefits, and were given the authority to distribute both collective (such as infrastructure development initiatives) and individualized resources (such as cash payments). Some comments referred to the kind of roles residents performed (such as forest guards, tour guides etc), which severely undermined the voice and influence they needed to function on the same level as all others involved in the ACM process. The implication of this result is that the way benefits (roles, authority, information etc) are shared can determine the extent to which local communities can or feel empowered to participate in ACM practices.

> "I joined the labour club because it had young men who had a common interest in stopping the project. The benefits were going to older people in the community and we were being deprived. Although we could not stand up to them in public, we charged them exorbitantly for work on their farms…sometimes we spent a day or two doing what we normally finish in a day. These were deliberate attempts at changing the power base, and pulling some attention to youth in the community…. nothing has however changed" (INT-COM/I8)

6.5   Outcomes of participation

6.5.1   Beneficial outcomes of participation

Participation in ACM practices produced a wide range of outcomes. Survey data (figure 6.10) show that benefits resulted from participation in ACM practices (80 percent of informants in

Lalehun and 49 percent in Nemahungoima somewhat agree), though not all those involved benefited from the process (77 percent of informants in Lalehun and 63 percent in Nemahungoima totally agree). The survey also shows that outcomes resulted from participation that may not have occurred without involvement in the process (86 percent of in Lalehun and 69 percent in Nemahungoima totally agree) from participation that would not have occurred without involvement in the ACM process. Across these cases, a minority suggested that they could not tell whether benefits resulted from participation because they were not involved in the process.
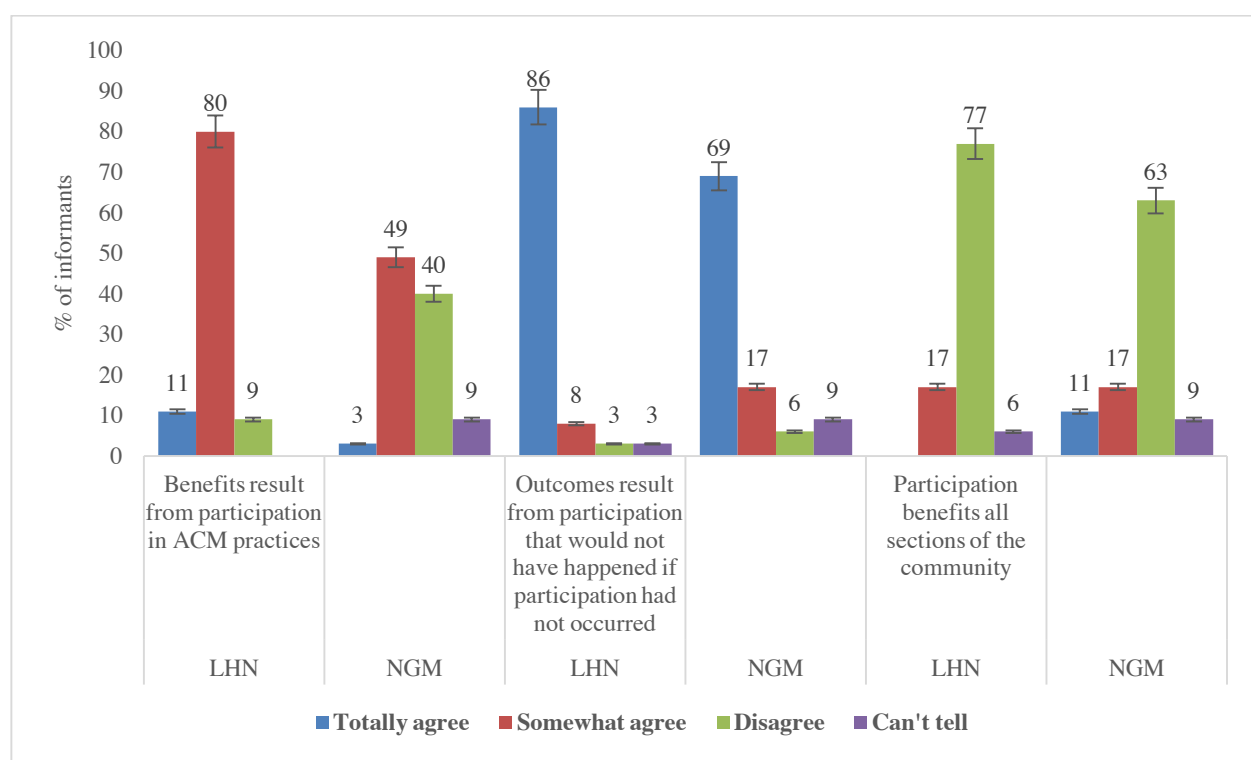
Figure 6.10 Community perceptions of outcomes of participation in ACM practices (SPSS output)

One important beneficial outcome identified by community informants was the increased strength of relationships among residents in forest communities. Notably, results from households surveyed (figure 6.11) show that 97 percent in Lalehun and 100 percent in Nemahungoima totally agree that participation in ACM has helped individuals to see merit in working closely with other members of their household to address forest-related problems and

address various other needs. Another benefit was the increased access to farm and non-farm

sources of income. In the case of farm sources of income, residents managed to acquire income

from cash crop (cacao) and tree crop activities implemented by NGOs such as WeltHungerHilfe

and Green Africa. WHH set up green houses in some communities to nurse trees, which were

used for restoring the buffer zones and sold (especially cash and fruit tree crops) within and

outside the community. The tree nursery enterprise helped local outgrowers develop sustainable

techniques for cash and tree crop production, which afforded the extra income they needed to

meet their needs. NGOs like Centre for Environment and Development (CEFED) supported a

livestock scheme in Ganyawama, three miles from Lalehun, where individuals from nearby

villages (especially Lalehun) received training in livestock breeding and ethno-veterinary

practices. The Livestock Club set up by CEFED encouraged domestic and commercial

production of livestock, which many informants attributed to an increasing interest in pastoral

livelihoods due to the ban on poaching and trade in bush meat.

> "We own plantations here…mostly in coffee and cacao. Because these are permanent crops we only brush the undergrowth, nothing else. When the project started, they introduced us to high value cash and tree crop species, and various techniques for keeping the trees healthy and productive. Some of the trees that I took from the nursery are mature now, so I hope to start making substantial income by next year" (INT-COM/I17).

> "I joined friends in Ganyawama many times for the livestock breeding and enthno-veterinary training workshops. It was a project supported by UNDP and implemented by an NGO called CEFED. They supplied goats and set up livestock clubs. I am thinking about doing the same here, once I get some money from the savings club later this month" (INT-COM/I22)

Plate 6.1 Images of recent tree nurseries set up by the project; and livestock pen and livestock provided through a CEFED project implemented in Ganyawama (source: Fieldwork)

Non-farm sources of income included financial credit provided by savings associations and

labour clubs, annual cash payments made to landowners, and sale of surplus production. In Lalehun, 60 percent of household informants indicated access to non-farm sources of income, while 70 percent reported access in Nemahungoima. Concerning financial credit obtained from groups supported by the ACM process, majority of household informants (66 percent in Lalehun and 91 percent in Nemahungoima) indicated adequate access, implying active membership in the savings associations and other internal leading schemes in the community. Based on this data (figure 6.11), it can be observed that much of the financial support obtained from the project came from internal lending schemes, especially village savings and loan associations.
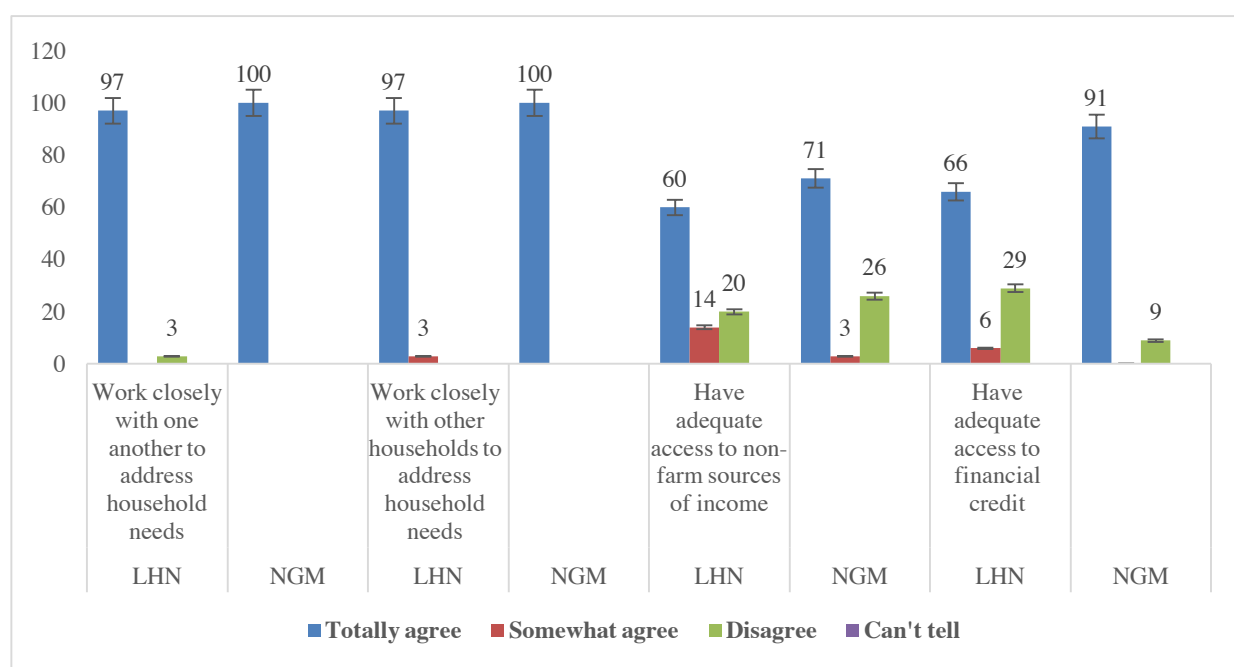
Figure 6.11 Community perceptions of benefits of participation in ACM (SPSS output)

The financial support residents received from these sources were helpful in undertaking wedding, naming, and funeral ceremonies; organizing dance shows and religious events; as well as setting up small businesses like selling food in the community, phone recharge cards (known locally as top-up) and woven baskets. The actual value of income made from these investments was as follows: up to SLL 30,000 (£3.75) was made for rotating labour on farms; and up to SLL 100,000 (£12.5) was made monthly from selling food and groceries. These

profits were mainly used to purchase motorbikes, which were used to transport goods and

people, and preferred to cars for managing the severe road conditions. "Bike riders" saved as

much as SLL 500,000 (£62.5) every month from these services, and saved much more from

transporting goods from stuck trucks and trailers on the main road.

> "We got loans from the various clubs we joined. But it wasn't free, since you must put in some money to be able to take a loan. It is like a revolving fund that everyone contributes to so that one person takes it as a financial credit at a certain time. We also use the savings to help members looking to solve certain problems, like funeral arrangements of deceased relatives or a child naming ceremony. Some people used their loans to sell food and top-up; others bought motorbikes, radios and new clothes for the Ramadan or Christmas. People made sacrifices (joined many groups and paid contributions to these groups) to secure enough financial credit to meet household needs" (INT-COM/I21)

> "I am a bike rider. I bought my bike from a loan I took in 2010. It's my means of livelihood. I make up to SLL 500,000 monthly from transporting people and goods. I even make more in the rainy season, because that is when people prefer not to walk and vehicles get stuck on the main road with lots of people and goods from Kenema and Liberia" (FG2-NGM/P9)

> "Here in Nemahungoima, the savings clubs and farm demonstrations have exposed us to ways of making extra income. Some of us own phones, motorbikes and larger farms now due to the income we generate from these activities. This is even why the community is livelier now than before. Some communities in the park are very lifeless, because they are not part of the project. Besides, we see cars, motorbikes and white people all the time. In some areas, you walk for several hours through the forest to just make a call. So, I can say bad things they have done, but not when it comes to income generating activities they have supported" (FG2-NGM/P9)

Moreover, participation in ACM practices led to various infrastructural development projects.

One such effort was the construction of a lodge for tourists and researchers in Lalehun (plate

6.2) and a training camp for forest guards (known as Sileti Training Camp) in Nemahungoima.

There were also reports of schools renovated in other parts of the park, though no evidence of

such investments could be found in the fieldwork locations.

Plate 6.2 Images of Ecotourism Lodge constructed by ACM project in Lalehun (source: fieldwork)

Furthermore, the ACM process created jobs and employment (such as forest guards, forest

monitors, tour guides etc) for more than 150 people drawn mostly from participating

communities (Forestry Division 2009). Some of these staff were volunteers from communities

(like some caretakers at the ecotourism lodge in Lalehun) who periodically received cash

incentives to help with living costs. The community-based staff (such as forest guards) played

a supporting role to the technical staff based in Kenema, including serving as liaison for

community relations, enforcing rules, and providing real-time, day-to-day data on sanctioned

practices (such as poaching, logging etc) within the forest.

> "I was employed about a year ago. I practically volunteered for this work. Before becoming a forest guard, I volunteered as a tour guide in the park. I made so many friends from overseas; some gave my children clothing, sweets and money. Though my role was unpaid, I did not complain because I loved helping people. When a paid opportunity came, I knew God had finally answered my prayers. Though it's a tougher job to do, especially with the risk of wildlife attacks and the long walks through the forest, I could care for my household from the little I make here. I hope they keep me here for a long time, so that I can see my children through school" (FG1-LHN/P1)

> "I am the chairman of the forest management committee in Lalehun. I am also in charge of the visitors' lodge there, and I help with communicating between the project and the community. I am not paid monthly for what I do, but there are incentives in being here. You get tips from guests; you get money periodically from the project for living costs; and you get to coordinate local activities on behalf of the project like meetings, workshops. I enjoy being here for all that it is worth" (INT-COM/I11)

Plate 6.3 Image of forest guards employed by the project (source: Gola Forest Programme website)

6.5.2   Detrimental outcomes of participation

Participation in ACM practices also produced detrimental outcomes. One informant stated that

residents related poorly with local leaders (especially Paramount Chiefs) because of perceived

corruption and elite capture in ACM practices. Another commented that social links broke with

the perception that only a select few were involved in decision-making, while others considered

that efforts made by their representatives to manipulate residents into supporting the process

were spiteful. This suggests that participation in ACM practices may have contributed to

breaking social links between local leaders and residents, and between residents and the project,

because local representatives were shown more leniency by implementing partners for their

part in stifling voice and agency in the process.

> "When benefits come, they say call the chief; a new NGO comes, it is the chief they want to see first; a meeting is organized by the project, the chiefs again get invited. We are tired that we don't get the chance to travel and know places like these chiefs. Maybe their exposure is the secret to their strength" (FG2-NGM/P2)

> "When the president came to open the park, the security guards barricaded the entrance, letting only the village leaders in. At that point, I felt this (the project) was not for us (the community) because on a day like that, we should be allowed to enjoy ourselves and share our sentiments about the project" (FG1-LHN/P8)

Moreover, access to financial credit increased slash and burn activities to harvest fuelwood

since labour could be afforded, and extensive charcoal production to meet the growing demand

in big towns since transport costs could be paid (plate 6.4). Charcoal production was more

prevalent in Nemahungoima because of its location on the main roads leading to Liberia

(neighbouring country in the south) and Kenema (nearest major town in the region), and its

accessibility (in the dry season) by road for cargo trucks. There, individuals earned up to SLL

200,000 (£25) a month from selling fuelwood and charcoal. The rationale for these activities,

per the views of some informants, was to fill gaps created by the lack of promised benefits and

to address the increasing needs of their households.

> "I only took microcredit at the start of the farming season, because that is when more labour is needed. I have a very large family, but they are mostly women. The hard part of upland rice cultivation is normally felling, for which you need to hire labour from the clubs. That is one way I spent the money I received from the savings club, in addition to purchasing seed inputs and farming implements" (INT-COM/I3)

> "Every farm here produces fuelwood they use for cooking in the homes or sell to make extra income. The larger your farmland for that season, the more money you can make. Sometimes, you need labour to transport the wood to the street, and proceeds from previous sales or loans from the village club can be helpful" (INT-COM/I21)

Plate 6.4 Images of fuelwood harvesting and charcoal burning in fieldwork locations (source: fieldwork)

In addition to fuelwood harvesting and charcoal burning, residents also took part in logging and mining activities, earning up to SLL 1,000,000 (£125) in labour fees. These activities were mostly external investments financed by people based in the big towns, which could be seen in the kinds of timber that were harvested. For instance, loggers preferred "red board" (*Heritiera Utilis* known locally as Yawii; and *Entandophragma spp* known locally as Njelei), and "white board" (*Melina Arborea* known locally as Yemani), which were in high demand in urban areas. The engagement of residents in logging and mining was attributed to a prehistory of antagonism and cynicism (and everyday resistance) relating to the issuance of permits and licenses by government agencies with recourse solely to local leaders. Some comments attributed these practices to the consistent failure of conservation actions to deliver adequate and appropriate community development benefits. The results are consistent with those of Gilmour (2000) who found that where permits for logging are issued by government agencies who also retain revenues made from the exercise, illegal activity may result in forest communities as a form of protest. This is further corroborated by Villegas et al. (2013) who found that in Sierra Leone, the licensing process does not explicitly require consultation with local communities, nor is the revenue made from these activities used to develop (deliver development benefits to) affected communities.

> "Commercial loggers give us jobs and pay better than what we receive from the project. My role as head of one of the labour groups put me in contact with potential investors who wanted me to mobilize labour and serve as a middleman. As a middleman, you get everything from money to household gifts, construction materials and even a motorbike" (INT-COM/I12)

> "Mining and logging are going on in areas of the park. They mostly mine at night when we are

all gone to bed. The loggers come out when it is raining because forest guards rarely come out at those times. The groups are financed by outsiders but the money is good and quick. Sometimes, you can get a few logs to sell, though many labourers here opt for cash because getting a car here is difficult" (FG1-LHN/P6)

Plate 6.5 Images of abandoned logging and mining sites, and timber from the forest (source: Fieldwork)

Concerning jobs and employment created by the ACM process (described in section 6.6.1), the issue of low salaries was raised by some forest guards. One forest guard noted that the salary provided was small, though the job exposed them to severe risks such as attacks from loggers and poachers, and attacks from wildlife. Another commented that being employed by the project affected their relationship with other members of the community, and kept them away from activities that yielded financial support (such as farm demonstrations).

> "I have been with the project as a forest guard for 2 years. (To be honest) the main challenge to our work is not wildlife or the low wages we receive; it is our people in the communities. They think that by wearing this uniform, you have taken sides with the project. Some people stop talking when they see us because they believe we are trained and work as spies too. In the forest, we always patrol in teams because an angry mob might hack you to death for taking their job (especially if you don't come from that area of the park), or for helping a stranger (park authorities) against your own people" (FG1-LHN/P1)

> "Look at the new cases of gold mining and logging in the park. This is all spreading from the Kambui Nature Reserve. But it does show that the forest guard strategy has not worked. You cannot employ a few hundred guards to protect a forest area of this size. I think a better approach would have been to treat everybody in the community as a living fence, so there would not have been the need for extra payment, but the training and education they give to the guards would have benefited everybody. Many people here antagonize the project because they don't know what it is about; the project having isolated itself, has proved them right" (FG3-ORG/P7)

> "Our job requires us to patrol the forest for defaulters all the time. We patrol the forest in teams, and we do specific blocks in each time. It keeps you away most of the time, so you cannot join others in meetings and community work. As a forest guard, people also think you are paid so highly, but that's not true. With what people think, I have failed sometimes to get loans from friends & relatives, but I am not quitting the job because of that" (FG1-LHN/P1).

Furthermore, despite the delivery of infrastructure projects because of participation in the ACM

process (such as the construction of an Ecotourism Lodge in Lalehun), activities undertaken had a marginal impact on basic social amenities in local communities. Informants referred to the lack of adequate access to vibrant markets, decent housing, reliable and portable water supply systems, good educational facilities, and healthcare facilities. Perceptions of the impact of ACM practices on local amenities are illustrated in figure 6.12.
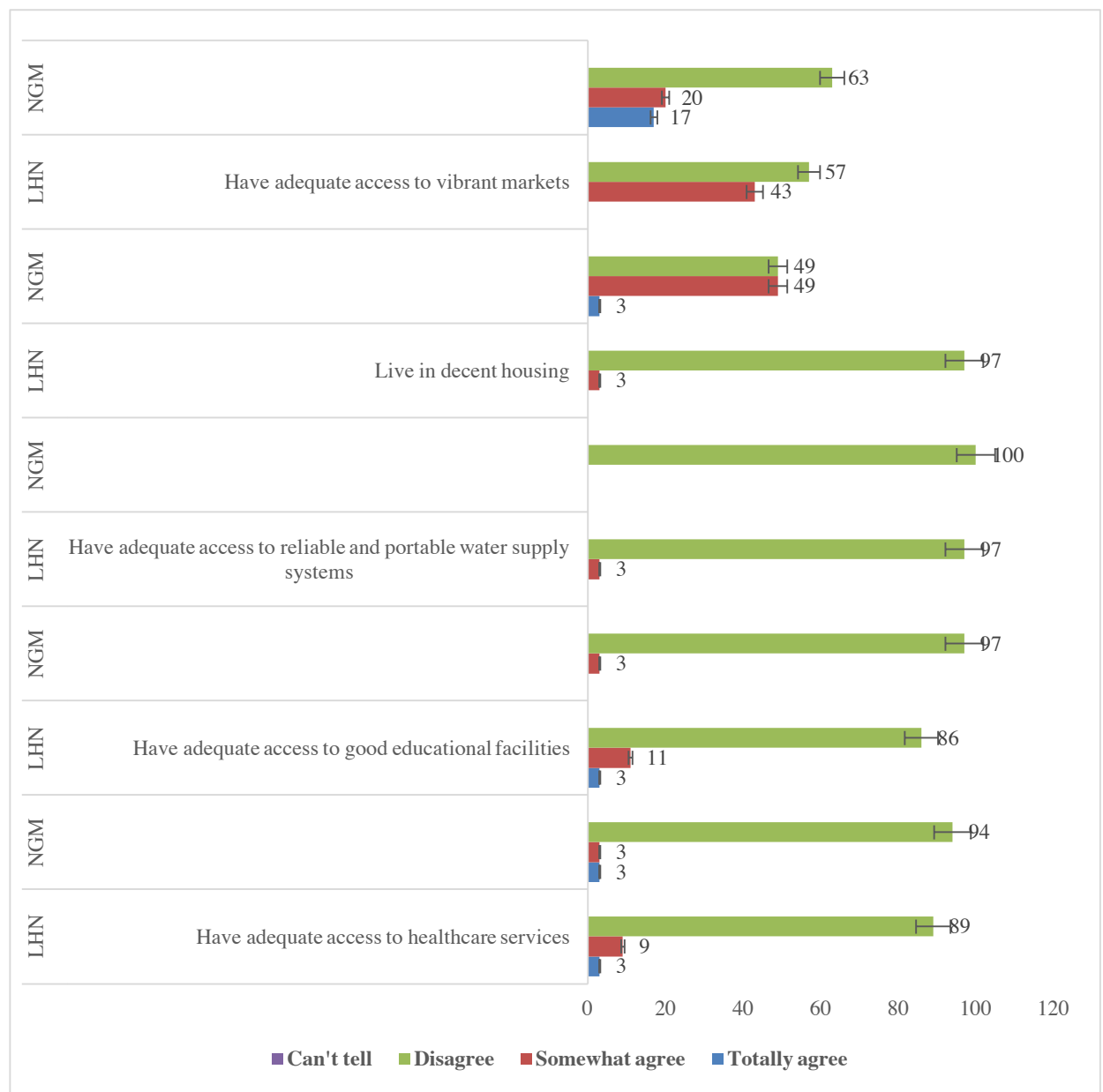
Figure 6.12 Community perceptions of impacts of ACM practices on local amenities (SPSS output)

One informant attributed the increasing infant and maternal mortalities to the lack of healthcare

services, because illnesses that are easily treatable in the big towns (such as malaria and

common cold) often led to death or prolonged illnesses in fieldwork locations. Another

commented that the high cases of cholera over the years were partly attributable to the lack of

public toilets and contaminated streams used for drinking and cooking (due to artisanal mining).

Additional evidence was drawn from Bulte et al. (2013) who obtained data on the status of

"infrastructure" across communities in the GRNP. They found that in Gaura and Tunkia

Chiefdoms (where the fieldwork sites are located), there was no community with access to a

drying floor, although 88.5 percent and 81.8 percent of the local population (respectively) are

farmers. Likewise, there was no community with access to electricity; only 14 percent of

residents had access to public toilets in Gaura, and 11 percent in Tunkia; and health clinics and

markets were a very long distance away (Bulte et al. 2013 p.32).

> "There is a nurse in Ganyawama that is about 3 miles away, but she works in Joru. Sometimes
> if a member of your household falls ill, you must hire labour to carry him/her to the nurse. Some
> of our pregnant women get through labour on the way and the children don't always live" (FG1-
> LHN/P7)

Plate 6.6 Image showing housing conditions in fieldwork locations (source: fieldwork)

Additionally, there was a lack of adequate access to transportation, as many residents used

motorbikes to travel across the park, which made transporting produce to nearby markets

difficult. The difficulty in travelling to and from communities on motorbikes can be described

based on my experience in the field. As both trips in October 2015 and July 2016 were in the

rainy season, we (I and my two research assistants) had to hire motorbikes to travel from

Kenema to the fieldwork locations. We had to retain their services throughout our stay because

commercial motorbikes only took trips to these hard-to-reach areas of the park when they had a good hire. We found out that the main road from Kenema was cut off from vehicular traffic in many places, and the road leading to Lalehun from Joru was virtually impassable. Beside the slippery and steep slopes, the bridge at Ganyawama was already inundated before we arrived in the evening. Nemahungoima had similar challenges, with many of the trucks and trailers from Liberia stuck on the main road, making their trails virtually impassable. The poor condition of roads was somewhat surprising, because after more than 25 years of conservation in this area, one would expect to find fully developed routes that allow continued access by tourists, researchers, project staff and visitors.

6.6   Summary

This chapter has presented findings of research undertaken to understand the nature of participation in ACM, focusing on: who participates, how participation occurs, why participation occurs (and why not), and outcomes (impacts) of participation. On who participates, the chapter began by describing the roles played by implementers (the GoSL, RSPB and CSSL) and beneficiaries in planning and implementing ACM practices. Implementers played various roles ranging from developing and enforcing forestry laws, to raising awareness and developing technical and financial capacity. Beneficiaries included local leaders and residents of communities adjacent to the GRNP who historically and lawfully enjoyed tenure before ACM implementation. Land ownership was a major factor in determining stakeholders at the local level, so minority groups (such as women) and other landless residents played peripheral roles in ACM activities. Thus, due to their rights to land and labour, local leaders served as representatives of participating communities. Yet, issues of representation and accountability were evident because residents felt that local leaders did not always have the best intentions for participating. Many comments referred to the discretion placed in the hands of these representatives, with claims that their empowerment encouraged corruption,

undermined community agency, and weakened downward accountability.

Concerning how participation occurs, the chapter referred to various concerns expressed about participation in planning and implementing ACM processes. Planning included the design of a Local Communities Cooperation Agreement (LCCA) that emerged from an initial Conservation Concession Agreement (CCA) adopted by key stakeholders in the process. Many comments referred to the approach to consultation, claiming that consultation did not include dialogue on rules and procedures for ACM implementation. Claims that consultation occurred once and after implementation had started, when it was too late to incorporate local ideas, priorities and perspectives were also made. The issue of clarity and commitment in planning exercises were also raised, which underscored the attention paid to conservation relative to addressing local development needs. The exclusion of local participants in decision-making and the implications for understanding the goals, rules and procedures of ACM practices were also highlighted. In a similar vein, the chapter described the nature of participation in implementation, which primarily involved the delivery of activities contained in a Forest Management Plan (FMP). Beside comments that these activities delivered far less benefits than the sentiment they carried, the issues of timing and frequency were also raised. Many comments suggested that the timing and frequency of participation were pre-determined by implementers who were far removed from the communities themselves.

Regarding why participation occurs (and why not), the chapter has presented reasons for both participation and non-participation. For participation, many comments referred to the need to build collaborative relationships, preserve scarce community resources (such as sacred forests), improve access to diverse benefits- financial benefits (such as microcredit), social benefits (mutual recognition), and personal benefits (such as self-esteem and a sense of self-efficacy), and gain knowledge to influence decisions and increase management effectiveness. In the case

of non-participation, comments referred to contextual and institutional barriers, as well as issues for benefit distribution. Contextual barriers included culture, age, gender, time, wealth status, family size and ethnicity. Culture limited the inclusion of minority groups (such as women and youth) in ACM practices, making age and gender critical barriers to participation. Many comments referred to the roles played by older residents because of their close ties with those in power, their rights to land and positions in traditional institutions (e.g., secret societies). Women were not actively involved in ACM practices because they were landless, and constrained by culture and religion from being vocal in the participation space. Time constraints referred to the high opportunity costs of using time for farm work to participate in ACM activities, while wealth status referred to the wealth, prestige and influence that accompanied rights to land and labour and the implications for leadership and participation in ACM practices at the local level. The comments also suggested that the size of a household determined the opportunity costs of participation, and referred to the costs of belonging to a minority ethnic group on participation in ACM practices. Institutional barriers included a prehistory of cynicism and resentment that made residents less willing to participate in ACM practices, and the approach to implementation, which referred to the non-consensual way rules and procedures were developed and enforced, weak downward accountability, and limited participation due to the approach to public consultation. More comments referred to benefit distribution, specifically, the tangibility, probability, immediacy and divisibility of benefits and the implications for participation in ACM practices.

The final section of the chapter addressed the outcomes of participation, referring to both beneficial and detrimental outcomes. Beneficial outcomes related to the strength of social relationships (social capital) due to active involvement in community groups, access to farm and non-farm sources of income (financial capital), increased investments in infrastructure development (physical capital) and the creation of jobs and employment (human capital).

Nonetheless, the nature of participation encouraged and facilitated by ACM practices limited the quality of communication and coordination and the effective delivery of community development benefits. Loans and microcredit obtained from community groups were used to fund fuelwood and charcoal businesses, which filled gaps left by unmet expectations and undelivered benefits. Participation and leadership in community groups also made individuals prime contacts for external investors that sought middle men for their logging and mining operations in the park. This means that although participation nurtured and improved strong social relationships, it also allowed for using the new-found relationships to exploit forest resources that were being conserved through ACM practices. Additionally, although participation invited investments in the local infrastructure, basic amenities such as healthcare, water supply, educational facilities, and transportation (including roads) were not impacted. Altogether, the chapter referred to outcomes that could not have resulted without participation in ACM practices, although the impacts were both beneficial and detrimental.

6.7   Conclusions

This chapter has shown that many factors and conditions (contextual and institutional) determine the nature of participation in ACM. In that regard, the following three conclusions can be drawn from the analysis. First, the evidence from this chapter suggests that ACM implementation in FPAs scarcely depoliticizes the participation space because local practices substantially entrench power and privileges wielded by local leaders, thus scarcely resulting in the effective distribution of benefits and shared decision-making. Second, the results suggest that a top-down approach to ACM effectively masks long-standing concerns about accountability, representation, commitment and transparency that undermine participation in ACM practices. Third, the results also indicate that while some level of participation do occur in ACM practices, the policy environment and conditions for practice do not create a levelled playing field for all stakeholders, because roles and interactions are mostly planned and directed

by actors that are far removed from the target communities themselves. Altogether, the evidence from this chapter suggests that in resource and capacity-challenged settings, ACM finds difficulty in bringing forest managers and users together to develop shared goals for conservation and find strategies for achieving them. The principal theoretical implication of this chapter is that decision-makers are more concerned about their own utility than the welfare of local communities, indicating therefore that ACM practices are prone to abuse by influential stakeholders in Forest Protected Areas (FPAs). What is particularly needed are priority investments in capacity building processes which facilitate learning at the local level. In this regard, therefore, the next chapter describes the nature of learning in ACM using data from surveys, semi-structured interviews, focus groups and documents-in-use.

Chapter Seven

Nature of Learning in Adaptive Collaborative Management

7.1   Introduction

This chapter follows on from the previous chapter, which unearthed multiple institutional and contextual barriers and triggers to effective participation in practice. The chapter presents findings of research undertaken to understand the nature of learning in ACM. The key issues examined include: learning for whom; learning goals, mechanisms that support learning, barriers to learning, and impacts of learning. The chapter also explores why certain learning objectives are set, the mechanisms by which learning takes place, and the role that institutional structures play in facilitating or constraining learning processes. As with the chapter on participation, the analysis draws from data obtained through surveys; in-depth, key-informant interviews, focus groups, and documents-in-use (content).

7.2   Learning for whom?

The next two sections address central aspects of who the target groups were for learning in ACM practices in the GRNP. Although the issues addressed here are highly interrelated, the first section, which describes learning that targeted beneficiaries of the ACM process, focuses more on how community learning structures are constituted and the implications for

leadership and collaborative relationships. The next section looks at learning through the lens of who makes the decisions at the policy level, how knowledge is generated and utilized, and the implications for ownership, trust, and adaptive management. Together, the analysis focuses on who is targeted in learning practices in ACM, and whether such interactions are relevant to what decisions are made regarding forest conservation and community development, specifically considering current governance dynamics.

7.2.1   Beneficiaries in participating communities

Learning in ACM practices at the local level occurred primarily through roles and interactions in community groups. Local participants were required to join groups ranging from savings and loan associations to livestock clubs and farm management associations. Community groups comprised individuals that shared similar interests, such as in rotating labour or revolving financial credit, and who took collective action through regular interactions with others in the community or nearby locality.

> "The project set up groups that offered various incentives like loans and social support. However, the key advantage of joining these groups was to work with others in the community to implement various livelihood activities. Through these interactions, individuals developed strong social relationships, as well as new skills for meeting household needs and contributing to solving community-wide problems" (FG1-LHN/P3)

> "Community groups were a hub for gaining knowledge about virtually everything- from news about project actions in other places to information about benefits and activities. Groups comprised people seeking to solve similar problems because the main issues here are related to livelihoods, but also to increase local stake in decision-making" (INT-COM/I11)

Comments from the survey of organizational informants (figure 7.1) referred to the accessibility, inclusiveness, and effectiveness of local learning structures, as well as the ability of group leaders to coordinate shared decision-making. Those informants that could not tell how community groups functioned (about 4%), referred to other learning structures that existed before ACM practices (such as secret societies), indicating that local communities had a tradition of collective action and collaborative learning before ACM implementation.
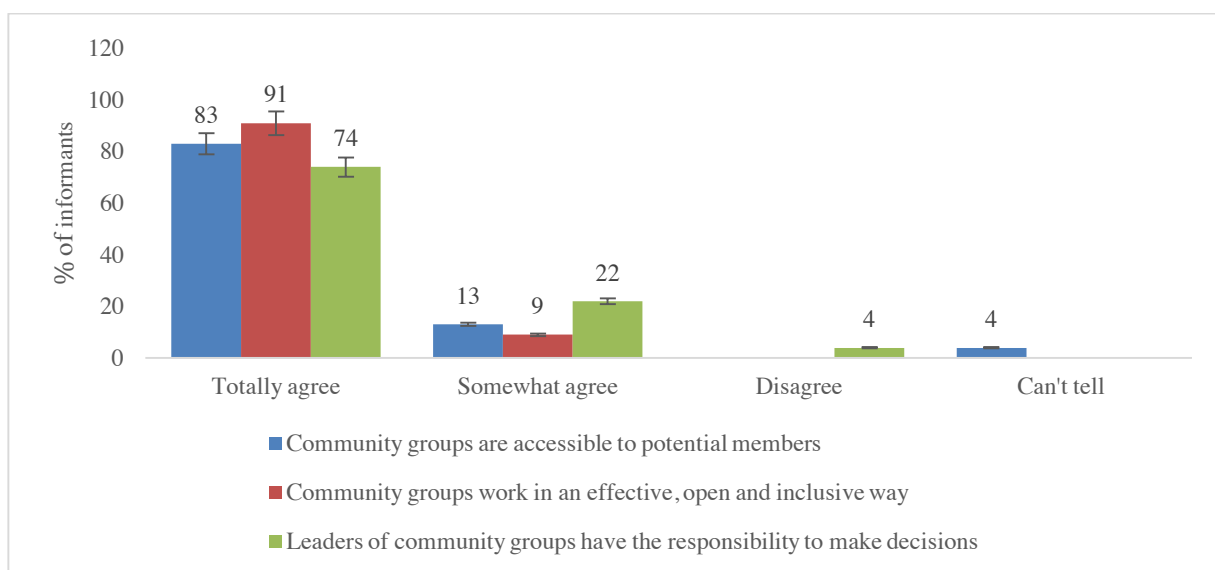
Figure 7.1 Practitioner perceptions of the design of community learning structures (SPSS output)

As noted already, many comments about community learning structures emphasized their openness to all residents with interest to join. Yet, individuals also needed to meet a set membership criteria, including willingness to pay membership dues, support rotational labour processes, belong to a certain gender and own land in some cases. Members that could not contribute in savings clubs, for example, as well as those who could not keep up with the pace of work in labour clubs (such as the chronically sick and handicapped) were mostly excluded. These results match those described in earlier studies (e.g., Pahl-Wostl 2009) that suggest that learning in ACM practices at the local level occurs through open and inclusive structures that easily mobilize people and resources. The results further support the idea of Folke et al. (2009) who suggested that ACM creates learning structures through which new kinds of knowledge, social relationships, and social action may evolve.

> "Some people don't see the need to belong to groups, but when they see how we help our members with their ceremonies, they come running. For some, we still have to talk to them about the benefits and we emphasize that it is always useful to have friends that you can turn to in times of need" (FG1-LHN/P3)

> "Everyone can join. It's voluntary. You don't need to have this or that to be in the group. Because of that, we have a rich diversity of people who have something to say and offer in any situation. When it's a dance, we have members who can organize the process, some who sing, others who cook and many others who can build the fence" (FG1-LHN/P2)

Community learning structures served various purposes, including: 1) giving moral and financial support to households in the community; 2) sharing information and exchanging knowledge about ACM practices (such as providing information to community members soliciting farming advice); and 3) highlighting the roles and benefits of various institutional structures for conservation and local development in the GRNP. These comments show the relationship between why people join community learning groups and the nature of outcomes that may result from various roles and interactions. The results agree with previous findings on the broader purposes for joining community groups described in Schusler (2003).

> "We have members that joined similar groups in other communities. Some were in groups set up by NGOs and the community before the war. For that alone, new members must be motivated to join, because there are members who can give advice on spending the loan money you receive or saving enough produce for the rainy season" (FG1-LHN/P9)

> "The women's group is one big family. We talk about our children, husbands, farms and plans for the new year. We also talk about our financial needs and how to help others. In one case, I got a loan from the community bank because a member had a relative working there. Some women now display their produce at the exhibition in the big towns because someone in the group knows staff at the Agricultural Business Centre (ABC). There's a sense now that problems get really easy when you share them" (FG2-NGM/P10)

> "I joined the labour club because it had young men who had a common interest in stopping the project. The benefits were going to older people in the community and we were being deprived. Although we could not stand up to them in public, we charged them exorbitantly for work on their farms…sometimes we spent a day or two doing what we normally finish in a day. These were deliberate attempts at changing the power base, and pulling some attention to youth in the community…. nothing has however changed" (INT-COM/I8)

7.2.1.1   Issues of leadership in community groups

Leadership as an element of community learning arose in several of the discussions. Initial comments referred to the roles group leaders played in the community, including enhancing access to information on ACM practices such as meetings and livelihood activities. For example, group leaders were helpful in sharing information about planned activities with members of their groups. Many group leaders noted that the task of sharing information and mobilizing people for action is much easier now with the availability of cell phones, though it was difficult to get to and find connection at the usual spot on rainy days.

"Community learning structures were led by people respected by everyone in the community, not necessarily older residents. These are people with a record of accounting to members about funds raised and ensuring information about important activities are quickly and effectively shared with all concerned" (FG2-NGM/P8)

"I was head of one group two years ago. Whenever park authorities or NGOs wanted to meet, I took responsibility for convening everyone. I also followed-up to ensure that promised benefits were delivered, though I was unsuccessful many times. With members in nearby communities, I always took time to visit members' homes to share information. Now, it is much easier with access to cell phones, though we walk to the hilltop to make calls, where we cannot easily go in the rains" (INT-COM/I5)

Considering these roles, many comments suggested that group leaders were potent forces for driving shared action at the local level. Many informants referred to the nature of facilitation and motivational leadership provided in groups, and conscious efforts made to jointly make and implement decisions. These results are consistent with previous studies (e.g., Boal & Schultz 2007) that suggested that in ACM practices at the local level, leaders of community groups play a pivotal role in mobilizing people, knowledge and resources, as well as shaping how members learn and cooperate. The results also support the idea of Senge (2014) who highlighted the role group leaders have in increasing commitment to learning and building capacity for identifying and solving shared problems.

"In my group, the leader is very humble and helpful. He is always around to understand our problems and to give advice on the best solutions. When a member loses a relative elsewhere, we all gather in his house, leave and return at the same time. He ensures that we are always on the same page with things, even sacrificing his time and resources to help others. For me that shows effective and great leadership" (FG2-NGM/P5)

"(To add to what she said), our leaders don't make autonomous decisions. There is always a process of consultation and instruction prior to making decisions. We all sit and look at the collective benefits and disbenefits of a decision or representation, so it's never a one-sided or one-man-rules-all situation" (FG2-NGM/P9)

"There are times when tensions grow among members about some benefit delivered or who to represent the group in an initiative supported by the project. We are blessed to have leaders who go some way to coil down such tension and ensure we are together again. Sometimes the palaver spills over to husbands in other groups who want to defend their wives in our group, but the leaders work to stop the mess from spreading further. The fear is that relatives from nearby communities and the big towns join in when they are told, and we'd be in for a larger conflict" (INT-ORG/I3)

However, some comments referred to the shortcomings of the kind of leadership provided in community groups. There were concerns about the number of members in some groups and the

openness of groups to nearly everyone that found time to participate in group activities. Moreover, there were challenges to retaining new members and failures in bridging the power gap in the communities. Some comments referred to the incapacity of group leaders to deal with negative behaviour, such as members who failed to pay membership dues on time, attend meetings regularly, contribute to labour rotation, and refund loans taken.

> "I left the first group because no one came to see me when I delivered my baby; but the affection was great in the other group. In one case, some members even came to our farm to enquire why I didn't show up for the meeting that week. I felt appreciated and loved" (FG1-LHN/P4)

> "One area where groups have performed badly is connecting members with the project. We still don't have the leverage to relay our sentiments directly. You should go through the village chief, who then consults the section chief, then the paramount chief to raise a concern. That's why it is the paramount chiefs or their delegates that go to meetings with staff from the project. And no one wants a disagreement with the chiefs, especially if don't hold rights to land" (FG1-LHN/P8)

> "Some people take microcredit and leave the village, and never come back. Some take the loans and don't pay back. Some even take from one or two groups and when it's time to contribute for others, they make excuses. That burden of repayment then falls on other members, which sometimes extends the waiting time for disbursing a new loan. Unfortunately, we don't know how to deal with such behaviour; we don't even have the resources to find individuals who run away, or pay for their litigation at the Barri (traditional court). When you take them to the chief, they ask them to work on their farms as a fine, which does not solve our problem" (INT-COM/I14)

Some informants attributed these challenges to the lack of general understanding of internal rules and procedures, and the total lack of guiding rules in some cases. This suggestion agrees with findings in McCay et al. (2014), which showed that effective functionality in community groups is mostly achieved with mechanisms (rules and procedures) that are clear and acceptable to all members. In cases where community groups lack well-defined and enforceable rules and procedures, they may struggle to exercise control over their membership (Cronkleton et al. 2011) and members may elect to act without due consideration for the interests of individual members and the entire group (Tole 2010; Devkota 2010).

> "Leaders in community groups could not exert absolute control because many of these structures lacked well-defined rules and regulations. Actions were taken based on the frameworks available to group leaders like by-laws developed with implementers, but members had a free choice to adhere to these rules or not. Those that adhered did so at no extra reward, while those that flouted rules faced no penalties due to the absence of strong and functional accountability mechanisms at the local level" (INT-COM/I8)

Other informants felt that poor leadership in community groups may have been likely due to the rising local population, leaving groups with more members than they would ordinarily control and cater for. The rise in the local population is corroborated by an earlier study done by Bulte et al. (2013), which reported an increase between 1990 and 2010 by 3.1 percent in Gaura Chiefdom (the location of Lalehun), and 2.7 percent in Tunkia Chiefdom (the location of Nemahungoima). Moreover, the idea that a rising population may have influenced group dynamics and undermined cohesion and control is consistent with previous research (e.g., Bac 1998; Mansuri & Rao 2013), which suggest that fast population increases in resource management areas can diminish incentives to conform to rules set by community groups and other structures to manage equal access to collective resources.

> "One cannot also dismiss the rising population in local communities as a likely cause of poor control and cohesion in community groups. With the incentives provided by these structures, especially the financial credit, and the surge to join them, groups can only cater for the few committed members they have been working with" (INT-COM/I8)

7.2.2   Implementing partners

While community learning took place in community groups, as described in the preceding section, learning targeting policy-makers and implementers was realized through various studies and assessments, also known as policy learning (Newig et al. 2016). Examples include baseline studies, audits, reviews and scientific research. For the purposes of scientific research, all learning products were published in journals and books (e.g., Wotton et al 2009 in the International Journal of Avian Science; Lindsell et al 2011 in Cambridge Journals etc).

> "We undertook baseline studies to understand the local context and design a project that was appropriate to local conditions. Somewhere between 2007 and 2009, we conducted various reviews to track the progress we were making. At the close of the process in 2012, assessments were done to draw lessons for the transition to REDD+" (FG4-ORG/P8)

> "You may have seen some of the learning products we have produced on best practices, lessons learned etc. The goal was to communicate with a wider audience given the importance of learning beyond borders and the value that adds in terms of funding and visibility. The content was mostly published and shared as resource materials with staff" (INT-ORG/I19)

Many comments referred to specific considerations for policy learning in ACM practices, including (figure 7.2): 1) generating baseline data; 2) using knowledge generated to develop the FMPs; 3) ensuring that FMPs include strategies for conservation and development; and 4) communicating knowledge obtained from these processes. Some informants (about 5% of organizational informants surveyed), however, argued that baseline information was not sourced for every stage of ACM implementation, but mostly as a one-off activity. Overall, there was a general recognition of the importance of sharing policy learning results, though the approach to using and sharing such knowledge were questioned (see next two sections).
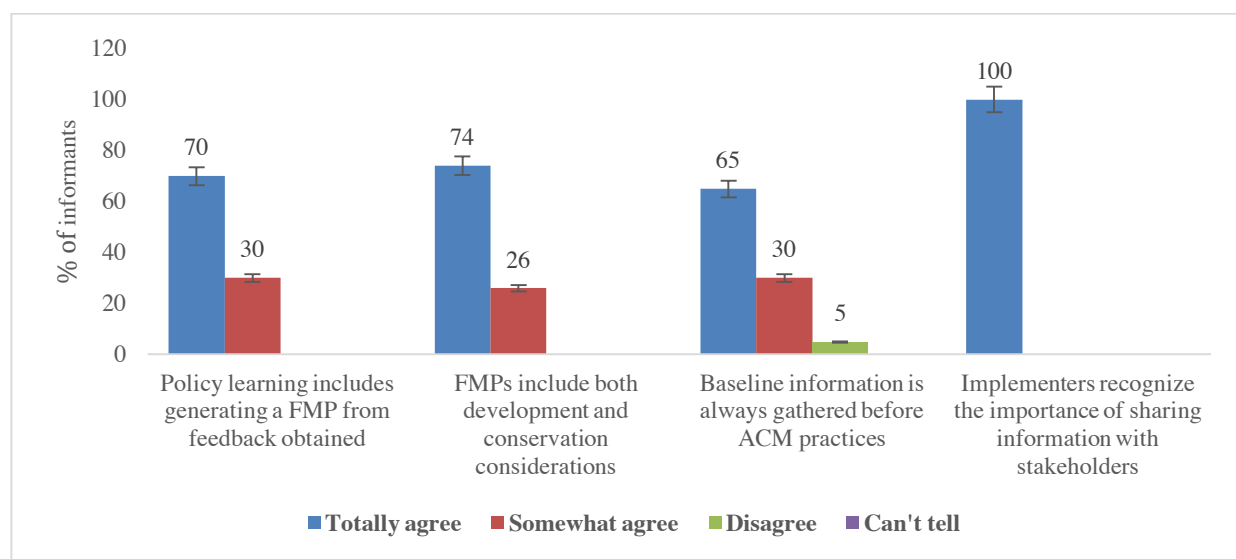
Figure 7.2 Practitioner perceptions of key considerations in policy learning for ACM (SPSS output)

Additional comments referred to methods used to undertake policy learning, including formal and informal procedures. Regarding formal procedures, both committees and consultants were used. A Project Planning Committee (PPC) that comprised the Project Leader from RSPB, the Directors of CSSL and FD, and a Paramount Chief representative, was convened every three months to scrutinize and approve progress reports, work plans and budgets as a way of tracking progress and shaping consequent rounds of decision-making. On the other hand, consultants were hired to support different stages of planning, implementation and evaluation. Consultants

were drawn from local institutions (such as Njala University), overseas institutions (such as

Wageningen University), and independent firms. For example, in 2005, a twelve-member

survey team was led by an internationally-recruited biologist and a national consultant to assess

the local biodiversity, including forest conditions, mammal populations, bird species count,

habitat and vegetation structure etc (Hipkiss 2007 p.8). Other consultants contributed to the

design of management plans and operational procedures, and results-based management, which

informed decision-making and activities undertaken by the project. The finding corroborates

previous research (e.g., Sabel & Zeitlin 2012) who showed that policy learning in ACM

practices can be intentional, following structured processes to generate and share knowledge

(such as the hiring of consultants for the tasks specified above).

> "The Project Planning Committee (PPC) was a useful arm of the ACM process, enabling the
> sharing of perspectives and experiences regarding activities implemented, results produced and
> the best ways forward using human and financial resources available" (FG3-ORG/P2)

> "Consultants enrich conservation practices everywhere- you know that. We used consultants for
> different purposes: collect socio-economic data on local communities, organize trainings and
> workshops, undertake scientific research etc. These processes provided the necessary data for
> developing FMPs and keeping tabs on what mattered at different levels" (INT-ORG/I14)

Concerning informal procedures, many comments referred to the use of forest guards to provide

real-time information on illegal practices (such as farm encroachment, logging etc) in the park.

Learning in this manner is informal because knowledge is generated accidentally without a

specific need to fill a gap in policy knowledge. The finding agrees with Bennett and Howlett

(1992) who showed that policy learning in ACM practices can also be accidental.

> "Some of the most useful information on illegal practices throughout the park emerged from
> regular patrols organized by Forest Guards. They go out in search of defaulters but take note of
> all other incidents that may undermine conservation activities, including new grievances,
> potential conflicts, feedback on livelihood activities etc" (FG4-ORG/P8)

> "We collected all kinds of information on community activities in the park. While our duties
> were limited to forest protection, we took the chance to understand how residents were faring
> and what concerns were developing. While being accused of being spies for the programme, the
> information we obtained was useful in stemming local resistance and conflicts before they were
> fully conceived. It was risky, however, but, we lived through it" (INT-COM/I4)

7.2.2.1   Utility of knowledge generated

Perceptions of the utility of knowledge generated through policy learning in ACM emerged in several of the findings. The survey results (figure 7.3), for example, show that policy learning served three primary purposes, including to: 1) provide a clear picture of the range and levels of participation that already existed (74 percent totally agree); 2) provide a clear picture of the different stakeholders that needed to participate in ACM practices (65 percent totally agree); and 3) enhance knowledge of the barriers to participation and learning as well as knowledge of possible solutions (70 percent totally agree). Some informants (those that "somewhat agreed" to the statements put to them) were unsure about whether these goals were achieved, claiming, for example, that while policy learning helped a better understanding of local problems, it did not necessarily lead to fair, equitable and lasting solutions, as described in the next section.
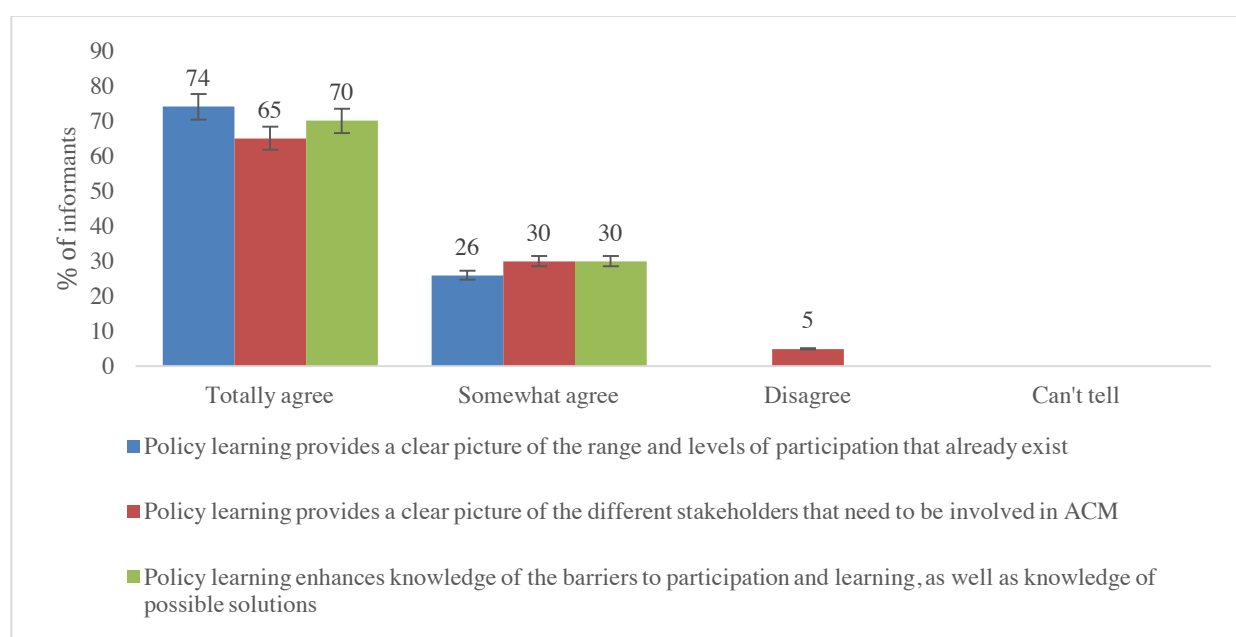
Figure 7.3 Practitioner perceptions of the utility of policy learning results (SPSS output)

Overall, comments regarding the utility of knowledge generated through policy learning activities referred to the understanding they provided of the local context. These comments

referred to the usefulness of such knowledge to decision-making and programme implementation, which are in accord with previous research (e.g., Carlson & Berkes 2005; Biggs et al 2011) indicating that policy learning in ACM may involve harnessing information and knowledge from the local context to set new goals and make informed management decisions (Carlsson & Berkes 2005; Biggs et al. 2011).

> "When you have capable staff and institutions, it is easier to generate and share quality information with stakeholders. It also makes identifying problems and potential solutions easier than when the technical resources are limited. The support of our partners in this area and the leadership of policy institutions is remarkable. The trainings and capacity building have prepared us better for the challenges in the field…yet, sustaining these capacity gains is the major issue for us involved in policy-making" (INT-ORG/I16)

> "We used project selection and monitoring to our advantage because it got us most of the information we needed about participating communities. It made us more familiar with the various structures, processes and issues for participation in these communities…even potential threats and opportunities. It prepared us for action at all levels, though we realized later that information supplied by local informants were mostly either understated to avoid reproach from chiefs, or overstated to receive more development benefits" (INT-ORG/I20)

Nonetheless, there were assertions that RSPB made greater use of policy learning outcomes because of its control over the decision-making space. Some comments referred to the use of policy learning resources by RSPB to enrich its knowledge of the local context and maintain a leverage in decision-making. Others felt, therefore, that policy learning did not bridge the capacity (knowledge) gap between RSPB, GoSL and CSSL, because "new knowledge" was utilized in ways that could not shift the "capacity base" to national and subnational actors. The implication is that policy learning in ACM practices may not emerge in view of diverse needs, perceptions and expectations, or in a context of mutual respect and recognition. This view matches those of Yu et al. (2016) who argue that policy learning resources may be used by experts to achieve dominance by seeking conformance to certain ideas and strategies.

> "There's no project in this country that does not allocate a budget to consultants and experts who come from overseas. It's even more displeasing that these are mostly jobs that a local expert can do. But when you get funding for a certain activity, the donor insists on bringing experts from their region, when most don't add any value. And this is weakening our institutions because they rarely get the opportunity to show what they can do. Still, jobs like extensive biodiversity surveys and some climate assessments cannot be done locally; not that we don't have good people, but we don't have advanced research equipment and labs" (INT-ORG/I14)

> "You cannot depend so much on experts and tell me you can independently design and deliver

conservation programmes. This is the problem we have in this country…we sit in meetings with so-called experts who come here to instruct us because they know we lack basic understanding of the issues we should be addressing. You cannot engage an expert from that position…always expecting support and not objecting any of their ideas at some point" (INT-ORG/I11)

7.2.2.2   Issues of ownership, trust & adaptive management

Many comments also referred to the implications of the way policy learning results were used for ownership, institutional trust and adaptive management. Starting with ownership and trust, some informants from FD and CSSL shared the point that RSPB did not recognize them as co-owners and co-directors of the ACM programme, because policy learning results were not always shared, and opportunities for shared decision-making were limited. The implication is that because FD and CSSL did not always benefit from policy knowledge through RSPB-led activities, their understanding of local problems was significantly affected. At the same time, the lack of useful information on the local context affected both their capacity to join in developing and operationalizing solutions and their sense of empowerment and ownership. This is an important finding because trust and respect among implementers of ACM practices are important determinants of success at the landscape level (see McConney et al. 2003). The results are consistent with previous studies (e.g., Pomeroy et al. 2001; Berkes 2010; Monroe et al. 2013) which suggested that an effective relationship that emerges from policy learning in ACM practices is both relevant to gaining a better understanding of the problems being solved and giving stakeholders a greater sense of confidence and empowerment.

> "When you get information from your monitoring activities (referring to a project consultant in the focus group) do you share them with us…. you don't. That's the leverage you have over us, and that's why we depend on experts to develop projects and mobilize funding because lack both the capacity and information to do so. When an expert designs a project, he increases the overhead expense, so he comes back often for the travel benefits…they make sure capacity development is cursorily supported, so we cannot be at the same level to make decisions because they say we lack the technical know-how to do this and that" (FG4-ORG/P9)

Responding, some organizational informants reported that implementers collaborated in every phase of the ACM effort to share policy learning results (43% totally agree), claiming that

RSPB saw benefits in cooperating with FD and CSSL to manage policy learning results (70% totally agree). However, majority of the informants (that indicated "somewhat agreed" to the statements put to them) were unsure about the extent to which implementers cooperated, considering the enduring role and leadership of RSPB throughout the ACM process. Those that "disagreed" referred to limited cooperation among implementers in the use of policy learning results. Furthermore, the results show that whereas policy learning results may have been shared with key stakeholders, RSPB often vetted such information before sharing. The implication is that RSPB shared certain kinds of information with stakeholders and restricted access to other resources, such as expense information and negative feedback from the field.
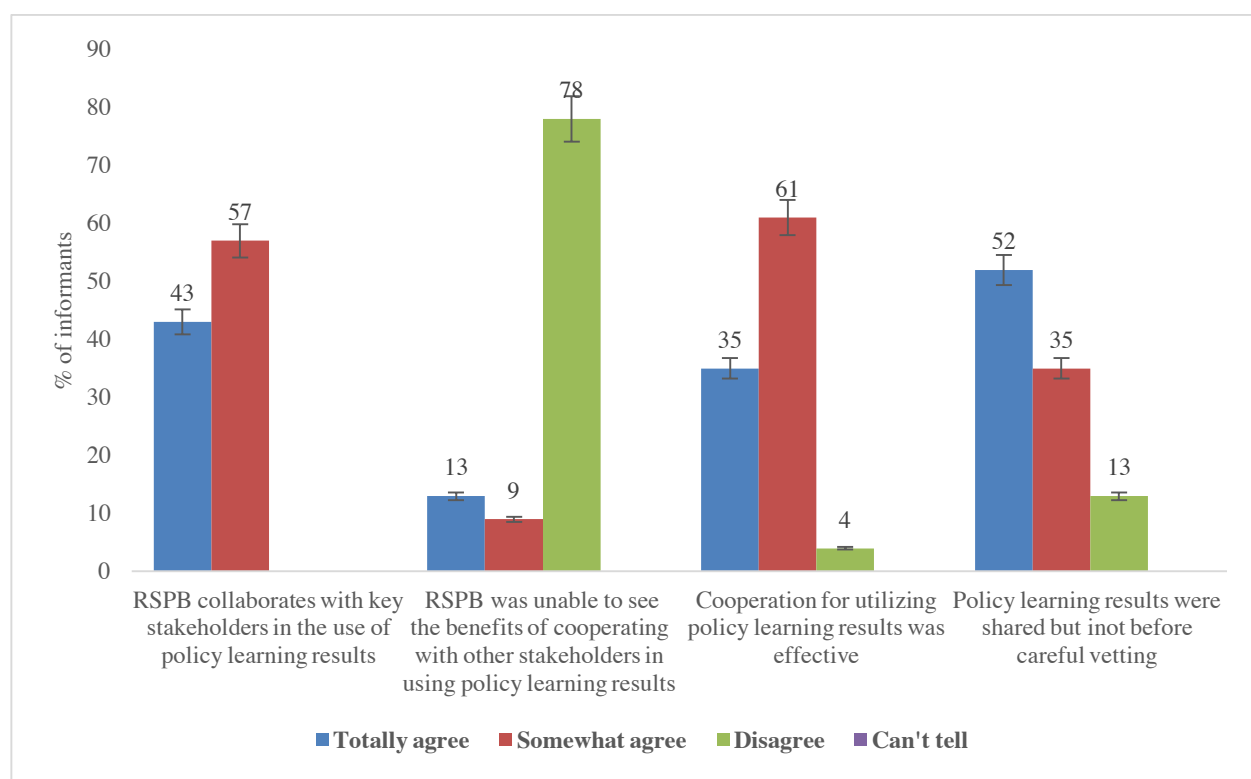
Figure 7.4 Practitioner perceptions of the nature of cooperation in policy learning practices (SPSS output)

Following from these results was the issue of ownership at the local level. Many comments referred to the lack of shared understanding and action in local communities because local participants were mostly excluded from policy learning activities. Some informants suggested

that rather than periodically going into local communities to obtain information, a continuing process of involving residents in monitoring, evaluating and communicating impacts would have been more suitable. The argument was that because policy learning processes did not involve local participants, many of the problems that ACM was designed to solve remained unsolved. This result further supports the idea that local communities should be free to choose the direction of participatory governance practices, including the use of information obtained by policy stakeholders, because they are more severely affected by the management decisions and actions that result from such efforts (Watts 2008).

> "All I can say is that monitoring was done by consultants hired by the project. They came here in the usual project vehicles and went around to talk to few people. Sometimes they only spoke with the chief before going into the forest for more research. I cannot even say what the purpose of these visits were or what results were achieved" (FG1-LHN/P6)

> "The information they obtained through assessments were not sourced in a participatory manner. It was often selective, involving few people, mostly those ready to say positive things about the project and the implementers. As such, some of the real concerns remained hidden, diverting resulting actions from the problems they should seek to solve" (FG2-NGM/P4)

Turning now to concerns about adaptive management, specifically the incorporation of policy learning results into ACM decision-making, majority of the organizational informants surveyed indicated that policy learning results were not always incorporated (74%), and "new knowledge" did not significantly change decisions regarding community development benefits (65%). Other comments included that policy learning results were not incorporated because no clear and purposeful modifications resulted in the governance structure, or in the way local strategies were operationalized (48% agree). For example, despite persistent requests by local communities to include compensation for wildlife-induced damage[9] in the benefit-sharing agreement, which was a serious issue in the park, it was not included in both phases of the ACM process even though assessments highlighted the issue many occasions.

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[9] Brown and Crawford (2012) recognize wildlife-induced damage as a serious concern in forest communities across Sierra Leone, and highlight that no conscious efforts have been made to provide a fair, equitable and lasting solution to the problem (including offering compensation to affected communities or considering strategies to curb human-wildlife conflicts).
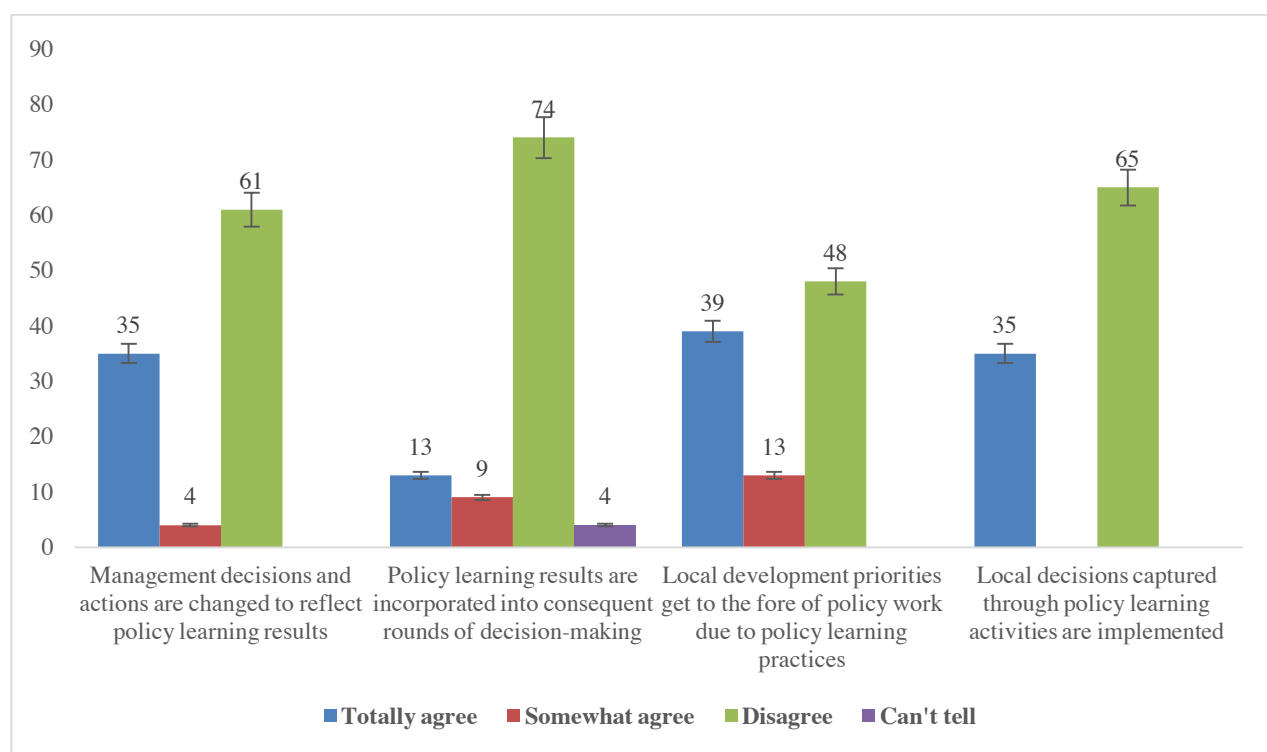
Figure 7.5 Practitioner perceptions of adaptive management in ACM practices (SPSS output)

Additional examples of poor adaptive management can be drawn from comments suggesting that no conscious efforts were made to address local concerns about weak downward accountability and risks of retaining local leaders as representatives of communities that participated in ACM practices. The implication, generally, is that although policy learning leads to acquiring new knowledge and information about the issues that ACM may be designed to address, policy stakeholders may deliberately (or otherwise) fail to utilize such resources to adequately adapt governance structures and procedures.

> "If you want local groups to show interest in a process and contribute to the effectiveness of management decisions, I think a good way to begin is to build reliable bridges between community members and their leaders, and then these communities and the project. Now, these essential bridges either don't exist or have collapsed through many years of inflating local expectations without meeting them because we have always sought to keep a policy vision" (INT-ORG/I4)

> "I cannot support anything that the chief supports. I am fully convinced that he only seeks personal gain in this process. So, continuing to use chiefs to represent us and disseminate important information about the project or collect feedback jeopardizes the engagement that is needed for that to happen. Not many of us here believe in these chiefs anymore" (INT-COM/I9)

However, some organizational informants responded to the preceding claims by highlighting examples of interventions that resulted from the incorporation of policy learning results into decision-making. These include increased opportunities for employment and increased incentives for livelihood support (such as plantain multiplication and bee keeping) and collaborative learning (such as farmer field schools). Some of the key decisions taken in response to policy learning results can be found in Hipkiss (2007 p.12). Nonetheless, there was a general recognition that significant challenges remain because of the shortage of funds and suitably qualified and experienced staff to take greater ownership of implementation activities. Specific comments referred to the necessity to improve institutional capacity to generate data to demonstrate ACM performance in the field. This finding is important because it underscores the difficulty in operationalizing ACM principles in resource and capacity-challenged resource management contexts. It further supports the idea that funding and capacity are critical to gathering and understanding policy learning resources, and to the effectiveness of ACM structures and practices (Poulsen & Luanglath 2005).

> "Where will the money come from to involve community participants in every monitoring and evaluation activity? No project can do that. We are, however, using the meagre resources available to us to invite as much participation as possible" (FG3-ORG/P7)

> "You get quality feedback when community participants are committed to the process. These people know that if they stick with the structures we set up, they can be sure of receiving all the information and resources they need. That's the secret some community members have understood. We are limiting the project to these boundaries (structures and processes developed by the project) because the funding is targeted and our staff are overstretched" (INT-ORG/I21)

7.3   Learning goals

All informants were asked about reasons for learning in ACM practices and comments referred to the same reasons for participation, as described in section 6.4 in chapter 6. The reasons put forward for learning include to: 1) protect scarce community resources; 2) maximize available resources; 3) diversify community benefits; and 4) increase capacity to influence management decisions. The correspondence between goals for participation and learning is not surprising,

as experience from ACM implementation in various contexts (e.g., Berkes 2004; Folke et al.

2005) show that learning drives conditions necessary for participation to occur, such as shared

understanding and relationships (Schusler 2003; Plummer & FitzGibbon 2007). The idea that

participation and learning are interrelated actions that shape ACM practices is reflected in the

following comments:

> "The whole programme was designed to enhance greater local awareness about conservation and conservation outcomes. We subscribe to the belief that education comes before engagement…you cannot have people actively participating in processes they are not sure about. They are more active when they know who is involved, why, why their involvement is necessary, where it takes them and the community and what other alternatives exist to their participation. That way, you build a consensus around the process and help participants make sense of benefits and costs" (FG3-ORG/P4)

> "The repeated meetings and training workshops have been the foundation of the programme, especially in terms of resolving conflicts and preventing new ones from developing. The communities are hungry for information about benefits and the stake they can possibly have by participating, so we are always out talking to them about why this process addresses their long-term needs and those of the government. We could not have reached shared understanding and action without activities for sharing information and knowledge exchange" (INT-ORG/I14)

Regarding the preservation of scarce community resources, many comments referred to the

relevance of learning to moving farming away from upland areas where grass and fodder were

collected for both construction and livestock. Other comments referred to the usefulness of

community groups to supporting community-wide efforts that seek to solve mutual challenges,

particularly problems relating to the depletion of scarce resources (such as construction

materials, food materials, sacred forests etc). The results confirm previous research (e.g.,

Armitage et al. 2008) which suggested that learning in ACM may be a response to social-

ecological change fuelled by resource depletion and livelihood disruption.

> "Before Green Africa started work here, very few people cultivated Inland Valley Swamps. We always thought it was difficult to cultivate and the yield is always small. Post-farm demonstrations, we have seen the benefits in working in these areas" (FG2-NGM/P3).

> "Not only does IVS cultivation provide higher yields or make work easier and safer, it has taken attention away from the steep slopes, which is good because in few years, there will be enough trees to harvest for building new homes, bush meat, and less impacts on water availability. We appreciate Green Africa for introducing us to this farming technique" (FG2-NGM/P8)

> "Community groups gave us the feeling that we have the knowledge to protect scarce resources. Yes, there may not have been adequate direct and tangible benefits delivered through ACM

practices, but we some level of understanding of what to protect and how was achieved. That is why I supported the process and even my resources to mobilize others" (FG1-LHN/P7)

Concerning the need to maximize available resources, many comments referred to the relevance of information shared through radio discussion programmes to the increasing interest in Inland Valley Swamp (IVS) cultivation. IVS cultivation was a major activity in Farmer Field Schools (FFS) that aimed to improve farm productivity (agricultural income) and protect the forest by reducing slash and burn. Other comments referred to the choice to join community groups to increase knowledge about the park and local biodiversity. Such information was useful for effectively guiding tourists and marketing local handicraft to visitors. These results are in keeping with Armitage et al. (2008) who suggested that learning in ACM may occur for instrumental reasons, specifically, to seek opportunities for livelihood improvement, or invest in practices that can prove economically beneficial to households and the wider community.

> "We receive signals from SLBC 93.5 in Kenema. Not just the project discusses climate change on radio, many NGOs and government agencies are doing mass sensitization. What I have gathered is that farming on steep slopes increases the risks of soil erosion and flooding, which they say will negatively affect our crops and inundate the rivers and lakes we use for drinking and other domestic purposes" (INT-COM/I12)

> "The talk shows have resulted in a change in people's affinity to slash and burn. However, the difficulty we have in leaving the upland areas is land availability; there are fewer swamps for IVS cultivation, and some might not be suitable for producing surplus grain that we can sell and address our needs. The techniques we have learnt on the demonstration plots show us that we can farm and produce better yields on much smaller pieces of land, which is good for us and the forests that lie at the centre of our engagement" (INT-COM/I10)

> "There was this tourist or researcher from Holland, I don't know…who asked whether I knew about the history of the village and the conservation project. I neither knew about my village, nor did I know how the project started. He, however, decided to take me along throughout his tour because I knew the route very well. All the time, he talked to me about the beautiful birds and mammals in the forest and why the project was doing well by protecting them. For a long time, I felt guilty that a white man knew much more about my forest than I did. I also wondered that maybe, I could use these tours to market my handicraft and share my problems, and that my first task in making them listen to me would be to increase my knowledge about conservation, the project and the history of the village" (INT-COM/I4)

In terms of the diversification of community benefits, some informants noted that by joining community groups, individuals were exposed to a range of benefits including economic, social, and personal incentives. Economic benefits (such as food availability and improved income)

and social benefits (such as recognition for sharing farming ideas and inputs with other farmers

that solicited such advice) resulted from the acquisition of new skills and knowledge.

Informants clarified that individuals were mostly interested in skills and knowledge that were

absent before the project (such as poultry farming, fish farming etc). These results show that

participants in ACM practices typically use learning (new skills and knowledge) to diversify

local benefits, specifically, to broaden access to economic, social and personal incentives.

> "As a member of the Farm Management Association (FMA) that Green Africa established, I helped coordinate people and benefits, particularly loans from the savings scheme. I also supervised the IVS facility and other activities, so people always came to me to solicit advice about crop varieties, times for selling produce and even contacts of cacao business men in Kenema. I knew people depended on me to make important decisions that affected their wellbeing, and I knew that by being in my group, they had access to knowledge that isn't readily available in the community. This was how many people benefited from farm demonstration activities; they ask questions and try what they learn on their farms. They take loans and invest in other things. The benefits were diverse and timely, and I am sure this intervention alone changed our opinions about the project and what Gola stands for" (INT-COM/I16)

About influencing management practices, many comments referred to the relevance of learning

in ACM practices to the growing interest in checks and balances at the local level. New

knowledge acquired through learning activities was essential to understanding important rules,

roles and rights, as well as ways to lobby for inputs, implements and financial support. Other

comments referred to the acquisition of skills for increased cooperation and representation at

the group level through learning in training workshops. These results show that learning can

provide a platform for engaging more influential stakeholders broadly, as well as opportunities

to influence the direction of management decisions and actions, which is consistent with the

ideas of Plummer (2007) and Plummer & FitzGibbon (2006).

> "You don't know the secrets of a society from outside. You must join, show interest in what they do and learn. I joined several groups in the village and nearby communities to learn about the project and learn from others' experiences. I must say that I have met many people and my views about the project have changed. I think I am in a better position now to challenge park authorities because I know what this is all about and how it will affect the community" (FG2-NGM/P4)

> "Having the chief or headman in the group means so much. People came to such groups believing that it would be a prime target for the project because park authorities always want to

work with village leaders. Others thought it offered a way to be close to power, so you get exempted for things that are normally punishable" (FG2-NGM/P4)

"When authorities from the park visit, we only listen. At times, I wonder if what he (project head) means is exactly what the interpreter says. There is always a barrier- language, culture, fear. But in the groups, we know one another and we feel free to talk about our problems. It's satisfying to know you can raise concerns about the project in public, and that there are many others who share your views…but nothing said leaves the room…our problems persists, nonetheless (chuckles)" (FG1-LHN/P3)

7.4   Mechanisms to support learning

Different mechanisms were used to support learning in ACM practices. Direct mechanisms included community meetings, training workshops and farm demonstrations (or Farmer Field Schools). Indirect mechanisms did not require face-to-face interactions with participants at the different levels of practice, so they comprised public media tools such as radio discussion programmes, bill boards, newsletters, brochures, flyers, theatre (drama), road shows etc.

7.4.1   Direct learning mechanisms

For community meetings, there were both large meetings involving whole communities, and small meetings targeting chiefs and other local leaders. Meetings were also organized by forest guards and other staff to communicate the purpose of the project, and conservation benefits generally (Hipkiss & de Marco 2005). A prominent case is a set of meetings that followed the development of the first FMP, which took place between 2002 and 2005 to explain project objectives and discuss the provisions in the community benefits and payments agreement. A partners meeting was convened in October 2006, followed closely by meetings with forest management committees in November 2006. The new plan was then presented to local leaders and residents in a series of community meetings (Hipkiss 2007 p.5).

"We engage beneficiaries directly at meetings to share our ideas for the steps we take and get their views on the best way forward. It's mutual learning because we tell them what works from a technical perspective and they tell us why some of our ideas cannot survive the heat of local traditions and ideals" (INT-ORG/I19)

"Meetings are an expensive, but effective way of sharing messages from the project and

collecting feedback from everybody who has interest in this process" (INT-ORG/I21)

Although a minority mentioned that community meetings were open and inclusive, all agreed that they were not spacious enough for minority voices (such as women) to be heard. Many informants felt that meetings were inadequate or inaccessible because documents (and other materials that were the object of meetings) did not receive fair local input. These results match those observed in chapter 6, which suggested that women were restricted from raising concerns at public meetings, especially in the presence of their husbands and local leaders. It shows that gender is a barrier to effective learning in practice, as was shown to be the case for participation in section 6.4.2 in the previous empirical chapter.

> "Yes, they organize meetings to explain the project to us, but it is the men that speak most of the time" (FG1-LHN/P5).

> "Islam teaches total submission to one's husband. You don't raise your voice in public, not even when something directly affects you. Our customs and religious practices limit our participation in many ways, but no one will ever do something about it" (INT-COM/I23)

> "Meetings were held to discuss the project, but the issues for which participants met were only communicated when everyone gathered, not before. Besides, we were not informed about the different considerations for the project for us to make some input, it was to raise awareness about what to expect from the process" (INT-COM/I3)

Regarding training workshops, activities were undertaken to support a wide range of activities such as beekeeping and soil conservation, which aimed at helping local people understand new strategies for increasing food production and income without increasing pressure on the forest. Trainings were also applied to research activities undertaken by the project. One such training effort involved the recruitment of 7 residents into a biodiversity survey team, which received training on the use of clinometers, rangefinders, binoculars, and Geographic Positioning Systems (GPS). These skills were applied to recording data on various species such as large mammals, birds, plants etc, and to making detailed financial overviews of field expenses. Another noteworthy training effort supported by the programme was an in-service course for national partners (such as Forestry Division) and local staff (such as forest guards) in basic

ACM principles, forest monitoring, and environmental communications (Hipkiss 2007 p.7).

Overall, trainings were useful for building and strengthening stakeholder capacity, so that ACM

practices were not dependent on the expertise of one actor or institution.

> "We invite leaders in community groups to workshops and train them on facilitation, conflict resolution and many things. We follow-up with their membership to evaluate how such training impacts their performance, especially their control in the groups" (INT-ORG/I19).

> "We have also developed the capacity of local NGOs that, in turn, build the capacity of group leaders on things as petty as bookkeeping, social care and time management" (FG4-ORG/P6).

> "We are not just focused on forest conservation…we also invest a lot in human capacity development, because we know skills formation is one effective way to reduce local dependence on forest resources" (FG3-ORG/P9)

Negative comments referred to drawbacks relating to the use of training workshops to support

learning in ACM practices. The first concern related to the strong focus on group leaders, which

many believed was responsible for limited participation in decision-making because the wider

community lacked the needed skills and knowledge to engage at such a level. Moreover, there

were assertions that training activities were all prearranged, with the pattern, timing and

intensity (frequency) determined by implementers. Furthermore, it was suggested that training

modules were not tailored considering type of learners, their capacity, and appropriate levels of

engagement, rather, they were structured to reinforce activities that sought to increase local

support for conservation actions. These results confirm points made earlier in chapter 6, which

include that ACM practices are coordinated by actors that are far removed from target

communities themselves (Chuenpagdee & Jentoft 2007).

> "Workshops were mostly organized in the large villages. Once there, we don't even get to decide what or when we eat, nor do we have a say in what we learn. They have everything prepared beforehand...attendance sheets; learning materials; when we introduce ourselves; when we break out into discussion groups; and ask questions. They rush us through the question and answer session to avoid embarrassing questions. Some of us only went to workshops for the food and cash they give…because you don't learn anything that's helpful for making a living" (INT-COM/I13)

> "For the workshops, they ask the town chief to suggest representatives from the community. That is all. Attendance then becomes mandatory because you don't want to disobey the chief. The only good thing is that the organizers inform us very early, but after the workshop we come back empty. We don't even understand the terms they use to describe certain things. If they are serious about knowing how much we learn at workshops, they should ask others if we tell them

> anything about the information they share. You can't share what you don't have. If the workshops were effective, we would not be talking about logging and mining now. The implementers organize these things for the cash returns they get from preparing materials and catering for food" (INT-COM/I18)

> "People attend these workshops for the training they receive. Some only attend for the cash benefits. But even that, we record their attendance as participation because it counts toward our periodic assessments. These activities are costly to organize. Meetings are much easier to do and we hold them more frequently, but workshops are more formal and targetted. So, we expect that coming to a training workshop indicates interest, and shows support for the things we do and the ideas we have shared for a long time" (INT-ORG/I19).

Concerning farm demonstrations, sites were maintained for the demonstration of new crops and techniques, and the propagation of farming resources (seed inputs, implements etc). A good example is the pilot implemented by Green Africa (GA) in 8 Gola South communities: Jagboima, Nemahungoima, Semabu, Bogorma and Bikoma in Tunkia Chiefdom, Kenema District; and Bayama, Nyeyama and Pewa in Makpele Chiefdom, Pujehun District. The pilot undertook different activities, including poultry farming, fish farming, Inland Valley Swamp (IVS) development and cultivation, and fruit tree nursery enterprises. Poultry units and fish farms (for Tilapia and Catfish) were set up in various communities and perennial swamps were identified and fully developed with bunds and irrigation canals. Inputs of improved rice varieties (Nerica mainly) and tools were provided, while organic manure from poultry units was used to complement fertilizer procured as part of required inputs. Harvests from the IVS initiative were partly used to develop a gene (seed or grain) bank, while surplus production was sold and invested in various conservation activities (such as fruit tree nurseries), and to finance a savings scheme for the Farm Management Associations (FMA) Participation in these processes was a major requirement for claiming learning benefits.

> "You don't benefit from a demonstration farm without direct engagement. That is why it is called demonstration, because learning must be experiential. It is a useful technique for mobilizing local communities and increasing their interest in actions typically leading to forest conservation (FG3-ORG/P8).

> "At a typical Farmer Field School, participants experience learning that changes their livelihoods and perceptions about conservation. They gain first-hand information about turning their lives around through conservation-based initiatives, so they are given a choice between supporting the project to continue benefiting from farm demonstrations, or otherwise and lose important benefits" (FG4-ORG/P10)

Many comments referred to the general implications of learning through farm demonstrations.

For example, it was reported that farm demonstrations strengthened the collective management

abilities of individuals by making important resources accessible (such as information on crop

varieties, market prices, and pre- and post-harvest techniques). Comments generally referred to

knowledge acquired for undertaking innovative and sustainable farming and conservation

practices. The results are in accord with Davis et al. (2012) who showed that FFS are useful

instruments through which farmers gain the knowledge they need to form new skills and build

capital. Moreover, the findings are consistent with Plummer and Armitage (2007) who suggest

that ACM practices typically seek to create effective platforms for social interaction, which, in

turn, improve learning capacity, develop a shared understanding, and cultivate a motivation for

collective action.

> "I came to the Farmer Field School ready to learn because I had seen the impact on other people.
> On the demonstration farm, they tell you to practice a range of farming methods and work with
> others in the process. The good thing about this was that I had the chance to acquire new skills
> for expanding my own farm, but also found the chance to meet and work together with others,
> which is an effective way to build rapport and settle pre-existing disputes' (FG1-NGM/P8)

> "We only used foul dropping for backyard gardening before the project. Now we know we can
> use it to produce organic manure for both rice cultivation and our tree nurseries. We are using
> one skill to solve many problems, which only reduces our reliance upon the forest" (INT-
> COM/I2)

> "I was not part of the poultry farming project, because I was away for a while. Upon my return,
> I was told about the scheme in Pewa and how eggs and income were distributed among
> participants. It is not these incentives that attracted to the activities here in Nemahungoima, it is
> the ownership that the initiatives accord us. We see it as a process that depends entirely on our
> commitment to thrive, so we give it our very best" (FG2-NGM/P4)

Negative perspectives related primarily to limitations to applying new knowledge to individual

farms because some learning activities (such as poultry faming) were costly to establish and

maintain. Women were constrained from effectively utilizing new skills and knowledge

because they lacked access to land, as well as a say in the kind of crops that were cultivated by

their households. There were also assertions that farm demonstrations introduced new methods

of farming that diminished the usefulness of traditional ideas and tools (such as the use of

NERICA rather than local varieties of rice). At the same time, there were concerns that using

agriculture to promote conservation reduced the communities to agrarian status because it

increased dependence on agricultural income and reduced the value individuals saw in other

ways of making a living while supporting forest conservation.

> "You go the demonstration farm every week and all you get is lessons on how to plant this crop and that, which are mostly known already. You spend the day working on a public farm and come back home empty-handed. At one point, we requested help with cooking ingredients, but they (the project) welcomed providing food for work, which only kept us on these plots. Imagine you have a family of 6 and don't get to share the food with other members of your household…I have come home many times to a bunch of miserable faces, so I cannot continue to rely upon one source of livelihood and income, I have too many mouths to feed" (FG2-NGM/P3)

> "Everyone seems interested in the NERICA rice variety they are supplying because it takes 3-6 months to harvest. Yet, I cannot grow it on my farm because I am not used to it and eating it does no good to my stomach (laughs)…it is not a traditional variety. If you go to the market in Joru now, you will find more of the new rice variety on sale. We are fast losing everything we have worked so hard to develop and keep through generations. But I don't blame our youth, it might be that I am too old to adopt a new way of doing things" (INT-COM/I5)

> "You really learn good things in these groups, but you cannot apply them because you don't own land…and your husband does not even listen to your ideas about trying something new. Much of what we learn are applied to backyard gardens in the village. There, you have sheep and chicken that eat up everything, so it's a waste of time and money" (FG1-LHN/P6)

7.4.2   Indirect learning mechanisms

As a complement to the direct mechanisms described in the preceding section, various indirect

mechanisms were employed to support learning in ACM practices. The approaches are indirect,

because participants were not physically engaged in learning sessions. Additionally, indirect

learning mechanisms targeted a much wider audience, covering issues that interested audiences

within and outside the GRNP. Overall, learning occurred through materials distributed using

various media outreach tools such as community roadshows, discussion programmes, notice

boards, bill boards, and newsletters. Community roadshows disseminated information on the

project and its benefits in the local language (Mende) using video, picture presentations, drama,

and jingles. Discussion programmes were aired on local radio stations (such as SLBC 93.5FM

and Eastern Radio 103.5FM in Kenema) to raise awareness about project activities, including

announcements of meetings and job vacancies. Project calendars, brochures, and regular newsletters were distributed, while newspaper articles were frequently published in the national press and periodically in the international press. The project was also promoted at various national workshops and fora, such as the STEWARD forum[10], and in international magazines such as World Birdwatch and RSPB Birds (Hipkiss & de Marco 2005; Hipkiss 2007 p.5).

> "Communication and media outreach is a very important part of our work in the park. Using various tools…radio, roadshows, tourism leaflets, newspapers etc…we have communicated both within and beyond the scope of the programme" (FG4-PRAC/P9).

> "Using newsletters, roundtables…we have built strong partnerships and attracted interest from potential funders. But outreach using various media tools is a costly endeavour, as not everyone has access to the materials we produce, and not everyone has the required skill to put out appropriate messages about the project and our work as an organization" (INT-ORG/I17)

> "The radio programmes are mainly done in Mende, which is the most widely spoken local language here. The road shows too. Where we need an expert to explain few things, like for film screenings and road shows, we always find interpreters that are locally-based. The good thing is the ability to reach out to those most affected by the conservation programme" (INT-ORG/I21)

7.5   Barriers to learning

Although ACM practices made important progress in some respects, many barriers to learning were evident. These challenges were embedded in a set of contextual and institutional conditions. Contextual barriers included costs related to involvement in community groups; gender; and leadership in community groups. Institutional barriers included an insensitivity to local conditions; poor communication and coordination; and the capacity building approach. Together, the next two sections describe the barriers to learning in ACM practices, and the implications for the effectiveness of the broader governance process.

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[10] STEWARD (Sustainable and Thriving Environments for West African Regional Development) was a USAID-funded and US Forest Service-led project implemented in all four countries of the Mano River Union (Sierra Leone, Guinea, Liberia, Ivory Coast) and Ghana. It supported policy harmonization relating to transboundary biodiversity conservation and climate governance, and was one of few organizations to provide a grant to the Gola Forest Programme in the second phase of its collaborative forest management project. Regular (weekly) forum events were organized at Forestry Offices and universities in the five countries, as well as in local communities near priority transboundary zones (such as Mount Nimba between Liberia and Guinea).

7.5.1   Contextual barriers to learning

The first barrier to learning was the cost of joining community-based groups. Some informants felt that joining groups like the savings association and few labour clubs required regular cash contributions that they could not afford. This implied losing out on important benefits (such as microcredit) for poor households, and exclusion from learning activities that required active involvement. This finding matches those observed in earlier studies (e.g., Olson 1971), which argued that costs involved in joining community groups may easily discourage individuals from any active engagement, which then creates a vacuum that external actors may fill, and thus, block shared management practices from progressing.

> "In the first Osusu (savings group), we used to contribute SLL 2,000 every week, and SLL100,000 at the end of the farming season, which we give to one member at a certain time. You had to pay your contribution even if the yields were poor, and your husband could not help with the costs…If you don't pay, you won't get loaned from the revolving fund…it was as simple as that" (FG2-NGM/P8)

> "If my wife recommends a group to me, I know it's affordable because she thinks about the future of our children. We don't own large quantities of land that we can lease to generate extra income for these additional costs, so she won't invite me to a group that always asks for cash contributions. Not that I don't like being in the groups, but I can't meet their demands" (FG2-NGM/P6)

In addition to membership fees, there were assertions that belonging to a certain secret society[11] was required to claim certain learning benefits. One individual suggested that secret societies were the primary traditional learning institution in the community, and membership was mandatory for all locally-born villagers. Thus, opting not to join these institutions (like in the case of children of resident religious leaders who may object to their children being initiated on religious grounds, also meant you could not successfully run for leadership selection in a certain

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[11] In Sierra Leone, secret societies are a critical source of political power, making and implementing laws in various social settings. They primarily serve to promote solidarity between and among women's groups in rural areas. Membership of secret societies like the Sande (or Bondo) is a prerequisite for gendered personhood and carries high purchase and social prestige in the local socio-political organization and in national politics. The social capital that is a corollary of secret society membership can be used to settle personal scores with non-members who sometimes sue for violation of their rights, but receive no judicial attention or local backing at all (see Pemunta & Tabenyang 2017).

group, or claim certain benefits. Another explanation is that members of secret societies are favoured in terms of selection for trainings and other benefits, since local leaders with a pivotal role in sharing benefits are members themselves. These results are consistent with data obtained in Bulte et al. (2013), which reported that in the GRNP, secret societies depict an important layer of community organization, offering knowledge associated with nature and reproduction. They note further that these groups forge life-long loyalties among co-initiates, and impart skills and techniques that are useful in defending mutual interests (Bulte et al 2013).

> "We don't discuss secret societies here, but because you are a man, I assume you are an initiate. There are certain things such as land disputes, benefit sharing, chieftaincy elections and evictions that we discuss and decide upon in the sacred forest. So, if you are not a member you will lose in some way because no one will appear interested in your concerns" (FG1-LHN/P2).

> "If you don't belong to our traditional institutions, you won't even have the gut to raise your voice in meetings, or object to decisions taken by the "men" in the community" (FG2-NGM/P3)

Similarly, some informants felt that once they joined community groups, their dependence on group benefits increased. This meant waiting for a certain farm implement or input (such as seeds) promised by the project and NGOs no matter how long it took. A common view was that because the benefit waiting times were longer in some cases (like in developing and cultivating the IVS in Nemahungoima, members of the FMA waited almost two months to get farm implements and cash incentives for labour committed), learning in the project was stopped from progressing, and time farmers needed to cultivate their private plots was lost.

> "We rely on external funding to work in these communities, and these funds are given to us in tranches. Just to organize beneficiaries, select sites for the IVS, and clear land, the first quarter of implementation was gone. At that time, we needed to submit a report to the donor to be able to claim the next tranche of funds. That took some time, and it affected our plans for farming that year. These are challenges we anticipate anyway, but we always hope they can be addressed, because local people don't care to know how funds are sourced, or why there are delays in fulfilling promises" (INT-ORG/I11)

> "Last year the inputs came after the rains had ceased. Sometimes they come a long time before the farming season starts and other times they supply poor quality. Some households even consumed their supplies during the hunger season and went into the planting season on crop loans from other households. And some of us see this as a waste of the quality time we need to spend on our own farms, and with our families. We cannot cope with its demanding nature too…we are used to doing what we know and at the best times possible…now, even the peer pressure pushes you into trying a new crop variety on your farm. It's an awful situation really" (FG2-NGM/P3)

Regarding gender, the results show that women were unable to apply new knowledge gained from farm demonstrations because they lacked access to land. Women, and other landless residents, were less likely to participate in ACM practices, and less likely to make substantive contributions when they do participate in learning activities. Land ownership is, therefore, a recurrent theme in the data describing gender limitations to participation and learning in ACM practices in FPAs. This result corroborates the ideas of Agrawal (2010) who suggests that rural women show a high dependency on males for access to land, especially in areas under traditional authorities, such as the fieldwork locations included in this thesis. The implication is that the success of learning activities is shaped by the existence of many different interests distinguished by gender, expectations, ethnicity and systems of culture (Agrawal & Gibson 1999; Reed 2010), which limit the way projects facilitate multi-stakeholder collaboration and action, and the extent to which they can promote equity and efficiency (Natcher et al. 2005).

> "You really learn good things in these groups, but you cannot apply them because you don't own land…and your husband does not even listen to your ideas about trying something new" (FG2-NGM/P4).
>
> "Much of what we learnt from the project were applied to backyard gardens in the village because of women lacked rights to land. There, you have sheep and chicken that eat up everything, so it's a waste of time and money" (FG1-LHN/P6)

Concerning leadership in community groups, it was reported that group leaders failed to establish clear rules to deal with negative behaviour, and failed to retain the participation of some individuals that joined because of a lack of relevant mobilization skills. Additionally, learning was affected when group leaders started receiving support from local leaders (and attended few workshops and meetings convened by implementers), because they were no longer vocal about defending the interests of their membership. Moreover, it was suggested that some group leaders were not transparent in financial transactions involving savings groups and farm demonstrations, which significantly eroded trust in them and the institutions they served (chiefs and the project). These findings agree with those obtained in Chuenpagdee & Jentoft (2007), which suggest that trust in community learning structures (groups) is nurtured through

information sharing, effective and regular communication, and transparency.

> "Until we can give members a reason to stay in their groups, we are failing. In some of these groups, the leaders only check to see who has paid what, who came to the community farm that morning, who was absent for the last meeting. They don't go on to find out why such things happen or even propose a solution to the problem. We cannot be treated seriously by our own membership and the project if we can't show leadership in these areas" (FG1-LHN/P3)

> "One area where groups have performed badly is connecting members with the project. We still don't have the leverage to relay our sentiments directly. You must go through the village chief, who then consults the section chief, then the paramount chief to raise a concern. That's why it is the paramount chiefs or their delegates that go to meetings with staff from the project. And no one wants a disagreement with the chiefs, especially if don't hold rights to land" (FG1-LHN/P8)

> "The initial trust and hope we had in them (group leaders) diminished with the knowledge that they were mostly nominated by the chiefs. Well, no one needed magic to find out that they played the ball placed at their feet by their masters" (INT-COM/I10)

The finding regarding the influence of group leadership on learning in ACM is significant. It implies that even where leadership selection in community groups is democratic, the leaders that emerge are exposed to external influences (such as meetings with implementing partners) that significantly change the way they think and side with those they represent. While this brings about political control for decision-makers over processes in community groups, it considerably diminishes the kind of participation and learning necessary for these institutions to thrive. The inherent idea is that although decision-makers can build a constituency of local supporters by working directly with the existing leadership, it may not be sufficient to drive the social (collective) action necessary to solve resource management problems.

> "Make no mistake. When community people rise to the bad things the project and local leaders have done for years, especially how they have successfully stymied our voices from being heard within and beyond the community, they say we want to spur violence. But no one thinks about it (violence) when we don't have the opportunities and benefits that are due us" (FG1-NGM/P9)

> "They (the project) wooed us into believing our welfare featured prominently in the new plan, but experience they say is the best teacher. And they did well that they never failed us; we now know they would not even demand an explanation if a need to abolish our settlements arises. For them it's forests first, and forests second" (FG1-LHN/P10)

> "If the current conditions persist, we will be left with no other option than to face our leaders and make them pay for all we have endured which will mean first blocking their source of extra income- abolishing the protected area" (INT-COM/I10)

7.5.2   Institutional barriers to learning

The first barrier was the insensitivity of management practices to local conditions. Many comments referred to the application of rules and regulations without due regard for existing or customary practices at the local level. For instance, some informants argued that the project developed new institutions (such as forest management committees, community development committees) when local communities already had structures that facilitated organization (like chieftaincy institutions, secret societies, labour clubs etc). Some informants felt that learning activities did not effectively reflect their needs, such as plantain and NERICA rice production, which were considered "strange" to local farming traditions. Other informants noted difficulties in applying new knowledge to their farms (such as establishing poultry units, purchasing fertilizer for IVS cultivation), while a few commented that learning activities did not support selling surplus production, rather, they supported farming practices that had specific livelihood and agro-ecological consequences.

> "They (park authorities) decided it all. They decided how, when and how often community meetings were conducted and by whom. They were in absolute control" (FG2-NGM/P8)

> "For the workshops, they ask the town chief to suggest representatives from the community. That is all. Attendance then becomes mandatory because you don't want to disobey the chief. The only good thing is that the organizers inform us very early, but after the workshop we come back empty. We don't even understand the terms they use to describe certain things. If they want to know whether we learn in workshops, they should ask others if we tell them anything about the information they share. You can't share what you don't have" (FG1-LHN/P6)

> "If the workshops were effective, we would not be talking about logging and mining now. The implementers organize these things for the cash returns they get from preparing materials and catering for food" (INT-COM/I18).

> "We have few people here investing resources in plantations. It is good to have a plantain farm, but who eats plantain as a main meal here. We sought to have incentives that affected both our wellbeing and the commercial activities our farms support" (FG2-NGM, P6)

> "Imagine going to a certain village that shows interest in cash crops and another that wants to cultivate rice, but you say no, we can only give you cassava. We have communities that had Village Savings Schemes introduced by other projects, and in some cases, by the communities. Why do you have to duplicate that, when it was still an active process. The farmer field school is another example. You cannot bring your own facilitators when the Ministry (of Agriculture, Forestry and Food Security) has extension officers stationed in these areas. In my view, many things failed to work because they were just not right for the time" (INT-ORG/I3)

The results described above imply that learning in ACM practices, to some extent, does not allow learners to determine the focus of learning activities; rather, learning is determined based on resource management needs and challenges, which are determined by decision-makers. Moreover, the results suggest that narrow, top-down decisions that try to bring about changes in local attitudes and behaviour may fail to fully consider differential priorities and capacities, and equitably share benefits, risks and costs. One such factor that was not fully captured in learning practices were human factors that impacted on the issues that the ACM programme sought to address, thus undercutting local commitment and willingness to participate. This interpretation is consistent with previous research (e.g., Pomeroy et al. 2001; Hauck & Sowman 2003) which showed that insensitivity to local conditions may result in the exclusion of the interests and perspectives of those that are most affected by ACM practices, thus shaping their choice and commitment to participate. Commitment and willingness are required to effectively share roles and responsibilities (Pomeroy 2007), because it shows that communities believe that ACM practices clearly recognize their interests and ideas.

> "The project contributed a lot to the development of our communities. We cannot deny that. But we believe the approach used did not consider our ideas and preferences. (For instance) some of us did not prefer a cacao project, and many of us could not tell how the decision to provide such livelihood support was reached. We have our own institutions, beliefs and ideas, and we are the best people to say what works for our households and communities, not an expert who resides in the city, or someone who comes from overseas. (Because of these reasons, and many others, I would like to submit that) there was some misfit between local expectations and project objectives, so it should not be surprising that some objectives were fully attained, while others were not. We can only support what we believe in" (INT-COM/I4)

The second barrier was poor communication and coordination, which buttresses points made about trust and accountability in chapter 6. Frustrations were evident amongst focus group participants that learning activities were planned and implemented with little public input. Moreover, there were concerns that local leaders (representatives) did nothing to break these to enable direct engagement between implementers and beneficiaries. Additional comments referred to the lack of downward accountability due to poor communication and coordination over the course of ACM implementation. These results are consistent with other research (e.g.,

Kamoto et al. 2013) which found that poor communication and coordination creates a vacuum of information which local leaders can exploit for personal gain. The implication of the finding is that when beneficiaries know less of their rights and roles in a governance process, they are less likely to hold key players accountable or confront self-serving institutions (Shackleton et al. 2002; Zulu 2013). Furthermore, the finding implies that local communities best respond to ACM practices when they understand and believe that it is necessary, that it is effective in addressing their needs, and that they can have a voice in decision-making (White et al. 1994).

> "Why do you think the process failed to work. You cannot implement a project this large in isolation. Working together has never been more important. We hope they learn their lesson" (INT-COM/I5)

> "The chiefs did nothing to spread information about the project. Some of our brothers and sisters that were picked up by the project were key informants. As project contacts, well in our view, they were a one-stop-shop for all our information needs" (FG1-LHN/P4)

> "The chiefs did nothing to break the walls between us and the project. In fact, leaving us in resentment of the project played to their benefit, because we all got disinterested at some point in the little benefits the project provided. Our trust in the chiefs eroded completely, and we turned to forest guards for information. They became a new source of hope and a stronger bridge before we realized that they had no stake in the process; so, we went back to square one" (FG2-NGM/P7)

The last institutional barrier suggested by informants was the approach to building local capacity. Many comments referred to the exclusive focus on group leaders for trainings and other learning benefits, which made them vulnerable to implementers who sought compromise within local groups. The approach, therefore, resulted in distrust and weak accountability, indicating that capacity building is not only useful in driving collective action in community groups (which is the role group leaders perform), it is also needed by all participants in ACM practices to engage power structures in effective dialogue over roles, rights, and risks. This result is consistent with previous research (e.g., Pomeroy et al. 2001; Crona & Bodin 2006) which suggested that by engaging one section of the community more than others for capacity building, ACM practices significantly undermine local involvement, trust and accountability.

> "I am not a chief, but I use the forest for the same purposes that he uses it. Why does he have to be treated specially, when we impact the forest the same way? When you mostly deal with local

leaders, and leaders in community groups, and develop their capacity thinking they make the decisions and must be more knowledgeable in the process, you are gravely mistaking, because these leaders cannot save the forest all by themselves" (INT-COM/I8).

"We all need to be educated about management practices, so we can see value in joining hands to protect the forest. Learning should not target a specific individual or group. What if that individual dies or leaves the community, will we do the work all over again?" (INT-COM/I16)

7.6   Impacts (outcomes) of learning

Learning in ACM practices produced a wide range of outcomes. Many comments referred to improvements in social relationships, changes in perceptions and attitudes, and changes in knowledge capabilities, which are described in the following sections.

7.6.1   Changes in social relationships (capital)

Regarding social relationships, many informants in both Lalehun and Nemahungoima were keen to stress that community groups have evolved into social networks given their roles in settling disputes and arranging inter-community activities (such as trade, marriages etc). Many comments referred to social bonds engendered through these new relationships, as well as the consequences for applying by-laws to local activities.

> "I was at the forefront of protests against the park, but I have a different view now. Before now, we believed in what we were told, that parks have destroyed the livelihoods and displaced entire communities elsewhere. The benefits that have come in this short period should give us hope and a new life. I can attribute much of that to the groups I joined and the learning activities the project delivered" (FG1-LHN/P3)

> "Before the project, we had meetings and savings clubs (known locally as Osusu or Sosoi in Mende- the local language). We, however, did not have bookkeeping skills and the funds to start-up most of the time. The project made the savings groups function well. They provided notebooks, start-up funds, bookkeeping skills and investment ideas. These actions have expanded existing groups and even led to the formation of new ones; all with the goal of increasing our access to financial support" (FG2-NGM/P4)

Other comments referred to the impact of social bonds beyond the community. For example, social interaction between groups located in different communities (through exchange visits and study tours organized by the project) increased over the course of ACM implementation,

fostering strong bridges through inter-community marriages and cultural festivals. These relationships engendered a shared understanding of inter-household and inter-community challenges, and forged a sense of togetherness and cohesion.

> "When we join others on the demonstration plots, we discuss the issues that are common to our households. Some people care so much that they want to know if you had good food last night. I believe these interactions have brought us together and made us reason with a sense of unity and shared purpose" (FG2-NGM/P4)

> "(As you may have been told) the project invested heavily in driving commitment, cohesion and collective action. I am sure that bridges have been built between individuals and communities that did not commonly interact. For example, farmers who came to our demonstration plots acquired new skills and ideas that made farming easier, swifter and better" (FG3-ORG/P3)

7.6.2   Changes in perceptions & actions (attitudes)

To understand and describe changes in perceptions and actions due to learning in ACM practices, informants' responses to three questions were analyzed, including: whether the GRNP should be abolished (to show changes in perceptions of conservation); whether people from the GFP did good things (to show changes in perceptions of conservation outcomes); and whether poaching was considered breaking the law (to show changes in perceptions of existing sanctions). In all these cases, both positive and negative views were expressed. On the question of whether the GRNP should be abolished, 23 percent of informants in Lalehun indicated "yes", 23 percent indicated "no", and 54 percent preferred not to comment. Similarly, 37 percent of informants in Nemahungoima indicated "yes", 37 percent indicated "no", and 26 percent preferred not to comment (see figure 7.6). Positive comments referred to benefits offered to adjacent communities including jobs, infrastructure, skills, microcredit, cash payments etc, indicating that local communities are better-off with conservation in force. Comments also suggested that local people were more perceptible of conservation benefits now than before ACM, indicating changes in levels of understanding due to participation in learning activities.

> "An old friend once told me that we are cowards because we have remained silent over the appropriation that is happening here. I wondered if he understood what it meant living in an area that is virtually neglected by the government because the routes are hard to ply. Who could

> have helped us anyway? We have seen miners come and go…loggers have come, made promises and duped us. I don't think it makes sense stopping the project…it is the last source of hope for us and the future of our children" (FG2-NGM/P7)

> "Today is indeed better than yesterday. We know our rights better now and know a lot more about making our community and household better- all thanks to this project" (FG1-LHN/P5)

Negative comments referred to access restrictions brought about by the establishment of the GRNP, and the consequences it continues to have for local livelihoods. One individual commented that livestock must now be taken to far distances to access grazing land, which has constrained additional household income by increasing breeding costs. Another commented that local support for conservation was entirely based on promises that they would be allowed to access essential goods and services, given their proximity to (and dependence on) the forest, which abolishing the protected area might enhance. Others considered that conservation has introduced new ways of thinking about farming and community relations, which has significantly undercut the significance of traditional institutions, ideas and practices.

> "You come here today and make a petty difference with your incentives and impose restrictions on everything by the next day. The people are used to undertaking diverse activities to make a living; now they are relegated to swamps and a buffer area that cannot even support the regenerating forest, lest we talk about farming and other activities" (FG3-ORG/P10)

> "We used to go miles into the forest with the herd, but that is all over now. In the past years, we have had to either take them to the big towns to sell or raised them for thieves. You go to Kenema to sell goats and you realize after boarding a car that you have spent everything (proceeds generated) on your return fare. How depressing!" (FG2-NGM/P5)

> "They come here and give us what they want. We have endured for many years thinking things will improve. Few others who have ventured out to find alternative means of livelihood have returned to tell interesting success stories. We have chosen to stay and look on while the chiefs and park authorities build homes in the city. They just continue to fool us" (FG1-LHN/P3)

> "Well we had our own view of conservation. That is why the sacred forests were established. But when they came they introduced what they had learnt in the cities and tried overseas, ignoring our institutions, values and norms. Did our ancestors seek advice from conservation agencies to farm in the forests and keep portions of it under protection? Wasn't that a skillful way of showing that our interests and theirs (conservation) can co-exist without harm to either parties? What is so novel about this new conservation agenda anyway?" (FG2-NGM/P4)

Regarding whether the GFP did good things, 49 percent of informants in Lalehun indicated "yes", 37 percent indicated "no", and 14 percent preferred not to comment. Likewise, 31 percent of informants in Nemahungoima indicated "yes", 43 percent indicated "no", and 26

percent preferred not to comment. (see figure 7.6). Positive comments referred to the need to

protect the forest, indicating that without protection, local communities will see large-scale

exploitation and considerable shortages in land and food availability. Other comments referred

to new skills acquired through learning activities (such as establishing a gene bank) which

encourages surplus production that, in turn, cushions the effects of the lean (hunger) season.

> "You know destroying the forest stops the rain from coming but you still think trees should be cut. When rivers dry elsewhere, we pray in the mosques for God's mercy and grace. We know how important water is, and what the slightest shortage will do to our crops. This project has changed my views entirely about conservation and those who support it, because I have come to realize that we owe our survival to the forest" (FG1-LHN/P8)

> "Things get so hard here in the lean season that many households go to bed on a meal of pawpaw and cassava leaves. We are grateful to the project for introducing us to new farming techniques and ways by which we can maximize our yield, store our harvest safely…far away from rodents and thieves and plan our lives for different shocks and surprises" (INT-COM/I4)

> "Look at the schools they have constructed, the roads, the bridges. How would I have paid my son's school fees? The scholarships they give take care of all our children. As if that's not enough, the publicity about our struggles and hardship is stunning. People from all over the world now come here to see us. Some have even come back to help' (FG2-NGM/P7)

> "I often say this to the displeasure of others. Yes, it is good to abolish the protected area, but what's the alternative. What else have critics come with to show us we would be better off leaving the current situation. We are all locked in a dream world for now" (FG2-NGM/P10)

Negative comments referred to the forest being a gift from God, implying that placing it under

formal protection disregarded religious and cultural beliefs about open access. Other comments

referred to corruption in management practices, and the slow shifts in governance structures to

reflect changing needs and ideas at the local level. What informants meant is that everything

has stayed the same- value of cash payments to landowners, implementing teams, livelihood

activities etc, thus increasing cynicism about and resentment for conservation benefits. More

comments referred to restrictions that cut off access to medicinal plants within certain parts of

the protected area, and perceptions that the Ebola Virus Disease (EVD) that caused tremendous

loss of lives in 2014, emerged from conserving chimpanzees and bats.

> "You cannot place a thief in charge of your barn. That is what we have done over the years. These people are so corrupt that their only focus is what keeps the financial support for the project coming. We are not trees; we have a life to care for and children to feed. Yet, the chiefs think we don't deserve to be treated any better. Of course, you know that everything here is a secret…everything is still planned and done in the dark" (FG2-NGM/P6)

> "The project is a masked devil that keeps changing its clothing and not the mask. We are struggling with the same issues that we had when the project started. We know this new one is just an old wine in a new bottle; just the same old devil now altering dance steps to deceive us" (FG1-LHN/P5)

> "They say they are giving us support. Ok let me put it this way. Imagine living on the outskirt of the forest where the trees are still regenerating. We have told them fetching wood for cooking is harder now; yet, no alternatives have been provided" (FG1-LHN/P5)

> "Why would I keep a dangerous enemy in my backyard where my kids play all the time. The wildlife here is a serious disturbance to our crops, children and women who go to fetch water at the stream. And with this trouble lurking on their way, a project comes to tell me I should not do anything about it. That's surely how a man living far away in the city thinks" (FG2-NGM/P7)

Concerning whether poachers were considered law breakers, 60 percent of informants in Lalehun indicated "yes", 29 percent indicated "no", and 11 percent preferred not to comment. In a similar vein, 29 percent of informants in Nemahungoima indicated "yes", 40 percent indicated "no", and 31 percent preferred not to comment (see figure 7.6). Positive comments referred to the need to uphold laws against illegal practices to ensure continued access to forest benefits. Others expressed the need to curb illegal practices through sanctions to stem large-scale exploitation, and inhibit the eventual depletion of forests and disruption of forest-based livelihoods.

> "Open up the forest today and you will see destroyers flooding its tracks. You will see crime and large-scale mining and logging projects everywhere. I am sure we know what mining does to land and other things we hold close to our hearts. I hope we don't make that mistake" (INT-COM/I3)

> "The sound of chainsaws has reduced now and some of the saw men here have given up- no job for months. The animals are returning too. It's also a long time now since the big truck came into the village for timber and charcoal. We are all watchmen now. We won't let few people benefit at the community's expense. The project is working hard to make us happy. We don't want to disappoint them' (INT-COM/I5)

Negative comments included that ACM practices were more of talk than action because many promised benefits were not realized. The common view, therefore, was that a good way to ensure survival was to use forest resources available to local communities. For instance, one individual stated that poaching provided bush meat, which is a rich source of protein for their children (and households). Another commented that trade in bush meat was a viable alternative source of income for both households and the community, which could lessen local dependence

on conservation benefits. It was also suggested that poaching was necessary for addressing wildlife-induced damage, such as crop raiding, which has been ignored by the project despite frequent calls for urgent action. Moreover, some comments suggested that poaching will continue in the GRNP despite existing sanctions, because the demand for bush meat has soared, and new ways of harvesting and trading large quantities are now available.

> "The market is just next door and the demand keeps increasing. I believe we can rely on that as an alternative source of income for households, and one source of financial support for the provision of the basic facilities that we direly need in the community" (FG1-LHN/P7)

> "Just recently a man was attacked and gored to death by a buffalo on his farm. We have heard about similar incidences in other parts of the protected area. Yet, the park authorities are unmoved by these developments; they are yet to suggest a solution to the problem, or consider compensating us for the wildlife raids we suffer on our farms" (FG2-NGM/P2)

> "They have been here since I was a boy; yet, those dealing in wildlife products remain unfettered. Why do you have to keep a ban in place when you know you cannot effectively enforce it. They expect us all to be living fences against these illegal activities, but some of us are not motivated enough to interfere with the trade" (FG1-LHN/P3)

Altogether, the results presented in this section demonstrate that learning in ACM practices led to marginal shifts in local attitudes toward conservation, conservation outcomes, and existing sanctions (see figure 7.6). The data shows that more informants in Lalehun (54 percent) favoured the establishment of the protected area than those in Nemahungoima (26 percent), and showed greater inclination toward conservation outcomes and sanctions. Altogether, the analysis demonstrates that learning impacts were marginal in Nemahungoima relative to cases examined in Lalehun, where more people seemed positive about learning in ACM practices.
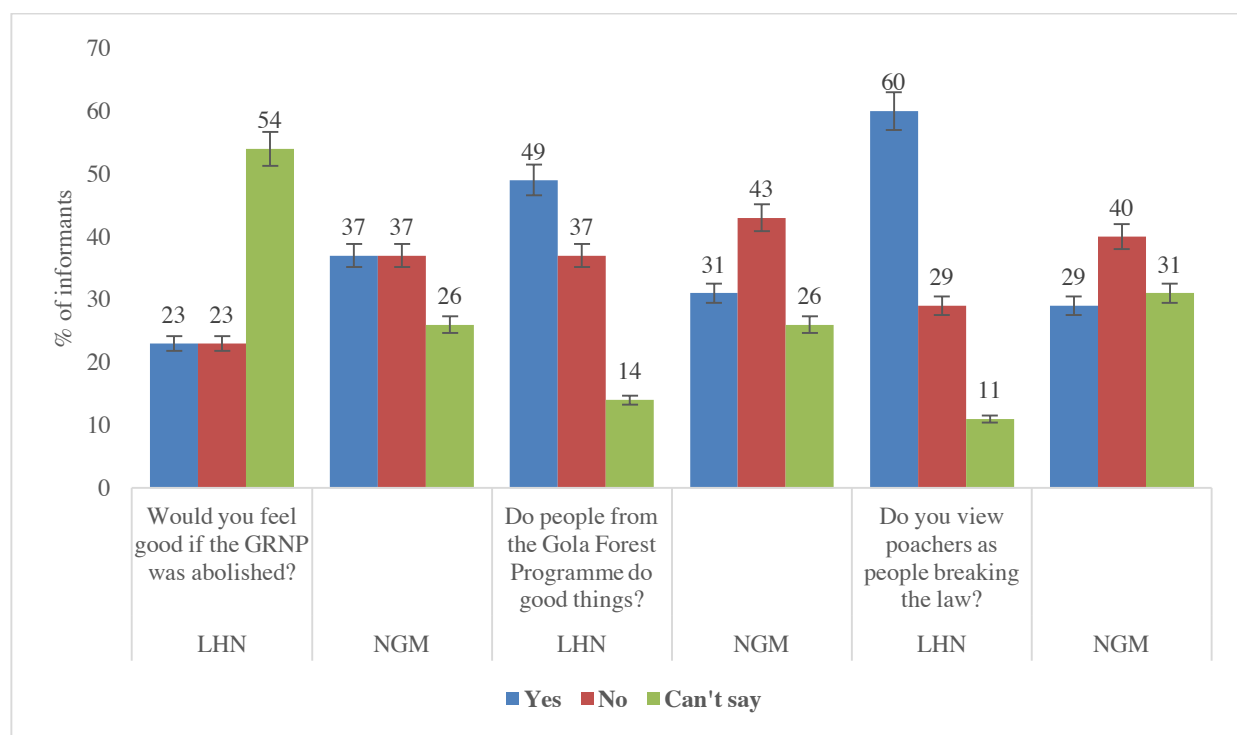
Figure 7.6 Changes in community perceptions due to learning in ACM practices (SPSS output)

7.6.3   Changes in local knowledge capabilities

Both beneficial and detrimental impacts of learning on the capabilities of individuals were reported. The results show greater awareness and sense making of the natural environment in the fieldwork locations because all informants could identify the location of important community resources (such as streams, forest etc) and state reasons why they felt the forest was in a good condition. In this regard, the reasons put forward by informants included that trees were regenerating; sanctions against poaching, logging and mining were being enforced; streams were much fuller than before; the distance covered to fetch water has been shortened; there were longer periods of rainfall; farm yields were much better now because of the rainfall; it is much cooler now during the day than before; materials for constructing homes (e.g., bamboo, ropes, sticks) are much easier to find now; some medicinal plants have regenerated; and there was an increase in wildlife-induce damage (such as crop raiding) indicating an increase in wildlife and a decline in poaching. Interviewees were also able to identify land they

would use for farming and other purposes (such as tree planting), as well as the farming and

tree planting techniques to use in both upland and lowland areas. These results were attributed

to learning activities undertaken by the project, especially farm demonstrations and community

roadshows. The findings also show a change in the level of knowledge and information

available to communities due to training and education efforts.

> "What we stress at the roadshows is the importance of the forest to community wellbeing and health. You should make them see the effects of deforestation more practically through a film for example, and judge what life they want to leave- one that will barely survive on scarce or no resources at all because of forest loss, or one that ensures continued survival and reduced competition because resources are sufficient for various communal purposes. That's basically how we took the message to the people, and I believe it stuck with them" (INT-ORG/I23)

> "We are not happy that our crops are being raided by buffalos, but it is better that we are not hunting them because we think that will open the forest to other harmful activities like logging. We don't need the project to tell us now that if you leave the forest for a while, all the things you crave for a better life will return, good drinking water, rainfall for our crops, forest cover for our secret societies and herbs for the sick. We hope to be able to benefit in this way for a long time" (INT-COM/I16)

Training and education efforts were more recurrently reported in the focus group data as key

investments made to improve learning and knowledge exchange in the communities. These

activities provided knowledge in sustainable agro-ecological techniques such as farming in

lowland areas (IVS cultivation) to reduce slash and burn, and using smokers for harvesting

honey to avoid fires that regularly degraded large portions of the forest. In this regard, changes

in local knowledge capabilities, which also demonstrate rule compliance in the communities,

were portrayed by an increasing preference for NTFPs that are not sanctioned by the project

(77 percent of informants in Lalehun and 83 percent in Nemahungoima agree), and a dwindling

interest in bush meat (63 percent in Lalehun and 58 percent Nemahungoima agree).
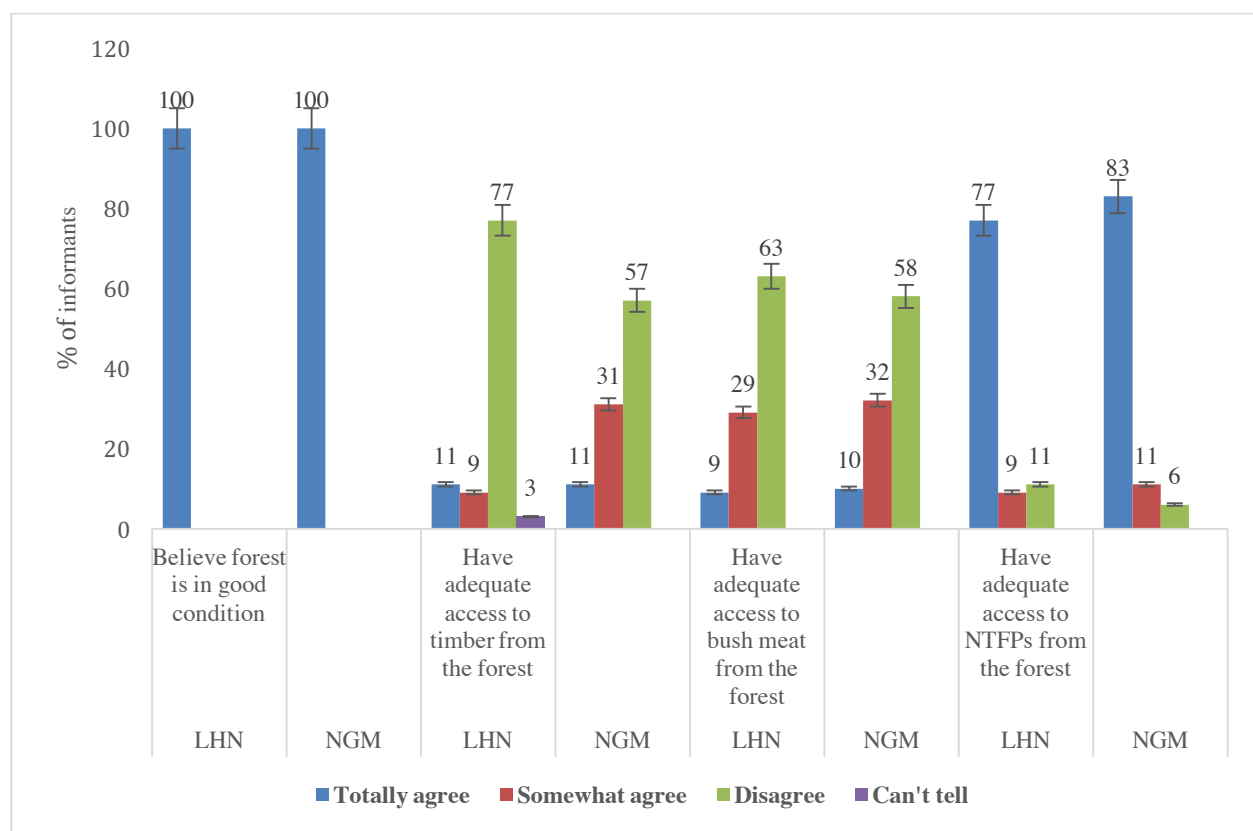
Figure 7.7 Community perceptions of learning impacts on resource use patterns (SPSS output)

However, there was a marginal change in literacy levels despite investments to provide jobs and facilitate trainings. Data from surveys (see figure 7.8) show that at the time of fieldwork, more than half of the household informants interviewed could not read and write (86 percent in Lalehun and 83 percent Nemahungoima). At the same time, majority of the informants reported that despite participation in learning activities (such as farm demonstrations), they were still unable to negotiate fair market prices for their goods (54 percent in Lalehun and 71 percent Nemahungoima). Overall, whereas more household heads in Lalehun could not read and write, more household heads in Nemahungoima indicated a lack of adequate knowledge to negotiate market prices.
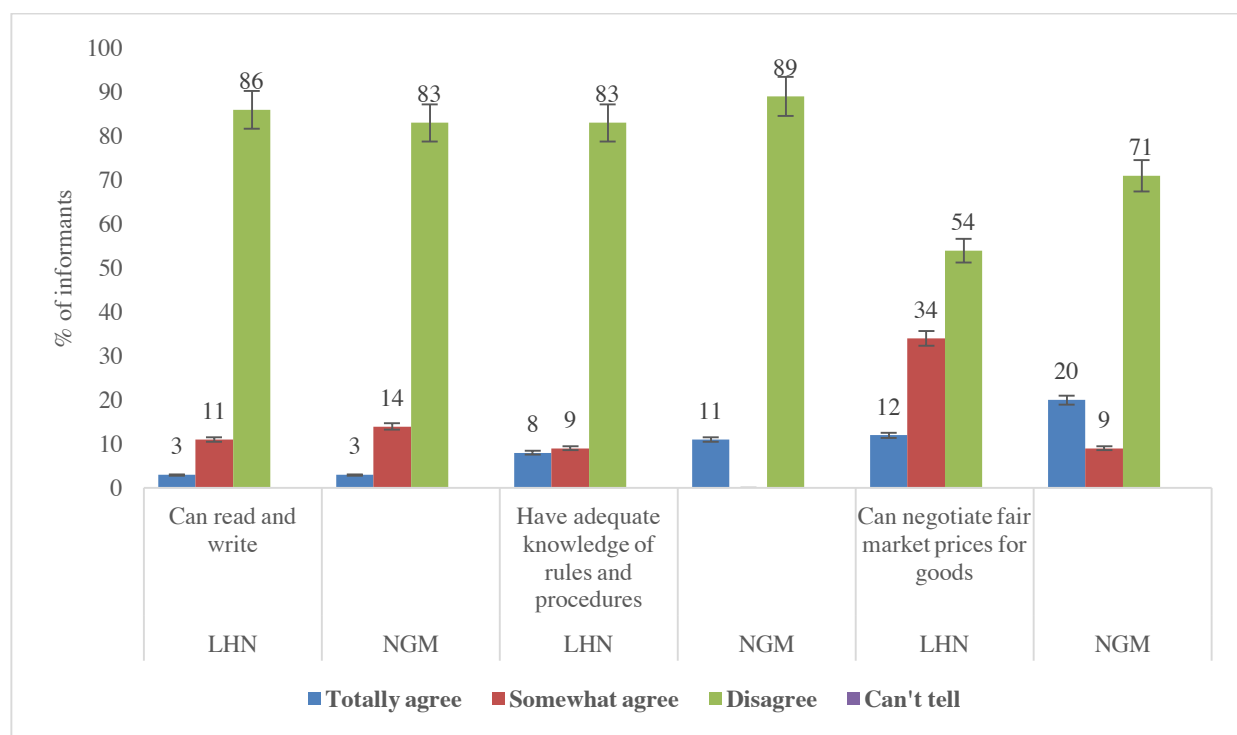
Figure 7.8 Community perceptions of learning impacts on the literacy rate (SPSS output)

Documentary analyses correlated with survey results, with data from the 2004 national census showing 14.5 percent enrolment in primary schools, 13.8 percent enrolment in secondary schools, and 0.03 percent university enrolment in the chiefdoms bordering the project area. These data are not significantly different from those obtained in Bulte et al. (2013) which show a literacy rate of 32.1 percent in Gaura Chiefdom (where the first fieldwork location Lalehun is found) and 30.9 percent in Tunkia Chiefdom (where the second fieldwork location is found). Some informants attributed the decreasing literacy rates to the focus on improving knowledge sharing capabilities, rather than the ability to internalize external knowledge (i.e., knowledge transfer capability) (Ifejika Speranza et al. 2014). More comments referred to out-migration of children and youth aged between 6 and 18 due to the lack of good educational facilities.

> "Many of us never went to school and for those of us that cannot send our children to the big towns where they can live with relatives and attend school, we force them to enroll in the madrasas here. They go to these schools in the morning and join us in the farms in the afternoon. It's a cycle really, because many of those who claim to have attended a formal school stopped at the primary level, and our children in the madrasas only learn Arabic which no one uses for work in this country" (FG2-NGM/P4)

> "The communities have nothing to offer to those coming up. Everyone tries to move their kids to the big towns for a better education. For those who complete and return periodically to visit relatives, we take the chance to share our problems, but they are not bothered about our problems anymore. Some promise to provide support, but as soon as they return to the city, they forget about us and…the sadness that, we are stuck in the same path…that we cannot challenge the status quo…returns" (FG1-LHN/P2)

Related comments referred to the marginal change in rule awareness due to the way learning activities were controlled by implementers. Survey data indicates that majority of household heads did not have adequate knowledge of rules and procedures applied to ACM practices (83 percent in Lalehun and 89 percent Nemahungoima). This is likely to be related to funding and capacity constraints reported earlier in chapter 6, and the chronic lack of human and financial resources in the forest sector (described in chapter 4). Generally, the results confirm those obtained in Johnstone et al. (2004) which showed that in resource-challenged settings, implementers are often unable to effectively engage beneficiaries in developing rules and creating awareness around them. The results also confirm the ideas of Hauck and Sowman (2003) who suggested that the nature of participation in ACM determines the nature of learning that occurs, implying that local participants are fully aware of rules and procedures when they are effectively consulted and actively involved in governance processes.

> "Do you know of anyone that has come here to talk to us about new forestry legislation of the application of old ones? (asking others in the focus group). I have never been called to any meeting on that. What I know is that they invite the Paramount Chiefs to the validation meetings, but the information does not trickle down to us" (INT-COM/I16).

> "We lack awareness of the rules and procedures followed by implementers, which is why we can hardly challenge the status quo because we don't know our rights and obligations. However, some of us are not fools that the project can control; we can act if we know our boundaries and chances. That is why they don't share these information, because they know there are people like us who would ensure that all parties follow the rules to the latter" (FG2-NGM/P3)

7.7   Summary

This chapter has presented findings of research undertaken to understand the nature of learning in ACM, focusing on the themes: learning for whom, learning goals, mechanisms to support learning, barriers to learning, and impacts (outcomes) of learning. On learning for whom (or

who learns), the analysis referred to learning processes targeting beneficiaries and implementers. Beneficiaries partook in learning activities through active involvement in community groups, which provided access to non-farm sources of income (such as microcredit) and skills for agriculture-based livelihood activities. Leaders in community groups were potent forces for driving shared understanding and action, though they lacked the skills required to involve and support new members, retain old members, and stem negative behaviour. In the case of implementers, learning occurred through assessments (such as baseline studies), using both formal (such as hiring consultants) and informal methods (such as incidental monitoring done by forest guards). Comments referred to the relevance of learning to stakeholders' understanding of the local context, though the new knowledge generated was more accessible to experts (RSPB), thus entrenching their influence over all others in the decision-making space. The implication was a lack of ownership and institutional trust, and poor adaptive management (limited incorporation of learning outcomes into consequent rounds of decision-making).

Concerning learning goals, the analysis referred to the need to preserve scarce community resources, maximize available resources, diversify community benefits, and influence management practices. Learning contributed to the preservation of scarce community resources by improving local understanding of the benefits of sustainable and innovative farming practices (such as IVS cultivation and using improved rice varieties like NERICA). Moreover, learning offered a way to maximize available resources by providing tools and methods that helped to improve farm productivity and diversify household income. Furthermore, learning diversified community benefits by increasing economic opportunities (improved income), social incentives (social recognition) and a "personal" motivation to help others and be efficient for the good of the wider community. Additionally, learning enhanced knowledge about rules and procedures followed by ACM practitioners, which was useful for creating checks and balances and influencing management outcomes. Altogether, learning in ACM practices was

instrumental in nature, focused on stemming resource depletion, reducing livelihood disruption, and expanding socio-economic opportunities.

Regarding mechanisms used to support learning, the chapter has described both direct and indirect mechanisms. Direct mechanisms included community meetings, training workshops, and farm demonstrations, while indirect mechanisms involved the use various media tools and approaches. Community meetings entailed explaining ACM objectives and provisions in the benefit-sharing agreement, targeting whole communities in large gatherings, and local leaders in small consultations. These meetings were not spacious enough to allow minority voices (such as those of women and younger residents) to be heard. Training workshops supported activities included in the FMP (such as beekeeping), which aimed at helping local communities understand new strategies for increasing food production and income generation. Workshops were criticized for the strong focus on implementing teams and local leaders (including leaders in community groups); for being a pre-arranged (in terms of timing, pattern and frequency); and for not being tailored to suit the different kinds of participants involved, their level of capacity, and their choices for engagement. Farm demonstrations included the establishment of sites for the demonstration of new crops and techniques and the propagation of farming materials. Comments referred to the effects of farm demonstrations on knowledge capabilities at the local level, and limitations to applying knowledge acquired to household activities. Overall, direct mechanisms of learning were complemented by various media tools and public outreach approaches, such as road shows, drama, radio talk shows etc.

In the case of barriers to learning, various limitations to effective learning in practice have been unearthed. First, it was found that learning processes were insensitive to local conditions because activities (such as farm demonstrations) did not allow learners to determine the kinds of crops they wanted to grow, and the nature of trainings they needed to address the capacity

deficit at the local level. Second, the cost of joining community groups was high (in terms of membership fees), which excluded motivated individuals from learning benefits. Third, opting not to join secret societies in the community, debarred individuals from running for leadership selection in some community groups and reduced their chance of benefiting from certain processes (such as being chosen to attend training workshops or far-away events organized by the project). Fourth, learning benefits that were promised by the project (such as farm implements) were mostly delayed, which stopped learning from progressing (in the case of undertaking activities in FFS) and took time needed to cultivate household farms. Fifth, gender limited the nature of learning that occurred because women lacked access to land, which was required to apply new knowledge obtained through participation in learning activities. Sixth, the lack of clear rules to stem negative behaviour and retain new members in community groups, which isolated motivated individuals and excluded new perspectives and experiences, made leadership a crucial barrier to learning in ACM practices. Finally, poor communication and coordination between stakeholders created a vacuum of information that local leaders and implementers exploited to weaken accountability and effective learning.

Concerning outcomes of learning, the analysis referred to both beneficial and detrimental outcomes. It was found that learning strengthened social relationships between individuals, groups, communities and localities. However, it was observed that learning caused marginal shifts in local attitudes toward conservation (in terms of whether the protected area should be abolished), conservation outcomes (in terms of whether implementing partners do good things), and sanctioned activities (in terms of whether poachers broke the law). Nonetheless, learning activities increased greater awareness and sense making of the natural environment among individuals, given the common understanding of the condition of the forest and what could be done to maintain the forest estate. New skills and knowledge obtained through learning activities were particularly relevant to farming practices and income generation activities that

removed the need to harvest the forest. As such, learning in ACM practices produced minimal changes in literacy levels at the local level (in terms of the ability to read and write, and negotiate fair market prices for goods), as well as in knowledge of rules and procedures used in ACM implementation and the enforcement of sanctions.

7.8   Conclusions

The following conclusions can be drawn from the analysis undertaken in this chapter. First, the evidence from this chapter suggests that learning in ACM is steered by implementers towards achieving set goals for forest conservation, rather than to enhance community agency and meaningful engagement. Second, the results indicate that the effectiveness and outcomes of learning practices in ACM could be owed principally to the separate needs and interests of participants (learning goals), rather than the mechanisms used to support learning. Third, the findings suggest that in general, whereas the density and heterogeneity of community groups may affect learning outcomes, learning processes require effective and sustained leadership to be successful, which is not effectively nurtured through support for local leaders and their delegates. Taken together, these findings suggest that ACM practices draw stakeholders from different backgrounds who pool different capabilities and perspectives toward addressing shared challenges, though their engagement may not be done in the context of mutual respect, where one set of actors recognize the needs and knowledge of others. Therefore, the principal theoretical implication of this chapter is that the lack of equal voice in determining goals and mechanisms for learning at the local level considerably limits the knowledge capabilities necessary to question the values and interests that underpin management decisions in FPAs, which further weakens checks and balances on otherwise unregulated management practices.

The next part (chapters 8 and 9) of the thesis uses a political ecology lens to discuss the findings

which emerged from the analysis of the nature of participation and learning in ACM. Chapter 8 explores the sources, dynamics and ramifications of power relations in more depth with a focus on nine political ecological themes, including: the politics of structural dependence, neoliberal traps, politics of autonomy and co-optation, discursive spaces and knowledge traps, empowerment and contestation, politics of land and identity, and everyday resistance. Chapter 9 focuses in greater detail on the institutional conditions that shape ACM practices, critically reflecting upon seven broad political ecological themes, including: territorialization, NGO "puppetization", community agency, local ownership, transparency and accountability, trust and coordination, and the design of adaptive institutions.

Chapter Eight

Power Relations Shaping Adaptive Collaborative Management

8.1 Introduction

Chapter 6 examined the nature of participation that occurs in ACM. Chapter 7 followed with an analysis of the nature of learning that occurs in ACM. Together, the analysis shows that ACM practices in FPAs are shaped and driven by various power relations. Therefore, this first part of the discussion explores the sources, dynamics and ramifications of power relations in more depth with a focus on nine political ecological themes, including: 1) state capacity and the politics of structural dependence; 2) international conservation NGOs and the trap of neoliberalism; 3) chief power, representation and the struggle for democracy; 4) community group dynamics, politics of autonomy and co-optation; 5) discursive spaces, trapped knowledge and legitimization; 6) deliberative empowerment, contestation and development; 7) land, identity politics and the tribal slot; 8) gender and the politics of poverty; and 9) peasant politics: from covert resistance to overt dissent. The second part of the discussion presented in chapter 9, moves on to consider in greater detail the institutional conditions that shape ACM practices in FPAs.

8.2 State incapacity (weakness) & the politics of structural dependence

Chapter 6 shows that two state actors were actively involved in the design and delivery of ACM in the GRNP in Sierra Leone. These were the Forestry Division (FD) and Conservation Society of Sierra Leone (CSSL). FD's role included providing the enabling policy environment for

ACM implementation, including the designation of the Gola Forest Reserve as a National Park. CSSL, on the other hand, was responsible for community outreach and seconding management staff at the Royal Society for the Protection of Birds (RSPB), the international and lead partner. Given their influential roles in framing, planning and implementing ACM activities, it is not surprising that many authors, for example, Gruber (2010), Edmunds and Wollenberg (2013), and Plummer et al. (2013), stress the importance of examining the authority and influence of this group of actors in ACM practices especially in a context where there is a significant resource incapacity and obvious power asymmetries. An analysis of state capacity is critical in understanding which actors are invited to participate and to what end (Stringer et al. 2006; Sandström et al. 2014). Moreover, discussing the role and influence of key stakeholders shows whether the ACM process was polycentric, that is, whether it had more than one means of control (Huitema et al. 2009; Berkes 2010), with political authority dispersed to separately constituted bodies that do not necessarily exist in a hierarchical relationship (Skelcher 2005; Munaretto & Huitema 2012). ACM practices are distinguished from other governance approaches because of their polycentric nature, which empowers actors at various levels to address their own challenges using their own skills and knowledge (Raymond et al. 2010; Leys & Vanclay 2011).

Starting with the inclusion of these state actors in the Gola Forest Programme (GFP) as partners of RSPB, as mentioned before in chapter 6, this research shows that ACM practices were purposefully set up in a hierarchical and monocentric manner to tap the influence and skills of the most powerful actors at the national level. FD, for example, took responsibility for formulating new laws and amending old ones to create the right policy conditions for ACM implementation, including through the enforcement of laws to drive cooperative behaviour in participating communities. Laws enforced, such as sanctions against farm encroachment, logging and poaching, were considered harmful to local livelihoods. Many comments in chapter

7 referred to restrictions from critical resources and attempts to regulate local behaviour. Similarly, CSSL had a history of working with forest communities and a long presence on the ground, which was useful for developing the necessary rapport and trust across these communities. Therefore, the institutional arrangement for ACM was driven by the need to increase legitimacy and draw upon diverse sources of power and expertise (Backstrand et al. 2010).

However, the power to make rules and mobilize local communities was significantly shaped by conditions created for engagement at the local level. Chapter 6 shows that RSPB led in the design and delivery of ACM practices, giving them the sole discretion to regulate the application of rules in the field. Besides, the forest guards that enforced most of the laws were hired, trained and paid by RSPB, so they were beholden to its interests and strategies. Therefore, the lack of technical and financial capacity to influence conditions for ACM on the ground significantly limited state participation and power, and increased their structural dependence on the RSPB. Concerning technical capacity, Chapter 7 attributes state incapacity to the lack of access to detailed knowledge and information on the local context. It also suggests that even in cases where new knowledge and information were shared with state actors, their access was limited to materials that had been fully vetted by RSPB. As such, although involving state actors in the implementation of ACM was an important incentive to exercise power and control, their lack of adequate information and resources (and by extension, their lack of capacity to act without external support) was a powerful fillip to their disempowerment. The issue raised here is the connection between state capacity and structural dependence, implying that where state actors are unable to singularly enforce their will without support from international agencies, they may also not be able to influence and control local processes.

To buttress, the analysis shows that although the Gola Forest Programme (GFP) placed state

actors in a unique position to understand and find a solution to various local forest governance problems, they were effectively prevented from doing so by their level of capacity. Bryant and Bailey (1997) consider technical and financial incapacity as major pressures on state actors to support the interests and ideas of international conservation NGOs in the management of natural resources. This makes the point that resource governance processes are by no means the exclusive preserve of state entities, given the way processes are heavily influenced by non-state actors (Okereke 2010). Moreover, while the role of state actors in leading conservation efforts is generally necessary, their behaviour in practice can be disappointing due to capacity challenges. Rather than being the leading actors with possible solutions to various resource management problems, state actors can be reduced to contributing to a process without a full understanding of where their involvement might lead. Therefore, there is an inherent, continuing potential for external actors to influence state actions in FPAs in Sierra Leone, because the role and authority of state actors are significantly constrained by capacity challenges that continue to persist and evolve.

For these reasons, state actors were shown to have operated under a political system that widely differed from their mandates and core interests. In chapter 6, many state actors referred to meeting the social needs of local communities as the key determinant of success for ACM in the GRNP, while RSPB representatives called for a stronger emphasis on forest protection (or biodiversity conservation). Looking at the direction of local initiatives, especially the allocation of funds for conservation versus funds for community development (as described in chapter 4), it is obvious that the vision, interests and strategies of RSPB took precedence over those of state actors involved in the process. The extent of structural dependence unveiled by this research can be seen in the discretion RSPB enjoyed in developing and managing budgets and FMPs, as well as tracking the progress of local initiatives. This shows that because of gross incapacity, state actors can be politically marginalized in the making and implementation of crucial

decisions, leading to a culture of silence and support (Dressler et al. 2010; Corson 2011). Therefore, state incapacity can be associated with the leverage RSPB enjoyed in influencing local ACM practices (such as what crops to grow on demonstration farms as described in chapter 7), implying that success in "getting away with what they wanted" in participating communities was a localized version of their control over larger struggles of power involving FD and CSSL (Bryant & Bailey 1997).

8.3 International Conservation NGOs & the trap of neoliberalism

The structural dependence of state actors discussed in the preceding section can also be used to describe the ways in which power relations with international conservation NGOs (such as RSPB) can engender "neoliberal traps" (Bryant 1998). The issue of state incapacity has featured in many political ecology writings as the cause of dependence on neoliberal structures for technical and financial assistance (e.g., Bryant & Bailey 1997; Bryant 1998; Peet et al. 2010; Neumann 2014). For example, chapter 6 highlighted the role and influence of the RSPB in ACM practices in the GRNP, including in managing all technical and financial aspects of the process, hiring staff, and tracking progress. The nature of RSPB's role and influence in ACM practices demonstrates how forest conservation in Africa is deeply rooted in western constructions, which political ecologists argue, are often strongly imbued with political meanings (Bryant & Bailey 1997; Büscher 2013). This is not to suggest that international conservation NGOs are guided by western stereotypes, but to recognize that struggles over geography reflect larger struggles over ideas, forms, images and meanings (Neumann 1997). Thus, the argument is not whether international conservation NGOs possess a false idea of forest communities for which this research might propose a replacement. Rather, this section demonstrates how neoliberal constructions can persist in a modified form through Adaptive Collaborative Management (ACM) to shape processes of participation and learning, and

resulting outcomes of forest conservation and community development. Thus, the research reveals the relations of power between international conservation NGOs and state actors which were embodied within approaches employed to facilitate participation and learning at the local level.

Comments analysed in the empirical chapters show that it was RSPB's prerogative to determine who participated in ACM practices, including which state actor played a role in governance processes and which local participant had a voice in decision-making. Picking up on this reference, it is evident that although ACM practices encouraged and facilitated participation at different levels of engagement, RSPB ultimately secured not only rights to coordinate and regulate participation and learning, but also "state authority" to define local rights of access and acceptable use of forests and forest resources (Neumann 1997). Besides, RSPB followed a technical problem-solving approach to ACM implementation, using standardized assessments to propose generic solutions to these problems in a Forest Management Plan (FMP). This approach to ACM implementation results in a general erosion of the ability of state actors to dictate the pace and nature of forest governance processes, because it increases their dependence on external support, and creates a dysfunctional consensus (Cooke & Kothari 2001). Therefore, the roles played by RSPB in the ACM process demonstrate that international conservation NGOs do not solely derive power and influence from funds they control, but also from providing technical advice and assistance (Schroeder 2010). For instance, political ecologists argue that funds available to international conservation NGOs have been an important means by which they have enhanced their power and control over local actors in resource systems (Fletcher 2010; Princen & Finger 2013). In this regard, the role played by RSPB in terms of offering technical and financial assistance, was an invaluable neoliberal tool to assert essentially political objectives (Bryant & Bailey 1997).

RSPB's role is considered a "neoliberal trap" because despite presenting ACM to be participatory and locally empowering, the power and knowledge to propose, design and enforce local practices was not shared or transferred. As such, state actors continuously struggled against drowning in "red tape", and thus, increased their reliance upon RSPB because they could not change the status quo or effectively contribute to local practices. Thus, neoliberal governance tendencies can constitute a trap for state actors for which both technical and financial capacity are essential. When international conservation NGOs achieve a capacity leverage over state actors, and assert a powerful role for themselves in management practices, the relevance and control that state actors seek in governance practices are often severely undermined. Altogether, the research argues that the role and influence of state actors can be hampered by power relations with international conservation NGOs, specifically where state actors have much less technical and financial support to offer, and essentially, can barely maintain a presence on the ground or demonstrate powers of enforcement. The thesis shares the point that deficits in capacity among state actors can result in the use of significant neoliberal "veto power" to shape the extent to which ACM practices can be empowering and participatory (Reed 2008).

8.4 Chief power, representation & the struggle for democracy

As mentioned before, the localized version of power relations discussed in the foregoing sections was manifested in the role and influence of local institutions. In this regard, chapter 6 notes representation as one of many critical issues that shaped the nature of participation in ACM practices at the local level. Local representatives (who were mainly chiefs) were either self-selected (based on titles to land) or appointed by the project, implying the lack of a deliberative and democratic process (such as elections) in local ACM practices. What resulted was the entrenchment of "chief power" because local leaders (who were mostly chiefs) used ACM practices to secure more power for themselves rather than facilitate local participation

and learning. So, even though individuals and groups were technically included in various planning and implementation activities, power remained with local elites who benefited from the status quo, thus externalizing the social, political, economic and ecological costs associated with participation in the process. An important point to recall regarding the role and influence of chiefs is the way residents were kept out of decision-making (described in chapter 6), which allowed these chiefs unchecked influence and control over what happened in participating communities. This shows that where power relations between local leaders and implementers are strong, ACM can serve to perpetuate or reinforce those relations without confronting obstacles to effective representation and participation at the local level.

The analysis of chief power unveils questions and problems of paternalism and patronage in the practice of ACM in FPAs. For instance, the analysis begs the question of whether collective rights need to be elevated to a privileged status in forest communities, rather than individual rights (Gibson & Woolcock 2008). These questions emerge from the understanding that the selection of local representatives based on traditional political practice (land ownership, ancestry etc) creates an impression that the ACM process did not seek an equitable collective solution to the diverse challenges in the GRNP. Rather, the process entrenched parochial interests that were linked to the state's vision of control at the local level. What was considered participation by implementers was a form of decentralized decision-making that involved Paramount Chiefs (and their delegates), but still dominated by implementers at all levels of organization (planning, implementation, benefit distribution etc). This means that in ACM practices in FPAs, traditionally powerful actors can seek to retain and enhance their power over other actors at the local level, creating an opportunity for these leaders to improve or consolidate their power or position in the governance process (Borrini-Feyerabend et al. 2013). In these situations, where historically paternalistic or authoritarian structures become entrenched due to management practices, the spaces for participation are constantly reduced, and increasingly

supplanted by a "culture of silence" (White 1996). This induces rule compliance and cooperative behaviour, and makes individuals that may be keen to retain or gain political power (such as leaders or aspiring leaders in community groups) vulnerable to co-optation because they are unsure of acquiring such roles and rights without help from both the chiefs and implementers (Larson 2010).

The obvious power asymmetry described here should be concerning because it could have serious implications for the future of forest governance in the GRNP. For instance, chapter 6 shows that although chiefs and other local representatives acted as service providers and a substitute for the provision of essential services by implementers (such as benefit distribution), their roles and actions only provided a short-term fix. Chapter 6 referred to a growth in cynicism and disappointment in the second phase of ACM implementation (2007-2012), when local communities felt that both the selection and empowerment of chiefs (to serve as representatives) directly undermined the establishment and operationalization of democratic accountability mechanisms. Many informants felt that because local leaders were primarily accountable to implementers (not their subjects), the quality of representation was significantly compromised. The dialectic between representation, accountability and participation is therefore a central theme of this discussion, because weak accountability and poor representation were noted in chapter 6 as major barriers to local participation in ACM practices. Many comments referred to the failure of local representatives to forge the common good of local communities where it was not in their political and economic interest to do so. Political ecologists like Bryant and Bailey (1997) consider this type of representation to be based principally on calculations of personal economic gain with harmful consequences for the interests of the people being represented.

The underlying discourse is thus very much about the struggle for democracy in social-

ecological systems (forest communities). Chief power, representation and other examples of power play described in the context of ACM practices in the GRNP, help better explain on-going struggles for the recognition of local territorial and resource rights, as well as resource management prerogatives (Eversole 2011). It shows that resource management in Sierra Leone is largely a confrontation between chiefs seeking greater control and subjects seeking to maximize their own returns. The research therefore engages with the kinds of images of community that are being produced in ACM practices in FPAs in Africa, though the cases studied in this thesis give an impression of neoliberal homogenization because local practices were homogeneous in both design and delivery even where interests and perspectives were different across participating communities. The take-away message is thus that while empowering local leaders is critical to increasing legitimacy and engagement at the local level, implementers should pay attention to the democratic value of local practices so that those providing representation can address the interests of those they purport to represent. Eversole (2011) argues that in the absence of democratic and deliberative processes, local representation may not reflect local concerns, rather, it would engender problematic consequences by fitting participation and learning to larger institutional interests. Therefore, this research argues that a paternalistic approach to representation in ACM practices, or seeing local communities through the eyes of implementers and local leaders, can, firstly, undermine accountability to target beneficiaries because local leaders feel primarily obliged to implementers; and secondly, spur a struggle for democracy that makes processes of participation and learning difficult to facilitate and harder to trust.

8.5 Community group dynamics, politics of autonomy and co-optation

Beyond the entrenchment of power and privileges for chiefs, chapter 7 also indicated a growing interest in establishing groups to facilitate community engagement through various learning efforts. ACM practices in the GRNP led to the creation of "communities of place", which

Yanow (2004) describes as locally-based (or place-based) learning structures that provide situated knowledge and feedback for policy practice. While bearing important power relations of their own, the most critical power issue in these groups was leadership. Chapter 7 shows that individual leaders played important roles in the evolution of activities within community groups (such as savings associations), implying that leadership is a necessary ingredient in bringing beneficiaries together, as well as in exploring mutual gains through participation and learning. Yet, leaders were crucially influenced by key stakeholders in the ACM process, with local representatives reported to have selected leaders for some groups in the community. In many cases of leadership selection, it was an individual's relationship with local representatives and implementers that determined who controlled processes in community groups. This leads to three important deductions, including that: 1) the ACM process entrenched a precolonial system of forest conservation based largely on nepotism rather than rationality (Bryant & Bailey 1997); 2) ACM practices did not adopt mechanisms for participation and learning that sought to ensure a balance of power among stakeholders, or give meaningful and equal voice to all participants involved (Lasker & Weiss 2003); and 3) attempts by group leaders to negotiate a share of power with existing political institutions (such as chiefs) made them vulnerable to co-optation and control. It is not surprising, therefore, that comments concerning group leadership referred to issues of autonomy and co-optation as key limitations to what leaders could have done more effectively and what could have emerged from members' priorities. I have discussed the issues of autonomy and co-optation in more depth as follows.

Community group dynamics (such as participation in farm demonstrations) undermined the autonomy of group leaders because pressure from chiefs and implementers often made keeping a distance from their social bases (in terms of seeking their interests over those of political elites) a more realistic option for active participation in (and gaining benefits from) ACM practices. Chapter 7 suggests that learning practices did not envision and aggressively confront

cultural spheres of autonomy, because opportunities like being selected to attend training workshops or lead a new demonstration activity remained the exclusive preserve of the chiefs. The implication is that community groups were not treated as autonomous power structures at the local level, so no special rights and privileges were proposed and actioned for the groups or their leaders. Both empirical chapters show that decisions and actions for participation and learning worked from one direction only- implementers engaging beneficiaries through their representatives (the chiefs)- as could be seen in the approach to consultation, implementation, benefit distribution, learning and monitoring. The concerns raised here about the autonomy of community groups and their leaders, and by extension the nature of community agency that resulted from ACM practices, are in keeping with results obtained in Eversole (2011). Eversole (2011) observed that when implementers engage local communities in participatory resource management, they leave fewer avenues for meaningful engagement, engendering the following three power relations: 1) community engagement is nearly always on implementers' terms and conditions; 2) the nature and scope of community engagement are pre-defined by external policy directives and situated in the cultural space of policy-level institutions; and 3) communities are required to leave their own institutional terrain and enter political spaces that operate based on different rules. Eversole's (2011) account of autonomy in community groups and the consequences for leadership at that level, resonate with findings in chapter 7 regarding local groups operating according to rules set by implementers (such as the kind of crops grown on demonstration farms and the general pattern- timing and frequency- of learning practices).

Concerning co-optation, chapter 7 also referred to cooperative behaviour demonstrated by group leaders after they were selected to attend workshops and other activities organized by implementers. Comments made in this regard were not critical of the cooperation group leaders showed. Rather, the concerns related to the success in transforming them and some members into "eyes" and "ears" of political elites to curtail dissent within their communities and groups.

This implies that the loss of autonomy when engaging with implementers and local leaders may have been a deliberate strategy, because these institutions are normally financially and politically much stronger. Besides, the chance for co-optation was greater because of weak downward accountability mechanisms and poor representation (described in chapter 6). Weak accountability and poor representation were attributed to the level of financial dependence demonstrated by chiefs, compromising their ability to control and confront the behaviours and attitudes of those involved in ACM practices. As such, co-optation led to a seeming absence of representatives on the decision-making committees they served, because these representatives were required to work within certain bureaucratic structures that were atypical of local arrangements. In this context, determining who got selected to participate in decision-making and what extent of agency they were allowed, served to the social and political disadvantage of local communities. The consequences of co-optation reflected comments that were made about ACM being "old wine in new bottle" and a way to preserve the original remits of chiefs who many believed did not have the best intentions for participating (or leading).

The underlying discourse is thus very much about how keeping the role and influence of community groups (and their leaders) off the radar in ACM practices leaves room for co-optation and a loss of autonomy (Eversole 2011). Entrenching the power and privileges of chiefs (and few group leaders) not only overlooks the ways forest communities have long governed themselves, but also weakens and delegitimizes the various forms and meanings of self-organisation in both groups and the wider community (Eversole 2003). The dominative control decision-makers and local leaders had over processes in community groups (and the activities and resources of group leaders) can be partly attributed to the marginal change in local knowledge capabilities. Because local participants did not have a good understanding of rules, rights and roles, as described in chapter 7, they were left at the mercy of interpretations they were given by representatives and implementers. This lack of understanding also constrained

leadership activity in community groups because leaders struggled to retain new members, make rules that were acceptable to all (such as for attending meetings, paying membership fees etc), and get members to engage others in a collaborative spirit (described in chapter 7). Comments made in this regard attributed the "knowledge or capacity deficit" to the obvious power asymmetry between beneficiaries, representatives, and implementers, because only a select few were invited to participate in training workshops and meetings where "project business" was more likely to be discussed.

8.6 Discursive spaces, trapped knowledge & legitimization

The foregoing discussion establishes that community groups (discursive spaces or learning structures) emerged as interesting new sites for power play in ACM practices. In this context, the power issue relates to the way knowledge was produced, utilized and transferred. Chapter 7 indicates that although the ACM process engendered the creation of various learning platforms, local knowledge was belittled as inefficient and inferior to the scientific knowledge and expert understanding presented by implementers. Design and delivery strategies were based on formal learning results (consultant reports, implementer accounts etc), which also reflected the way consultations were done to the extent of developing and implementing Forest Management Plans (FMPs) with little input from local communities (see chapters 6 and 7). The idea that superior knowledge emanates from implementers of ACM practices (or political elites) is problematic because it engenders paternalistic knowledge relations that discount the environmental practices of local communities (Uphoff 2000), thus taking attention away from key issues that ACM may be designed to address. The ACM literature emphasizes the importance of drawing knowledge from multiple sources to engender effective governance in social-ecological systems (Tengö et al. 2014). Many authors (e.g., Berkes 2009; Dale & Armitage 2011; Armitage et al. 2011) consider learning in ACM to be effective when knowledge is "co-produced", that is, when the governance process draws upon diverse

perspectives and experiences to generate more holistic understandings of context. In the context of forest governance, this means facilitating consensus through learning processes that do not prefer scientific (expert) understanding to traditional knowledge and ideas (Armitage et al. 2012).

For the lack of sufficient consideration of local knowledge in ACM practices, local ideas, perspectives and experiences remain trapped. Under such conditions, ACM practices fail to establish a "common mission" (Roussos & Fawcett 2000), "common ground" (Yaffee & Wondolleck 2000), "common purpose" (Huxham 2003), and "common objectives" (Padiila & Daigle 1998). Making learning a one-way practice transforms local communities into objects of discussion rather than subjects whose interests should be actively considered and safeguarded throughout the governance process (Ostrom 2015). In contexts of trapped local knowledge, ACM practices fail to break down existing stereotypes concerning the access and use of power at the local level (Ansell & Gash 2008). Put differently, learning practices that fail to forge a consensus regarding the definition of challenges in local communities also fail to facilitate an agreement on the relevant knowledge necessary to solve these challenges, or the appropriate levels at which local engagement could be organized (Pahl-Wostl & Hare 2004). Concerning using appropriate levels of engagement, ACM practices are expected to explore the diversities of participants, ensuring that they can define problems and establish the purpose of learning in a reflective manner- reflecting their own political, cultural, social, and economic positions in the community (Dare et al. 2011). However, it was found that the ACM process considered participating communities to be homogenous with respect to their learning needs and capabilities, hence supporting the same kinds of activities for all groups of people (and communities). Women, for example, were restrained from meaningfully contributing to community meetings (due to cultural and religious limitations) and farm demonstrations (because they lacked rights to land), producing learning outcomes that were not very relevant

to their needs and priorities and demotivating their ongoing active engagement in the ACM process. Also, chapter 7 indicated that training workshops and community meetings emerged as mere "talk shops" where the actual issues of power imbalance and inadequate benefits were disregarded.

This whole idea of using discursive spaces to define problems and establish the goals of learning in a reflective manner is known as legitimization (Voß & Bornemann 2011). It has been noted already that learning in ACM served the broader purpose of sustaining the existing political order of forest conservation practices, including presenting implementing partners as fundamental building blocks of both conservation and community development. This conception and operationalization of ACM is problematic because not only does the political ecology literature suggest that learning processes should be as diverse as the social and ecological contexts within which they occur (Bryant & Bailey 1997; Newig et al. 2010), a point has also been made about identifying a level of engagement that is appropriate to the needs and priorities of the different stakeholders involved (Reed et al. 2009). Thus, the overall purpose of legitimization is to allow all those involved in ACM practices to determine the terms of engagement, and thus, equalize power between participants and create room for less powerful voices (such as women) to be heard (Reed et al. 2009; Danielson 2015). A possible inference, therefore, is that the limited opportunities for knowledge co-production in ACM practices also means that implementers lacked local knowledge in terms of understanding participating communities, their characteristics and their ability to understand and deal with local challenges. Eversole (2011) has argued that when knowledge for participatory management practices come from outside, there is a chance that implementers would fail to know and understand the local context, and hence, damage the very systems that their policies and practices intended to help. Further anthropological insights suggest that implementers often see local problems and seek potential solutions in their own way, so without situated knowledge that needs to be co-

produced with local communities, policy implementation may fail (Rist et al. 2016; Nel et al. 2016). Supporting this notion is James Scott's (1998) "seeing like a state", which makes the point that the success of institutional designs for resource management and social organization rely principally upon the acknowledgement that local, practical knowledge is as useful as formal, epistemic knowledge.

The underlying discourse is thus very much about making discursive spaces appropriate to local conditions, and increasing local input into and legitimization of ACM plans and processes. The research has shown that the approach to ACM implementation, especially the preference for expert knowledge, can constitute a threat to the genuine aspirations of knowledge holders within forest communities. Making residents in forest communities scapegoats of the problems ACM is designed to solve without soliciting their input, significantly undermines policy understanding of the problem and the effectiveness of local practice. In a way, the detrimental outcomes of ACM practices described chapters 6 and 7 can be blamed on the unwholesome expansion of expert knowledge and information to local communities based on externally determined policy directives. Therefore, by exploring the nature of learning in ACM, this thesis both demonstrates that the focus of learning processes was skewed towards a policy vision, and shows that there are real people and institutions involved in masking the purpose of such practices at the expense of community development interests (Robbins 2012). Moreover, this discussion acknowledges that the contexts in which learning processes are employed are dynamic, so learning mechanisms must be adapted correspondingly using the right tools and incentives (Reed et al. 2013). The implication is that properly tailored learning practices can lead to self-preservation by people whose way of life is tied to the abundance and preservation of forest resources (Bodin & Prell 2011). It could also address existing status (political and social) differences and forge a mutual recognition of needs, priorities and capabilities (Fabricius & Currie 2015).

8.7 Deliberative empowerment, contestation and development

Following from the analysis done in the previous sections is a question of the kind of empowerment that resulted from participation and learning in ACM practices. The analysis shows that ACM facilitated empowerment through self-help groups (community groups discussed in the foregoing sections and section 9.3 in chapter 9), which, particularly, provided individuals with greater financial leverage. Individuals in community groups such as savings associations had direct access to non-farm sources of income (such as microcredit), which improved their power to negotiate within their groups and the community because they could lease or farm more land, and improve their housing conditions (which determined wealth in the community). Others benefited from farming inputs, implements and seed loans provided by Farmer Field Schools (FFS), which were useful in diversifying and improving the agricultural income on which their households depended. Therefore, community groups served as a conduit for outside assistance, and demonstrate the ways in which ACM practices can engender self-empowerment through various forms of individual action (Pigg 2002).

Self-empowerment emphasizes personal efficacy as opposed to empowerment related to the delegation and sharing of power and authority (Matarrita-Cascante & Brennan 2012). This suggests that despite growing activity by community groups, as described in chapter 7, ACM practices did not result in the sharing of power and authority with individuals beside chiefs and their delegates. Empowerment in this sense is not about self-organisation, but enabling individuals and groups to meaningfully participate in decision-making. It is, therefore, about building the capacity of individuals and groups to constructively engage representatives and implementers, and essentially, shift power relations at the local level. Gibson and Woolcock (2008) consider this to be "deliberative empowerment" because it creates conditions for contestation and alternative development, both of which are discussed in more depth later in

this section. The empirical chapters attribute the lack of deliberative empowerment in ACM practices to the role and influence of local leaders (chiefs). Many believed that empowerment could not come from active involvement in community groups because, as Posner and Kouzes (1988 p.175) argue, "your capacity to strengthen and empower others begins with the degree of power that you hold, your connection to lines of supply, information, and support…". Local representatives empowered by the ACM process did not use their power in the service of others or to enhance access to opportunities in the same way that they acquired it themselves (Gruber 2010). Thus, it can be argued that participation and learning in ACM did not facilitate the sharing of leadership responsibility and power to the extent that those empowered (primarily chiefs) could contribute to strengthening others in effectively and equitably serving the common good (Ratner et al. 2012). This is not to argue that chief power proved to be the single key that unlocked power play at the local level (as argued already in this chapter). Rather, the research argues that chief power was essential to the protection of rights that could have increased welfare, efficiency and empowerment for local communities. However, as suggested in sections 8.2 and 8.3 of this chapter, sharing power seemed a bloodier battle than the localized struggles imagined in this section, with more widespread control emanating from RSPB and more uncertain gains for local actors.

Yet, it can be suggested that the type of empowerment facilitated by ACM practices did not lead to removing structural barriers in political and social systems that disadvantaged local communities from having greater control over the ACM process, or simply, create conditions for contestation. Gibson and Woolcock (2008) argue that empowerment should go as far as developing routines of contestation that expose and weaken the practices that crystallize power outside the radar of community groups. Evans (2004) uses contestation to mean the capacity to confront and change the pattern of community development practices, or simply, having "the ability to choose" (p.36). In this regard, rather than being given conditioned power, Alejandro

Leal (2007) argues that genuine local empowerment is about people commanding greater power and control through their own praxis. Solomon (1976) argues that "powerlessness…arises through a process whereby valued identities and roles on the one hand and valuable resources on the other hand are denied, all of which are prerequisite to the exercise of interpersonal influence and effective social functioning" (p.12). The implication is that participation and learning in ACM failed to connect local people with the resources (information, power etc) necessary to make choices and negotiate more favourable outcomes with the political elites that held more control over those resources. The cases examined in this study reveal that ACM practices did not foster "deliberative development" (Evans 2004 p.36-37) because planning and implementation activities left little room for local participants to articulate and solve their own problems through contestation and debate.

The underlying discourse is thus very much about the hierarchical and monocentric nature of ACM in FPAs, with the power and capacity necessary for deliberative empowerment and contestation scarcely developed. Therefore, the theme that emerges from this discussion is "institutional monocropping" (Evans 2004), which reflects the imposition of blueprints (ideas, activities and rules) by implementers and local leaders on local communities, as described in chapters 6 and 7. As noted in section 8.6, policy ideas, scientific knowledge and "chief opinions" were presumed to transcend local circumstances and understandings to the extent of homogenizing activities and benefits for participants with varied interests, capabilities and experiences. Therefore, the thesis argues that although community groups can provide discursive spaces, incentives and resources to incrementally shift power relations at the local level, such shifts cannot emerge where limitations to contestation exist and endure. In this sense, deliberative empowerment and contestation refer to a collective capacity to bring about collective action and change. The roles played by local leaders and implementers to limit this type of empowerment may depict a form of unresolved tension in the institutional design, which

has been questioned in chapter 9 as a case of either contradiction or ambivalence, or both. It is supposed that a lack of understanding of the way communities work and what they expect, and how implementers delivered ACM practices, may have undermined the project's goal of deliberative empowerment.

8.8 Land, identity politics and the "tribal slot"

Turning now to the more localized versions of power play in the ACM process. Starting with the politics of land, it was observed in the empirical chapters that land ownership was an essential requirement for active involvement in ACM practices. For example, chapter 6 indicates that local leaders (representatives) were involved in decision-making primarily because of their rights to land and labour in local communities. Both chapter 6 and 7 also noted that being landless resulted in passive participation in ACM practices, as examples of the participation of women and younger residents showed. These examples show that ACM practices that come about through the establishment of bounded spaces (protected areas) can have major implications for the politics of land in local communities (Neumann 1997). Whereas developers and implementers of ICDPs across Africa recognize the importance of local participation, they also do believe that this is best done by sharing material benefits based on land ownership. The rationale is that participation in conservation practices increases with security of tenure (Barrett & Arcese 1995; Wainwright & Wehrmeyer 1998).

Focusing on the politics of land and major implications for local identity, chapter 6 indicated that land ownership provided both cultural and political identity, because leadership selection and wealth status were both determined based on an individual's rights to land in the community. Cultural identity based on land ownership was manifested in the social construction of households in the cases studied in this research, with the clear majority being male-headed. Men owned land in these settings, giving them the right to control labour in their households,

and the ability to usurp women's participation in ACM practices. For instance, comments in chapter 6 referred to the power male heads exercised in determining the type of crops household members cultivated, limiting the choices women belonging to these households had to apply knowledge gained from farm demonstrations supported by the project. The empirical work done in this research shows that various types and levels of hegemonic masculinity existed in the ACM participation space, ranging from male household heads considering land ownership an achievement of a successful adult manhood, to chiefs using it to symbolize power and prestige. For these chiefs, political identity emanated from holding rights to land, because land ownership determined wealth differentiation (wealth in both place and people) and accorded major control over the local economy (since chiefs leased lands to landless residents in return for labour and cash payments). Given the nature of power and influence that local elites derived from the ownership of land, there is some evidence to argue that these leaders could have rarely willingly allowed participation and benefit-sharing in ACM practices to be based on collective capacity and rights. Many authors (e.g., Neumann 1997; Brosius et al. 1998) have argued that local elites can rarely willingly facilitate local participation in ICDPs because they use these projects to manipulate local communities and advance their own political power. Therefore, the focus on land as a requirement for participation and benefits in ACM practices reinforced, rather than confronted a long-standing identity politics in local communities. It also represents a continuity with rather than a cleavage from past, centralized forestry practices.

The politics of land and identity also had major implications for ethnic differentiation at the local level. Much of the analysis available on ACM practices in resource systems have been light on the connection between the politics of land and the ethnicization of local spaces for participation. Chapter 6 revealed that owning land in the GRNP was also central to ethnic identity and the nature of participation in ACM practices. It was "actual residents" belonging to the majority Mende ethnic group that owned land as opposed to landless "strangers" that

belonged to minority ethnic groups (see Bulte et al. 2013). Additionally, some members of these minority ethnic groups suggested that local leaders found more convenience in supporting their own tribesmen, making ethnicity a major barrier to participation and learning in ACM practices. Thus, this thesis argues that where participation and benefits are based on individual rights to land, ACM practices might lead to an accentuated sense of ethnic differentiation (or create a tribal slot), and create conditions for tension and conflict. Therefore, the research makes the point that ethnic identities in FPAs in Sierra Leone are politically crafted and designed to position a group vis-à-vis others in competition for power and resources (Scott 2009). The research also makes the point that the politics of land is a politics of fear, because landowners worry that they might be marginalized once other social groups become privileged. More importantly, a study of ACM practices in settings defined by land ownership, such as the GRNP, develops insights into the tensions that exist between images of ethnicity and the local participation space.

8.9 Gender and the politics of poverty

The preceding section establishes that there is always an impact of granting individual rights to land (vested primarily in local elites and male heads of households) on relatively powerless or voiceless members of the community (such as women and youth). In this section, the impacts on women have been discussed in more depth. Chapters 6 and 7 indicated that gender was a major limitation to participation and learning in ACM practices. Not only did women not speak-up in community meetings, they also rarely applied knowledge gained through farm demonstrations to private farms. Landlessness has already been advanced as a position of cultural and political disadvantage in rural communities, so lacking ownership rights made women one of the poorest and most marginalized groups at this level; perhaps, "the most marginal of the marginalized" in these communities (Bryant & Bailey 1997 p.166). Land ownership reduced the risk of poverty because it ensured access to individualized benefits (cash

payments) and collective resources provided by the project. So being landless also meant being poor in this case, because it limited access to various benefits and the processes that engendered such access (participation and learning). This example of women's participation in ACM practices shows that the costs of governance processes and associated impacts on the environment are distributed in such a way that those who already face other socio-economic difficulties tend to bear the greatest burden (Okereke 2011).

The case of marginalization explored here is important to emphasize that minority groups in forest communities are often marginalized in ACM practices despite their relationship with the forest. In resource systems, women's reliance upon forest resources relate squarely to their material needs, as well as their political and cultural positions in the community (Otto et al. 2013; Rocheleau et al. 2013). Writing in her book "Rainforest relations: gender and resource use among the Mende of Gola, Sierra Leone", Leach (1994) noted that the reliance on plant and forest resources is much more apparent amongst poor women than is amongst men. She notes, for example, that while men grow rice, the women are required to provide alternative staple supplies from the forest in the period before the rice harvest. They must also supply vegetables, fish and meat even when the rice is available. Further she states that, while men control key income-generating activities, such as coffee and cocoa farms, women have fewer comparable opportunities. As such poor women depend almost entirely upon forests to supplement their meagre incomes and care for their households (Leach 1994). The point that emerges from Leach's (1994) book is that whereas women show more dependence on forests and their day-to-day decisions impact forests more than men, ACM practices scarcely recognize differences among local participants in terms of their needs, socio-cultural and economic status, and gender. Therefore, ACM practices created a false impression of a unity (or homogeneity) of interests that did not account for why women took certain actions (such as declining to participate in community meetings or joining some community groups, etc) and how differently these actions

impacted both forests and the wider community (Blaikie 1999; Forsyth 2008).

Concerning why women did not "speak up", both "local" and "policy" justifications were found. Chapter 6 noted that women did not speak-up or confront power over their participation in ACM practices because they were required by culture and religion to always submit to men. This finding is consistent with White (1996) who suggests that women in rural areas are generally not interested in expressing interest in political change because they expect no or little change to occur through their activism. Political ecologists like Robbins (2012) and Sen et al. (2013) share similar thoughts, emphasizing that culture is among many reasons why equal participation and benefits have not been prominent in the demands of women in local communities. Therefore, much as the politics of land is a politics of fear (see section 8.8), women's roles and influence in ACM practices in forest communities may also be related to a "politics of speech". Getting women to be vocal in resource management processes has, therefore, drawn the attention of policy-makers of late. The Sierra Leone Parliament adopted national policies on the Advancement of Women and Gender Mainstreaming in 2000 to improve the status and role of women in decision-making processes and increase gender mainstreaming into all development objectives. Yet, women remain at the periphery of governance practices across the country. Even with the adoption of the National Gender Strategic Plan (2009-2012), Poverty Reduction Strategy Papers (such as the Agenda for Prosperity: 2013-2018) and the 2014 National Land Policy, policy limitations to women's participation in resource management practices have persisted and continue to evolve.

8.10 Peasant politics: from covert resistance to overt dissent

Following from the question of "speaking-up" to confront the status quo in FPAs is an example of everyday politics and peasant resistance highlighted in chapter 6. The cases analyzed in this research exemplify everyday politics in social-ecological systems because they reveal how local

people embrace, comply with, adjust and contest norms and rules regarding authority over, production of, or allocation of collective resources. So, what distinguishes everyday politics from official and advocacy politics is that little or no organisation is required and actions may not be considered political by perpetrators. In peasant societies like the communities studied in this research, everyday politics reflects the thoughts and actions as well as the relationships of individuals in local communities (Tria Kerkvliet 2009). Therefore, through the examination of participation and learning in local communities, the analysis pointed to various forms of everyday resistance, including logging, mining, poaching etc. Political ecologists like Bryant & Bailey (1997) and Kothari et al. (2015) have noted that everyday resistance usually takes the form of illegal exploitation of resources, including forest clearances for illegal cultivation, fuelwood gathering, or poaching of big game in wildlife parks. However, everyday resistance was not limited to illegal activity, as chapter 6 indicates that a major reason for participation in ACM practices was to preserve scarce community resources (such as sacred forests). The political ecology literature suggests that efforts by local communities to preserve an "ancestral domain" may represent a way to "counter-map" a demarcated resource area under management (Colchester & Lohmann 1993; Peluso 1995). This implies that local communities can also seek to assert their perceived rights over forests through participation in the governance process (Redpath et al. 2013). Such is known as "embedded resistance" because subalterns shape the nature of the hegemonic structure by working within the system to broaden their roles and increase their stake (Mihelich & Storrs 2003 p.419).

Alternatively, the types of resistance described above can be termed avoidance, survival, and accommodation respectively (see Vinthagen & Johansson 2013). Avoidance involves ways of acting to undermine power; that is, ways by which individuals act to avoid engaging the space, time, or relation where power is manifested. Whereas some critics argue that when you avoid power you do not influence it (and by extension, cannot undermine it), there are those (e.g.,

Hardt & Negri 2004) who believe that avoidance can be a form of resistance because not engaging with the powerful makes the exercise of power temporarily impossible. This makes the point that self-exclusion from ACM practices was a form of escape from or avoidance of the hegemonic influences that obtained on the local participation space. At the same time, participation in the process might have been a means of survival or a demonstration of accommodation. It is survival where local participants used engagement in ACM to cope with changing conditions of power. Similarly, local engagement might be construed as accommodation where individuals sought a chance of dealing with the consequences of power by demonstrating strategic compliance, or detached compliance, to say the least (see Crewe 2007). What is apparent from the analysis, however, is that all three forms of covert resistance were employed by participants from time to time, indicating that while covert actions can take many forms, they are not either-or choices, but combinations (Vinthagen & Johansson 2013).

Generally, what distinguishes these types of local resistance is that they involve very little or no organization, those involved may not consider their actions to be political, and those targeted typically do not know, at least not immediately, what may be done at their expense (Tria Kerkvliet 2009). The pattern of peasant resistance can rarely be traced because perpetrators do not seek to draw public attention to their protest (Adnan 2007; Keith & Pile 2013) to avoid provoking political elites into retaliatory actions that could worsen the difficulties already faced (Bryant & Bailey 1997). Bryant and Bailey (1997 p.45) describe such forms of resistance as "hidden transcripts", or "weapons of the weak" in Scott's (1985; 1990) words, because they offer a means to question the decisions, beliefs and practices of political elites. The preference for covert resistance could be attributed to the "fear of chiefs" (Uvin 2008) and the role traditional institutions played in forging loyalty and facilitating reproach (such as secret societies), as described in chapter 6. Likewise, local resistance could be attributed to the lack of meaningful participation in the process, because resource systems that facilitate genuine

participation from a wide range of stakeholders are more likely to reduce tension and achieve progress than those that seek to advance their own visions and ideas (Okereke & Ehresman 2014). Although everyday resistance degrades the resources upon which local livelihoods depend (Ghai & Vivian 2014), it helps local communities to somehow "cross the threshold of fear and insecurity" (Adnan 2007 p.204 and 214). At the same time, the examples of everyday resistance discussed here illustrate that local communities are not necessarily helpless in the face of broader political and ecological changes (Berkes 2012; Ghai & Vivian 2014). Nevertheless, in the scope of this research, there were no indications that local concerns for ACM were addressed due to covert resistance. The exclusion of benefits and payments for wildlife-induced damage in both phases of the ACM project (in the 2003 and 2007 benefit sharing agreements), for example, underscores that local resistance did not yield desired results. This shows that local resistance in the GRNP did not have a significant political impact, such as ending the dominance of implementing partners and local representatives (chiefs specially). It means that local resistance has clear limits in the quest to increase opportunities, as individuals and groups may be relatively powerless before their more powerful counterparts-local representatives, implementing partners etc (Otto et al. 2013).

One probable cause of overt dissent observed in the analysis, such as labour clubs prolonging time spent on chief's farm to increase returns and household heads barring their dependents from participating in community work or even coming to community meetings, might be the ineffectiveness of the covert forms of resistance highlighted above. In the first instance, the courage to show open defiance came from the strength of numbers and the collective bargaining power of the labour club. The second instance, in contrast, demonstrates that overt resistance can also occur circumstances where the necessary bargaining power or cover might not be available. What is obvious in these varied instances, is the thought that those partaking in everyday resistance are seen as "prophets of renewal" by their kind, as noted by Scott (2009).

Besides, the examples show that local participants in ACM-based governance practices can move from covert resistance (and outward compliance) to open dissent (or confrontation) where their immediate and long-term needs for participation cannot be met, especially where they are dominated and exploited by richer and powerful individuals and groups. Such examples serve to dispel the notion that poor and weak individuals and groups in local communities only apply covert form of everyday resistance (Adnan 2007). They indicate that everyday resistance and the thoughts lurking behind them can feed into larger struggles of power and breed community conflicts (Tria Kerkvliet 2009). This means that outward compliance with hegemonic management practices cannot be taken at face value, because such appearances are facades concealing diverse beliefs and actions that evolve into open dissent with time (Tria Kerkvliet 2009). This research, therefore, partly addresses questions of everyday resistance as articulated by Scott (1985;1989), because it not only addresses the question of how resistances are formed, it underlines the conditions under which resistance and the shift described here can occur.

8.11 Summary

This chapter has discussed nine broad political ecological themes emerging from the analysis to provide an understanding of the ways in which power relations shape the effectiveness of ACM practices in FPAs. The chapter started with a discussion of the role and influence of state and non-state actors involved in ACM practices, showing that roles reflected conflicting political interests. This section suggests that although state actors (e.g., Forestry Division) found merit in collaborating with non-state actors (e.g., RSPB) through the Gola Forest Partnership (GFP), there was an inherent inconsistency between their considered roles and what they played in the field. The lack of technical and financial capacity caused an overreliance of state actors on RSPB (an international conservation NGO), giving away the spot to interpret rules and procedures on the ground. The nature of roles played by RSPB, including but not limited to providing technical and financial support, demonstrates that international

conservation NGOs derive power and influence from the funds they control and from providing technical assistance (Schroeder 2010). What emerges strongly from this discussion is that state actors can be limited by capacity and financial constraints, which, in turn, obligate them to support the interests of international agencies. The effect on participation and learning is that processes of planning and implementation seize to be the exclusive preserve of state actors, thus giving international agencies the leeway to condition management practices based on their own interests, perspectives and experiences.

The next section of this discussion moved on to consider power issues related to the selection and empowerment of local representatives, and the role and influence of leaders in community groups, emphasizing that there are political implications associated with the various roles local leaders play in forest governance processes. Local representatives, for example, derived a good deal of their power from their rights to land and labour, which gave them a role in management decision-making. Thus, those who did not hold rights to land (such as women), essentially internalized the costs associated with ACM implementation in their communities. Understanding leadership selection and roles in this manner aids in demonstrating that the ACM process did not seek (and find) a collective solution to the challenges identified, rather, it entrenched parochial interests that reinforced the vision to enhance the control of political elites through conservation actions. The dominative control observed among local representatives had a direct influence on who got selected for leadership roles in community groups, since leadership selection was based mostly on nepotism rather than rationality. In the section that followed, the chapter argued that there was an inherent political logic to the way learning was organized in the ACM process. For example, the way consultation was done, and the inputs that went into the preparation of FMPs, indicate that implementing partners preferred scientific (expert) ideas and information to traditional knowledge. Therefore, the process engendered paternalistic knowledge relations that excluded important local practices, thus veering

conservation actions from some of the important local problems they may have been designed to solve. Learning mechanisms produced community development outcomes that were defined and directed by implementers, visualizing local participants as objects of discussion rather than subjects with clear interests that needed to be safeguarded in practice.

The significance of local empowerment was discussed in the following section, highlighting that the ACM process facilitated collective action in terms of self-help initiatives (such as savings associations) and afforded opportunities that ensured greater financial and negotiating leverage (such as access to financial credit). Nonetheless, growing social activity within local groups did not stimulate a shift in power relations, which shows that participation and learning did not facilitate the sharing of leadership responsibility and power, which was critical to enabling others in serving the common good. As such, the personal power engendered through individual action in the ACM process (such as new knowledge obtained through participation in farm demonstrations), did not remove the structural barriers that restrained local stakeholders from having greater control over the governance process. This also means that the ACM process failed to connect beneficiaries with the resources they needed (such as quality information, power etc) to negotiate more favourable outcomes and make relevant choices in support of conservation actions. The section that followed moved on to consider the politics of land, indicating that land ownership provided both cultural and political identity, because leadership selection and wealth status were both determined based on an individual's rights to land in the community. Cultural identity related to male household heads that saw land ownership as an achievement of a successful adult manhood, while political identity related to chiefs who used land ownership to symbolize power and prestige. This shows that where the nature of participation in ACM is determined by land ownership, an identity politics results that significantly disadvantages the relatively powerless or voiceless members of the community (such as residents belonging to minority ethnic groups and women). Land ownership led to an

accentuated sense of ethnic differentiation and fear, because landowners worried that they might be marginalized once other social groups become privileged. Lacking rights to land also meant that women could not speak-up in community meetings, and rarely applied knowledge gained through farm demonstrations to private farms. Overall, this section of the chapter shows that ACM practices reinforced, rather than confronted a long-standing identity politics in local communities, which also represents a continuity with rather than a cleavage from past, centralized forestry practices.

Finally, the chapter discussed everyday forms of resistance that occurred because of the way power was assigned and exercised in the ACM process, underscoring that roles and interests that characterize power inequalities in participatory governance processes do not necessarily go unopposed. Political inattention to local concerns (such as offering compensations for wildlife-induced damage, and developing mechanisms for downward accountability) resulted in everyday resistance reflected in activities such as logging, poaching and mining. Local resistance also occurred through participation to preserve threatened community resources (such as sacred forests), which is known to political ecologists as an attempt to counter-map bounded spaces established by political actors for forest conservation. The challenge with the nature of resistance observed in the cases studied is their covert nature, with individual perpetrators and actions being difficult to pinpoint and contain. Covert and individual forms of everyday resistance mainly seek to avoid provoking political elites into retaliatory action, and may fail to address local concerns as observed in the cases studied. Still, the potential for covert forms of everyday resistance to endure and expand should concern those in power and control in FPAs, because, as mentioned earlier, covert actions are difficult to pinpoint, perpetrators are relatively not easily identifiable, and they easily proceed to larger, overt struggles over power, roles, responsibilities, and authority. Examples of a transformation from covert resistance to open dissent were discussed in this section to dispel the notion that forest communities only

apply covert forms of everyday resistance.

8.12 Conclusion

This chapter has drawn attention to the power relations that shaped the effectiveness of ACM practices in the GRNP in Sierra Leone, emphasizing the conditions under which ACM worked and where it foundered. The chapter has pointed toward the prospects of ACM practices in FPAs, including: the delivery of community development benefits; development of strategic partnerships with locally-based NGOs; empowerment of local leaders; development of platforms for knowledge generation and transfer; acquisition of new knowledge, power and wealth; and self-empowerment through self-help initiatives. The chapter also points to pitfalls that affect the delivery of these valued outcomes in FPAs, which sound alarmingly similar to the centralized forest management approach that ACM supposedly replaced, including: power imbalances in the spatial distribution and prioritization of activities and benefits; hierarchical and monocentric institutional structures; overreliance on expert information; poor local representation; limited opportunities for knowledge co-production; inappropriate levels of learning-engagement, and marginalization of minority groups. Altogether, the chapter demonstrates that ACM is a localized governance practice that is conditioned by political transactions (and interests) at different levels. Moreover, the chapter shows that ACM does not aggressively confront limitations of culture, gender and politics rooted in approaches to participation and learning, since local practices basically fortified pre-existing fault lines such as chief power and unilateral decision-making. Combined, the chapter shows that the prospects and pitfalls of ACM rest chiefly on the way power relations are mediated, particularly how power and authority are assigned, exercised and reassigned to strengthen or weaken the involvement and influence of others.

Therefore, the thesis has found support for the first proposition made in this research, which is

that *the nature of participation and learning in ACM reflect the diverse sources, conditions and ramifications of power relations in FPAs*. The implication is that the most useful approach to achieving proposed goals ACM in FPAs is to consider the roles and interactions of all stakeholders involved in terms of equal power relations. The need to ensure fair power relations is premised on the finding that just as power exercised by implementers proved to be a major impediment to active local involvement in the ACM process, so too did power play (such as the sole empowerment of chiefs) within local communities influence social conditions for those that participated, as well as how, why (and why not) and to what extent participation and learning occurred. Overall, in this first part of the discussion, it has been explained that although ACM promises an effective strategy for forest governance in FPAs where power relations are mediated to ensure fair and equitable local engagement, it is less likely that such a balance will be achieved in the shortest possible time given capacity and resource constraints. Developers and implementers of ACM processes must understand that failing to address the power issues discussed in this chapter will further deepen structural limitations to participation and learning (such as distrust, lack of accountability and community agency etc), which are the issues discussed in detail in the next chapter.

Chapter Nine

Institutional Conditions Shaping Adaptive Co-Management

9.1 Introduction

Using findings presented in chapters 6 and 7, chapter 8 discussed nine broad political ecological themes to explore the sources, dynamics and ramifications of power relations that shape ACM practices. From the previous discussion, it can be seen that ACM practices have political roots and consequences. This second part of the discussion focuses in greater detail on the structural conditions that shape ACM practices, critically reflecting upon seven broad political ecological themes, including: 1) territorialization: state spaces and the friction of terrain; 2) locally-based NGOs: puppets or seeds of change? 3) community agency and engagement; 4) driving ownership: credible commitment or incentive alignment? 5) transparency and accountability: matching parts or Siamese twins? 6) ties and trust: coordination and the "trust-control" nexus; and 7) the institutional design: contradictory or ambivalent?

9.2 Territorialization: state spaces and the friction of terrain

The contextual background to the thesis shows that ACM practices were implemented in a Forest Protected Area (FPA), with the final phase of implementation (2007-2012) primarily designed to upgrade the Gola Forest Reserve to National Park status- an example of

implementers' spatial fix. The establishment of FPAs involves creating new territorial entities through maps of a terrain, its people and resources, to define laws and management plans to which new political, economic, social and cultural meanings may be assigned (Holmes 2014). Political ecology uses "territorialization" to understand roles and interactions within forest areas, since power struggles are more prominent in clearly defined spatial units (Roth 2008), including the ways in which FPAs shape the economy, culture and society of local communities, as well as the ways in which these communities try to reshape and redefine the decisions and actions occurring within these spaces (Holmes 2014). The political ecology literature considers bounding the environmental space a way for responsible institutions to be in the "right place at the right time" and a way to strike a balance between community development and forest conservation interests (Bryant & Bailey 1997). Political ecologists also consider the specification of boundaries for governance practice to be an attempt by the state to identify those individuals, communities and resources that fall under its control (Peet et al. 2010; Dryzek 2013). In the wider ACM debate, protected areas are established to integrate traditional and expert ecological knowledge, which allows for using local understandings developed through generations of control over environmental resources (Olsson et al. 2004; Raymond et al. 2010). Additionally, "protection of forest areas" is advanced as a means for achieving effective wildlife and biodiversity conservation by addressing community development challenges, which is a compelling and convincing way to drive local interest and involvement (Rands et al. 2010; Watson et al. 2014).

From a social perspective, the bounded, territorial model of conservation is flawed. Most production systems are not spatially discrete and require the integration of different resources at different times. Livestock management for example requires the rotation and movement of animals through space, and cropping systems depend on carefully managed spatial rotations and fallows (Robbins 2004). The argument is that bounding conservation reserves over

traditional management spaces usually spells ecological trouble and opens the door for unending struggles over control (Robbins 2012), or creates a "friction of terrain", to use Scott's (2009) term. Enclosures usually force community farming efforts into less productive areas or relocate groups that could farm in different areas into shared management areas, causing competition and exacerbating rather than reducing overexploitation and land encroachments (Bryant & Bailey 1997; Larson & Pulhin 2012). At the same time, access restrictions to essential materials from the forest can have dramatic implications on the diet of poor households, which, generally, implies that poor households bear the brunt of costs associated with the enclosure of forests (Bryant & Bailey 1997; Barrett et al. 2011). Moreover, displaced households suffer long-term socio-economic disruption and deprivation (Groves et al. 2012) as FPAs can have significant negative impacts when people are removed from socially and culturally important places (Holmes 2014). The impacts of FPAs are mostly unevenly distributed by gender, class, or ethnicity (Holmes & Brockington 2013), which is implicated in the finding that women were hard hit by the enclosure approach to forest conservation in the GRNP, given their reliance upon forests and forest resources to support their households (see section 8.9 in chapter 8). From a technical perspective, creating FPAs is flawed because new territorial entities are demarcated and governed in a hierarchical and monocentric way by a distant authority, mostly the state, but increasingly with support from international conservation NGOs (Holmes 2014). Such partnerships claim to represent a much wider constituency than forest communities, suggesting that ownership and control of the forest estate should reside with political actors rather than adjacent local communities (Ojeda 2012).

Under such circumstances, states and their affiliates tend to maintain or increase their power often beyond "sustainable levels" (Walker 1989; Neumann 1997), where adjacent local communities cannot continue to have the resources they need to make a living. Moreover, given their role and influence in FPAs, international conservation NGOs can use territorialization to

cement their authority and stake in determining rights and boundaries (Corson 2011). What is apparent, therefore, is a strong relationship between the institutional design of ACM practices and the production of particular subjectivities (Agrawal et al. 2005). Agrawal (2005) argues that conservationist policies (like territorialization) that do not seek to devolve control over forest resources leads to the creation of "environmental subjects". In that regard, territorialization demonstrates that the way of life of local people is inimical to forest conservation (Kothari et al. 1995). Thus, the principle of enclosing forests may also have political roots and consequences (Kull et al. 2015). The establishment of the GRNP, for example, is the result of a long-standing partnership with and pressure from RSPB, which demonstrates that political and economic factors motivated the implementation of the ACM process in a protected area. To begin with, forest conservation in national parks is considered a way to remove local economic pressures on forests and forest resources.

Likewise, protected areas are established in response to pressures from international actors who have a long-standing fascination with tropical forests and their inhabitants (Bryant & Bailey 1997; Smouts 2003). International conservation NGOs provide political, technical, financial and discursive support for the establishment of FPAs, which is part of global shifts to neoliberal forms of forest conservation. Such "eco-imperialism" is particularly prominent in countries where state agencies are unwilling and unable to invest in biodiversity conservation programmes (Corson 2010; 2011). This is implicated in the findings that RSPB used forest biodiversity conservation programmes to condition policy processes in the GRNP, including directing the release of funds to those (local NGOs, community groups) committed to pursue objectives linked to their vision for forest conservation (and by extension, those of their funders). To the extent that such political, technical, financial and discursive support could be sourced from RSPB by establishing the GRNP, national partners in the GFP (FD and CSSL) found a strong incentive for adopting management practices that reinforced a conservation

vision at the expense of local development priorities.

Furthermore, the rationale for upgrading the Gola Forest Reserve to a National Park in 2011 could be attributed partly to the adoption of policies in support of eco-friendly businesses such as ecotourism. A case can be made, therefore, that the commercial focus of political actors did not change, because ecotourism activities could deliver substantial income to implementing partners, and substantial income for local leaders (such as Paramount Chiefs) that are willing to cooperate with and facilitate such businesses. The argument here is that forest protection provides a big incentive for forest managers to accumulate capital for conservation actions at the expense of the livelihoods of local communities (Bryant & Bailey 1997; Büscher & Dressler 2012). Even where ecotourism brings new sources of income, resulting benefits are often subject to elite distribution and capture and political actors may recentralize power through forest protection to claim benefits from ecotourism (Ojeda 2012). As such, efforts to establish FPAs can also assign power and control to political actors, strengthening their position in relation to other actors (Kelly 2011). This is because, the establishment of PAs is always accompanied by the enlistment of a whole "army" of forest guards to ensure that excluded actors do not hamper management practices. This was seen in the case of ACM implementation in the GRNP, where forest guards were appointed to keep potential "troublemakers" in the communities under close surveillance in a way comparable to a military exercise (Bryant & Bailey 1997). Similarly, police arrests and court trials were used in place of the traditional barri system of levying fines, indicating that state-imposed measures are not only respected in local communities, they serve to displace and shatter traditional restraints, leading to chaotic outcomes and reckless extraction of forest resources (Robbins 2004 p.151). There is, therefore, a strong coercive element to the establishment of FPAs and their use for ACM programme operationalization, as force is used where necessary, to protect valued forest resources, as well as to crush local resistance (Bryant & Bailey 1997).

Overall, given the nature of politics in the establishment of a "state space" in the GRNP, one would naturally question the sense of "environmental Armageddon" that RSPB and other environmental INGOs have invented about Sierra Leone. In line with Ferguson (1990), this research contends that the GRNP and similar FPAs across the country are portrayed in terms that make them suitable targets for the design, implementation, and continued funding of ICDPs. As demonstrated in chapter 6, community profiles on which ACM implementers based their interventions bore little relation to the realities on the ground, which calls for a rearrangement of current governance realities to take politics out of conservation and development interventions (or ACM-based practices) in FPAs in Sierra Leone, to facilitate meaningful local participation, multi-level learning, and sustainable benefits.

9.3 Locally-based NGOs: puppets or seeds of change?

Chapters 6 and 7 show that since the introduction of ACM practices in the GRNP in 2002, the approach to conservation has changed markedly and implementers increasingly see that the future of the park lies in some form of partnership with locally based Non-Governmental Organisations (NGOs). Green Africa is one prominent example mentioned recurrently in the empirical chapters for its role in stimulating participatory approaches to agro-forestry initiatives across the park. In general, NGOs and community-based organisations were instrumental in preparing minority voices for effective engagement in the ACM process and were found to play a critical role in influencing participation and learning. NGOs can influence local communities because local people credit them with the ability to address their needs, given the knowledge they have of the outside world (Springate-Baginski & Blaikie 2013). Hence, NGOs influence local decisions and actions, whether consciously or sub-consciously, as soon as they interact with local communities (Humphreys 2014). Comments on the basis for NGO-implementer cooperation referred to the need to demonstrate the feasibility of shared forest management practices (also see Princen & Finger 2013). Such a recognition is somewhat contradictory

because it creates a strong argument against the instrumentality of NGO involvement in ACM practices, which is for devolved service delivery, rather than tapping into the diverse knowledge sets of multiple actors to jointly identify and solve local problems (Eversole 2011). In this regard, ACM becomes a policy vision, with implementers tapping the insights and energies of locally-based NGOs to maximize impact through devolved service delivery.

This discussion highlights that whereas locally based NGOs have undoubtedly emerged as key players in the implementation of ICDPs, they are yet to become "seeds of change" in these local communities. The implication is that NGOs could be used as puppets of implementers to solely play service delivery roles, which shows the effectiveness of policy actors in "dulling the sharp edge of NGO criticism and occupying the attention of much of the best NGO talent" (Clark 1995). Many informants attributed the "puppetization" of locally-based NGOs (Najam 1996 p.344) to funding constraints, implying that the lack of funds increased the dependence of NGOs on implementers, hence their co-optation to undertake activities that served forest conservation interests at the expense of local development priorities (Bryant 2002). Other informants considered that activities supported by NGOs were highly selective, reflecting a decision to give priority to the problems that resonated well with the aims and objectives of the GFP. The activities (such as farm demonstrations) were geared more to replenishing the forest estate than to providing local communities with satisfactory livelihoods. Likewise, local communities did not participate in the design of NGO-led initiatives, which also explains the relative neglect of local livelihood concerns. This is not surprising because despite the importance of giving local participants the opportunity to tailor management practices to their own priorities (Pomeroy & Andrew 2011), NGOs have, too often, demonstrated the same ineffectiveness and lack of attention to local preferences in resource systems (Princen & Finger 2013; Fowler 2013). However, some authors have argued that NGOs are not capable of intervening in all governance situations due to limited resources (Ongolo 2015). NGO

practitioners indicated that, in a way, they failed to live up to the high expectations placed on them due to inadequate and delayed funding (see chapter 7).

Alternatively, using the political ecology literature, it is possible to suggest that the cooperative relations observed between locally-based NGOs and implementers may not have solely been to secure funding. Clark (1991 p.75) argues that "NGOs can oppose the state, complement it, or reform it- but they cannot ignore it", which implies that beyond providing funds, NGOs use the support of state institutions (or affiliates) to garner power and influence, thus facilitating the success of their initiatives on the ground (Bryant & Bailey 1997). Sanyal (1994 p.37) argues that in these situations, NGOs would eventually be controlled or co-opted by implementers, thus losing their legitimacy and effectiveness. Fowler (1996) has raised a similar concern, noting that NGOs receive funds from the state, or their affiliates, they may risk becoming mere voluntary contractors. Political ecologists believe that such cooperation weakens the credibility and power of NGOs, because it erodes their autonomy and undermines the purpose of what, after all, is called a non-governmental organization (Bryant & Bailey 1997; Princen & Finger 2013). If such a situation prevails, some writers (e.g., Natal 2001) have argued, NGO capacities to drive social change and a community development process led by local people may be seriously undermined.

These perspectives are implicated in the findings as the data shows that NGOs were accepted by beneficiaries for offering a sense of impartiality (that locals thought implementers and local elites had compromised), so conducting their work in conjunction with (like GA), and on behalf of implementing partners (like WHH) eroded the public goodwill that was the cornerstone of their relationship with local communities. As some organizational informants mentioned, some locally-based NGOs were less driven by concerns of effectiveness and impartiality and more by standards of a hand-to-mouth existence (organizational survival). Bryant (2002) has

described these mutant NGOs that change from being potential "seeds of change" to puppets due to prevailing institutional conditions as "false prophets". While this makes for an important finding, the more critical insight is that implementers of ACM practices in FPAs have the ability and drive to simultaneously enable and undermine community-level change by partnering with local NGOs while keeping a monocentric identity. Natal (2001) argues however, that while NGOs can privilege the state (and international NGOs) in their relations, it is important to highlight that the political capital of NGOs is not only conditioned externally, but also internally. It is conditioned by the type of NGO involved, the location of engagement, and the strategic orientation and management capacity of community initiatives. Pfeffer and Salancik (1978) suggest further that NGO's political performance (when they engage with other political actors) is determined by the capacity to adapt or respond to signals provided by the environment, by their beneficiaries, or other stakeholders or actors; the large part of which has not been evaluated and discussed in this research to give an informed reasoning.

9.4 Community agency and engagement

Institutional conditions that shaped NGO agency also had major implications for community agency and engagement. First, it is important to emphasize that by engaging local communities in planning and implementing ACM practices, there was some level of recognition for the value of communities and their ability to influence change. Chapter 6 and 7 indicate that implementers looked to local energy and creativity in identifying needs, risks and opportunities, though the question of "who were the local actors?" based on who influenced ACM practices has been raised in the previous chapter. As such, ACM can be described as a place-based governance mechanism that recognizes that local communities possess some form of agency in a social-ecological sense, meaning that they can act and be agents of their own change (Eversole 2011). For example, chapter 7 indicates that some community groups (such as savings associations) existed in the communities before the ACM process, showing that local people had both a

means of self-organization and a drive to continue to explore ways to by-pass the state in proffering local solutions to local problems. Chapter 7 also notes that other groups such as Farm Management Associations were formed by NGOs with a purpose to meet some of the ambitious goals set out for ACM, including to enhance local livelihoods through agricultural productivity, and remove the need for forest resources at the local level. In the two situations, community groups provided a collective response to environmental problems that jeopardized the livelihood interests of households, and evolved into important organizing tools through their ability to provide information and microcredit to members. These results show that implementers see community engagement as a key ingredient for achieving a broad range of goals at the local level. Whether this also translates into recognition for community ideas and knowledge has been discussed in section 8.6 of chapter 8. However, this aspect of the data emphasizes that implementers perceived their actions to be of interest to individuals, groups and the wider community.

What emerges from the preceding discussion is that community groups play two distinct roles in social-ecological systems: first, as an effective means through which the livelihood interests of members receive social priority; and second, as an ineffectual enterprise whose functions and structure are determined by outside actors' perceptions and interests (Bryant & Bailey 1997). It was found that in the meeting point between these two realities, limitations to community agency and engagement emerged. For instance, chapter 7 shows that when the interests of funders changed, or when funds were delayed or insufficient, local livelihoods became vulnerable to disruption. Farm demonstration activities in Nemahungoima were stalled when funds for purchasing farming implements and seed inputs were delayed. The implication is that where financial support is withdrawn, or delayed, community groups may be exposed to uncertainty that stalls interest from potential members to participate. Moreover, reliance upon external financial and technical support means that decisions concerning the design and

delivery of initiatives would not come from within the membership of community groups. External dependency in ACM processes may, therefore, translate readily into a situation in which members of community groups are manipulated by influential stakeholders to suit their own interests (Pollini et al. 2014). In these situations, community groups are constrained in developing self-directed objectives and capabilities that could foster effective participation and learning in ACM practices. The key take-away message here is that although community groups do provide a site of resistance (Ingram et al. 1997), and a means by which local people organize and find alternative livelihoods (Bryant & Bailey 1997; Bennett & Dearden 2014), their agency can be constrained (by external actors) from constituting a pragmatic challenge to the political status quo or becoming an effective critique of those shaping the status quo- implementers in this case (Bryant 1998).

The underlying discourse is thus very much about limitations to community agency and engagement which emerge from lumping the diversities within "community" into a small spatial image, with representative units considered to be a homogeneous social structure. From the foregoing discussion, it is evident that individuals in community groups were placed into the same basket as having common interests, which were primarily socio-economic rather than political needs and aspirations. Chapter 7 shows that implementers scarcely recognized that there were individuals within community groups (and local communities generally) with varying preferences and experiences, given the use of the same mechanisms to meet varied learning goals. Under such circumstances, therefore, implementers did not fully recognize that multiple actors existed in the local space with different and dynamic priorities and perspectives. The formation of groups by local people themselves (such as youth groups) may serve as a reminder that implementers did not fulfill their roles as both protectors of local resources and promoters of social justice (Bryant & Bailey 1997; Bollier & Helfrich 2012). Political ecologists like Tarrow (2011) argue that community groups develop as a direct reaction to the

inability or lack of commitment of political actors to address local challenges. Therefore, this thesis suggests that understanding local attitudes and behaviour by way of genuine and effective engagement can bolster community agency. It can show recognition for the constantly evolving interests and development trajectories at the local level, and make way for dispersed agency as an alternative to centralized institutional structures (Hinchliffe 2007). Moreover, such agency and engagement should emphasize that local communities can mobilize their own assets and perspectives to address entrenched environment-development challenges at the local level (Mathie & Cunningham 2003; Eversole 2011).

9.5 Driving ownership: credible commitment or incentive alignment?

The kind of community agency and engagement referred to in the previous section involves building a sense of ownership at the local level by bringing a range of actors into ACM practices. A sense of ownership not only gives local communities and institutions a voice in decision-making, it also spurs commitment on both sides of the institutional arrangement. Commitment may relate to ensuring that the perspectives of all that matter are accounted for in the process, or demonstrating that shared decision-making and action is the best way to achieve desirable policy outcomes (Burger & Waishwell 2001). Clearly, commitment is about seeking and achieving mutual recognition (Saarikoski 2000) or joint appreciation for decisions and actions taken together (Plummer & Fitzgibbon 2004). However, as Adams (1990 p.190-1) argues, "the primary objectives of conservationists are protected areas and species. Development, even if packaged as sustainable development, is attractive chiefly as a secondary strategy where it promotes their primary objective" (cited in Bryant & Bailey 1997 p.150). Adam's (1990) views match the findings of this research, indicating that in the design and delivery of ACM practices in FPAs, a question of "credible commitment" to facilitating ownership through broad-based inclusion may emerge.

Concerning commitment, the analysis indicated that implementers were not fully committed to understanding the diverse perspectives and experiences at the local level, as the one-way approach to consultation and implementation demonstrated. Many informants believed that the lack of credible commitment to ensuring a shared understanding at the local level, spurred the decision to control negative behaviour by controlling the practices that depicted such actions (Robbins 2012). The issue explored here is that where implementers show commitment to understand the local context, rather than impose insights from externally driven policy directives, consensus on local practices that may conflict with the objectives of conservation may easily emerge and endure. Such concerns reflected comments that the regulation and criminalization of local practices (such as logging etc) are not consensual, so continued enforcement has only closed lines of communication and thwarted interest in and ownership of conservation actions. Some informants even suggested that because of the lack of commitment to understand what communities know and how they behave (Eversole 2011), sanctions against poaching, logging etc have so far been ineffective. Rather, in the long-term, the emergent institutional conditions could remove important tools local communities traditionally use to make ends meet, creating tension between state agencies and forest communities (Robbins 2004). The underlying discourse is thus about the unwillingness of implementers to share roles beyond the chiefs, which Lachapelle & McCool (2012) consider a perennial stumbling block to developing a sense of participation and ownership in forest communities. In the cases studied, there appeared to be a marked preference for processes that engendered local involvement more than those that enhanced local influence. Even where consultations were undertaken, there was a lack of up-front willingness (on the part of implementers) to abide by the results of deliberation (such local preferences for including compensation for wildlife-induced damage in the benefit-sharing agreement).

This makes the point that institutional conditions for ACM made way for aligning interests and

incentives to achieve a conservation vision at the expense of local needs and aspirations. The findings show that implementers seemed unwilling to understand and accept that the dynamics of bargaining with local communities could take surprising proportions (and lead in unpredicted directions), and so, were technically and financially not ready to conform to new positions they did not initially include in the FMPs. The implication is that, in addition to the unwillingness to share roles, the ACM process only aligned incentives that sought to maintain the original remits and influence of local leaders and implementers at the expense of community agency and engagement. Literature suggests that stakeholders in participatory governance processes are not solely expected to be "critics from a distance", rather, they should be allowed to own the decision-making space collectively with those that may hold contrasting perspectives (Ansell & Gash 2008). This calls for sharing roles and responsibilities throughout the ACM process because local people are most willing to participate in processes that guarantee that political actors will not take advantage of their enthusiasm to engage in good faith (Vivien Lowndes et al. 2006). It also requires recognizing that local communities have their own organizing principles and institutional forms, implying that incentive alignment should take varied forms to account for all voices included in ACM practices (Vivien Lowndes et al. 2006). Together, driving ownership of ACM practices requires understanding that the governance process is neither wholly owned by implementers, nor wholly owned by local participants, but occupy a new space between connecting these two entities (Eversole 2011).

9.6 Transparency & accountability: matching parts or Siamese twins?

From the discussion above, it is easy to see how clear and equitable procedures are critical to ACM success in the field**.** As such, arrangements that ensure role sharing don't only demonstrate commitment, or facilitate a sense of ownership, they also foster transparency and accountability. In the GRNP, procedures and rules were not clearly articulated, which explains the low knowledge of rules, rights, and risks as described in chapter 7. The lack of clarity made

it easier for local elites to act manipulatively, and implementing partners to act co-optively. Thus, possibilities for reciprocity through participation and learning were significantly diminished, creating a dysfunctional consensus for forest management. Clear (transparent) rules and procedures enhance procedural legitimacy and trust (Corbera et al. 2007) because they awaken local stakeholders to issues of equity, power sharing and the possibility to be manipulated (Parkins & Mitchell 2005). Besides, clarity of purpose and in rules and procedures shows that stakeholders have the chance of getting a "fair hearing", and demonstrates that the public consultation is real and not a cover for backroom, private arrangements (Grazia Borrini-Feyerabend et al. 2007). Overall, the literature emphasizes that it is crucial for ACM processes to clearly define roles and clarify expectations about all possible outcomes (Pomeroy & Andrew 2011).

Concerning accountability, the analysis reveals that ACM practices promoted upward accountability to ensure compliance with donor requirements. Accountability mechanisms did not exist for reporting on ACM activities to local communities, which undermined participants' sense of mutual achievement (Berkes 2010). As mentioned before, local leaders felt primarily obliged to report to implementers than to their subjects, implying that accountability in ACM practices can be undermined by existing institutional conditions. Four ways in which these thoughts were in the empirical work include that: 1) decision-making processes were not visible, so local participants were not clear on the reasoning behind many decisions and actions; 2) information about the process was not readily available even to other implementers (state actors), which limited financial, governance and performance accountability, and the possibility to correct and improve lessons learned; 3) local representatives were selected without following democratic procedures, which was necessary for both legitimacy and credibility; and 4) accountability was a one-way affair, upward to implementation partners, and not downward to those most affected by the ACM process. All four concerns match earlier concerns raised by

Moore and Rockloff (2006). Therefore, what emerges from this discussion are answers to questions previously asked in chapter 3 regarding who makes certain decisions for ACM, how such decisions are reached, on whose terms and conditions they are made, and who takes responsibility for resulting outcomes. By and large, the emphasis on upward accountability gave attention to rule compliance, which skews management practices towards the interests of implementing institutions (Ebrahim 2010) .

Furthermore, the focus on upward accountability makes accountability and transparency Siamese twins rather than matching parts because the "Siamese twin" interpretation recognizes that the two items are separable in principle, or occasionally in practice. Conversely, the matching parts perspective suggests that accountability and transparency are both needed to produce good governance outcomes (Hood 2010). In this regard, many comments considered transparency in terms of the disclosure of information about ACM practices, either through local representatives or via learning mechanisms. This perspective emphasizes that actions to increase transparency also enhance downward accountability because access to information allows local participants to know what was happening in ACM practices and where checks and balances were needed. Other informants that perceived transparency and accountability to be essential matching parts of the ACM practices also noted that more information on rules, procedures and processes could have limited elite capture in the distribution of benefits and assuaged elite control. These perceptions are in keeping with Hood (2010) who argues that where the two items are treated as matching parts, transparency can contribute to accountability by making governance objectives clear enough to detect any unseen errors and address any underlaps.

9.7 Ties and trust: coordination and the "trust-control" nexus

Many of the institutional issues discussed so far in this chapter boil down to poor coordination and lack of individual and institutional trust. Coordination in ACM practices usually involves reaching local communities to encourage and facilitate their participation. Eversole (2011) considers coordination as a process of seeking out, reaching beyond the comfort zones of colleagues and offices to initiate collaborative relationships. In the context of this research, it was found that ACM decision-making was limited to local leaders, who demonstrated longstanding loyalties to management practices in the GRNP. The results also suggest that consultation was poorly done, with local leaders being primary targets of the exercise. There were also reports of duplication (such as the formation of revolving community funds by NGOs and savings associations by the ACM project) because of poor communication and coordination between implementers. These perspectives demonstrate that ineffective coordination encourages and facilitates a type of paternalism that sets an institutional pattern like centralized forest governance approaches. They show the extent to which centralized models of forest governance have endured at the heart of more recent efforts to democratize forestry practices in the GRNP.

The results also suggest that where ACM involves too many role players, there can be difficulties in aligning the priorities, plans and activities across implementing institutions (Lockwood 2010). Charnley et al. (2014) argue that poor coordination of role players can lead to a highly fragmented institutional process that could further deepen existing issues of trust and communication. Young (2016) suggests further that poor coordination can engender a disjunction between the way implementers organize their efforts, and the actual influence such efforts can have on the ground. The underlying argument here based on a political ecology perspective is that ACM practices in the GRNP did not fully connect the "political world" to

the "resource world" (Bryant & Parnwell 1996), though the research does not suggest that the future for a partnership-based forest governance process in the GRNP in Sierra Leone is all bleak.

As mentioned above, the consequences of poor coordination were most prominent for trust-based relationships. Trust articulated at the interpersonal level, such as through individual association with others in community groups, was far stronger than that at the institutional level. Relationships at the group level were more cohesive because of the trust members placed in group leaders and the consensual decisions that were made (Smith & McDonough 2001). Likewise, although relationships at the institutional level were not particularly cohesive, the results show that state actors trusted expert opinions on many issues because they could not explore and understand these issues on their own (due to lack of technical and financial capacity). Also, implementers placed significant trust in local leaders, who acted inappropriately and exposed local communities to many unintended consequences (as described in chapter 6). These results suggest, firstly, that trust building in FPAs is associated with the fear that others' decisions and actions can cause harm or emerge from a position of self-interest. Moreover, the findings show that trust is dynamic because it increases or decreases based on on-going interactions and roles (Bijlsma-Frankema & Costa 2005).

Furthermore, the results highlight the inefficacy of elite-based leadership models and raise concerns about the inability of few decision-makers to represent the wider span of stakeholder priorities and values (Parkins & Mitchell 2005). Collectively, the research demonstrates that where management practices are less well-defined and where distrust exists at interpersonal and institutional levels, the choices associated with participation and learning in ACM become clearer. Individuals participate to influence management practices, and where this seems unattainable, they invest their time and energy in practices that conflict with conservation

activities (see section 8.10 in chapter 8). As Parkins and Mitchell (2005) put it, trust-based relationships typify the quality of participation and learning that occur in governance processes, and involve interactions sitting on the margin between trust in individuals (such as local representatives and group leaders) and institutions (such as implementing partners).

The underlying discourse is thus very much about the extent to which institutional trust strengthens institutional ties and shapes the leverage (control) implementers can have on the ground. Put differently, there is a nexus between trust and institutional control (effectiveness of management practices) in FPAs, because participants in ACM practices need to trust those they engage with, as well as the procedures for engagement (Hahn et al. 2006). Distrust leads to disengagement, so when individuals or whole communities lose trust in individuals or whole institutions, they tend to avoid interacting with them and sharing the risks and benefits that may follow such an interaction (Bijlsma-Frankema & Costa 2005). Altogether, the current discussion supports the idea that trust lubricates cooperative behaviour, rule compliance and collective action, which are products of effective coordination, because it strengthens ties between implementers and beneficiaries and makes roles played by some actors agreeable to all (Bijlsma-Frankema & Costa 2005). Therefore, any attempt to disregard trust issues that may undermine ties in FPAs, no matter their relative significance, would also undermine efforts at successfully designing and delivering ACM practices.

9.8 The institutional design: contradictory or ambivalent?

The political ecological themes discussed so far have shown that ACM practices in FPAs are shaped and driven by institutional conditions. The underlying discourse is thus very much about the institutional design and its implications for participation and learning in forest communities. The ACM literature places a strong emphasis on shifting from hierarchical and formalized management procedures and processes to devolved service delivery (Berkes 2010; Zulu 2013;

Reed et al. 2013). However, in the context of the cases studied in this research, it was found that the institutional design was purposefully oriented toward activities that increased local engagement with conservation actions, rather than limitations to community agency and engagement (such as weak accountability, poor representation, inappropriate benefits etc). Moreover, participation and learning processes were consistent with a ladder approach, where decisions involved top-down arrangements, though those active at the lower rungs did not have the capacity and power relationships necessary to move upward into the decision-making space. Furthermore, there were assertions that through the implementation of ACM processes in a protected area, benefits were reallocated to political actors because these actors (implementing partners) wrote the regulations, management plans, and procedures, thus defining the participation and learning space in a way that they could retain control and benefits (Nelson & Agrawal 2008; Hoffman 2009). Similarly, many informants suggested that ACM floundered in a way because implementers lacked complete information on the local context, limiting full and fitting consideration of local priorities, experiences and perspectives. Additional comments indicated that structures and processes (such as mechanisms used to support goals for learning and participation) did not derive from extensive discussion and debate, so outcomes did not portray consensual decision-making. Other comments considered that representation was poor because participation and learning in ACM practices did not yield the influence necessary to shape decisions at the levels where representation occurred. Overall, perceptions of ACM practices in the GRNP were that the institutional design was based on misguided assumptions about how local communities worked and what they already knew that could have improved management practices.

These experiences and perspectives inevitably lead to a question of whether the ACM institutional design was contradictory or ambivalent? The perspectives suggest that implementers' understanding of how communities worked and what they knew produced

contradictions in the design and delivery of ACM practices. Perhaps the most problematic contradiction concerns the creation of relatively homogeneous spaces for participation and learning despite varied interests, ideas and experiences at the local level. Rules and procedures were defined by singular and relatively static FMPs, rather than processes that were more flexible and appropriate to local conditions. A second contradiction arises from the entrenchment of power and privileges for local elites, which engendered power inequalities that significantly undercut the willingness of local participants to come forward and contribute, because the common view was "why participate when we cannot have the upper hand in the process". A third contradiction arises from the pattern (timing and frequency) of participation and learning because timing appropriate to all parties and frequent engagement reflect processes that are clearly articulated and agreed upon by all stakeholders. Collectively, the institutional design was contradictory because implementers attempted to insert and sustain new definitions and meanings in dynamic social, political and cultural settings (Holmes 2014), disintegrating local structures that could constitute an effective means of long-term resource management. Okereke (2011) argues that such decisions and actions portray interest-based politics which is by no means based on objective sciences. The implication is that the institutional design for ACM was a representation of a mixture of institutional interests, which ascribed varied meanings to local conditions and shaped the purpose management actions served, who benefited, and who played a role in decision-making (Holmes 2014). This shows that actions and decisions taken in resource systems are shaped and driven by the normative context within which negotiations occur (Okereke 2010), that is, the institutional settings in which ACM practices are imagined.

The issues discussed above establish that while ACM is presented in the literature as more decentralized, more participatory, and more networked, the actual practice in FPAs does not fully reflect that promise. Nonetheless, some levels of participation and learning do occur,

suggesting that there is a broad consensus between developers and implementers that local communities are a critical part of management practices. Still, as Eversole (2011) argues, while implementers see benefit in cooperating with local actors, there seems to be little awareness and interest in how communities mobilize resources, address challenges, and influence governance practice. Therefore, what is now needed in the GRNP, and for ACM practices in Sierra Leone more broadly, is an inclusive approach to design, delivery and governance. Okereke (2010) argues that if the distribution of the costs and benefits of governance processes is to be fair, it must emphasize a process agreed by all parties, more specifically those affected by decisions and actions. In this context, the design best suited for ACM-based governance is what Callon (2004) calls "hybrid collectives", or hybrid spaces, in which different actors are allowed take different actions, contributions to the emergence and transformation of social and ecological identities are jointly determined, and the spatial and temporal settings in which these actors exist and act are collaboratively framed. Callon (2004) further notes that a hybrid form of institutional design engages beneficiaries through meaningful collaboration and learning; recognizes diversity and variations in perceptions, experiences, interests, and ideas; and is constructed more effectively on the basis of the variant needs, demands, expectations, feelings, and capacities of action and cognition that define the participation space or sphere.

Thus, moving forward, the institutional design for ACM practices in FPAs should include fair and consistent procedures that are agreeable to and enforceable by all (Carr et al. 2012). This implies that local communities cannot maintain an active interest in ACM practices without hope of influencing decisions or changing a situation. Therefore, ACM practices should emphasize "process" as much as "outcome", ensuring that decisions and actions are not based on pre-defined individual goals (Parkins & Mitchell 2005). This should involve creating opportunities for all stakeholders to engage on a basis equal to that provided to political elites (Lockwood et al. 2010), and drive the uptake of new ideas or maintenance of practices that fall

outside of project plans (FMPs), all geared toward increasing local interest and involvement (Rijke et al. 2012). This research proposes these directions for the institutional design of ACM practices because no single actor has the resources to generate adequate solutions to local challenges (Berkes 2010; Lele et al. 2010). ACM practices imagined and arranged in this manner can provide a useful counterpoint to the ability of few actors to dominate governance processes (Ban et al. 2013), thus ensuring that the exercise of power is not one-sided, and assertive local groups can evolve and endure (Jones & Murphree 2004).

9.9 Summary

This chapter has discussed seven broad political ecological themes emerging from the analysis to provide an understanding of the ways in which institutional conditions shape the effectiveness of ACM practices in FPAs. The chapter started with a general discussion of structural (institutional) issues relating to the implementation of ACM in a protected area, arguing that the bounded, territorial model of ACM practices is socially flawed because most production systems at the local level are not spatially discrete (such as farming). It makes the point that whereas forest protection is a big incentive to accumulate capital for conservation actions, it takes control from local communities, thus stifling their means of and undercutting their motivation for participation and learning. It also raises the concern that FPAs are portrayed in terms that make them suitable targets for the design, implementation, and continued funding of ICDPs, indicating the nature of politics ACM-based governance practices in Sierra Leone. The chapter went on to suggest that although NGOs were instrumental in preparing local voices for ACM, their role did not translate into political advantage for participating communities due to various funding and capacity constraints. NGOs relied upon resources provided by implementing agencies, coercing them to give priority to the problems that resonated with the aims and objectives of conservation. This shows the instrumental role funding plays in dulling the sharp edge of third party criticism and action in FPAs, which has direct consequences for

effective participation and learning at the local level. For example, while community groups provided avenues through which individuals could organize alternative livelihoods, they were limited in developing autonomous objectives and capabilities that could foster involvement in decision-making.

The chapter moved on to consider institutional issues relating to coordination, arguing that implementers were more interested in achieving conservation outcomes than ensuring shared decision-making and joint problem-solving. The chapter pointed to a persistent orientation toward (and marked preference for) activities that enhanced local involvement rather than local influence, noting that local communities did not have a fair chance at influencing decisions at the levels where representation occurred. The discussion has emphasized that where ties and trust among actors involved in ACM practices are weak (because of poor coordination and a lack of local agency), beneficiaries can rarely maintain an active interest in management practices. This is because local participants lack the resources (information, knowledge, power etc) they need to influence management decisions or change the political status quo. The result is an ACM process that is not agreeable to and enforceable by all, and a closure of the lines of communication between implementers and beneficiaries. Overall, the issues of coordination, trust, ownership, transparency and accountability, suggest that the ACM process failed to recognize differences in perspectives and interests at the local level, attributing it to a reluctance to accept that the dynamics of working in local communities could lead in surprising directions. Moreover, the chapter has argued that the emphasis on accountability upward to implementers rather than downward to those most affected by ACM practices, created conditions for local leaders to act manipulatively and implementers to act co-optively. Thus, the chapter emphasizes the importance of making management practices visible to all so that the reasoning behind decisions and actions are clear enough to invite meaningful involvement and influence in ACM practices.

In the last section, the chapter highlighted contradictions in the institutional design for ACM in the GRNP. It suggested that where the institutional design is less well-defined in terms of roles, rights, responsibilities and rewards, the level of distrust in both individuals (such as local representatives) and institutions (such as implementers) increases. The issues that emerged regarding the empowerment of chiefs as representatives of local communities, for example, shows that an elite-based ACM model has major implications for participation and learning because local leaders are generally unable to represent the wider span of priorities, perspectives and experiences in local communities. Simply put, local people participate in ACM practices to influence management practices (and learn from doing so), but where this seems impracticable, they invest their time and energy in practices that undermine conservation efforts (such as logging). However, the examples highlighted to discuss the inefficiency of ACM institutions could also be used to argue that ACM principles are difficult to translate into the language that local communities and practitioners understand and easily relate to, which may be due to capacity and resource constraints. Still, these findings further underscore that the nature of participation and learning in ACM largely depends on the effective design and adaptiveness of institutions because poor design sets a political pattern that deepens existing power imbalances, narrows the participation space, weakens downward accountability, trust and ownership, and limits opportunities for knowledge co-production.

9.10 Conclusion

This chapter has drawn attention to the institutional conditions that shaped the effectiveness of ACM practices in the GRNP in Sierra Leone, emphasizing the conditions under which ACM worked and where it failed. The chapter has pointed toward prospects of ACM practices including: formation and support of community groups, partnership with locally-based NGOs, promotion of self-help initiatives, and promotion of upward accountability. The chapter has also pointed to pitfalls that shape the delivery of these valued outcomes in FPAs, including:

weak downward accountability; limited commitment and ownership; elite-based approach to implementation; poor coordination; and issues of individual and institutional trust. Altogether, the chapter demonstrates that ACM institutions can be designed to reinforce and facilitate the internalization of coercive missions of forest management, thus representing a manipulative instrument through which local support for conservation can be engendered. Moreover, the chapter shows that although the ACM literature emphasizes the non-territorial character of participation and learning, given the growing consensus that power and role sharing are the basis of governance success in resource management contexts, ACM implementation in FPAs tends toward the territorialization of spaces for both conservation (through the establishment of protected areas) and participation (through the empowerment of local elites). Furthermore, the chapter makes the point that ACM cannot follow a simple, straightforward approach to design and delivery because the terms for effective governance need to be set on the margins of diverse interests, experiences and perspectives. Combined, the chapter shows that in addition to the way power relations are mediated in ACM practices, the prospects and pitfalls of ACM also resides with the design and operationalization of adaptive, robust and appropriate institutions.

Therefore, the thesis has found support for the second proposition made in this research, which is that *the nature of participation and learning in ACM reflect the quality (design) and strategic interests of institutional arrangements in FPAs*. The main argument of this chapter has been that ACM practices depict stakeholder interaction processes shaped by various institutional factors and conditions (such as poor coordination, lack of commitment and accountability etc). Thus, the chapter suggests that if FPAs are governed collaboratively through the design of effective, adaptive and robust institutional arrangements, the costs of adversarial policy practice could be minimized or avoided, meaningful participation could be facilitated, and learning could feed into processes needed to strengthen policy-making and conservation actions on the ground. The idea is that by designing adaptive institutions, ACM practices would address the

multiple political ecological conditions (highlighted in this thesis) that constrain participation and learning in FPAs. Overall, in this second part of the discussion, it has been explained that whereas ACM promises an effective strategy for forest governance in FPAs where the institutional design is appropriate to local conditions, developing improved and adaptive institutional structures will depend largely on the willingness of implementers to share roles and responsibilities, which the social, cultural and political conditions observed in the case studies may not permit in the near-term. The next chapter presents a summary of the main findings and principal issues and suggestions which have arisen in this research.

Chapter Ten

Contributions and Conclusions

10.1 Introduction

This thesis set out to explore the pathways, prospects and pitfalls of ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone to understand the nature of participation and learning that occurs, and unearth the underlying influence of institutions and power relations. The project was motivated by the growing popularity of ACM as the way to go for designing and delivering effective ICDPs and governing and implementing REDD+ despite lack of empirical evidence on its main achievements and shortcomings in resource and capacity-challenged African countries. In this chapter, the thesis is drawn to a close by synthesizing the key findings of the research, discussing the broader significance and major contributions to theory, and recommending key practical applications and topics for future research. Overall, this chapter brings together the different elements of this research project, which was designed to explore: 1) the nature of participation and learning in ACM practices; and 2) the ways in which structural conditions influence the effectiveness of ACM practices in FPAs.

10.2 Summary of key findings

In general, the research has found that while ACM is presented in the literature as a more decentralized and more participatory approach to governance in resource areas, the actual practice in FPAs does not fully reflect that promise. Thus, while being a prominent concept in

academic circles since the 1990s, the way ACM works within social-ecological systems, especially in resource and capacity-challenged African countries, warrants further investigation. Using a political ecology lens, this thesis has sought knowledge about how ACM practices shape the ability to deal with management challenges in FPAs, and provided insights into the underlying role and influence of power and institutions. The research has summarized empirical evidence regarding the pathways, prospects and pitfalls of ACM practices based on two case studies in the GRNP in Sierra Leone. The focus on local communities provided a fundamental bridge between the theory and practice of ACM, as communities provide an interface for analyzing the processes and outcomes of resource governance actions, as well as the underlying political and institutional issues of importance (Berkes 2010; Armitage et al. 2012).

10.2.1 Nature of participation & learning in ACM practices

Starting with participation, this study has shown that participation in ACM practices in the GRNP in Sierra Leone followed an organized, pre-arranged process, with the interests and perspectives of implementing agents and their affiliates (e.g., NGOs, Paramount Chiefs) superseding those of local communities (for which the programme was intended). The implication is that ACM practices in FPAs are undertaken by actors that are external to participating communities, and important decisions regarding participation and benefits are taken without much recourse to those that are affected by such decisions and actions (Castro & Nielsen 2001). The research has also shown that although local communities are directly involved in diverse aspects of the ACM process, particularly in the implementation of activities suggested in the Forest Management Plans (FMPs), more discretion for decision-making is placed in the hands of few representatives, who are mostly local leaders (Paramount Chiefs) drawn from the better-off members of the community (because of their rights to land and labour), and who do not always have the best intentions for participating. This elite-based

approach to ACM design and delivery engendered far less participation and benefits than the rhetoric and sentiment the governance process carried, and made the pattern (timing and frequency) of participation unpredictable, limiting downward accountability, trust and ownership. While these factors roused self-exclusion from and non-participation in the ACM process, other equally important institutional and contextual barriers were evident, including: a prehistory of cynicism and resentment; concerns about the tangibility, divisibility, predictability, and immediacy of benefits; requirement to own land (wealth status); family size; gender; age; ethnicity; and the approach to implementation and rule enforcement (described in chapter 6).

Moving on to learning, this study has shown that despite the barriers to participation, individuals gained new knowledge from their active involvement in open and inclusive groups set up through ACM practices. Some of these groups (e.g., farm demonstration groups), however, gave priority to problems and practices that resonated with the aims and objectives of the Gola Forest Partnership (GFP), which included placing more emphasis on activities that replenished the forest estate and sustained park operations. Still, learning activities provided an interface for generating knowledge for policy-making and practice through monitoring and evaluation, though the information obtained did not always feed into management decisions, nor was it always shared with other stakeholders (state actors). The new knowledge obtained was utilized by experts (RSPB), giving them the needed leverage to make greater use of the decision-making space than their national and local counterparts. Overall, learning through ACM practices occurred principally for instrumental reasons, to undertake socially and economically beneficial activities and address livelihood challenges (Armitage et al. 2008). These goals were achieved through various learning mechanisms, more specifically farm demonstrations and training workshops. However, the attainment of these valued outcomes was limited by different institutional and contextual conditions, including: poor alignment of

management practices with local conditions; group membership costs; poor timing of activities; inappropriateness of levels of engagement; gender; unskilled and demotivated leadership in community groups; poor communication and coordination; and issues of interpersonal and institutional trust (described chapter 7).

For both participation and learning, the study found outcomes that had a marginal impact on local communities (described in chapters 6 and 7). This is because local communities for which management processes were formally intended realized few of the benefits that implementers claimed to have provided through various initiatives (as presented in progress reports). Benefits of participation and learning accrued to one section of the communities (landowners) more than others, since individuals assumed to be seeking individualized benefits (cash payments for their rights to land) invariably benefited as much as possible from collective resources (such as infrastructure projects, scholarships, and livelihood support initiatives) (see Robbins 2004). As such, ACM practices produced marginal (and differential) shifts in local knowledge capabilities, as well as perceptions of (and attitudes toward) conservation, conservation outcomes and existing sanctions. Overall, the thesis has argued that ACM practices are incentive-based, with a strong emphasis on activities that improve local livelihoods rather than community agency. Thus, ACM practices in FPAs are largely a livelihood issue, more concerned with achieving community wellbeing than enhancing capacity (and agency) to remove prevailing social structural barriers to participation and learning. In this regard, ACM practices depart from the political orientation the concept is given in the extant literature- to share power and roles to ensure meaningful participation in management practices and enhanced capacity and empowerment at the local level (Plummer & FitzGibbon 2006; Berkes 2010).

10.2.2 Power relations and institutional conditions shaping ACM

The findings for participation and learning summarized above fill a significant gap in the literature by demonstrating the desirable and undesirable aspects and impacts of ACM policies and practices in FPAs, and showing that consequent conditions for participation and learning are contingent outcomes of power relations and the institutional design. Regarding power relations, this study has argued that ACM practices in FPAs have political roots and consequences. For instance, the choice to implement ACM in a protected area allowed implementers to control access to a wide range of resources, which produced livelihood costs that severely affected those without access to land (such as women). This shows that some stakeholders were more influential than others in spatially distributing activities, benefits and costs associated with participation and learning. Moreover, the research has argued that the inherent inconsistency between the considered roles of state actors and what they performed on the ground due to financial and technical incapacity, had considerable impact on the nature of participation and learning that occurred. The lack of capacity obligated state actors to rely upon and support the ideas of experts (RSPB), which were considered inappropriate in many cases.

This is implicated in the findings on the way consultations were done and how local representatives were selected, the ways by which these representatives derived their power and authority, and the impact this had on local involvement and benefits. It is also implicated in findings for learning, which show a marked preference for expert information over local experiences and perspectives, and the homogeneity of learning mechanisms and activities. Overall, the expert- (and elite-based) approach did not seek a collective solution to forest governance challenges, rather, it entrenched parochial interests that undercut local involvement and influence in the ACM process. So, participation and learning were not supported to a compensatory and political end, thus undercutting the empowerment necessary to remove

existing social and structural barriers to effective forest governance. This shows that the effectiveness of ACM practices in FPAs can be influenced by power relations involving stakeholders at different levels, which could render management efforts into utter shambles if allowed to continue.

Concerning institutional conditions, the research has shown that the decision to implement ACM in a protected area allowed implementers to control participation and learning in local communities, including spatially distributing roles, risks and rights. The thesis argues that the protected area approach was both socially and technically flawed because it opened the door to power struggles, encouraged rule enforcement to crush local resistance, created limitations to livelihood strategies, and facilitated the internalization of a coercive conservation vision. Moreover, the influence of institutional conditions was implicated in the roles performed by NGOs and community groups. For example, despite the public goodwill that accrued to locally-based NGOs, and the capacity to mobilize financial support, they still relied on resources provided by implementers of the ACM process, coercing them to prioritize activities that supported goals for forest conservation. Similarly, because community groups received financial and technical support from implementers, they could not develop self-directed plans and capabilities to increase their stake in decision-making. The implication is that funding and technical advice can be used by ACM implementers to weaken the influence of NGOs and community groups, which, implicitly, undercuts community agency and engagement. It also limits opportunities for shared decision-making and joint problem-solving, and creates a situation where participants lack a fair and equal chance at influencing the outcome of management practices. Altogether, the thesis shows that the effectiveness of ACM practices (in the context of participation and learning) can also be shaped by institutional conditions such as weak downward accountability, weak ties and trust, lack of ownership, and limited community agency. Such conditions lead to a dysfunctional consensus for ACM practices in FPAs,

deepening inherited and current power imbalances, and increasing distrust between and among actors involved at different levels and scales.

10.3 Contributions to knowledge

10.3.1 Critical political ecology as a theoretical lens

From the perspective of political ecology, this thesis contributes to an understanding of the nature of participation and learning in ACM practices in the GRNP in Sierra Leone, as well as the underlying power relations and institutional issues of importance. The research contributes to emerging literature examining the pathways, prospects and pitfalls of ACM practices in FPAs in Africa, given that relatively little data exists on what constitutes ACM in these settings (Plummer et al. 2012). Given the nature of the research questions addressed in this thesis, a more holistic theoretical underpinning was required to account for the different community and policy-level issues relating to participation, learning, power and institutions. In this regard, political ecology served as a helpful bridge between the theory and practice of ACM, allowing full attention to the influence of context and institutions. Similarly, the research lens enabled the exploration of various interconnected actions through which individuals and groups pursue specific and generalized interests that may, or may not enhance governance processes in FPAs. Likewise, political ecology helped an exposition of the different ways in which participation and learning occur in FPAs, and how actors use their roles and rights to meet their daily needs and encounter shared problems (Springate-Baginski & Blaikie 2013). Moreover, the theoretical framework aided an understanding of the ways by which individuals and institutions improve their knowledge and expertise by interacting at various levels on an on-going basis (Robbins 2012).

Third world political ecology, and critical (or global) political ecology more broadly, have been vastly engrossed with exploring the role, sources, uses, and manifestations of power, and largely

isolated the local-scale issues and conditions that also affect resource management situations. Themes such as transitions in everyday resistance; land-based, ethnic and gendered identities in resource governance; and community knowledge traps, which have been scholastically presented and discussed in this research, have been lightly addressed in the extant political ecology literature. Altogether, from the perspective of political ecology, these themes demonstrate what it means to understand ACM-based governance of FPAs as a practice that is entangled in a dynamic with power and institutions, reflected in the way processes of participation and learning evolve and work. Simply, these themes shed light on how roles and interactions are shaped to forge common bonds and energize collective action for effective forest (resource) governance (Berkes 2010; Voß & Bornemann 2011; Robbins 2012).

10.3.2 Adaptive Collaborative Management as a conceptual lens

The thesis has shown that the principles and lessons of political ecology, which emphasize participation, learning, power and institutions, are applicable to the study and analysis of ACM practices in FPAs. Therefore, ACM (which also emphasizes these four concepts) provided an appropriate conceptual lens for understanding the pathways, prospects and pitfalls of forest governance practices in the GRNP in Sierra Leone. Using ACM as a conceptual lens broadened the analytic reach of the theoretical lens through the exploration of the nature of participation and learning, and the social structural conditions that shape these interactions. For example, the conceptual lens enabled the examination of the outcomes that forest communities seek to achieve through participation and learning, and provided deeper insights into the roles and interactions that influence the direction of management decisions and actions. More specifically, the conceptual lens afforded insights into the ability of individuals and groups to mobilize new kinds of knowledge and foster collaborative relationships (Plummer & Armitage 2010; Plummer et al. 2013), but also introduce negative energy that significantly diminishes the dynamism and direction necessary for collective action (Boal & Schultz 2007).

Hence, the thesis has shown that ACM offers a rubric under which many distinct, though interrelated concepts and issues, can be analyzed and discussed in a disaggregated way. A better understanding of the conceptual and practical relationships among participation, learning, power and institutions has provided a useful approach to examining the effectiveness of ACM from a forestry perspective. What this means is that despite drawing on separate research lineages, a conceptual and contextual connection among these concepts can be demonstrated through the analytical lens of ACM. The research, therefore, demonstrates both conceptually and empirically that the ACM literature provides a suitable framework for investigating and analyzing the nature of participation and learning in forest communities, and the ways in which such interactions are shaped by power relations and institutional conditions.

10.3.3 Pathways, prospects and pitfalls of Adaptive Collaborative Management

Turning more specifically to this study's main line of inquiry, which is the pathways, prospects and pitfalls of ACM in the contexts of participation and learning in FPAs, this thesis has demonstrated that the promise of ACM described in the introduction and literature review have not been fully met, though there has been important progress in some respects. On the one hand, ACM has the potential to influence forest governance in FPAs positively and promote and strengthen positive trends in community development by: delivering a wide range of development benefits; promoting upward accountability; enhancing self-empowerment (and personal efficacy) through self-help initiatives; inducing rule compliance and cooperative behaviour; and partnering with locally-based NGOs. On the other hand, however, ACM may end up being influenced by inherited problems and existing shortcomings in management practices. The bottlenecks relate principally to power imbalances in the spatial distribution and prioritization of activities and benefits; hierarchical and monocentric institutional structures; overreliance on expert information and knowledge; poor local representation; differential levels of knowledge capabilities; limited opportunities for knowledge co-production; inappropriate

levels of learning-engagement; marginalization of minority groups; weak downward accountability; poor communication and coordination; and issues of ownership and trust. Altogether, the thesis has shown that ACM practices are conditioned by political interests (and transactions) and institutional conditions manifested at different levels and scales. Moreover, the research concludes that ACM practices in FPAs cannot aggressively confront social structural barriers to participation and learning, such as culture, gender and power imbalances, when activities appear to fortify inherited and current fault lines in forest governance.

However, the thesis suggests that ACM is difficult to operationalize in capacity and resource-challenged settings like FPAs in Sierra Leone, where the effectiveness of forest governance is affected principally by deficiencies in financial and technical capacity (see chapter 4). Therefore, while ACM cannot solve all the problems of forest governance in the GRNP, and Sierra Leone generally, at its best, it would shift development priorities and promote a new environment-development model in forest communities. At a minimum, ACM could offer alternative livelihood options and address economic interests that compete with goals for forest conservation. Yet, the effectiveness of ACM in translating social relationships into the collective political action needed to simultaneously address forest management and poverty reduction challenges in FPAs, would depend on management decisions and actions taken to improve current institutional conditions. Current conditions, if allowed to persist, could just as easily make way for weak accountability, increase chief power, limit shared decision-making, and limit the reach and utility of benefits. The way ACM institutions are designed will have consequences for the nature and effectiveness of participation and learning, as well as the nature of local empowerment and development. As such, the thesis makes the point that ACM cannot follow a simple, straightforward approach on the ground, but employ strategies based on the diverse interests, perspectives and experiences of those involved. This leads to an argument for placing institutional development at the heart of ACM practices in FPAs, because the

institutional design has a major role to play in offsetting accumulated inequalities and ensuring that local stakeholders receive their intended share of benefits delivered- power, knowledge, roles, responsibilities etc (German et al. 2010).

In the context of REDD+, the findings suggest that ACM could become a critically important element of current efforts to design, deliver and benefit from the Gola REDD+ project and REDD+ interventions in Sierra Leone (and Africa more broadly). Researchers have suggested that REDD+ could be designed to ensure and enhance participatory and locally appropriate governance processes, such as through Adaptive Collaborative Management (Brandon & Wells 2009; Minang & van Noordwijk 2013). Therefore, the results are useful for identifying where greater efforts are needed to ensure effective governance and implementation, including ways to build better on past experiences, and consider the values, priorities and knowledge streams that characterize the local context. The findings also emphasize the importance of straddling multiple interests and perspectives in the design and delivery of governance processes, which means emphasizing roles for both resource users and managers, and learning from past outcomes and experiences. More specifically, the analysis of the nature of participation in ACM is useful for identifying those stakeholders that will be consulted and invited to provide input for REDD+; those that will be empowered and conferred decision-making authority; and those that will have their views and concerns reflected in management outcomes (Schroeder 2010). Moreover, the results for learning are useful for identifying where greater efforts are needed to ensure effective learning throughout REDD+ implementation in the GRNP, specifically, how processes and structures can be adapted to the local context, as well as how learning outcomes can be used to improve management practices (Corbera & Schroeder 2011). Furthermore, the analysis of the outcomes of ACM may be useful to improving the allocation of and access to conservation benefits, which is essential to tackling deforestation and forest degradation in FPAs (Corbera et al. 2010; Corbera & Schroeder 2011; Rosendal & Andresen 2011).

10.4 Practical applications & recommendations

10.4.1 Proposals for policy & practice

This research has several important policy and practical implications. For example, greater efforts are needed to make resources (information, knowledge, power and benefits) more accessible to local communities, which makes developing procedures that ensure fair, equitable, immediate, predictable, and sustainable access a key policy priority. Inequalities in knowledge, power, and benefit allocation and access emerged as crucial influences on ACM practices in the GRNP, so it is necessary to carefully consider and address the institutional and contextual issues analyzed and discussed in this research (see chapters 6 to 9) through effective and inclusive policy-making. This will enable institutions at the different levels of organization to synthesize the different interests and actions required to effectively and simultaneously address forest management and local development challenges. For future practice, the findings from this research suggest several courses of action for improving institutional and contextual conditions for participation and learning in FPAs, including ways to design appropriate and adaptive institutions; increase adaptiveness, legitimacy and accountability, and improve allocation of and access to conservation benefits (Corbera & Schroeder 2011). These recommendations should prove to be particularly valuable to the design and delivery of targetted forest management interventions in Sierra Leone, and Africa generally, including for REDD+ governance and implementation.

Design appropriate and adaptive institutions

The first recommendation is to design appropriate and adaptive institutional arrangements by drawing stakeholders from all affected interests to increase the legitimacy and effectiveness of implementation efforts. In the GRNP, there is a definite need to afford all stakeholders equal and meaningful access to the decision-making space, which will provide complete information

on the local context, and engender the successful design and delivery of locally appropriate processes and structures. In this manner, local choices for forest conservation will be effectively captured without compromising interests and perspectives for community development, and implementation processes will revive the sense of ownership and commitment that is necessary for governance success. Designing appropriate and adaptive institutions will also require specific changes to prevailing political arrangements, including in the role and power of local elites, the definition and delivery of benefits, the involvement and influence of minority groups (such as women), and the function, structure and support of discursive structures (such as community groups) that could create a balance of power on the ground. This is critical to the joint design and delivery of ACM practices, because empowering one group of stakeholders effectively isolates those motivated to engage in the process, and encourages elite control and capture (Sunderlin et al. 2005).

Increase adaptiveness, legitimacy and accountability

The second recommendation is to increase adaptiveness, legitimacy and accountability. Adaptiveness could be increased by strengthening and improving existing structures for community and policy learning, which harness different kinds of knowledge that can shape decisions and actions at multiple levels. Therefore, greater efforts are needed to provide training and education that allows for enrolling and retaining new members in community groups, and for reducing the current overreliance on experts, which, in turn, reduces technical and bureaucratic limitations to local involvement, ownership and innovation (Scheba & Mustalahti 2015). While this makes the point that "an expert knows best" ACM approach cannot yield the results expected of ACM practices in FPAs, it does not call for the complete removal of expert input. This is because the findings suggest that ACM principles are difficult to translate into projects and activities that support effective participation and learning on the ground (Plummer & Fennell 2009). In the case of legitimacy and accountability, there is a definite need to make

quality information more accessible to all stakeholders, as increased understanding of important rights, roles and risks will motivate shared action and increase procedural legitimacy (Bernstein 2011). In doing so, policy-makers and practitioners will provide the awareness and capacity needed to ensure vertical and horizontal accountability and collaboration across the various levels of engagement.

Improve allocation of and access to conservation benefits

The final recommendation is to improve the allocation of and access to benefits, which emphasizes the definite need for increasing political agency so that local stakeholders can have a voice in decisions and actions that determine the direction and quality of conservation benefits. Distribution of benefits and costs are of paramount importance to governance success in FPAs, because forests are a source of livelihood for adjacent communities (Larson & Petkova 2011). Thus, rather than just promoting access to alternative livelihoods, practitioners should be willing to create opportunities that enhance greater local influence and control over decision-making processes. Such actions could involve placing the discretion of determining the allocation of conservation benefits in the hands of forest communities (not just in the hands of Paramount Chiefs or local elites), which would ensure that benefit distribution is fair, inclusive and appropriate to local conditions (Springate-Baginski & Wollenberg 2010). In this manner, governance practices will improve the allocation and access of benefits, and by extension, increase the engagement and support needed to effectively reconcile goals for forest conservation and community development (Corbera & Schroeder 2011).

10.4.2 Suggestions for future research

This research has presented and analysed many important issues relating to a broad field of study, and has provided a basis for further empirical testing and theory elaboration of ACM. Therefore, there is need for more case studies to allow further analysis of institutional and local

dimensions of the research subject, following the methodological approach described in chapter 5. For example, reasons for the differential association between institutional arrangements at the different levels of the ACM process were not provided, so more research is needed to understand and explain why some institutions wield more power and authority than others in FPAs. This would be a fruitful area for further work because it suggests reasons why participatory forestry practices should not be conducted as business-as-usual, focusing particularly on strengthening structures that engender local engagement and the changes needed in current policies and practices to improve forest governance. Another possible area of future research would be to investigate why it is difficult for practitioners to communicate the technical meaning of ACM, which causes an overreliance on technical information and expert opinion. A greater focus on this issue could produce interesting findings that account more for why and how local understanding (traditional knowledge) is passed over due to a marked preference for scientific (expert) knowledge in FPAs, showing how to deal with trade-offs and priorities concerning the integration of knowledge from multiple sources and interests in these settings.

Moreover, a future study investigating how the overreliance on technical information and expert knowledge undercuts local engagement and benefit sharing in FPAs would be very interesting. The issue of expert opinion is an intriguing one, as it is thought to engender technical and bureaucratic challenges that create a bottleneck for participation, learning and benefit-sharing (Scheba & Mustalahti 2015). Thus, it would be useful to understand how experts and the institutionalized relationships within which they perform various roles influence participation, learning and benefit-sharing at various levels and across scales. At the same time, further studies regarding the role of financial incentives in increasing participation and learning in FPAs would be worthwhile, focusing on innovative ways of making longer-term financing available to deal with the issue of co-opting NGOs and community groups to serve political

interests. Chapter 9 suggests that the lack of financial and technical capacity shaped the form and meaning of ACM practices in the GRNP, because it gave RSPB greater control over the decision-making space, coercing other stakeholders to internalize their vision of (and approach to) conservation and community development.

Furthermore, the research has examined various outcomes that result from ACM practices in FPAs. What is now needed is a study investigating the extent to which these outcomes enhance resilience in forest communities, because, while they may lead to certain capabilities (such as new knowledge), they may not necessarily be indicators of community resilience (Kulig et al. 2013). Community resilience is considered the prime indicator of ACM success in resource management contexts (Armitage et al 2010), so the relevance of current results could be usefully explored in further research. It is recommended that further research be undertaken in the following areas: 1) the categorization of outcomes of participation and learning into various capitals; 2) the examination of the stock and types of capital invested; and 3) the interaction among and resulting impacts across capitals (based on Emery & Flora 2006 p.20). If the debate about the utility of ACM is to be moved forward, an understanding that ACM practices are dynamic needs to be developed, to the extent that changes that occur in community resilience through influences from both internal and external conditions can be understood. This should include enquiring into the ecological aspects that complement the social elements explored and discussed in this research. Similarly, a further study could assess the long-term implications of current results for REDD+ governance in FPAs. Although the GRNP is drawing lessons from ACM to facilitate the transition to REDD+, more information on the relevance of ACM to the design and delivery of local REDD+ projects would help to establish more accuracy. The findings of this research would be of great help in generating hypotheses and defining the methodological approach to use. This is not to state, however, that the current suite of methods and procedures (see chapter 5) is the only useful methodological approach that could build on

this research.

10.4.3   Research generalizability

Limitations to generalizability

The generalizability of the results presented in this thesis is subject to three key limitations. First, there were only two separate but iterative data collection phases, which made it difficult to comprehensively explore some of the issues reported in the data (such as elite and expert capture, accountability mechanisms etc). Nevertheless, the nature and impacts of related factors and conditions (such as the ways in which "chief power" was entrenched by the ACM process, and the influential roles performed by experts) were captured at every level of the analysis. Second, the use of surveys to analyze the views of household and organizational informants in relation to participation and learning, may, statistically speaking, best pertain to structures, processes and outcomes in the forest communities examined in the GRNP in Sierra Leone. Third, this investigation is strongly focused on the local level, and examines a specific landscape (a forest protected area), so more research is needed to show how observed structures and processes currently obtain, or can be made to cascade beyond this scale and in other contexts (see Plummer 2013).

Potential for generalizability

Although the findings demonstrate a certain level of context specificity, many of the social and structural issues analyzed and discussed in this research (such as power imbalances, elite distribution and capture of benefits, exclusion in design and decision-making, inappropriate and inadequate benefits, gender discrimination, overreliance on experts etc) have been recurrently used to make deductions about the African experience with ICDPs to date (Wells & Bradon 1992; Struhsaker et al. 2005; Wunder et al. 2014; Lambin et al. 2014; Watson et al. 2014),

suggesting that the findings from this research are not unique to the Sierra Leonean context and the conclusions may have broader applicability. For instance, the incentive for designing and implementing ACM in the GRNP is comparable to objectives for co-management in Malawi (see Russell & Dobson 2011), as well as cases of ACM practice in Ghana (see Akamani & Hall 2015) and many East African countries (see Nunan et al. 2015). These interventions, like REDD+, are designed to address issues affecting national forest conservation and management efforts (Okereke & Dooley 2010) Moreover, the case studies examined in this research are comparable to other cases across Africa because governance processes are directed by institutional arrangements at the policy level (see for example Nunan et al. 2015 for East Africa; Franks & Booker 2015 for other parts of sub-Saharan Africa). Other reasons for generalizability include the way power is mediated and benefits are shared (see Derkyi et al. 2013 for Ghana), and the choice for implementation in FPAs (see Wily 2001 for Tanzania). Therefore, moving forward, this research has the potential to guide the articulation of ACM practices across Africa, especially on how governance practices can be designed and delivered to enhance cross-level participation and learning.

10.5 Conclusions

This study was undertaken to explore the pathways, prospects and pitfalls of ACM in the GRNP in Sierra Leone by addressing two questions: 1) What is the nature of participation and learning in ACM practices in the Gola Rainforest National Park (GRNP) in Sierra Leone? 2) In what ways do structural conditions (power relations and institutions) shape the effectiveness of ACM practices in FPAs? In approaching these research questions, two propositions were examined, which were that: 1) the nature of participation and learning in ACM reflect the diverse sources, conditions and ramifications of power relations in FPAs; and 2) the nature of participation and learning in ACM reflect the quality (design) and strategic interests of institutional arrangements in FPAs. In general, support was found for both theses, with the research concluding that the

prospects and pitfalls of ACM practices in FPAs rest largely on the way power relations are mediated, specifically how power is shared, exercised and transferred, as well as the design and joint operationalization of adaptive, robust and appropriate institutional arrangements. What is abundantly clear is that ACM is conditioned by political transactions at different levels, thus undercutting the ability of individuals and groups to present an aggressive challenge to the political status quo, and address the costs that come from the roles and interactions of those with control over decision-making. Careful attention must, therefore, be given to the mechanics and politics of consensus formation and decision-making in forest communities (and resource systems applying ACM principles generally). The inherent suggestion is that ACM cannot follow a simple, straightforward and standardized prescription on the ground, because decisions and actions often reflect participation and learning among stakeholders that have different capabilities, priorities, and levels of authority.

Although the thesis does not submit that ACM is doomed, it argues that more needs to be done to ensure its short-term and long-term success in FPAs in Sierra Leone, and Africa more broadly. Many of the arguments presented in the preceding chapters help to shed light on why participation and learning in the context of ACM practices in the GRNP have been so unsuccessful. For instance, the results show that ACM interventions were very much like centralized forest governance practices undertaken before 2002, with an added gloss on "participation" and "learning" to mollify critics like NGOs and community groups. The delivery of appropriate benefits to enhance community agency played second fiddle to the goal of expanding bounded "state spaces" for forest conservation, clearly exemplifying a contradiction between the GFP's efforts to facilitate forest conservation, and its purported goals of community development and poverty reduction. In general, these points underscore that ACM practices can provide a façade for a business-as-usual forest governance approach, which principally seeks to preserve the original remits and political influence of implementers and

their affiliates. Likewise, much of this work suggests that participation and learning in ACM practices in the GRNP have been good ideas on paper, but bad in practice, because they have been pursued with little attention to unequal power relations in rural spaces, which have a long historical presence and are deeply entrenched in culture and religion. Participation and learning in ACM may therefore best be described as a "situated practice" (Cornwall 2002), because relations of power shape and drive socio-cultural interactions and institutional processes, and pre-determine whose (or what) interests and ideas are supported and whose (or what) is not.

Thus, while a more nuanced analysis of the mechanics and politics of ACM-based governance practices remains a topical issue for researchers and practitioners, the power relations and institutional conditions explored in this work have broader applicability to future trajectories of conservation and development in Sierra Leone, and Africa more broadly. One key step forward is to address unequal power relations within FPAs by encouraging and facilitating shared decision-making, knowledge co-production, and equitable benefit-sharing. Without this, the prospects for REDD+ could be undermined as paternalistic power relations continue to weaken meaningful local engagement, trap local knowledge, and deter equitable access to collective benefits. If the state and its affiliates see ACM as a strategy for reconciling goals for conservation and development in social-ecological systems, there is an urgent need to rethink the way national policies and local projects are presently being applied in the field. It, therefore, becomes crucial to take structural issues (power and institutions) seriously in the construction and application of participatory forest governance regimes, because ICDPs seeking to foster participation, learning, livelihoods and conservation will consistently fail to achieve these objectives until they bear clear connections to the needs and experiences on the ground.

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Appendix A: Concession/partnership agreement (2007)

Appendix 1 Partnership agreement between MAFFS, RSPB and CSSL (2007)

GOLA FOREST CONSERVATION CONCESSION PROGRAMME

Agreement of the Partners

Partners to the agreement

The Gola Forest Conservation Concession Agreement, is a partnership between the **Ministry of Agriculture, Forestry and Food Security** (MAFFS) of the Government of the Republic of Sierra Leone, the **Conservation Society of Sierra Leone** (CSSL), the BirdLife partner in Sierra Leone and the **Royal Society for the Protection of Birds** (RSPB), the BirdLife partner in the UK ('the partners'). Its objective is to establish the Gola Forest Reserves as a national park and to manage the national park until such time that MAFFS takes over full management control. ('the project').

Article I – Vision

The partners reconfirm their commitment to the vision as stated in the Gola Conservation Concession Framework of 20th March 2002 (Schedule 1):

'To conserve the integrity of the Gola Forest in perpetuity, ensuring that local people living around the Gola Forests will have enhanced livelihoods as a result of income generating schemes which remove the need for unsustainable use of the Gola Forest resources.'

The partners therefore commit themselves to:

    a.   the implementation of the management plan (schedule 2.),
    b.   the designation of Gola as a National Park
    c.   building the capacity of MAFFS personnel so that at the end of the 5-year period of this agreement, MAFFS will manage the Gola National Park in collaboration with others, in particular CSSL, with suitable skills being contracted, where appropriate.
    d.   the establishment of a designated Trust Fund.

As far as resources allow, the partners undertake to implement the activities of the project, accepting the responsibilities set out in Schedule 3.

Article II- Structure of the Gola Forest Conservation Concession Programme

II/1 A management committee will be established comprising a member from each of the partners and a representative of the 7 Gola Chiefdoms. It will be the forum to discuss progress and make any decision necessary to help achieve the project's objectives. The MAFFS Protected Area Management Unit once established will provide co-ordination and secretariat of the management committee.

II/2 Management committee meetings will be held twice a year or more frequently if any one partner feels the need to do so. Meetings may also take place by telephone.

II/3 With agreement of the partners, RSPB will appoint a **Project Leader** who will manage the project and be responsible for the administration of project funds and in conjunction with the MAFFS Protected Area Management Unit, for reporting to the management committee on progress. The Project Leader will also oversee the project, train the Gola Protected Area Manager and Trainee Protected Area Manager on protected area management. The Project Leader will supervise all staff, and will coordinate management meetings at the project site at least every two months that will include attendance of the Protected Area Management Unit.

II/4 The Project Leader will, jointly with MAFFS, recommend to the management committee, candidates for the posts of the following senior positions:

II/5 **Protected Area Manager** (MAFFS) – Will have overall responsibility for the Gola Forest and its protection. Will be guided by the Project leader and implement the activities in the management plan and will be responsible for the implementation of forest patrols and enforcement. Direct reporting line through the Project Leader to MAFFS. In day-to-day work, will work under the guidance of the Project Leader and will report, through the Project Leader, to MAFFS and the Management Committee. The Protected Area Manager will also be responsible for helping to train Departmental heads and other staff.

II/6 **Trainee Protected Area Manager** (MAFFS) – This post has been created as part of the Gola Forest Programme's role in providing training and increasing the capacity of protected area management in Sierra Leone. The post holder will be allocated a range of specific tasks by the Protected Area Manager, with a view to both making the management of the Gola Forest more effective and to broadening the post holder's protected area management experience.

Article III - Recruitment and management principles

III/1 All staff are to be recruited on a competitive, open and transparent basis and once recruited will be employed by MAFFS.

III/2 Staff will be managed by the Project Leader in accordance with the organisation structure in Schedule 5. Any modifications to this structure will be agreed by the management committee.

III/3 Candidates for all senior staff positions down to the level of Superintendent will be recommended by the Project Leader and the Protected Area Manager to the management committee for decision.

III/4 Staff below the position of Superintendent will be recruited by agreement between the Project Leader and Protected Area Manager.

III/5 The disciplining and dismissal of all staff will be recommended to the partners by the Project Leader and Protected Area manager, but must be decided by the Management Committee.

Article IV – Bank accounts, finance and programme equipment

IV/1 Bank accounts will be opened or maintained in the name of the Project.

IV/2 The Project Leader, Protected Area Manager and Accountant will be joint signatories to the account. The Project Leader must be a signatory on all cheques, the management committee may amend this at any time.

IV/3 All financial transactions and expenditures will be properly accounted for in accordance with procedures agreed to by the partners and in accordance with the management plan, annual work plans and budgets as approved by the management committee.

IV/4 The disposal of project equipment (assets) will be carried out as agreed by the management committee.

IV/5 The Project Leader will submit an annual financial report to the management committee. An auditor, to be agreed by the Management Committee, will carry out audits annually.

Article V - Community payments

V/1 A sum will be paid to communities and local governments annually by the Partners as part of a community benefits and payment agreement. This agreement in schedule 4.

Article VI – Resolution of conflicts

VI/1 Any major issues, including staffing issues, which cannot be resolved satisfactorily by the Project Leader and Protected Area Manager together with the Protected Area Management Unit, will be reported to the Management Committee for discussion and resolution. The decision of the Management Committee is final.

VI/2 The Protected Area Management Unit, together with the Project Leader and Protected Area Manager, will report all issues, to the Management Committee, as well as reporting on progress against the agreed Management plan.

VI/3 The partners agreed to work together in good faith and do all in their powers to resolve all disagreements amicably and agree not to institute any civil action or claim.

Article VII - Commencement of Agreement
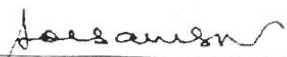
VII/1 This agreement will come into effect following signatures by all of the partners. The period of the Agreement shall be initially for five calendar years from this date. At the end of this period the Agreement may be reviewed and renewed, subject to satisfactory completion of the agreed activities

as outlined in schedule 2, and to further agreement in writing between all the partners to this agreement.

VII/2 Any modifications of this agreement shall be in writing and signed by all partners.
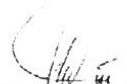
Signed and dated: 26th November 2008

on behalf of the Government of the Republic of Sierra Leone
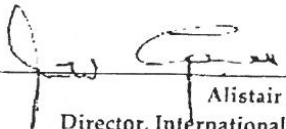
Dr Sam Sesay
Honourable Minister
Ministry of Agriculture, Forestry and Food Security

28/11-08

on behalf of the Conservation Society of Sierra Leone

Daniel D. Siaffa
Executive Director
Conservation Society of Sierra Leone

on behalf of Royal Society for the Protection of Birds

Alistair Gammell
Director, International Division

Appendix B: Benefit-sharing agreement (2007)

26 January 2007

GOLA FORESTS CONSERVATION CONCESSION COMMUNITY BENEFITS AND PAYMENT AGREEMENT

AN AGREEMENT BY AND BETWEEN

The National Commission on the Environment and Forestry
for and on behalf of the Government of Sierra Leone
(herein after referred to as "NaCEF")

and

The Concessionaires of the Gola Forest Conservation Concession, being:
The Royal Society for the Protection of Birds; and
The Conservation Society of Sierra Leone
(herein after referred to as "the Partners")

and

The Local Communities around the Gola Forest Reserves, being the seven Chiefdoms of;
Barri Chiefdom, Pujehun District
Gaura Chiefdom, Kenema District
Koya Chiefdom, Kenema District
Makpele Chiefdom, Pujehun District
Malema Chiefdom, Kailahun District
Nomo Chiefdom, Kenema District
Tunkia Chiefdom, Kenema District
(herein after referred to as "the Local Communities")

PREAMBLE:

Recognising that the Gola Forests are a globally important remnant of Upper Guinea tropical rainforest which, when managed in a sustainable manner through the support and cooperation of local communities, government bodies and national and international conservation organisations, can demonstrate the integration of environmental protection and the maintenance and development of livelihoods, contributing positively to the socio-economic framework of local communities, and the conservation of important biological diversity and environmental services; and

Whereas the Government of Sierra Leone has indicated its intention to conserve the Gola Forests and their biological diversity in their natural state in perpetuity, including constituting the Gola Forest Reserves as a National Park; and

Whereas the Partners have indicated their sustained commitment and support to this end; and

Whereas the Local Communities have indicated their consent for the conservation and protection of the Gola Forests, endorse the principle of a forest conservation concession and the constitution of a National Park, and pledge their cooperation towards this end;

The parties now therefore agree as follows;

SECTION I. GENERAL TERMS OF THE AGREEMENT

1. The Forest Conservation Concession Agreement

The Gola Forest Reserves are to be managed under a Forest Conservation Concession Agreement between NaCEF and the Partners. The Gola Forests will essentially be managed for the conservation of the plant and animal diversity of the entire Gola Forests, and not for the exploitation of timber or other resources. Since the Local Communities will not receive fees or royalties in respect of timber exploitation, and since other activities within the forest will be restricted, this agreement provides for other payments and benefits to be provided to the Local Communities.

2. The Area of the Forest Conservation Concession

This Forest Conservation Concession covers the entire area within the legal boundaries of the three Gola Forest Reserves, specifically:

- Gola North Forest Reserve, including extensions 1, 2, 3, 4 and 5 (approximately 45,843 hectares);
- Gola West Forest Reserve (approximately 6,216 hectares);
- Gola East Forest Reserve (approximately 22,844 hectares).

The total area of these reserves is approximately 74,903 hectares or 74.9 km^2.

3. Transition to National Park

The parties agree to work together to constitute the Gola Forests as a National Park. In the event that a National Park is created during the term of this agreement, the agreement shall remain in effect until it is replaced by a new agreement.

SECTION II. RIGHTS AND OBLIGATIONS

3. Undertaking by NaCEF

The Government undertakes to ensure that the Gola Forest Reserves will be conserved and protected according to the management plan.

The Government undertakes to ensure that no other parties, including commercial operators, local communities or the Government itself shall be allowed to exploit timber or minerals, or to carry out mineral exploration or prospecting in the Gola Forest Reserves, whether for commercial or non-commercial purposes.

The Government undertakes to ensure that all necessary measures shall be enacted and enforced, according to the management plan and relevant legislation, to maintain the biodiversity and natural character of the Gola Forest Reserves. Specifically, farming, mining, hunting and establishment of settlements within the reserve boundaries shall not be permitted. Other activities may be permitted, restricted or prohibited as provided by the management plan.

The Government shall apply the relevant legislation to constitute the Gola Forest Reserve as a National Park.

The Government shall have the overall responsibility for the physical management of the forest so as to achieve the objectives under the management plan, and to ensure the rights of the Parties in this agreement are respected.

The Government shall provide quarterly narrative and financial reports on forest management operations to the Parties.

4. Undertaking by Partners

The Partners shall not have the right to exploit timber in the reserves. Certain trees may be cut when specifically required for activities under the management plan, for example opening of access roads. Where trees are cut for these reasons, they may either be left to decay in the forest, or may be sawn for use in reserve infrastructure. Wood from the reserve may not be sold by any party.

The Partners shall have the right to approve the management plan for the Gola Forest Reserves, and any amendments or revisions thereto. The Partners shall have the right to approve of annual work plans and budgets for any forest management operations that are financed by the Partners contributions.

In return for the Forest Conservation Concession rights granted, the Partners shall make regular payments to the Government and local communities, as detailed under Section IV.

5. Undertaking of Local Communities

The communities will respect NaCEF's authority over the forest, and its legal responsibility to manage the forest and to enforce the laws of Sierra Leone as concern forests and wildlife.

The communities, including the Paramount Chiefs, Councillors, Section Chiefs, Village Chiefs, other community leaders and all members of the community will do all in their power to stop all prohibited activities within the Gola Forest Reserves. In the case of any illegal activities within the forest reserve which are beyond the power of the local authorities to control, these authorities must report such activities to the staff of the Gola Forest Reserves.

6. Participatory management

While the Government shall retain the overall responsibility for managing the Gola Forest Reserves, the planning of management systems and operations shall be carried out jointly by the parties. The Partners shall further have the right to participate in specified aspects of day-to-day management of the forest, according to a plan agreed by the parties.

SECTION III. CUSTOMARY RIGHTS AND COMMUNITY COMPENSATION

7. Historical rights of communities

The parties to this agreement recognize that the communities around the Gola Reserves have historically and lawfully enjoyed the following rights with respect to the Reserves:

(i) The land within the reserves remains the property of the original landowners and their heirs. However, the responsibility for managing the reserves and the resources found therein rests with the Government, in accordance with the Forestry Act, 1988.

(ii) Under the legal instruments creating the reserves and extensions, the inhabitants of the Chiefdoms surrounding the reserves have enjoyed the right to enter the forest for certain specified purposes, which vary depending on the reserve or extension in question, and may include the following:
   - Hunting, trapping and fishing, in accordance with applicable laws
   - Passing through the forest from place to place
   - Collecting thatch, binding materials and building poles
   - Tapping and collecting of produce from raphia and oil palms
   - Harvesting tree crops from plantations established before the creation of the reserves
   - Brushing and farming of swamps within the reserves, subject to authorisation of the Chief Conservator of Forests (currently the Director of Forestry, NaCEF).
   - Brushing of roads within the reserves, which existed before the creation of the reserves

(iii) Under the Forestry Act and Regulations, royalties are to be paid to the landowners, chiefdom administration and Paramount Chiefs for any timber felled in the reserves.

8. Compensation for foregone rights and for respect of management plan

Under this agreement and the accompanying management plan, some of the above historical rights of communities are to be nullified or restricted. Specifically, all farming, hunting, logging, mining and creation of settlements will be completely prohibited within the reserve boundaries. In addition, certain other forest activities are subject to restrictions in the management plan and in legislation, in order to avoid negative impacts on the natural environment and biodiversity.

To the extent that the exercise of the above rights will be restricted or limited by the present agreement and the accompanying management plan, the amounts to be paid to the communities under Section IV below shall be considered as constituting full compensation for the foregone rights of all community members, and for the cost and effort of complying with this agreement and the management plan. The purpose of these benefits and payments is fourfold:

(i) To compensate the communities for the loss of potential royalties and other economic benefits which could have been obtained from commercial logging and other forms of commercial forest exploitation;

(ii) To compensate the communities for any and all inconveniences resulting from the new management system of the Gola Forest reserves, including the loss of certain rights to carry out activities which are now prohibited or restricted, as well as any damage which may be caused by forest-dwelling animals to property outside of the reserves;

(iii) To encourage economic activities by the local communities that will reduce the pressure to exploit the forest in future; and

(iv) To reward the communities for their assistance in protecting the forest, ensuring respect for all applicable laws and regulations, and controlling and preventing illegal activities.

The Parties shall not be required to pay any other compensation to community members or any other person claiming to have suffered a loss as a result of this agreement or the implementation of the management plan. Specifically, the Partners shall not be responsible for any damage or injury caused by wild animals in the communities, whether or not the wild animals are thought to come from the Gola Reserves.

The Government intends in the near future to change the legal status of the Gola Forest Reserves to a National Park, in order to ensure their protection permanently. In this case, the benefits provided to the communities under this agreement will be considered as full compensation for the loss of any rights of use of the reserves resulting from the creation of the National Park, and no additional compensation will be provided.

SECTION IV. FINANCIAL PROVISIONS

9. Management of community support funds

The Partners shall be responsible for the overall management of the funds provided to the communities under this Section. This will include monitoring the use of the funds to ensure that it is used according to agreed procedures and criteria, and providing advice to the communities on the proper and effective use of the funds.

10. Community funds

Financial benefits will be paid annually to the Local Communities in the following amounts, expressed in United States Dollars:

(i) Paramount Chiefs:
Each of the seven Paramount Chiefs shall receive an annual amount of **$ 1,000**, paid bi-annually.

This amount is in lieu of any amounts the Paramount Chiefs would have received as royalties for exploitation of timber or other forest resources. In return for these payments, the Paramount Chiefs must do all in their power to ensure that the people within his Chiefdom respect the management plan and any laws and regulations concerning the Gola Forests.

The Paramount Chiefs shall not have any claim on any other funds provided by the Partners.

(ii) Community Development Funds:

Each of the seven Chiefdoms shall receive an annual amount of **$ 10,000** to support community development projects and programmes.

These funds shall be paid into a bank account created solely for this purpose in each Chiefdom. The Ward Committee of each Chiefdom shall determine the use of the funds, with transparency and accountability for the benefit of the population, in consultation with the entire community. In the case of Chiefdoms having more than one ward, the Ward Committees may choose to delegate some of their members to form a joint committee of the wards for the purpose of managing these funds on behalf of the Chiefdom.

Payments shall be made quarterly on receipt of financial and narrative reports for the preceding quarter, and a budget for the period covered by the next payment. On request of the Ward Committees, and at the discretion of the Partners, larger amounts may be paid at one time in order to enable the communities to carry out projects whose cost exceeds one quarterly payment.

(iii) District Councils:

The three District Councils covering the Gola Forests (Kailahun, Kenema and Pujehun) shall each receive a total annual amount of **$ 1,000**, being approximately 5% of the total amount of the development funds, in order to assist the District Councils to supervise the work of the Ward Committees.

This money will be paid into the general account of each of the District Councils, and will be managed according to the usual procedures of the Councils.

This money is in addition to the development funds, and shall be paid to the District Councils bi-annually. However, all decisions relating to the use of the development funds remain the responsibility of the Ward Committees representing each Chiefdom.

(iv) Land owners:

In recognition of Article 17 of the Act, and Article 10(3) of the Forestry Regulations, the land owners in the seven Chiefdoms shall receive a total annual amount of **$ 28,000**, in lieu of the royalties that would have been payable to the land owners in the event of timber exploitation. This amount will be divided amongst the Chiefdoms in proportion to their respective populations, the percentage of the fee to be amended with any new official census of populations within the Chiefdoms.

Based on the 2004 census figures, this amount shall be paid annually to the seven Chiefdoms as follows:

CHIEFDOM	POPULATION 2004	PERCENTAGE POPULATION	FUNDS US $
BARRI	32,245	24.7%	6,920
GUARA	17,361	13.3%	3,726
KOYA	10,184	7.8%	2,186
MAKPELE	21,947	16.8%	4,710
MALEMA	23,298	17.9%	5,000
NOMO	4,105	3.1%	881
TUNKIA	21,330	16.3%	4,578
	130,470	100.0%	28,000

These funds shall be paid through the Chiefdom authorities for distribution to the rightful land owners.

The Chiefdoms shall each receive an additional annual amount of **$ 1,000** (total $ 7,000 per year) to assist in organizing the distribution of the funds for the land owners.

In the case of any dispute concerning who are the rightful landowners, or who is entitled to receive the fund on their behalf, the Partners may, at its discretion, remit the funds destined for landowners to the Provincial administration for distribution. The Partners shall not in any case be held responsible or required to intervene in any dispute concerning the distribution of these funds.

(v) *Forest Edge Communities:*

The communities living on the immediate edges of the Gola Forests are those who will most immediately affected by the conservation arrangement. An amount of **$ 35,000** will be paid to these villages adjacent to the forest for livelihood-related investments. The specific uses of these funds will be chosen by the communities concerned, in consultation with advisors provided by the Partners.

(vi) *Scholarships:*

A programme of scholarships for higher education and/or secondary education will be provided to the seven Chiefdoms, with a total budget of **$ 7,500** annually. The details of this programme are to be agreed following consultation between the parties.

11. Summary of amounts to be paid annually by the Partners

(a) Paramount Chiefs	$ 7,000 annually
(b) Development funds	$ 70,000 annually
(c) District Councils	$ 3,000 annually
(d) Land owners	$ 28,000 annually
(e) Forest Edge Communities	$ 35,000 once-off
(f) Scholarships	$ 7,500 annually
TOTAL FEES PAYABLE	$ 122,500 annually

12. Exchange rate

While the amounts to be paid under this agreement are fixed in US dollars, the required payments shall be made in Leones. The resulting amounts paid shall be based on the actual official exchange rate of the Bank of Sierra Leone.

13. Conditions on payment of funds

The Partners may not withhold payment of the funds provided for in this agreement, except as specified in this article.

The relevant beneficiary structures (Paramount Chiefs, Ward Committees, and District Councils) shall be required to submit accounts and a narrative report on the use of the funds. The Partners may withhold further payments until such time as satisfactory accounting and reports on the expenditure of funds have been received.

If the Partners have a concern that any of the communities surrounding the Gola Forest is not doing all in its power to arrest activities that are prohibited under the management plan or by law, the Partners shall first notify the community/ies concerned in writing of its concern, with copy to the Park Manager. The Park Manager shall convene a meeting of the parties as soon as possible, and including a representative of the Provincial authorities concerned, to seek a resolution of the issue. In the event that the issue has not been resolved to the satisfaction of the Partners six months after giving written notice, the Partners may temporarily withhold the payment of any category of funds to the communities concerned. If the issue is resolved to the satisfaction of the Partners, then the Partners shall promptly pay any arrears to the communities.

SECTION V. NON-FINANCIAL PROVISIONS

14. Training of Local Community members

The Partners and NaCEF shall cooperate to provide opportunities for training of people from the seven Chiefdoms around the Gola forests in forest management operations.

A programme of livelihoods training and demonstrations will be provided to help people experiment new strategies for increasing food production and income without increasing pressure on the natural forest. A demonstration site will be maintained in each Chiefdom, for the demonstration of new crops and techniques, and the propagation of planting material. The programme will also include training in the communities based on their needs and priorities, with a focus on the villages near the forest.

15. Employment of Local Community members

NaCEF will directly employ at least three people from each of the seven Chiefdoms in forest management operations, on a permanent basis. In addition, people from the Chiefdoms will be employed whenever possible for casual work related to forest management, including clearing the forest boundary, other maintenance operations, and to serve as guides and porters. Where feasible, people from the Chiefdoms will be trained for more skilled positions within the forest management team

SECTION VI. SETTLEMENT OF DISPUTES

16. Amicable settlement

The parties agree that in case of any dispute, disagreement or difference of interpretation, each party shall endeavour to settle the issue in consultation with the other party by amicable means. In the event that an issue cannot be solved by consultation between the parties, the issue shall be referred to a panel for non-binding arbitration, consisting of two representatives named by the Minister responsible for NaCEF, one representative named by the board of directors of CSSL, and one representative named by the board of directors of the RSPB.
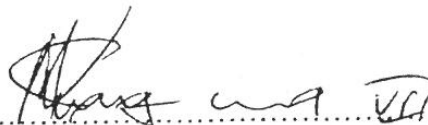
In the event that the parties fail to reach agreement on an issue by amicable means, either party has the right to seek for settlement of the issue under the laws of Sierra Leone.

SECTION VII. TERM OF THE AGREEMENT AND EFFECTIVE DATE
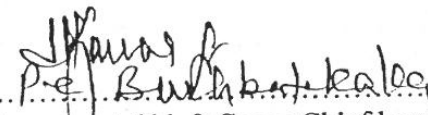
This agreement shall come into force two months after the signing of this agreement, and shall never lapse. No amendment will be of force or effect unless reduced to writing and agreed to by all Parties to this agreement. This agreement shall be reviewed by the Parties every five years.

THUS AGREED TO AND SIGNED
on this the
26th DAY OF JANUARY 2007
AT KENEMA
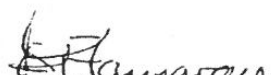
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Paramount Chief, Barri Chiefdom

....
Councillor, Barri Chiefdom

....
Paramount Chief, Gaura Chiefdom
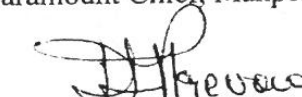
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Councillor, Gaura Chiefdom
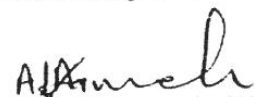
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Paramount Chief, Koya Chiefdom
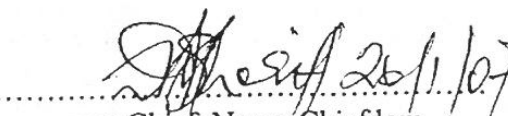
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Councillor, Koya Chiefdom

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Paramount Chief, Makpele Chiefdom
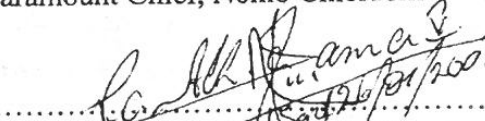
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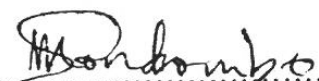
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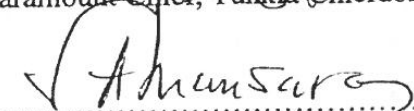
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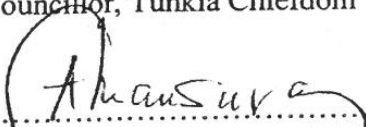
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Paramount Chief, Nomo Chiefdom

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Councillor, Nomo Chiefdom

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Paramount Chief, Tunkia Chiefdom

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Councillor, Tunkia Chiefdom
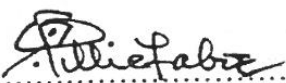
....
Executive Commissioner, NaCEF

....
Ass. Director of Forestry, NaCEF

....
Executive Director, CSSL

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Project Leader, RSPB

....

Endorsed by The Resident Minister:
H.E. Sahr Fillie-Faboe

....

Appendix C: Attached email questionnaire

Respondent details					
Name					
Organisation					
Designation					
Date of interview					
Respondent characteristics (cross as appropriate)					
Years of experience	1-5	5-10	10-15	20-25	Over 25
Geographical scope of practice	Local	Regional	National	Intl	All
Institutional affiliation	State	Consultant	NGO	Donor	Academic

Participation (evaluate the following statements on the nature of participation in ACM)					
Tick boxes as appropriate	Totally agree	Somewhat agree	Disagree	Can't tell	Comments
Local participants are involved in developing procedures for consultation	☐	☐	☐	☐	
Local participants are properly and genuinely consulted	☐	☐	☐	☐	
Local participants are consulted, but only on options which have been carefully constructed by implementers	☐	☐	☐	☐	
Procedures for consultation are decided by local participants	☐	☐	☐	☐	
Minorities (e.g., women) have as much stake as other key stakeholders.	☐	☐	☐	☐	
Minorities have ownership of all assets – there are no conditions which must be met	☐	☐	☐	☐	
Minorities have control over all activities, but only within conditions laid out in project arrangements	☐	☐	☐	☐	
Minorities are given the opportunity to have effective influence and control.	☐	☐	☐	☐	
Implementers give limited control over decision making to minorities	☐	☐	☐	☐	
ACM practices can lose momentum if committed leaders delegate to others	☐	☐	☐	☐	
ACM practices need sustained leadership to be successful	☐	☐	☐	☐	
Implementers invested significant time, money and resources to involve local participants	☐	☐	☐	☐	
There was a committed and skilled leadership for involving stakeholders in planning	☐	☐	☐	☐	
Different approaches to planning were tried to enhance local involvement	☐	☐	☐	☐	
Implementers pay attention to strengthening all forms of local involvement	☐	☐	☐	☐	
Existing laws and procedures emphasize conservation over local participation	☐	☐	☐	☐	
FMPs include the flexibility necessary to enhance participation in ACM practices	☐	☐	☐	☐	

	Totally agree	Somewhat agree	Disagree	Can't tell	Comments
Forestry laws and other administrative and regulatory requirements constrain local participation	☐	☐	☐	☐	
Changes should be made in existing laws and procedures for local participation to make ACM more successful	☐	☐	☐	☐	
Existing laws and procedures constrain implementation because they focus on specific conservation outcomes	☐	☐	☐	☐	
Local participation is supported but is not formulated into any meaningful policy	☐	☐	☐	☐	
Learning (evaluate the following statements on the nature of learning in ACM)					
Tick boxes as appropriate	Totally agree	Somewhat agree	Disagree	Can't tell	Comments
Community groups are accessible to potential members	☐	☐	☐	☐	
Community groups work in an effective, open and inclusive way	☐	☐	☐	☐	
Leaders of community groups have the responsibility to make decisions	☐	☐	☐	☐	
Policy learning includes generating a FMP from feedback obtained	☐	☐	☐	☐	
FMPs include both development and conservation considerations	☐	☐	☐	☐	
Baseline information is always gathered before ACM practices	☐	☐	☐	☐	
Implementers recognize the importance of sharing information with stakeholders	☐	☐	☐	☐	
Policy learning provides a clear picture of the range and levels of participation that already exist	☐	☐	☐	☐	
Policy learning provides a clear picture of the different stakeholders that need to be involved in ACM	☐	☐	☐	☐	
Policy learning enhances knowledge of the barriers to participation and learning, as well as knowledge of possible solutions	☐	☐	☐	☐	
RSPB collaborates with key stakeholders in the use of policy learning results	☐	☐	☐	☐	
RSPB was unable to see the benefits of cooperating with other stakeholders in using policy learning results	☐	☐	☐	☐	
Cooperation for utilizing policy learning results was effective	☐	☐	☐	☐	
Policy learning results were shared but not before careful vetting	☐	☐	☐	☐	

Appendix D: Household survey questionnaire

Respondent details	
Name	
Community	
Section/chiefdom	
Date of interview	

Respondent characteristics (Fill and tick as appropriate)
A1.2 Age: .... A1.3 Sex: ☐ Male ☐ Female A1.3 Are you the head of your household? ☐ Yes (go to A1.5) ☐ No (go to A1.4) A1.4 How are you related to the head of the household? .... A1.5 Were you born in this village? ☐ Yes ☐ No

Participation (evaluate the following statements on the nature of participation in ACM)					
Tick boxes as appropriate	Totally agree	Somewhat agree	Disagree	Can't tell	Comments
Local participants are involved in setting the rules and agenda for consultation	☐	☐	☐	☐	
Local participants are properly consulted	☐	☐	☐	☐	
Local participants are consulted, but only on options which have been carefully constructed by implementers	☐	☐	☐	☐	
Procedures for consultation are not decided by local participants	☐	☐	☐	☐	
Minorities (e.g., women) have as much stake as other key stakeholders.	☐	☐	☐	☐	
Minorities have ownership of all assets- there are no conditions which must be met	☐	☐	☐	☐	
Minorities are given the opportunity to have effective influence and control.	☐	☐	☐	☐	
Implementers give limited control over decision making to minorities	☐	☐	☐	☐	
Local leaders hold more stake in ACM processes than other participants	☐	☐	☐	☐	
Implementers invested significant time, money and resources to involve local participants	☐	☐	☐	☐	
Procedures for planning are appropriate to local conditions	☐	☐	☐	☐	
Different approaches are tried to involve more participants in the planning process	☐	☐	☐	☐	
Project structures are compatible with community structures for planning	☐	☐	☐	☐	
Work closely with one another to address household needs	☐	☐	☐	☐	
Work closely with other households to address household needs	☐	☐	☐	☐	
Have adequate access to non-farm sources of income	☐	☐	☐	☐	
Have adequate access to financial credit	☐	☐	☐	☐	
Have adequate access to healthcare services	☐	☐	☐	☐	

	Totally agree	Somewhat agree	Disagree	Can't tell	Comments
Have adequate access to good educational facilities	☐	☐	☐	☐	
Have adequate access to reliable and portable water supply systems	☐	☐	☐	☐	
Live in decent housing	☐	☐	☐	☐	
Have adequate access to vibrant markets	☐	☐	☐	☐	
Have adequate access rights to forest resources	☐	☐	☐	☐	
Learning (evaluate the following statements on the nature of learning in ACM)					
Tick boxes as appropriate	Totally agree	Somewhat agree	Disagree	Can't tell	Comments
Believe forest is in good condition	☐	☐	☐	☐	
Have adequate access to timber from the forest	☐	☐	☐	☐	
Have adequate access to bush meat from the forest	☐	☐	☐	☐	
Have adequate access to NTFPs from the forest	☐	☐	☐	☐	
Can read and write	☐	☐	☐	☐	
Have adequate knowledge of rules and procedures	☐	☐	☐	☐	
Can negotiate fair market prices for goods	☐	☐	☐	☐	
Community groups are accessible to potential members	☐	☐	☐	☐	
Groups work in an effective, open and inclusive way	☐	☐	☐	☐	
Benefit from effective group leadership	☐	☐	☐	☐	
Actively involved in community organizations	☐	☐	☐	☐	
Tick as appropriate	Yes	No	Can't say	Comments	
Would you feel good if the GRNP was abolished?	☐	☐	☐		
Do people from the Gola Forest Programme do good things?	☐	☐	☐		
Do you view poachers as people breaking the law?	☐	☐	☐		

Appendix E: Interview schedule for key organizational informants

Welcome and instructions	Thank you for agreeing to participate in this interview about ACM practices in the GRNP. I am going to ask you some questions about your experiences of ACM, your attitudes towards the stakeholders, and your thoughts about participation and learning in the process. Feel free to ask me to repeat a question if you need to, and while your views are valued, your identity will not be disclosed to anyone outside this research team. I am also going to record the interview, so please speak clearly and remember that the tape recorder will not pick up actions such as nodding in agreement etc. I am now going to tell you about the research, then we will introduce ourselves and check that the tape recorder is picking up our voices.	
Questions	Opening questions	What was your role in the ACM process? What were the main tasks that you undertook in this role?
	Introductory questions	Were all stakeholders represented in the ACM process? How many communities fell within the project zone? How was the process structured- stakeholder composition, types of committees, source of representatives etc? What geographical area was covered? How was the decision reached? How were the aims and objects of the process decided? Where in the process were local communities involved? How much influence/control did local communities have? Is there (a) evidence of a strategy for participation and learning (b) evidence of its implementation? Does the community participation strategy allow for a variety of 'ways in'? Does it allow local actors to raise questions? If yes, how did you address the questions raised? Is there any investment to develop local infrastructure (this could include buildings, new technology etc)?
	Transition questions	What local groups and networks did the ACM process establish? Did participants raise concerns about the project through these groups? Were the groups able to run in an effective and inclusive way? Were they able to retain the participation of those who joined? Did they have the diversity and experience to work effectively and to represent local interests? Did group leaders have access to the resources they needed to be effective? Did they have the skills and means to deal with negative group behaviour? How did groups know that they were successful? What proportions of members have recognizable roles in the group? Is there evidence of effective leadership, good facilitation, mediation, and creative ways of involving members? How are leaders selected? Are they self-selected or selected based on their expertise? Are they appointed or elected? Who do these leaders report to? Is there a formal requirement for them to report back? Is there a formal process of consultation/ instruction prior to decision-making? Do leaders make autonomous decisions? Can members get feedback from the project about the effectiveness of their groups and leaders?
	Closing questions	What key benefits were targeted by local ACM initiatives? Are there any changes (e.g., in livelihood assets) in the community? Do you think these changes can be directly attributed to ACM implementation? Who has benefited? How are benefits shared? Are there examples of problems that have resulted from the community not being listened to? Are there any negative impacts of participation and learning? What would not have happened without the project? Would more have been achieved using another approach? What improvements in subsequent projects would you suggest using lessons from the ACM process?

Appendix F: Interview schedule for key community informants

Welcome and instructions	*Same as above (in schedule for organizational informants)*	
Questions	Opening questions	What people were important for you in learning about the ACM process? What was their role in the project? What was your role in the project? Were the people identified actively involved in the project and how? Which institutions were these actors attached to?
	Introductory questions	How and where did you learn about the project? Could other methods be more effective in this regard? Why? Did you decide to participate in the project, and if yes, why did you choose to participate in the project? Who decided on the way the project was structured? Who determined local representation in the process? Who defined the geographical area to be covered? Who defined the aims and objectives of the project? How much influence/control did communities have? Were there investments in local infrastructure (this could include buildings, facilities, or new technology)? Were there investments in developing local leadership?
	Transition questions	Do you belong to groups set up by the project? If yes, do you raise your concerns about the project through these groups? Do groups run in an effective and inclusive way? Are groups able to retain the participation of new members? Do groups have the resources they need to function effectively? Are group leaders able to deal with negative behaviour? Do members have the skills and means to involve new members and support each other? How do you know that your groups are being successful? How many members have recognizable roles in each group? Are leaders able to effectively facilitate and mediate group processes? How are group leaders selected? Are they self-selected or selected based on their expertise and experience? Are they appointed or elected? Who do group leaders report to? Is there a formal requirement for them to report back? What information do they make available to those to whom they account? Are members consulted prior to decision-making? Are leaders allowed to make autonomous decisions? Do you get feedback from the project about the effectiveness of these groups and their leaders?
	Closing questions	Are there important events/benefits that changed your perceptions about the project? In what way did these conditions change your perception about the project (positive or negative) and why? Has your understanding of other participants' views improved? Has participation and learning in the project changed the way you relate to other community members and local groups? Do you think your involvement has had any impact in the community? Do you notice any changes in the community because of your individual support and involvement? What are these, if any? Who has benefited? Are there examples of problems that have resulted from the community not being listened to? Are there any negative impacts of the process? Could certain outcomes have occurred without participation in the project? Would far more be achieved using a different approach? Why?

Appendix G: Progression of focus group questioning (organizational informants)

Welcome and instructions	*Same as above (in interview schedules)*	
Questions	Opening questions	From the perspective of forest governance, how would you define Adaptive Collaborative Management?
	Introductory questions	What was the nature and extent of local community activity in the ACM process? What barriers (contextual, legal and institutional) to project design and delivery can you identify? How was the project designed?
	Transition questions	What was the balance of power within the project? What investment was made to develop and sustain local participation? How effective was the leadership within implementing organisations? How accessible were local groups/community-based organisations? How did groups ensure that their leaders were accountable?
	Closing questions	How effective was the ACM process? What real differences have resulted from ACM practices? What 3 positive and 3 negative lessons should consequent projects learn from local ACM initiatives?

Appendix H: Progression of focus group questioning (community informants)

Welcome and instructions	*Same as above (in interview schedules)*	
Questions	Opening questions	How long have you lived in this village? What is the history of the village? What do men do, and what do women do? What are your main day-to-day concerns? What is land used for in this area? How has this changed over time? What else do you grow? How has your experience of working here changed over time? What is your opinion of these changes?
	Introductory questions	What people were important for you in learning about ACM practices? What different methods did the implementers and NGOs use to help you learn about the project? Was this information useful to you? How and why? What kinds of people (interests) are there within the localities covered by the project? What barriers were there to participation and learning in ACM practices?
	Transition questions	How was the project designed? Where in the process were communities involved? What support was provided to encourage and facilitate community participation and learning? How accessible and effective were community-based organisations? Were local representatives accountable to their subjects? If yes, how did you ensure their accountability? If no, why were they not accountable? Why did local you not seek accountability from your leaders?
	Closing questions	Has your understanding about forest management changed over the years? Why and how? What notable differences have resulted from community participation and learning in the project area?

Appendix I: Sample consent form

Research topic	*Exploring the Pathways, Prospects, and Pitfalls of Adaptive Collaborative Management (ACM) in Sierra Leone: A Critical Political Ecology Analysis*
Instructions	You are being asked to take part in a research study of ACM practices in the GRNP in Sierra Leone. Please read this form carefully and ask any questions you may have before agreeing to take part in the study. You must be working in the sector or have done some work in the past to take part in this study. The researcher conducting this study is ABU-BAKAR S. MASSAQUOI. If you have questions later, you may contact Abu-Bakar at a.s.massaquoi@pgr.reading.ac.uk or at +44 7952 913788. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the University Research Ethics Committee (UREC) via Mike Proven at m.j.proven@reading.ac.uk. You will be given a copy of this form to keep for your records.
Purpose	The purpose of this study is to investigate the nature of participation and learning in ACM practices, and explore the underlying influence of power relations and institutions. Understanding how ACM works in FPAs is useful for ascertaining whether and how ICDPs meet their promise of empowerment through participation, learning and benefit distribution, as well as whether and how lessons could inform the design, implementation and governance of local REDD+ projects.
Questionnaire design	If you agree to be in this study, I will conduct an interview with you. The interview will include questions about your job, and ACM processes and outcomes in the GRNP and Sierra Leone generally. The interview will take about 30 minutes to complete. With your permission, I would also like to tape-record the interview.
Costs and benefits	I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. Additionally, there are no benefits to you for your participation.
Confidentiality & anonymity	The records of this study will be kept private. In any sort of report that I make public, I will not include any information that will make it possible to identify you. If I tape-record the interview, I will destroy the tape after it has been transcribed, which I anticipate will be within three (3) months of taping.
Taking part	Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part or to skip some of the questions, it will not affect your current or future relationship with the researcher. If you decide to take part, you are free to withdraw at any time.

Statement of consent

I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature _____ Date _____

Your Name (printed) _____

In addition to agreeing to participate, I also consent to having the interview tape-recorded.

Your Signature _____ Date _____

Signature of person obtaining consent _____ Date _____

Printed name of person obtaining consent _____ Date _____

Appendix J: Community cooperation agreement (2003)

Appendix 4 Local communities cooperation agreement (2003)

Annex 6. Participatory Planning Workshop Statement 2003

JOINT STATEMENT OF PARTICIPANTS

GOLA FOREST CONSERVATION CONCESSION PROGRAMME PLANNING WORKSHOP, 15TH – 17TH JULY 2003, PASTORAL CENTRE, KENEMA

PREAMBLE

In recognition of the urgent conservation needs of the Gola Rainforest, The Conservation Society of Sierra Leone (CSSL) in collaboration with the Forestry Division representing the Government of Sierra Leone (GOSL), Royal Society for the Protection of Birds (RSPB) and Conservation International (CI) organised a three-day (15th – 17th July 2003) Gola Conservation Programme Planning workshop at the Pastoral Centre, Kenema involving representatives of the seven Chiefdoms sharing the Gola Forest and other stakeholders including Local Government, Civil Society Organisations etc;

Having carefully discussed some key elements and principles of the proposed Conservation Concession strategy, and in recognition of the value of the Gola Rainforest as a natural heritage, and also mindful of the current threats facing the biodiversity of the Forest Reserve;

Participants of the said workshop, hereby agree on the following issues subject to further consultation with communities and other principal stakeholders:

1. There is an urgent need to protect and conserve the Gola Forest Reserves because of their unique biodiversity and the many products and services they provide to people.

2. While the management of the Gola Forests will take account of all concerned stakeholders, the principal partners in the management of the forest will be:
   - The Government of Sierra Leone, represented by the Forestry Division;
   - The Communities of the seven chiefdoms around the forest, including the Paramount Chiefs, Chiefdom Development Committees and Chiefdom Recovery Committees;
   - The Conservation Society of Sierra Leone and its partners, including the Royal Society for the Protection of Birds
   - The Donors

3. These four principal partners will work together for the conservation of the Gola forests.

4. A Conservation Concession is the most appropriate way to ensure the conservation of the forest. Under a Conservation Concession agreement, commercial logging would not be allowed in the forest, however non-destructive forest uses by local people would be allowed in accordance with the Forestry Act 1988. In return for the loss of revenue from logging, compensation would be paid to the Government and local communities using donor funds. However, the amount and distribution of compensation would have to be determined and agreed.

5. The period of the proposed Conservation Concession will be for 25 years. This will be preceded by a three-year bridging period during which the details of the final agreement will be worked out. During this bridging period, CSSL and its partners will continue providing development assistance to communities, and will seek resources to increase this assistance. CSSL will also provide assistance to the Paramount Chiefs to inform and consult with their people on the programme to conserve the forest. During this period existing laws and regulations will be respected. Further, a request will be made to Government that no logging

- To secure funds for immediate measures to alleviate critical problems at Gola, through sensitization, livelihood enhancement, law enforcement and provision of alternatives to forest products
- To adopt an updated agreement between Government of Sierra Leone and Conservation Society of Sierra Leone and RSPB, the BirdLife International partners in Sierra Leone and UK respectively.

Freetown, March 2002.

concessions should be granted during the three-year period. After the Conservation Concession takes effect, the partners will review progress every three years.

6. While the Conservation Concession will constitute the core of the strategy for management of the reserves, other measures will be needed to support conservation. These should include actions in the areas of capacity building, education and awareness, and poverty reduction.

7. Concerning the area of forest to be included in the Conservation Concession, the workshop participants were not able to reach a unanimous decision. The Paramount Chiefs and the conservation organisations agreed that the best option was to include all of the Gola Reserves in the Conservation Concession. The Forestry Division explained that its mandate is to conserve forests for protection and production. In fulfillment of this mandate in the interest of the nation, the Forestry Division proposes that a percentage of the Gola Reserves be set aside as core areas for the Conservation Concession.

8. All partners agreed to immediately begin work to carry the process forward.
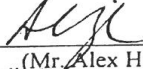
Signed for and on behalf of:

The Forestry Division, MAFFS _____ 18/07/03
(Mr. Shaku A. Mansaray)

The Conservation Society of Sierra Leone _____ 18/07/03
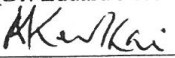(Mr. Daniel D. Siaffa)

The Royal Society for the Protection of Birds _____ 18/7/03
(Mr. Alex Hipkiss)

Donors (Conservation International) _____ 18-07-03
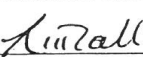(Dr. Eduard Niesten)

Makpele Chiefdom, Pujehun District _____ 18-07-03
(Mr. Alieu E. Kemokai)

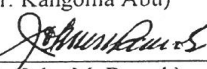Gaura Chiefdom, Kenema District _____ 18/7/03
(Mr. Sandi M. Koroma)

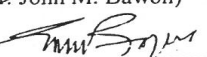Koya Chiefdom, Kenema District _____ 18/7/2003
(Mr. Lahai M. Kallon)

Malema Chiefdom, Kailahun District _____ 18/-7/03
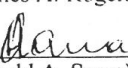(Mr. Kangoma Abu)

Nomo Chiefdom, Kenema District _____ 18/7/03
(Mr. John M. Bawoh)

Barrie Chiefdom, Pujehun District _____ 18/07/03
(Mr. James A. Rogers)

Tunkia Chiefdom, Kenema District _____ 18-07-2003
(Mr. Gerald A. Sama)