Inclusive Community Conservation

Environmental Justice in Ghana's

Community-Based Natural Resource Management

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List of Acronyms

CBNRM	Community-Based Natural Resource Management
CEC	CREMA Executive Committee
CREMA	Community Resource Management Area
CRMC	Community Resource Management Committee
NGO	Non-Governmental Organisation

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1. Introduction

This thesis evaluates the process and the outcomes of frequently implemented community-based natural resource management (CBNRM) initiatives in Ghana. The West African country struggles in finding effective ways to maintain and manage its natural resources sustainably. The richness of the natural environment of what the Europeans accordingly called the 'Gold Coast' has attracted human attention for exploitation already centuries ago. Today Ghana is balancing between gaining potential economic revenues of natural resource exploitation, and maintaining and managing them sustainably. The Government of Ghana maintains several conventional Protected Areas, but this approach has been criticized as it often fails to take the interests of local communities into consideration. Structural Adjustment Programs introduced by lenders like The World Bank and the IMF promoted decentralization of the central government's responsibilities and the ever since numerous CBNRM initiatives that advance communities into legislative bodies have been initiated in Ghana. Multiple studies have assessed these projects on community level, still only little is known about the divergent effects among social strata *within* the community. This thesis offers an intra-community analysis of the Community Resource Management Areas (CREMAs) by analysing them through the lens of environmental justice.

1.1 Ghana's Natural Resources

In sub-Sahara Africa, nearly 600 million people are dependent on forests for food and/or income (Ickowitz *et al.,* 2014). In the meantime, there is globally an increasing pressure on the natural resources and worldwide 129 million hectares of forest, equivalent to the size of South Africa, have been destroyed since 1990 (FAO, 2015). Nigeria, Benin and Ghana are among the countries having world's highest deforestation rates. Ghana contributes to this global trend with a loss of 33.7% of its forests, equivalent to 2,5 million hectares, since the early 1990s (FAO, 2010). Areas reflecting high rates of deforestation include Brong-Ahafo Region, Ashanti Region and Western Region, all located in the southwestern part of the country (Forestry Commission, 2010). Demographic changes, most notably Ghana's vast population growth from 6,7 million inhabitants in 1960 to 28,2 million in 2016 (see figure 1), have been identified together with economic forces and policy influences as main drivers of an increasing pressure on Ghana's natural resources (Forestry Commission, 2010). The natural resources (including wildlife) are particularly important for the livelihood of people living in rural areas. The use of these resources by those depending on its provisioning services has in recent years contributed to a level of depletion that may result in severe future economic developmental and environmental concerns (Forestry Commission, 2000). The

increasing pressure on Ghana's natural resources thus increases the call for effective management tools.

Figure 1: Total population Ghana, 1960-2016

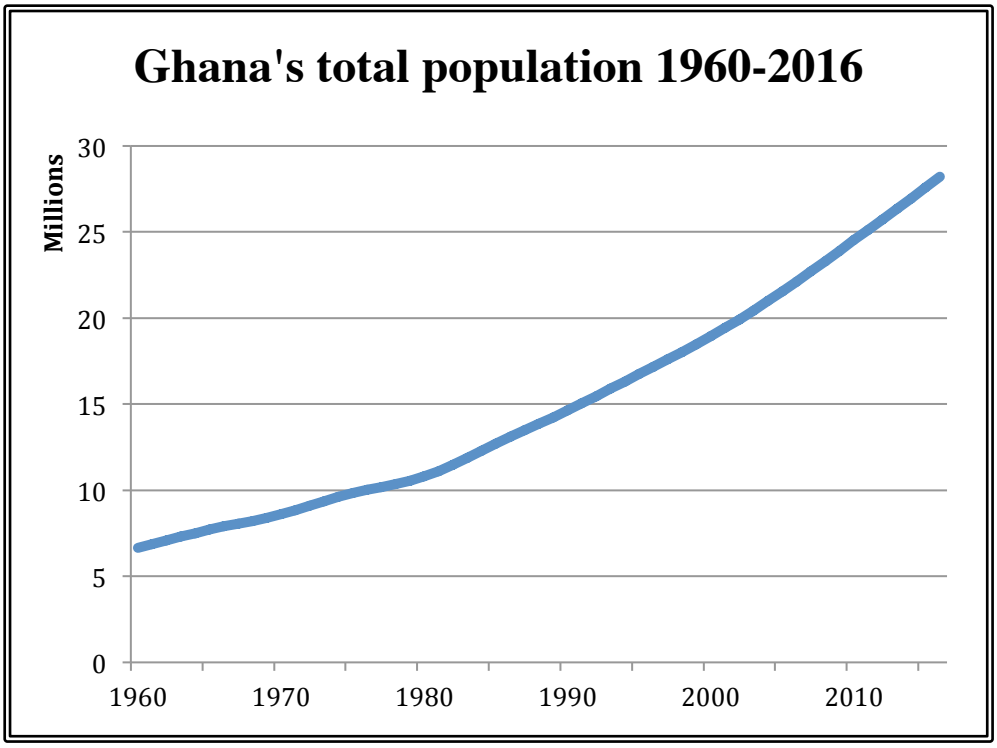
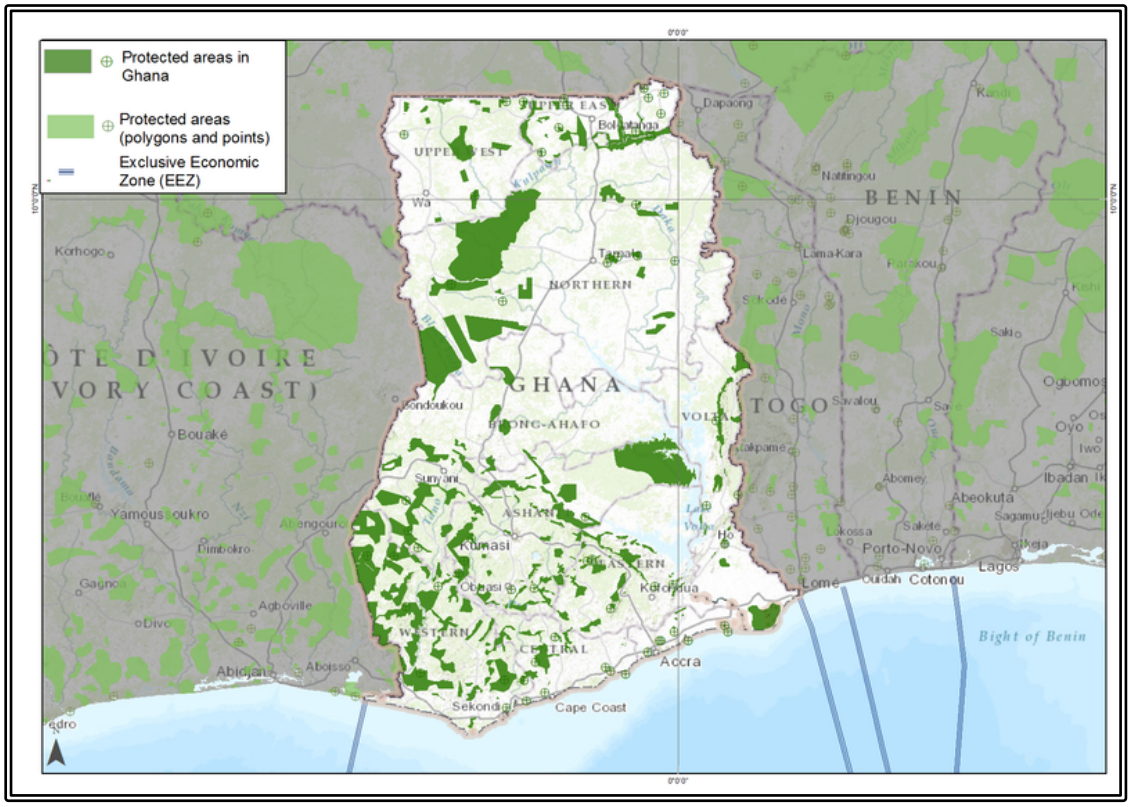


Chart based on United Nations Population Division, 2017

1.2 Natural Resource Management

In attempt to protect its natural environment The Government of Ghana, and during the colonial era the British ruler, used to adopt strict regulatory centralized approaches in the form of Protected Areas; a total of 332 National Parks, Reserves and Sanctuaries (see figure 2) were created. The establishment of Protected Areas was commonly characterized by little consideration of traditional values, historic property claims or local residents (Brandon & Wells, 1992). Since the 1970s, concerns regarding injustice and inefficacy led globally to the emergence of a high number of natural resource management and conservation projects that centred the position of local communities (Western & Wright, 1994). These conservation initiatives tend to put more emphasis on the notions of participatory engagement and community needs seeking to achieve combined objectives involving social justice, poverty reduction and biodiversity conservation (Dressler *et al*., 2010).

Figure 2: Protected Areas in Ghana, 2016



Source: UNUP-WCMW, 2016

The first CBNRM projects were established in southern Africa, after which the approach has come to be a worldwide-adopted strategy (Measham & Lumbasi, 2013). The underlying assumption of the approach is that communities are seen as the best managers of the local natural environment since they are dependent on the renewable resources it provides. Conserving the natural resources is for that reason regarded as highly beneficial for the livelihood of local communities. Thus, CBNRM initiatives have to ensure the sustainability of the management mechanisms on the one hand and the increasing livelihood opportunities for the community members on the other hand (Agrawal & Gibson, 1999: 633). CBNRM initiatives, in this way, also aim to return benefits of natural resources to local communities. A single definition of CBNRM remains debated, but according to Armitage (2005: 703) the approach generally '*seeks to encourage better resource management outcomes with the full participation of communities and resource users in decision-making activities, and the incorporation of local institutions, customary practices, and knowledge systems in management, regulatory, and enforcement processes*.' CBNRM is thus based on the idea that natural resource conservation and local development can be reached simultaneously (Berkes, 2004). It is therefore often placed within the Sustainable Development discourse that believes

in meeting human development goals without compromising the capacity of future generations.

The trend towards community engagement in natural resource management in Ghana specifically emerged after the implementation of 1994 Forest and Wildlife Policy that was part of the Structural Adjustment Programs imposed by The World Bank and the IMF. Ever since over thirty different Community Resource Management Areas (CREMAs) as a form of CBNRM have been implemented across the country aiming to give communities the legal rights to sustainably manage and benefit economically from natural resources (Asare *et al.*, 2013). These CREMAs claim to take local community structures, traditional values and community histories into account. Nevertheless, only little is known about the extent to which the mechanism take intra-community differences into account. This is therefore the focal point of this thesis. The assessment will be carried out using the environmental justice framework.

1.3 Outline of the Thesis

The remainder of this thesis is structured as follows. The next chapter provides a review of the relevant literature on community-based conservation initiatives and presents the research questions. Chapter 3 introduces the theoretical framework by concentrating first on the debate that revolves around the notion of 'community'. Subsequently, the chapter elaborates on the environmental justice theory, centred around the thoughts of Schlosberg. Chapter 4 presents and justifies the selected methodology and research design, and reflects on the researcher's positionality. Chapter 5 introduces the CREMA structures and explores the rationale behind the initiatives and the dimensions of environmental justice in its design. The subsequent chapter concentrates on a CREMA in Ahanta West District in the Western Region. The environmental justice dimensions of the CREMA in the selected case are discussed in the seventh and eighth chapter, which form the empirical foundation of this study. Chapter 9 finalizes this thesis with the conclusions of the findings accompanied with a discussion on the findings and the limitations of the study.

2. Community-Based Natural Resources Management

The first part of this chapter gives an overview of literature relevant to the concept of CBNRM and argues there is a demand for more research on the intra-community implications of CBNRM initiative. The second part provides a glance of the existing literature about the CREMA mechanisms in Ghana. The last part introduces the research question and sub-questions.

2.1 CBNRM: a Curse or Blessing?

The narrative as presented in the introduction (particularly on page 9) offers an optimistic view on CBNRM and considers it as a meaningful tool to promote sustainable development. Despite optimism, the shift towards CBNRM is not undisputed and scholars argue that many CBNRM projects have failed to achieve their aims and expose therefore a rather pessimistic view. Studies question whether the involvement of communities will ensure sustainability at all. Berkes (2004: 662) states: '*On the one hand, there have been increasingly greater efforts and investment in community-based conservation. On the other hand, there has been increasingly greater concern that community-based conservation is not working, and that the emphasis on 'community' and 'participation' is diluting the conservation agenda*.' Balooni *et al*. (2010) for instance asserts that the institutional reform towards decentralized management structures does not guarantee positive social and environmental outcomes.

Scholars have given insights in conditions under which community-based conservation initiatives are likely to perform best or fail. Although various studies demonstrated that local communities could manage the natural resources sustainably autonomously (Dalle *et al,* 2006), another body of studies has revealed that top-down project initiation by either non-governmental organizations or governments leads to inequity between communities and external parties (Duffy, 2006). By the inclusion of communities, NGOs and governments claim social legitimacy, while local actors are expected to meet the requirements set by international conservation authorities before they are considered 'fit' to participate (Spierenburg *et al*., 2006). Measham and Lumbasi (2013) present imposition of CBNRM by higher-level actors as a main factor for failure of community-based conservation programs. Others claim community participation is also halted by lack of economic incentives for communities (Francis & James, 2003).

The popularity of CBRNM has increased demand to question what a 'community' actually is in these community-based projects (Stone & Nyaupane, 2014). 'Communities' in CBNRM may be formed with paying no or little attention to differences among its members in aspects

as gender, interests, history, culture, ethnicity and socio-economic status (see page 14 for a more detailed description of 'community'). While CBNRM initiatives intent to empower local communities, the representations in the invention of 'communities' remain often unexplored (Brosius *et al*., 1998). On community level, an increasing number of investigations focuses on the curse of local elites and the risk of elite capture (Hedge, 2010; Borgerhoff Mulder, 2011; Persa & Andersson, 2014). Donors and implementers began to recognize the importance of equity within communities and particularly put emphasis on gender disparities (Ledelvo *et al*., 2012; Khumalo & Yung, 2015). Often, however, studies tend to focus on the men-women differences and deny other disadvantaged groups (Nightingale, 2002). This thesis is an attempt to contribute to the growing body of literature that attempts to gain local-level understanding of the implications of CBNRM. This is done by concentrating on the struggle among local community actors, and between community and external bodies, over the outcomes and processes of CBNRM. The thesis is based on empirical data gathered in CREMAs implemented in the Western Region of Ghana.

2.2 CBNRM in Ghana

Various scholars presented the CREMA mechanism in Ghana as a potentially meaningful natural resource management model. Foli *et al*. (2017) compared the CREMA with two other management schemes in West Africa and concluded that the CREMA has most institutional arrangements in place to allow local level actors to negotiate about the goals and logic of the mechanism. At the local level, the CREMAs are generally seen as a mechanism that allow people to freely and transparently participate in the decision-making processes (Murray *et al*., 2018). Asare *et al*. (2013) applauded the mechanism for its potential to integrate local traditional values and cultural systems to ensure its socio-culturally adoptability. Robinson and Sasu (2013) demonstrated the non-economic value of the CREMAs and the importance of non-material benefits such as to allow future generations to grow up with certain species.

Another body of literature is, similar to the CBNRM in general, more critical about the CREMA. Baruah (2015), for instance, revealed how local NGOs and governmental bodies overstep the local elected representatives. Agyare *et al*. (2015) assessed and tried to understand the differences in performances between a number of communities and argued outcomes are greatly dependent on issues like how and who introduced the mechanism, existing socio-economic and cultural context, the local challenges of the communities, leadership, and institutional capabilities. So far, studies on the CREMAs predominantly give insights on the effects of the CREMAs on the level of the community or an aggregate of

communities and so far, little investigation is done on variations in performances among social strata *within* communities.

2.3 Research Problem and Questions

This thesis therefore intends to meet to growing call for local level understanding of the implications of the CREMA mechanism in Ghana. To assess intra-community performance it is apparent to investigate the distribution of benefits and disadvantages of the CREMA within society since this is formulated as a main objective and a fair distribution is regarded component of social justice. Young (1990) argues that it is a mistake to reduce social justice to distribution: it is not only necessary to question how the benefits of the environment are distributed throughout society, but also what this (in)just distribution determines. Leading from this observation, this thesis will explore local level implications of the CREMAs through conducting a case study in Ahanta West District. It will do so through the lens of the concept of environmental justice, which will be further explained in Chapter 3. The following research question will address the mentioned knowledge gap:

> *What are the intra-community consequences of the CBNRM policies on the rural population in Ghana's Western Region and to what extent does the CREMA address dimensions of environmental justice?*

The following sub-questions form the guideline of this thesis in order get a useful understanding of the research question:

1. *In what way does the design of the CREMA model address dimensions of environmental justice?*

2. *What are the outcomes of the CREMA initiative in the Ahanta West District and how are the benefits and disadvantages of the CREMA distributed within the communities?*

3. *Does the CREMA initiative ensure a just process in which all stakeholders are recognized, their interests truly taken into account, and able to participate within the decision-making process? What are explanatory factors?*

3. 'Community' and Environmental Justice

The previous chapter already provided insights in the concerns about CBNRM and the notion of equity within such initiatives. This chapter introduces an overview of analytical steps for examining intra-community equity within CREMAs through the concept of environmental justice. Following the ideas of Adams and Hulme (2001) CBNRM has at least three main characteristics: the inclusion of local population within the decision-making process through the devolution of certain formal responsibilities, the assumption that local population intends to sustainably conserve the natural environment due to their high level of dependency on its resources, and the idea that local population benefits economically from the initiatives. This chapter elaborates on this notion of CBNRM by concentrating on the definition of 'community' and argues that this concept is highly political, which makes the natural environment a political arena where one constantly (re)defines the power to access the benefits of the natural resources (3.1). Subsequently, the chapter states that, in line with these ideas, it is meaningful to approach research on CBNRM from a political ecology perspective and concludes by discussing why the theory of environmental justice is commonly used within political ecology research, what it is, and how this theory can be useful for this particular research (3.2).

3.1 What is a 'Community'?

In order to be able to understand the implications of CBNRM and how individuals or various sub-groups are experiencing the community level based management tool, it is crucial to apprehend what this 'community' actually is. How do advocates of CBNRM imagine 'community'? This paragraph introduces a glance of the debate revolving around the notion of 'community'.

Due to the complexity of the concept there is no concise universal definition (Young, 1990). In fact, many different perspectives exist. Studies on community initially focused on the contrast between the 'urban' and the 'rural'. Tönnies (1887) introduced in his book on *Gemeinschaft* and *Gesellschaft* the rural as characterised by an '*idyllic representation of close-knit solidarity'* and the urban as '*a cold, disintegrated, rational lifestyle in the city'* (Blokland, 2017: 23). Rural communities were thus, in contract to the urban, regarded as small places where residents were involved with each other and where 'community formation' would take place relatively easy. This rural-urban dichotomy lost its validity later. This conception was after all based on the notion of sameness within a spatial unit following the idea of predominantly geographers that a community is something similar to a neighbourhood and could be appointed as an administrative unit on a map (Bernard, 1973). It

has become accepted that social networks and interactions, which are universally seen as components of the notion of 'community', are not necessarily geographically bounded, which led to a quest for a new definition. After all, living close to one another does not necessary result in people desiring much to do with each other (Stone & Nyaupane, 2014: 20).

Sociologist Melvin Webber recognized this problem in the 1960s and he accordingly made a differentiation between the above-described 'community of place' and the 'community of interest' (1964). The latter definition approaches 'community' as being based on economic relationships where different social actors rely on shared livelihood resources. Social actors therefore are assumed to have similar interests (Dikeni *et al*., 1996). People relying on similar resources such as rivers or forests do not necessary share locality. The claiming of right to similar resources by various social actors is often characterised by conflict (Kepe, 1999).

Another definition, in particular often used in Africa and thus relevant in relation to this present study, approaches the notion of community as rather something cultural, based on social structures as kinship, social and cultural relations in the form of common characteristics in relation to ethnicity, religion, caste, or language (Dikeni *et al*., 1996; Agrawal & Gibson 1999). The emphasis on social interactions and networks in the definition of community became widely supported by mainly sociologists. However, such an approach, in turn, ignores the divergent interests within communities, and between communities and other social actors (Agrawal & Gibson, 1999). The approach tends to deny the diverse range of histories of community members that may include internal conflict, division and marginalization (Belsky, 1999). Thus, regarding communities as a cultural unified entity is also characterized by several challenges.

Capturing the essence of 'community' is, as to be noticed above, already disputed for decennia and many community scholars, in the light of the mentioned debate, therefore commonly refer to a bundle of concepts including place, interests, norms, compositions, relations and interactions (Agrawal & Gibson, 1999). Still, there is no universal definition. Even participatory initiatives that centre the position of communities fail to point out what these communities actually are (Midgley *et al*, 1986).

This lack of a universal definition of 'community' has resulted in concerns regarding power within CBNRM. 'Community' is always extremely connected to power, as it defines insiders and outsiders (Blokland, 2017: 7). It is necessary to address the internal differences within communities and how these differences affect politics in order to create sustainable and

equitable resource management, as by privileging legal authorities to certain groups others may become excluded. In this way, the natural environment can be regarded as a political arena. To avoid social exclusion scholars suggest that the emphasis of CBNRM projects should be on implementing fair decision-making processes rather than on solely the outcomes, which implies that representatives of different interests should be included in the decision-making process, that it must be ensured that their outcomes form the foundation of the decisions rather than those of external forces and that the decision-making representatives are being reviewed by those who are affected by the decisions. The assumption is that this focus on fair institutions ensures fair outcomes (Agrawal & Gibson, 1999). This paragraph has illustrated how a shift towards CBNRM (re)defines access to the power to control the natural resources. This observation makes it useful to relate the notion of community to environmental justice, a concept that allows taking both the outcomes as the political processes into consideration.

3.2 Political Ecology & Environmental Justice

Environmental justice is a framework that is often used by political ecologists. This paragraph first introduces the sub-discipline of political ecology and subsequently explains the environmental justice framework.

3.2.1 Political Ecology

Environmental conflict is often regarded as something typical 'apolitical' where socio-economic and demographic factors are commonly regarded as main drivers. The study of political ecology differs from these approaches and sees the environmental conflict as inherently political. It is a multidisciplinary field that emerged in 1970s to analyse environmental challenges as a product of social, economic and political processes (Bryant & Bailey, 1997). Political ecology examines in particular those structures that are in interaction with the natural environment. Sutton and Anderson (2004: 26) define political ecology as a study '*concerned with power relations and specifically with the day-to-day conflicts, alliances, and negotiations that ultimately result in some sort of definitive behavior*.' Political ecologists therefore have special interest in the apparatus of legitimizing, exercising and directing power (Adams & Hutton, 2007). Scholars in political ecology are situated in various disciplines including geography, anthropology, politics, development studies, environmental studies and sociology.

The popularity of political ecology grew steadily during the 1980s and 1990s and it became a commonly used approach to study the impacts of the practices of natural resource exploiters and conservationist on local population. In fact, local population or 'communities' may be used as pawns in power struggles between governments, multinational companies and NGOs (Sutton and Anderson, 2004: 26). In the body of African conservation literature Brockington (2004), for instance, revealed how community conservation could increase inequality within societies. Other key issues include the politics of Protected Area declaration, both within colonial as post-colonial context (Neumann, 1992) and the relationship between communities, governments and conservation authorities such as NGOs (Fay, 2013).

The study of political ecology forces scholars to critically analyse power structures at various scale levels. Thus, political ecology does, besides the relations between the previously mentioned stakeholders, also take divergent interests in environmental related conflicts at the local level into consideration. For that reason, it is a meaningful sub-discipline to situate this particular study with an emphasis on intra-community variations in. CBNRM initiatives are, as mentioned, exceptionally political and therefore it is crucial not to only assess the outcomes, but also to understand the entire process of decision-making.

3.2.2 Environmental Justice

The fact that the concept of environmental justice combines an outcome-based approach with a process-based approach makes it a convenient tool to study intra-community differences within CBNRM. The remainder of this paragraph discusses the different dimensions of environmental justice: distribution, recognition and participation.

3.2.2.1 Distributive Theory

The debate around environmental justice emerged in the United States during the 1980s and initially had to do with the uneven distribution of the exposure of external threats concerning public health of sites of pollution since predominantly black communities were disproportionally exposed to environmental ills. By then, the theory of environmental justice was focused on the unequal distribution of environmental ills and the notion of race (Schlosberg, 2007). This *distributive theory* focussed mainly on one question: *who gets what* (Davaudi & Brooks, 2014: 2688)*?* Study methods to identify environmental (in)justice were mainly quantitative in order to indicate spatial and social distribution of the ills and gains. Later, in the 1990s, the environmental justice framework broadened its boundaries from only racial issues to include all marginalized groups (e.g. based on gender, sexuality, socio-economic status, etc.).

3.2.2.2 Recognition

The distributive focus of the environmental justice movement became criticized as it assumed that an unequal distribution inherently corresponded with an unfair distribution. But various political movements may use completely different definitions of a fair distribution: liberals have for instance a completely different view on fairness compared to egalitarians. The distributive theory furthermore failed to address the underlying factors of the uneven distribution. After all, distributive problems happen for a reason (Schlosberg, 2007: 4). Scholars therefore shifted away from just 'counting' the environmental ills and gains towards in-depth analysis of the underlying structures and processes that cannot be captured in numbers or statistics. Research methods thus shifted from a solely quantitative approach to a rather qualitative approach (Holifield *et al.,* 2009). This shift in focus soon acknowledged mis- or non-recognition of marginalized groups as relevant stakeholders as an important explanatory factor for their disproportional exposure to environmental ills (Schlosberg, 2007). Actors in the decision-making processes may fail to recognize certain minority groups as relevant stakeholders of their decisions and when they do recognize them, they often do not take them truly into account. Regularly 'indigenous' groups were not recognized as true stakeholders, this was for instance illustrated by the San who were initially not recognized as citizens of Botswana and as stakeholder of the natural resources in Central Kalahari (Sapignoli, 2015).

3.2.2.3 Participation

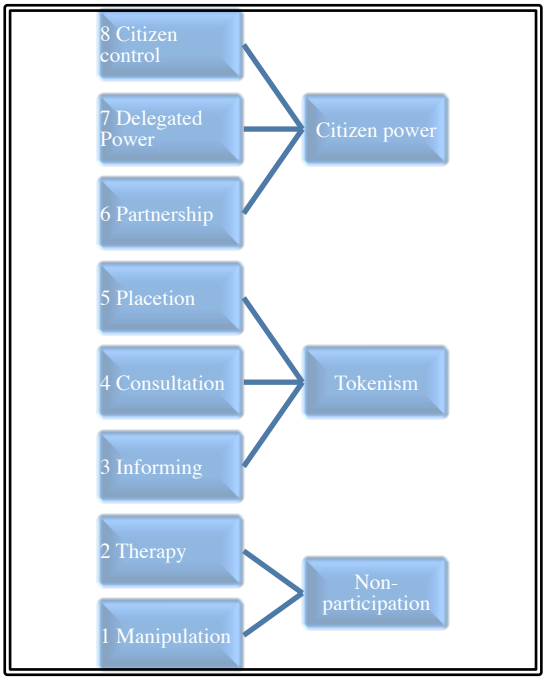
The third dimension of environmental justice, next to distribution and recognition, is participation. Political participation of all relevant stakeholders is to ensure equal access to decision-making and will for that reason secure just environmental policy. Democratic and participatory decision-making is both an element as a condition for social justice since it challenges institutionalised exclusion, social culture of denial of recognition and unjust distribution patterns (Schlosberg, 2007: 519).

The debate about the participation of communities within decision-making processes emerged during the time of much disputed urban renewal projects in the United States in 1960s, which led to the introduction of the influential and frequently quoted 'Ladder of Citizen Control' created by Arnstein (1969; see figure 3). She created a typology of eight levels of participation where the lowest two rungs imply *non-participation* of citizens. This occurs for instance where initiators tend to use the term 'participation' as a public relations exercise and regard local people as passive actors in the decision-making process (Pimbert and Pretty, 1995: 29). Here, extra-community stakeholders use 'community participation' as tool to

establish protected area. The three subsequent rungs indicate certain degrees of *tokenism*, in which citizens may be informed, consulted or are allowed to advise, but are still not empowered to ensure that their concerns and ideas are truly taken into account. The three top rungs imply degrees of citizen *participation*, including the highest rung where citizen are in full charge of policy and decision-making.

Arnstein, nevertheless, already noticed that her typology included some weaknesses as it categorizes power holders and the ones excluded from power in abstract, homogeneous blocks. It therefore does not allow room to identify power structures, various points of view and divergent interests within these blocks. Unrealistic assumptions by policy-makers regarding the homogeneity of communities is one of the reasons CBNRM initiatives may lack long-term viability (Leach *et al,* 1997).

Figure 3: 'Ladder of Participation'



Source: S. Arnstein, 1969, p217.

Still, there are no widely recognized methods to measure participation. Primarily scholars evaluated initiatives based on their outcomes. As mentioned, community participation is not only a desirable outcome but it is also likely to be an important component of the initiatives. For that reason Dyer *et al*. (2014) assessed community participation within external initiated CBNRM projects in southern Africa by a process-based evaluation, which focused on criteria for community engagement that should secure meaningful outcomes. These criteria include early engagement of the communities in the process, clear objectives set by communities

themselves and agreed by all stakeholders, integration of local and scientific knowledge, open and meaningful information exchange between the stakeholders, continued engagement throughout the process, the ability of independent management of the process and equity among the various stakeholders (Dyer *et al*., 2014: 139).

For the sake of a good understanding of environmental justice it is, moreover, crucial to realize that the three described dimensions (distribution, recognition and participation) are closely intertwined. For instance, without the recognition of certain groups as relevant stakeholders, they will be unable to participate in decision-making processes, which may result in uneven distribution. Concluding, the environmental justice framework forces the researcher to approach the CBRNM from various disciplines as it assesses the distribution of the economic outcomes of the CBRNM, but also the underlying social and political processes.

4. Research methodology

This chapter introduces and justifies the selected research methods. In order to examine to what extent environmental justice dimensions are part of CREMA, it is, as discussed in the theoretical framework, crucial to address how this functions in terms of the interlinked dimensions: distribution, recognition and participation. Rehearsing, in line with this framework, the empirical part of this thesis focuses on the following sub-questions:

1. *In what way does the design of the CREMA model address dimensions of environmental justice?*

2. *What are the outcomes of the CREMA initiatives in the Ahanta West District and how are the benefits and disadvantages of the CREMA distributed within the communities?*

3. *Does the CREMA initiative ensure a just process in which all stakeholders are recognized, their interests truly taken into account, and able to participate within the decision-making process? What are explanatory factors?*

Due to the tights linkages between 'recognition' and 'participation', they are being presented jointly in Chapter 8 as 'procedural dimensions'. The conclusion will subsequently discuss the implications of the CREMA on both concepts separately. This present chapter continues by describing the research strategy and design of the present study and the subsequent paragraph explains the importance of a multidisciplinary approach in examining environmental justice. The chapter then shifts to the methods of data collection that have been used in answering the sub-questions. The last paragraph considers the ethical concerns involved in doing this research and reflects on the position of the researcher within this study.

4.1 Research Strategy and design

The main objective of this study is thus to understand the processes that form the foundation of the CREMA model and to what extent these processes address the three dimensions of environmental justice: distribution, recognition, and participation. This emphasis on processes makes a qualitative research strategy most suitable. Qualitative research after all tends to view social life in terms of processes (Bryman, 2012: 402). Since this study aims to present a detailed exploration of environmental justice dimensions of the CREMA model, it uses a case study, which entails an intensive analysis of one case: the CREMA in Ahanta West, situated in Ghana's Western Region. Although the focus is on Ahanta West, experiences from the

CREMA in Bia West District, which is also located in Western Region, have been beneficial as well. These experiences were largely gained during an internship followed at a Ghana-based environmental NGO. Initially, it was the intention to focus the entire study on solely one community, but due to practical reasons including lack of time and limited accessibility due to poor infrastructure it appeared to be complex to gather data in this one specific locality. Due to the uniformity of the CREMA mechanisms, it has in fact been meaningful to gain insights in experiences of the CREMA from multiple sites. Moreover, the uniformity of the structures makes the conclusions of this thesis relevant for other CREMA sites in Ghana. Both the CREMA in Ahanta West District as in Bia West District have been selected as these CREMAs have been in place since 2010, which makes it possible to analyse the outcomes and examine recognition and participation throughout various stages of the process.

4.2 Multidisciplinary Approach

In order to gain understanding in the mentioned sub-questions a multidisciplinary approach is crucial. Investigating environmental justice through the lens of political ecology calls for special attention in the structures within communities that define the distribution of the benefits and disadvantages of the CREMA among various social strata. The theoretical framework (Chaper 3) suggests that, most likely a combination of, cultural, social, economic and political processes could explain a skewed distribution within communities. Leading from this observation, a multidisciplinary approach is necessary to be able to identify and understand the wide variety of these processes.

A certain level of comprehension of economics is crucial to understand the distribution of the benefits of the CREMA, as one of its main objectives is to create alternative livelihood opportunities for farmers. A political approach is necessary in order to understand the decision-making process within the CREMAs. Special attention should be paid to the question who is being included and who is being excluded in this process. Here, it is also important to take cultural and social dimensions into consideration. Issues like existing social relations, local norms and rules, cultural or religious beliefs, or traditional gender roles might be factors in defining local power structures. Concluding, the framework of environmental justice and the perspective of political ecology demand a multidisciplinary character of this thesis, including the data collection methods.

4.3 Data Collection

The methods of data collection are largely qualitative aiming to understand the conservation project as experienced by various community members with a focus on the various dimensions of environmental justice including distribution, recognition and participation. Firstly, the author conducted a six-week internship, which took place between start February and mid-March 2018, at a Ghanaian environmental NGO that currently engages in the implementation of various CREMA initiatives across the country. This NGO is also involved in the development of the various CREMAs in Western Region. This internship period helped to gain a better understanding of the functioning of the CREMA mechanisms. Moreover it helped, in combination with the assessment of various project documents provided by the NGO including monitoring and progress reports, to identify and understand the benefit-sharing arrangements and how communities are being institutionalized in the management systems. This knowledge has been beneficial in order to answer the first sub-question. Additionally, the internship helped in establishing useful contacts in the field. Lastly, during the internship the researcher engaged in a five-day field trip to the CREMA Bia West for project monitoring purposes. During this trip, that took place between 7 and 11 March, the researcher was able to get familiar with the CREMA structures and to conduct two focus group discussions with community management committees.

Political ecology requires a fieldwork-based research design, as this allows the researcher to gain in-depth information and experiences in the social and political structures (Adams & Hutton, 2007). The internship was therefore succeeded by six weeks of fieldwork in the particular areas in Ghana's Western Region. This fieldwork occurred from mid-March to end April and concentrated predominantly on the CREMA in Ahanta West (see Chapter 6.1 for description study field). Personal experiences and observations were important for the research as they allowed the researcher to identify how community members are interacting with the natural environment, and to identify social and political structures as well. During the fieldwork furthermore, semi-structured interviews and informal conversations with various inhabitants of the particular area aimed to give a better understanding in the consequences of the implemented management systems. These interviews (see Appendix I for list of respondents) had a special focus on the governance and socio-economic outcomes of the CREMA mechanisms and have therefore been useful in order the address the second sub-question. Respondents were selected based on their dependency on natural resources. The author aimed to get insights into the experiences of various resources users, thus for instance farmers, hunters, forest products collectors, ecotourism-workers, in order to understand the impact of the management shift. A possible limitation of this sample is that it was based on

the material value of the natural resources (predominantly livelihood values) and less on non-material values (e.g. aesthetic values). Therefore, the empirical data on the distribution is focused on the economic advantages and disadvantages and provides fewer insights into the distribution of non-material impacts.

During the same interviews, additional questions relating to respondent's engagement in the CREMA were meaningful for addressing the third sub-question. To get a better understanding of the recognition and participation dimensions it was also crucial to conduct various interviews with information-rich key-figures of the implementation process, such as NGO employees, District Assembly representatives and traditional village leaders. The CREMA model includes a management committee with community representatives. Interviewing these people aimed to give insights in the ways the management mechanisms try to pay attention to internal differences within the community. It helped in answering process-based related questions like: who is included in the decision-making process? Who is excluded? How are the decisions being made? Focus group discussions with community management committee members were beneficial to obtain insight in the structures among the members, between the members and the residents of the sites, and between the 'communities' and external involved parties. In all interviews and informal conversations the researcher gave special attention to multiple interests and identities within the rural community in order to get a better representation of the local reality. All interviews and focus group discussions have been detailed noted and they have been transcribed directly after conducting them.

4.4 Ethics and Positionality

This study is predominantly based on primary data. Interviews, informal conservations, observations and personal experiences of simply being in the field greatly enriched the research data, but this is not without concerns. This paragraph presents the ethical considerations of this particular research and the position of the researcher within this study.

The fieldwork took place in the western part of Ghana where the researcher took into account both formal as informal rules; this included national legal laws, local religious norms, and everything in between. The research project does not have any external sponsors to ensure the independency and the transparency of the researcher. The process of data collection involved participants in the form of inhabitants of the CREMA Bia National Park and CREMA Ahanta West, NGO employees, assemblymen and traditional village leaders. They have been involved in interviews, informal conversations and observations. Participating in the research was not without problems, as the researcher interacted with politically marginalized

individuals and/or groups. Therefore it is important that obtained data is treated strictly confidentially. During the participant recruitment the researcher avoided the involvement of vulnerable groups like children and during the interviews the researcher explained the participants that their involvement is voluntary, that they were able to withdraw at any time, and the data obtained from observations will remain strictly anonymous in any written work and/or any other form of publication. This is ensured by giving the participants other names and by avoiding publishing any other data that may make the identity of the participants traceable. Concluding, the researcher has ensured that nobody involved in the research will be exposed to any possible risks.

Furthermore, at time of data collection, the researcher was aware of the notion of 'outsiderness'. As outsider in the surroundings of Bia West and Ahanta West, there was a clear distance between the researcher and the research subjects. It could possibly have been occurred that respondents were not willing to talk about personal issues with a 'stranger from a place far way'. Being an outsider was on the other hand beneficial for the investigation as respondents were for instance willing to talk about their experiences with traditional authorities. Discussing such topics with local researchers might potentially have been complicated. In this way, being a 'neutral' outsider helped to gain 'objective' understanding of the local economic, social, cultural and political structures.

5. Community Resources Management Areas (CREMAs) in Ghana

In this chapter the organisation structures of the CREMA are shared. The first paragraph situates the CREMAs within Ghana's policy regarding natural resource management and elaborates on the rationale behind the policy. Subsequently, the chapter outlines the structures of the CREMA model and continues to analyse to what extent the model addresses dimensions of environmental justice.

5.1 Forest and Wildlife Policy

Policy regarding Ghanaian forests and wildlife is under the control of The Ministry of Lands and Natural Resources. The 1948 Forest Policy mainly provided the creation of National Parks and other Protected Areas. This policy failed to succeed since illegal harvesting and resource exploitation, among others by local population, increasingly threatened the forests. In order to give local population a greater share of the benefits and responsibilities of the natural resources, the Government of Ghana initiated a series of policies and measures in the 1990s that emphasised the notions of public participation and community involvement. These decentralization measures were part of the Structural Adjustments Programs imposed by lenders The World Bank and the IMF.

The natural resources policies and measures were known as the Collaborative Resource Management Programs and included the 1994 Forest and Wildlife Policy, in which the CREMA model officially emerged. Wildlife Division, a subdivision of the Forestry Commission, initially created the CREMA model. Primarily, it aimed to conserve threatened wildlife, but later the model became widely used as a forest management tool as well. By decentralizing forest and wildlife management the CREMA mechanism predominantly intended to promote natural resources conservation and to create alternative livelihood opportunities for those living close to Protected Areas, thus in off-reserve areas. It took several years before the first CREMA was inaugurated near the Ankasa Resource Reserve in 2003 (Forestry Commission, 2016: 93). Ever since the Government of Ghana strongly stimulates the CREMA approach and currently over thirty CREMAs have been implemented across the country.

5.2 CREMA Implementation Process and Design

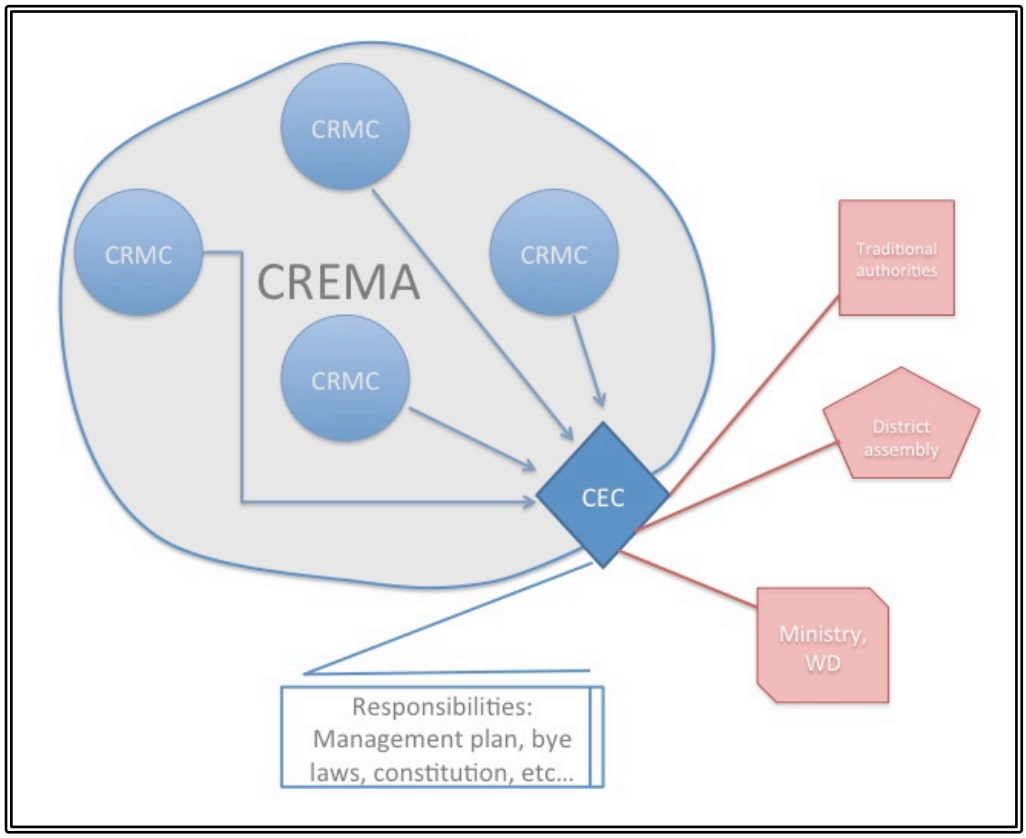
The creation of CREMAs is commonly funded by external donors such as global institutions and organizations like The World Bank, the Global Environment Facility, USAID, IUCN and

the United Nations, and the implementation process is usually a collaboration between the state, in the form of either Forestry Commission or Wildlife Division, and a local Ghana-based NGO, commonly with a facilitating role. This alliance works according to the step-by-step user manual prepared by Wildlife Division (2004) and accordingly starts the implementation process by organising a community consultation. Subsequently, they will, together with community leaders, traditional authorities and assembly representatives, assess whether the particular area is a potential CREMA site (Asare *et al*, 2013). This decision is based on determinants including existing land-use practices, community structures and land tenure regimes. A CREMA will not be developed without the approval of the local authorities. Several community leaders in the Western Region for instance decided that the CREMA model was not desirable for that particular village.[1] Thus, whereas the creation of CREMAs is highly promoted by the Forestry Commission, community leaders must approve the start of the process on behalf of the communities.

A CREMA is generally managed by multiple community resource management committees (CRMCs) and one overarching CREMA Executive Committee (CEC) (see figure 4). The formation of the CRMCs is, after the approval for a CREMA by community leaders, the first step of the CREMA implementation process. The role of the CRMC is to help with the implementation of the activities of the CREMA, to assist in formulating the CREMA goals and visions, and to intermediate between the CEC and the individual communities (Asare *et al*, 2013: 3). The CRMCs contain 5 to 13 representatives of a particular community or, when the communities are very small, cluster of communities. During a community meeting, the participants discuss the profile of the representatives, which has to ensure a fair representation of all sub-groups within the decision-making process. One has for instance to agree upon the male-female ratio and define the disadvantaged groups within the community to ensure they also being represented. The participants of the meeting subsequently set the criteria for the potential CRMC members. The list of criteria may be different for each CRMC, but candidates are commonly at least required to have a high reputation in a greater section of the community, to be literate which stimulates a proper functioning of the committee and to have a high voluntary spirit as the position can be time-consuming and no remuneration is awarded to the members. Qualified candidates are nominated based on these criteria and they, in turn, have to be accepted by the community members. When the number of qualified candidates exceeds the number of vacant positions, a voting process helps to elect the final CRMC members.

[1] Conversation NGO employee, 10/03/18
[2] Interview with fishmonger in Butre, 12/04/18

Figure 4: CREMA model



Based on: Wildlife Division, 2004

Once the CRMCs have been formed, representatives from each committee are elected to form the CEC. The CEC is the highest decision-making body of the CREMA and oversees and directs the operations of the CREMA (Asare *et al*, 2013: 3). The CRMCs and the CEC develop a management plan for the CREMA, decide on the benefit-sharing arrangements and define the boundaries of the 'community'. The CREMA is a landscape-level planning tool, which implies that it seeks to manage the natural resources within a specific geographical unit. Forestry Commission (2000: 8) states: *'the concept [CREMA] is based on the 'community' as the management unit but due to the diversity of circumstance, the definition of community will be determined in each case by the people themselves.'* The CRMCs and the CEC are expected to define the boundaries of the geographical unit. Economic, social and ecological similarities form commonly the foundation of this decision.

Once the CRMCs have agreed upon all rules and regulations of the CREMA, the CEC will review them together with traditional authorities, the District Assembly and by either Wildlife Division or the Forestry Division. All the rules and regulations are then drafted as district

byelaws and presented to the Minister. The Minister issues the final Certificate of Devolution, which transfers the authority to manage the natural resources to the CEC and the CRMCs. After this process the CREMA has, in theory, become an independent legal institution.

5.3 Conclusion

This gives several views on environmental justice dimensions of distribution, recognition and participation in the CREMA design. The distribution of the benefits and disadvantages is captured in the benefits-sharing arrangements in the constitution. This is to avoid a skewed distribution where certain groups disproportionally experience the negative impacts of the CREMA's rules and regulations without experiencing the benefits.

To ensure the recognition of all relevant stakeholders, during the community meeting participants define the 'disadvantaged groups'. One the one hand all stakeholders, including these disadvantaged groups, are expected to participate in the CRMCs and the overarching CEC. Thus, there is a certain intention to recognize different sub-groups within the community. On the other hand however, the list of criteria for committee members excludes people without high reputation, the ability to read and write, and time to volunteer to become elected. This makes it for already disadvantaged groups difficult to participate in the decision-making bodies and allows existing elite groups to dominate the management process.

In sum, the CREMA's design partly addresses the environmental justice dimensions. Nevertheless, in reality the implementation and the daily operations of the CREMA may be very complex. Chapter 7 and 8 elaborate on the outcomes of the CREMAs and the decision-making process and show how the CREMA implementation in the selected sites impacts intra-community differences in terms of distribution, recognition and distribution. Before proceeding to the assessment of these dimensions, some background information on the CREMA in Ahanta West District is provided.

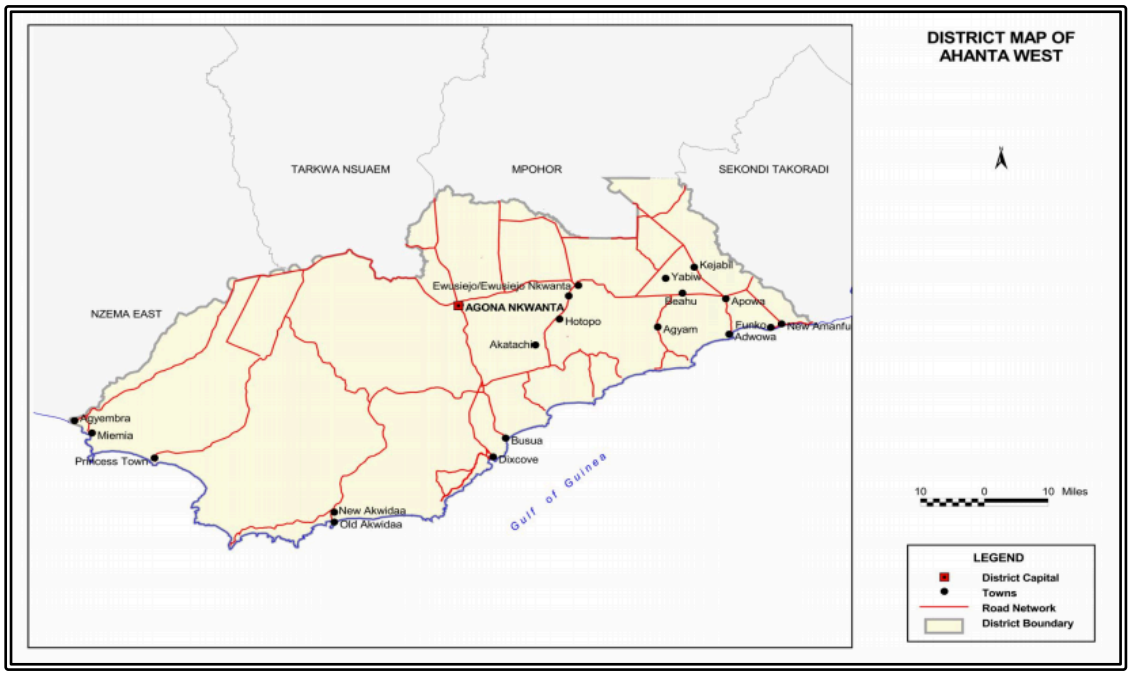
6. CREMA in Ahanta West District

The focus of this study is on a CREMA in Ahanta West District. This chapter first provides relevant background information about this particular area and subsequently introduces the CREMA that has been implemented in this specific site.

6.1 Ahanta West District

Ahanta West is a district located in Ghana's Western Region (see figure 5). It is located along the coast of the country and closely to the commercial and administrative capital of Western Region Sekondi-Takoradi. The district capital of Ahanta West is Agona Nkwanta and the remainder of the settlements are predominantly rural. Within the district, there is the tropical forest Cape Three Point Reserve, which is considered to be a Globally Significant Biodiversity Area and under serious threat. A high number of different animals and plants, including distinct primates, have been identified both within the reserve, as in off-reserve areas. The coastal areas of the district are furthermore characterized by the presence of many wetlands that include various rivers and mangrove forests, and which provide an important range of environmental, economic and social services.

Figure 5: District Map of Ahanta West



Source: Ghana Statistical Service, 2014

The major ethnic group in the district is the Ahanta, a sub-group of the Akan ethnicity that is widely spread throughout Ghana and Ivory Coast, and it is believed that the Ahanta settled already in the 13th century along the coast of Ghana. Currently the area is because of oil activities and its tourism potential a main destination for economic migrants from predominantly from other parts of Ghana with different backgrounds in terms of ethnicity, religion, beliefs, norms and language. Oil activities take predominantly place in and around the port of Takoradi, but many people choose due to the high costs of living in Takoradi to settle in closely located villages in Ahanta West District (Eduful & Hooper, 2015). Tourism activities take place along the coast of the district where beaches and forts are the main attractions (see figure 6).

Figure 6: Beach of Busua, one of main tourist attractions of Ahanta West. The tourism sector serves as pull-factor for migrants.

Source: author, 2018

Agriculture nevertheless still serves as the major economic activity and about 36,4 per cent of the population engages in agriculture, fishery and forestry (Ghana Statistical Service, 2014). There is a large-scale palm oil plantation owned by Norpalm Ghana Limited and there are numerous rubber farms and plantations owned by Ghana Rubber Estate Limited (figure 7). The huge amount of land that is needed for rubber and palm oil production, due to the low

yield productivities of the crops, has decreased the available land for small-scale food farmers (Coastal Resources Center, 2011). At the same time there is an increasing demand for land for non-agricultural activities as result of the oil and gas production that started in 2010. This has, in combination with other factors including an increasing population density, increased the pressure on the remaining natural resources of for instance the wetlands and the Cape Three Point Reserve. These factors and the paradigm shift of the state towards community participatory management have led to the initiation of a CREMA in Ahanta West that was officially inaugurated in 2010 and named after country's most southern village: Cape Three Point, which will be further explained in the next section.

Figure 7: Rubber plantation in Ahanta West

Source: author, 2018

6.2 CREMA Cape Three Point

CREMA Cape Three Point comprises twenty communities including the focus communities of this study. The overall objectives of this particular CREMA have been formulated by the CRMCs and CEC as follows (Coastal Resources Center, 2013):

- To conserve wildlife for the future generation;
- To conserve wetland areas for sustainable ecological, social and economic benefits;
- To protect all natural resources in general;
- To generate income for community development;
- To improve the livelihood of people in the community;
- To provide employment for people in the community;
- To promote ecotourism.

Connected to these objectives, the constitution and byelaws include a list of rules and regulations as showed in table 1. This list includes numerous restrictions on the use of the local natural resources that are located within the boundaries of the CREMA. The regulations set in the constitution and the byelaws might have several consequences on people that are relying on these resources. The next chapters elaborate on a description and analysis of the consequences of the management shift from a centralized model to a decentralized community-based model in terms of distribution, recognition and participation.

Table 1: Rules and regulations CREMA Cape Three Point

General protection of amenities	Right of access to resources
No person shall at any time: - Hunt, capture or destroy any wild animal by using chemicals, any artificial light or fire within the CREMA; - Pollute any water body within the CREMA; - Use chemicals, poisons or explosives for fishing; - Farm within a minimum distance of twenty meters from any water body; - Use dogs, clubs and sticks for hunting within the CREMA; - Fell trees to hunt or catch canopy wildlife animals within the CREMA; - Set traps especially the type called 'JACK' within the CREMA; - Use fire as tool of hunting rats and other land wildlife within the CREMA; - Pick snails during the incubation periods within the CREMA; - Allow caretakers to kill existing trees in farms within the CREMA unless such trees are life threatening or generally known to be unsuitable for cultivated crops within the location of the farmer. - Destroy farms via timber extractions by timber concessionaires with the CREMA; - Illegally fell timber / non-timber forest products using chainsaw within the CREMA; - Block water flow in rivers to fish and thus causing siltation within the CREMA; - Hunt during close seasons within the CREMA (1st August-1st December of every year); - Pollute drinking water bodies with effluent (waste) of alcohol distillation within the CREMA.	*No person shall at any time:* - Hunt, capture or destroy any wild animal within the CREMA except with the consent of the CEC and subject to conditions that the committee may determine; - Collect any non-timber forests products from the CREMA except with the consent of the CEC and subject to conditions that the committee may determine; - Hunt, capture, destroy or be in possession of any wild animal wholly protected by the byelaws of the national law or the national law as prescribed in L.I 685 and its amendments; - Harvest any tree/mangrove from the wetland without the consent of the CRMC; - Make any development in the wetland area that will lead to the elimination of the wetland environment and the natural resources contained thereof; - Introduce new species of wetland vegetation to replace the original vegetation; - Harvesting of trees/mangrove has been suspended until the community led by the CRMC monitors and deems it necessary; - The community, led by the CRMC shall protect the wetland environment from human and/or physical activities that will result in the degradation of the wetland. This include and not limited to: a. Uncontrolled harvesting b. Erosion/Sedimentation; - The community led by the CRMC shall preserve all wetland vegetation species in their natural area of occurrence; - The community shall re-plant all degraded mangrove sites a. Any tree/mangrove that is deemed appropriate by the CRMC for harvesting, when harvested must be replaced within two weeks; - Access to and harvesting of tress/mangroves will be regulated by the CRMC based on availability in line with the management plan; - The community led by the CRMC shall agree on rates to be paid by persons who are given access to harvest resources from the wetland. a. Such money collected should be paid into the CRMC account immediately.

Source: Coastal Resources Center, 2013

7. Distributional Dimension

Following the environmental justice framework of Schlosberg the concept first asks what the distribution of benefits and disadvantages looks like and then asks the central question how this (mal)distribution is produced. The list of rules as presented in the previous chapter may severely impact the daily practices of a number of community members since the livelihood of many depends on the local natural resources. This present chapter explores the differentiated effects of the CREMA's rules and procedures within communities, which in turn, will help to identify disadvantaged groups. Subsequently, Chapter 8, concentrates on the central question of how the (mal)distribution is produced, implying it explores the underlying procedural factors including recognition and participation.

7.1 Natural Resource Use Restrictions

The constitution and byelaws of the CREMA include a wide variety of restrictions on the use of natural resources, both in the wetlands as in the off-reserve areas near the Cape Three Point Forest Reserve. Mainly poorer community members, who cannot afford to buy certain alternatives, are dependent on the livelihood and health services the wetlands are providing, including food, construction materials, fuel wood and charcoal, and medicines.

In the entire Ahanta West District the main sources for cooking fuel are wood (49,5%) and charcoal (34,6%; Ghana Statistical Service, 2014). In literature, high costs of equipment and modern fuels are considered as main reasons certain households do not adopt modern fuels (Karimu, 2015). In the Ahanta West District especially the white mangroves (Laguncularia racemosa) are being felled as source for fuel wood, because this specific tree burns relatively slowly with an intense heat, and the black mangroves (Avicennia germinans) as source for charcoal (Abbiw, 1990). It is the traditional role of the women, often accompanied by their children, to prepare food and thus to get cooking fuel. These women claim that this specific tree gives a good taste to the fish they smoke.[2]

Due to the constitutions and the byelaws that have been introduced as part of the CREMA, it has become prohibited to exploit any resources from the wetlands, except for medicinal use. As alternative for mangrove trees, women have to buy rubber trees from the Ghana Rubber Estates Limited, since the distance to trees where felling restrictions do not apply is too large. The women insist that the rubber trees are too expensive, that the smoke of rubber wood causes eye irritation and that it reduces the taste quality of the food.[3] Thus, instead of getting

[2] Interview with fishmonger in Butre, 12/04/18
[3] Interview with fishmonger in Butre, 12/04/18

free wood from the local wetlands the women have, due to the introduction of the CREMA, to buy wood of an inferior quality from rubber producers, which harms their health and the quality of the food they prepare. Others, who cannot afford this alternative, are forced to fell mangroves illegally (see box 2). Hence many women do not appreciate the rules and regulations of the constitution and byelaws.

Box 2: Illegal mangrove harvesting.[4]

Aisha is a young lady born in the northern part of Ghana, fell in love with an inhabitant from Busua, married him and migrated to Busua where she gave birth to her son. Her husband was the head of the household and thus gained the lion share of their income. Two years ago he and their son both died in a car accident, which left Aisha alone. Without any formal education, she started her own small business in selling banku on the streets of Busua. Her income is nevertheless not high enough to afford the rubber trees from Ghana Rubber Estates Limited. Besides, she has no son anymore to help her getting trees legally from places located further away from Busua. Therefore she sees no other solution than to illegally fell the mangrove trees.

Poorer community members who utilize the mangroves, in particular the strong red mangrove (Rhizophora racemosa), as construction material are also being disadvantaged by the inauguration of the CREMA. Disadvantaged families are being forced to get their construction material from other sources, most often meaning they have to buy their wood or iron sheets in the district capital Agona Nkwanta and hire a lorry for transport.[5] These costs may be considerably high, especially for those living in the villages around Cape Three Point where roads are in critical condition.

Another sub-group that felt disadvantaged by the new rules are hunters. Hunting is perceived as the most important factor for the decline of wildlife numbers in Ghana, followed by deforestation and the expansion of human settlements (Campbell, 2005). Hunting is also in this particular CREMA an important rural livelihood activity as the wildlife population includes species such as antelopes, rats and monkeys that are being favoured, for instance, for meat trade. During a focus group discussion with the CRMC in Cape Three Point it was emphasized that some hunters do not comply with the implemented restrictions: *'how can a*

[4] Interview with wood gatherer, 09/04/18
[5] Interview with member Town Tourist Development Committee Butre, 11/04/18

man stop hunting if he has no alternative?'[6] It illustrates that the CREMA does not succeed in providing alternative livelihood opportunities (see also 7.3)

This paragraph has illustrated the high level of dependency on natural resources of various sub-groups in the communities and how the restrictions of the CREMA constitution and byelaws severely impacts their daily livelihood practises. In the meantime, the CREMA provides also certain benefits, which are presented in the next paragraph.

7.2 Benefit-sharing

Benefits of a CREMA usually include both financial as non-financial resources (Asare *et al*, 2013: 3). In the particular case of the CREMA Cape Three Point financial resources derive from various sources. The constitution reports: *'Money for the CREMA shall be generated from dues collection, fees of issuing hunting permits, penalties from offenders, sales of confiscated animals / NTFPs (non-timber forest products) money from ecotourism and sales of produce from CREMA property / resources* (Coastal Resources Center, 2013).' All CREMA stakeholders (overview stakeholders in figure 4 on page 28) must agree upon the benefit-sharing arrangements that will be captured in the CREMA constitution. In the particular case of CREMA Cape Three Point, the Ahanta West District Assembly, Wildlife Division and Traditional Authorities/Land owners all receive ten per cent dividends of the annual generated income, and the remaining seventy per cent is used for community development purposes. To explore how these intended benefit-sharing arrangements are carried out in the local reality, several interviews have been conducted with community members.

In the village of Butre the facilitating NGO assisted to promote ecotourism, one the main objectives of the CREMA. Several tour guides initiated a Town Tourism Development Committee and the NGO supported to realize a tourist information centre. The committee tried to attract tourists and offered rides on the communal canoe on the River Butre through the wetlands that have been partly restored due to the CREMA replanting programs. The incomes would be divided according to the above-described benefit-sharing arrangements.[7] This committee, in practice, hardly benefitted from the tourists who were attracted by the restored wetlands. The tourists predominantly went to the nearby-located luxury British owned lodge and hired private guides and boats via this lodge. The lodge was not seen as part of the 'community' and was therefore not involved in the CREMA processes. In other words,

[6] Focus group discussion with CRMC Cape Three Point, 16/04/18
[7] Interview with member Town Tourist Development Committee Butre, 11/04/18

the lodge was not obliged to share the benefits. The newly-build tourist information centre that needed to be maintained with income from the Town Tourism Development Committee was due to lack of generated income at time of research in a ruinous state.

These developments are in line with literature about the promotion of 'ecotourism' or 'community-based tourism': benefits commonly flow to those with most access to power and resources (Sandbrook & Adams, 2012). Instead of realizing community benefits, only a small elite group benefits financially from tourism. In the villages of Busua and Cape Three Point community members mentioned the CREMA hardly provided any direct financial benefits. In Cape Three Point, promoting ecotourism aimed to generate extra income as well, but hardly any tourist seemed to be prepared to take the long, bumpy road to the village. Thus although benefit-sharing is addressed in the CREMA design, this actually does not work due to a lack of financial benefits (in Busua and Cape Three Point) and claiming of benefits by privileged actors (such as the lodge in Butre), meaning there are some individuals who do experience benefits but that these benefits certainly do not reach the entire community.

7.3 Alternative livelihood opportunities

An important intended non-financial benefit of the CREMA is to increase the capacity for alternative livelihood opportunities for rubber and oil palm farmers. As mentioned rubber and oil palm both have a low yield productivity, implying that farmers need lots of trees and a large amount of land in order to realize a sufficient income. This has resulted in farmlands that have increasingly become a monoculture, which may decrease the level of biodiversity in the area. To curb this environmental hazardous trend, the assisting NGO and Wildlife Division provided workshops and trainings on alternative livelihood activities including beekeeping, mushroom farming and snail farming. Similar activities are also being carried out in CREMAs where cacao farming is leading to a monoculture, for instance in Bia West.[8] Various CRMC members observed that especially the trainings on beekeeping were experienced as very beneficial, due to the fact that equipment was provided to truly develop it as a meaningful additional livelihood opportunity.[9] NGOs assisted in providing beehives for a selected number of CREMA members, but were not able to do this for all CREMA members. According to other community members, those having close ties to the CRMC members were selected to receive this equipment.[10] The same applies for the workshops on snail farming where only few were able to access the provided equipment. The few who did access the equipment nevertheless benefitted greatly. One CREMA member indicated that he was able

[8] Interview with NGO employee, 08/03/18
[9] Focus group discussion with CRMC Cape Three Point, 16/04/19
[10] Conservation with farmer I in New Debiso, 08/03/18

to renew the roof of his house predominantly due to the additional incomes he generated through snail farming.[11] The provided equipment was thus not sufficient for all the engaging community members and although the CRMC members had appointed this problem to Wildlife Division a solution was not found. In this way, mostly the CRMC members and those with close ties to the CRMC were able to benefit from the alternative livelihood opportunities.

7.4 Fishing

Another group that greatly experiences the benefits of the management shift towards the CREMA are the fishermen. Restricted fishing zones as result of the oil production that started in 2010 increased the demand on wetlands and river resources. The removal of mangroves negatively influenced the fish stock in the water bodies as fishes use the trees as breeding places. The prohibition of the removal of mangroves and various community-replanting programs was experienced as highly beneficial by the fishers due to the increasing fish stock.[12]

7.5 Conclusion

The costs of the CREMA are unequally distributed among the wide variety of sub-groups in the community. In fact, the provided equipment, workshops and trainings on alternative livelihood opportunities were predominantly beneficial for few having close ties with the CRMC. The ones who are experiencing serious economic impacts of the CREMA restrictions are, logically, those who are most dependent on the services that the protected natural resources are providing. The exploration of this chapter reveals that this disadvantaged group includes food vendors (most of whom are women and their children), hunters and poorer families who for instance rely on the natural resources for construction purposes. These disadvantaged groups furthermore do not benefit from the intended benefit-sharing arrangements.

The CREMA constitution and bylaws appear to fail to take the economic value of natural resources for certain community members into consideration. But how could this happen in a situation where the community itself formulates these restrictions? It attracts attention to the question whether the disadvantaged groups have been able to access the decision-making process, and in terms of the key notions in this thesis, were recognized and could participate in the decision-making process. The following chapter elaborates on that question.

[11] Conversation with farmer II in New Debiso, 08/03/18
[12] Interview with fisherman Butre, 11/04/18

8. Procedural Dimensions

This chapter presents the data giving insights in the ways the wide variety of people and interests are recognized and engaging at all positions of the decision-making process. It aims to gain a better understanding in the recognition and participation dimensions of the CREMA development process. Following the ideas of Agrawal and Gibson (1999) a just decision-making process implies firstly that the community should be able to make decisions independently, without dependency on external parties, secondly that all interests are represented and thirdly that those affected by the representatives are being reviewed by those affected by their decisions. These ideas form the line through this chapter. The first paragraph considers the level of participation of the community as a whole and tries to understand the power relations between the community and external parties. Is it truly the community that is participating or is the community more or less regarded as a passenger of the initiative by external parties like NGOs and Wildlife Division or the Forestry Commission? The chapter then shifts towards a lower scale level to assess to what extent the variety of sub-groups within the community are being represented. In particular, it concentrates on the recognition and engagement of the disadvantaged groups identified in the previous chapter who disproportionally experience the disadvantages of the conservation program. The subsequent paragraph considers the ways representatives are being reviewed by those affected.

8.1 CREMA ownership and equity

The analysis on the independency of CREMA focussed predominantly on experiences of the CRMC of the village Cape Three Point and the executive director of the concerned NGO. The community of Cape Three Point was already familiar with community management committees: in 2000, a Community Biodiversity Advisory Group was formed followed by a Community Monitoring Team in 2006. However, these community-based groups were at the time of research not existing anymore. In 2010, a local environmental NGO approached the communities in the Cape Three Point area for the development of the CREMA. Community leaders and traditional authorities agreed that the CREMA mechanisms would be potentially beneficial for the area, meaning they agreed to engage in the CREMA. The local NGO, who received funds from USAID, assisted them during the implementation of the structures, thus for a period of three years.

A crucial part role of the CRMC is to envision the goals and objectives of the CREMA. However, during the focus group discussion with five members of the CRMC, they shared the experience that the objectives of the initiative were predominantly set by the regional division of Forestry Commission in Takoradi and that there was only little room for the community to

give input.[13] Besides, no formal project documents such as the management plan or guidelines were provided to the community, which is seen as of high importance for communities to understand the rationale behind such initiatives. Nevertheless, Forestry Commission had organised a meeting in September 2010 to inform the inhabitants of Cape Three Point about the newly introduced constitution and bylaws, including the restrictions on using natural resources of the Cape Three Points Forest Reserve, except for medical purposes. The CRMC members question the way the constitution and byelaws were formed:

> *'The constitution and bylaws make it illegal to harm any of the natural resources of the Reserve, but we [the CRMC] were not able to give our opinion [on the objectives]. Now it is the Forestry Commission who is happy as we are not allowed to use the resources, but for the community it is difficult because many have no other income.'*[14]

After the assistance of the local NGO stopped in 2013, the CRMC immediately became less active. According to the CRMC members there were two main reasons to explain this setback. The first reason was the lack of ability to engage during the initiation stage of the initiative. This was confirmed by the project manager of the facilitating NGO; after project evaluation he agreed that they failed to increase the capacity of the community to become the 'owners' of the initiative and the 'full managers' of the natural resources.[15] Among the CRMC members this failure led to a sense of distrust towards 'community' initiatives initiated by NGOs and the government: the CREMA was after all already the third unsuccessful attempt.

The second driver reason of the setback was the fact that the CREMA created little to no alternative livelihood opportunities. Therefore the hunters remained predominantly dependent on the wildlife resources of the reserve. The CREMA has created patrolling teams to prevent them from doing this, but after the withdrawing of the NGO there was no economic compensation for the patrollers anymore and therefore they immediately stopped patrolling. It suggests that the communities were too dependent on the activities and assistance of external partners in order to manage and control the process. This is for example also illustrated by the fact that the CRMC hardly organized meetings without pressure and assistance from external parties.

[13] Focus group discussion with CRCM Cape Three Point, 16/04/18
[14] Member CRMC Cape Three Point during focus group discussion, 16/04/18
[15] Interview with executive director local NGO, 06/04/18

Evaluation of the Cape Three Point CREMA produces thus various understandings of the community engagement in the CREMA. Firstly it illustrates that, although the CREMA model is actively promoted by Wildlife Division and Forestry Commission, it allows room for the communities to engage actively in the early stages of the initiative. Previous research has indicated that early community engagement may promote a sense of ownership and community empowerment (Dyer *et al*., 2014: 143). Although communities formally have the possibility to formulate the objectives of the initiatives, the CRMC representatives in Cape Three Point experienced that the objectives were predominantly set by Forestry Commission. Focus group discussions with CRMCs in other parts of Western Region confirmed this impression. Although both the community of New Debiso and of Amonie (both located in the northern part of Western Region) were provided official project documents, all fifteen CRMC members unanimously agreed that either Wildlife Division or Forestry Commission has formulated the project's objectives.[16] This unequal relationship between Wildlife Division and the communities carried on during the preceding years as the CRMC members still regarded Wildlife Division as the leading body of the CREMA.

Concluding, the CRMC members experienced they were not empowered to give direction to the CREMA as it is Forestry Commission or Wildlife Division who sets the agenda of the initiatives. Lack of ownership of the initiative by communities and lack of equity between the communities and external parties are regarded as significant factors for the lack community engagement (Dyer *et al*. 2014). Despite the little ownership and the lack of equity, the CREMA mechanisms still impacted the daily livelihood activities of the various sub-groups as discussed in the previous chapter. Some were more disadvantaged than others, what can be linked to the issue of representation.

8.2 The issue of representation

After the approval by community leaders and traditional authorities (chiefs) of the communities around the Cape Three Point Reserve for the implementation of a CREMA, the next phase includes the development of the CRMCs. The formation of these committees is a crucial step in realizing just management mechanisms; it defines for the lion share the power distribution of the decision-making process. The local authorities, together with the local NGO, decided the CRCM needed to adequately represent the various sub-groups and that the various members therefore should have diverse backgrounds. In practice this implied that at least representatives from the youth village committee, the church, the chief elderly, chief

[16] Focus group discussion with 6 CRMC members New Debiso, 08/03/18 & focus group discussion with 9 CRMC members Amonie, 09/03/18

fishermen, the assembly, and the women's group needed to be part of the committee. During a meeting various candidates were nominated by the local authorities. The final election took place at the Ahanta West District Assembly in Agona Nkwanta, on a costly two-hour drive from Cape Three Point. Therefore only few privileged community members were able to attend this meeting.

Recruiting qualified women who were willing to participate in the committee appeared to be a challenging task since the women themselves did not feel that they were having the sufficient appropriate capacities compared to male counterparts.[17] A population census suggests several arguments for this statement: the proportion of literate females is for instance significant lower than that of males (64,5% vs. 83,4%), school attendance among females is relatively lower compared to males and employment among females is lower than among males (Ghana Statistical Service, 2014). Besides, men commonly fulfil the leadership roles within the local society. To make sure the CRMC would consist at least one woman, the mother of the assemblyman was nominated and elected. The struggle to recruit women is also confirmed by a document of NGO Conservation Alliance that includes a list of all representatives of the 28 CRMCs they support: 58 representatives are female and 190 male (Conservation Alliance, 2017). In several cases, even women who are nominated by their friends and relatives refuse to participate in the decision-making committee. The executive director of the local NGO in Ahanta West revealed that he would prefer to see more women in decision-making positions, but mentioned that it is up to the community in the end.[18] Besides, he argued that he felt pressed by the donor to whom he had to report the made progress biannually, which resulted in a situation where not enough time was allowed to recruit qualified, or potentially qualified, candidates.

A rubber farmer who was willing to become a representative and who did attend the election meeting acknowledged there was nothing like an election and that there were not many volunteers.[19] Some community members did not feel they were able to become a CRMC member, as it can be a time-intensive position without remuneration, which excluded many people. The lack of volunteers made the local authorities decide to appoint the representatives themselves. This resulted in a CRMC that was predominantly constituted with members that already fulfilled other leadership roles within the community and had close ties with the local authorities such as the mother of the assemblyman. Despite the fact that the rubber farmer was one of the few volunteers, he was for that reason not appointed.

[17] Interview with executive director local NGO, 06/04/18
[18] Interview with executive director local NGO, 06/04/18
[19] Interview with farmer Busua, 05/04/18

After the formation of the CRMCs, and subsequently the CEC, the first step for these committees is to set the boundaries of the CREMA and thus to define the 'community'. Deciding what is 'in' and what is 'out' of the CREMA may be a challenging act: on the one hand, this step is important as it determines the geographical boundary where the constitution juridical enforceable is. On the other hand, as the CREMA shall include all inhabitants of that particular area, it prescribes whose interests the CRMCs and CEC are expected to represent. These boundaries are usually set according to natural barriers such as rivers and forests, built barriers such as roads, management entities such as administrative divisions, or social entities such as traditional areas or territories.

The committees decided to use the village units to define community. So all the inhabitants of the villages were seen as CREMA member. This resulted in some challenges. The British owned lodge as discussed in the previous chapter was not involved in any of the CREMA developments since it was not officially part of the village as a lagoon separates it and one has to cross a footbridge access the lodge. For this reason the lodge was able to bypass the benefits-sharing arrangements (as discussed on page 37). A privileged group thus defines the community. By drawing these boundaries, it has the monopoly to decide who is recognized as stakeholders whose interests are taken into account.

The fact that the decision-making positions are predominantly fulfilled by influential elderly males resulted in the fact that only a privileged group felt represented by the CREMA, especially those with strong linkages with influential elites. Fishermen, for example, are traditionally seen as powerful in the coastal villages of Ahanta West. The chief fisherman, also a member of the CRMC, perceived the restrictions on the mangroves as very meaningful for the community as it increased the fish stock (see also page 39).[20] The vulnerable groups nevertheless felt that they and their interest were not represented within the management committees.

8.3 Review by community

A just decision-making process furthermore implies that representatives are being reviewed by those affected by their decisions (Agrawal and Gibson, 1999). An important activity of the CRMC is therefore to report back to the people it is 'representing'. However, at the moment of entering the study field several informal conversations were conducted with randomly selected inhabitants and many of them were not aware of the existence of the CREMA at all, others were not able to mention the CRMC representatives or the objectives of the CREMA.

[20] Interview with fisherman Butre, 11/04/18

To inform the community about the progress of the CREMA, the CRMC organized, at time of the assistance of the local NGO, four meetings a year.[21] These meetings were announced through the local radio station and planned on suitable moments for most community members. However, since the withdrawal of the NGO the meeting are only organised once a year. Thus, whereas there used to be a certain form of community consultation in the first three years, today there are only few moments where the management committee and the community members are able to meet.

The meetings are furthermore more used as a means to inform the community members about the progress instead of a moment of review. Groups who were disadvantaged by the CREMA decisions are for that reason experiencing the mechanism not as 'community' based. A wood gatherer for instance stated that she attended two meetings to point out that she felt forced to fell mangroves trees due to the lack of alternatives.[22] Soon she experienced that she was not able to influence the decision-makers, which made her to decide to ignore the decisions and not to attend meetings anymore. Besides, she was afraid that she would annoy the chiefs and other village leaders. She had the idea that the CRMC and the CREMA activities were mostly beneficial for the traditional power holders such as the chiefs and fishermen.

8.4 Conclusion

This chapter has revealed the procedural dimensions of CREMA Cape Three Point. Although the 1994 Forestry and Wildlife Policy recognizes the community through the CREMA as a formal legal authority, this present case illustrated a lack of ownership for the community within the CREMA. Forestry Commission and the local NGO dominated the decision-making process, for instance during the formulation of the objectives. This inequity prevents the community to actively engage during the process. Regarding the issue of representation the committees predominantly consist of traditional leaders and influential sub-groups such as fishermen. Food vendors and others disadvantaged groups are due to this focus on existing authorities less able to engage in the committees, which results in the fact that their interests are not represented. Also, there are hardly any moments for those who experience the negative impacts to report back to the representatives.

In sum, the process of the CREMA is dominated by extra-community bodies and a privileged elite group within the communities. The CREMA is not able to involve already relatively disadvantaged groups in the process. This observation is crucial as external parties such as

[21] Interview with member CRMC Princess Town/Seremowu, 13/04/18
[22] Interview with wood gatherer, 09/04/18

The World Bank, Forestry Commission and NGOs present the CREMA as a mechanism in which the 'community' is actively involved. These parties tend to assume that those to whom and with they speak (e.g. management committee members) adequately represent the 'community'. In practice, they speak with the most powerful community members and they tend to ignore existing institutionalised intra-community differences such as gender roles, power relations and hierarchies, cultural practices and processes that create differing levels of recognition and participation in societies.

9. Conclusion, Discussion & Limitations

The objective of this thesis was to gain understanding of the intra-community differences, which exist in terms of the distribution of the benefits, recognition and participation within the decentralized 'community-based' natural resources management structures in Ghana, and specifically in Ahanta West District. This has been done by exploring the following research question: '*What are the intra-community consequences of the CBNRM policies on the rural population in Ghana's Western Region and to what extent does the CREMA address dimensions of environmental justice?*' This final chapter firstly provides an overview of the findings following the sub-questions and will subsequently answer the main question. Then, the chapter discusses what can be learned from the findings and this thesis will be concluded by considering its limitations.

9.1 Summary of findings

Chapter 5 has revealed the environmental justice dimensions within the design of the CREMA mechanism. Although the outcomes and process of the CREMA may vary largely between divergent contexts, it showed that the design considers the issue of unequal intra-community distributional impacts through forcing communities to develop benefit-sharing arrangements. The recognition of all stakeholders is assumed to taken into account through locally developed boundaries of 'community'. The ability for all stakeholders to participate in the decision-making process has been attempted to ensure via the selection of representatives of various sub-groups of the community and through organising public community meetings. These examples suggest that the design is, at least partly, taking intra-community differences into account. In the meanwhile, Wildlife Division provides a 'user manual' on how to implement a CREMA in which it sets a number of criteria that inherently exclude underprivileged groups to participate and in which it transfers responsibilities to existing elites.

Chapter 6 introduced the objectives and list of regulations of CREMA Cape Three Point and chapter 7 has assessed the CREMA's outcomes and the distributional dimension of these regulations. It illustrated that the costs and benefits are unequally distributed among the sub-groups within the community. The restrictions on the use of natural resources negatively influence the livelihood of certain groups that are highly dependent on these resources, whereas these groups hardly experience any benefits of the initiative. The CREMA failed to generate incomes for the initiated community development program and therefore only few experienced benefits, in particular those with close ties to the decision-making committee members.

Chapter 8 tried to explore the underlying factors of this unequal distribution following the ideas of Schlosberg about recognition and participation in the decision-making process. It firstly showed how the involvement of all sub-groups is discouraged since extra-community bodies as the government and NGOs remain dominant actors during the process. Within the community, traditional leaders and already influential persons fulfil powerful positions in the CRMCs and CEC, despite the intention of diversity within the committees in the CREMA design. Groups harmed most by the introduced constitution furthermore have no or little opportunities to report back to the 'representatives'. Although assessment of 'participation' is still complex, this study has made clear that certain groups are only informed about the progress of the CREMA and that these groups can certainly not be regarded as the managers and controllers of the natural resources.

9.2 Conclusion

The CREMA's design contains various elements that try to counter critics of a wide body of academic literature on CBNRM: the curse of local elites (as studied by for instance Persa & Andersson, 2014) has been tried to curb via the benefit-sharing arrangements, gender quota have to prevent gender disparities (as studied by for instance Khumalo & Yung, 2015), misrepresentation (as studied by for instance Belsky, 1999) has been tried to avoid through an election process that has to nominate representatives from a wide variety of sub-groups within the community and the issue incorrect top-down definitions of 'community' (as studies by for instance Stone & Nyaupane, 2014) has been tried to challenge by organizing meetings allowing targeted groups to create an own definition of 'community'.

Despite the considerations in its design, the local reality in Ghana's Western Region provides another view on the CREMA. Answering the main research question, the CREMA mechanism privileges local elite groups and provide only little opportunities for groups that are being socially, economically and politically disadvantaged by ruling norms and institutions to participate in the decision-making process. In line with the thoughts of Schlosberg, this inability to participate during the process explains why these groups' economic values of the local natural resources are less recognized and why these groups disproportionally experience the disadvantages of the CREMA. In the meantime, the privileged elite that dominates the process is able to generate benefits through the development of alternative livelihood opportunities and bypass the benefit-sharing arrangements since the benefits are not necessary material. Thus, although the CREMA design contains several environmental justice dimensions, this empirical study illustrates that

these considerations are not or only limited effective in reality in Ghana's Western Region. In fact, already poor and marginalized groups are hit hardest in the decentralization of the centralized natural resources management.

9.3 Discussion

Reflecting on the findings, this study provides various theoretical implications. It first of all supports the growing body of literature that questions the way neoliberal decentralization programs are being implemented in sub-Saharan Africa. CBNRM has long been regarded as the answer to undemocratic centralized conservation strategies. But in many cases, in fact, democratic decentralization is hardly realized. Local authorities often do not adequately represent the local population and there is regularly only little local decision-making (Nemarundwe, 2004; Ribot, 2010). The present study comes to similar conclusions as empirical studies by political ecologists as Feyissa (2006) and Bazaara (2006), who argue that similar initiatives reproduce existing inequalities within communities. It has been illustrated how existing unequal power relations reinforce socio-economic inequalities through disparities in access to the benefits of the natural environment. The CREMA initiatives aim to permit communities, land owners and land users to govern and manage wildlife and forest resources (Asare *et al*., 2013,), but in reality it allows power holders to reinforce their access to power and resources.

These conclusions have implications on a practical level. Although this thesis has revealed that the CREMA's design already contains several elements to favour poor and marginalized groups, meaning there is an increasing meaningful bridge between the academic and policy level, there is a call for revision. To curb the reproduction of existing inequalities the CREMA should integrate processes and structures in its mechanism that ensure that most poor and marginalized groups are especially being favoured. Setting criteria that exclude these groups to become committee members is for instance undesirable.

Exploring how the policy is executed gave furthermore the impression that there are many local challenges during the implementation process. There is thus also an increasing demand for an improved link between the theoretical policy level and the local reality of implementation. It must for, instance, be ensured that gender quota are not only being captured in policy documents but also occur in the reality. Field workers and project managers from NGOs and governmental bodies that facilitate the decentralization process should be better trained to take these responsibilities truly into account.

This study has furthermore showed how the geographical perspective on communities as something an administrative unit is inconvenient and it supports the body of literature that this approach is not able to consider cultural, social and political structures within these communities. Acknowledging the intra-community disparities in the CREMA communities is not only crucial in order to counter inequality reproduction, but also for environmental reasons. Leach *et al*. (1997) argued unrealistic assumptions about the homogeneity of communities might harm the sustainability dimension of CBNRM initiatives. Although assessing the sustainably dimension of the CREMA mechanism is beyond the scope of this study, it backs Leach's idea by providing evidence that by including only traditional leaders and privileged groups as 'community' representatives, those being excluded may decide to illegally exploit the environment. Thus, if we want to conserve our natural resources, management mechanism will have to put more emphasis on intra-community disparities.

9.4 Limitations

Although various useful insights have been provided, it is crucial to take a number of research limitations into account. First of all, the analysis focussed predominantly on material livelihood benefits and disadvantages. Although the study revealed some non-material disadvantages of the CREMA (such as eye irritation and reduced food quality due to the use of rubber wood as cooking fuel), it was not the main focus. As Robinson and Sasu (2013) proved, people might perceive non-material benefits, such as to allow future generations to grow up with certain species, as very valuable. In Ahanta West, people may for instance value the conservation of distinct primates or the aesthetic value of the mangroves as of high importance.

Another obvious research limitation is the limited time that was available for fieldwork. Six weeks to get familiar in a study area, to find suitable study participants, to arrange appointments, to adopt interviews on the local context and to do the actual data collection is clearly quite short. Interning at a Ghana-based NGO nevertheless helped to slightly stretch this period. In a situation that allowed more time for fieldwork, it would be beneficial to gain insights in the non-material benefits and/or disadvantages. Also, it would be useful to understand the intra-community disparities of CREMA mechanisms in other sites. This would be potentially beneficial to see whether the observations in this thesis allow for generalization.

Another possible research limitation is the language barrier of a non-Ahanta and non-Twi speaking researcher in Ahanta West. Although it was possible to conduct several interviews

in English (for example with NGO employees, assemblymen and a few English speaking community members), to avoid bias in the sampling also interviews have been conducted with the assistance of interpreters. In these situations, there could have been some 'lost-in-translation'.

Despite the limitations of this study, the findings presented in this study contribute to a growing body of literature, which aims to understand local level implications of CBNRM initiatives and the intra-community effects of these initiatives. Most notably, it has presented how the CREMA as form of CBNRM reinforces existing unequal power, social and economic structures within communities.

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Appendix

List of Respondents

Amonie:

- Focus group discussion with 9 CRMC members, 09/03/18

Busau:

- Farmer I Busau, 05/04/18
- Tourist sector worker I, 09/04/18
- Tourist sector worker II, 10/04/18
- Female wood gatherer I, 09/04/18
- Female wood gatherer II, 09/04/18
- Assemblyman, 09/04/18
- CRMC member, 08/04/18

Butre:

- Fisherman, 11/04/18
- Member Town Tourist Development Committee, 11/04/18
- Tourist guide, 11/04/18
- Fishmonger, 12/04/18

Cape Three Point:

- Focus group discussion with 5 CRMC members, 16/04/18
- 2 town development committee members, 16/04/18

New Debiso:

- Focus group discussion with 6 CRMC members, 08/03/18
- Farmer I New Debiso, 08/03/18
- Farmer II New Debiso, 08/03/18

Princess Town & Seremowu:

- CRMC member, 13/04/18
- Assemblyman, 13/04/18

Others:

- NGO employee I, 10/03/18
- NGO employee III, 23/04/18
- Executive Director NGO, 06/04/18
- Ahanta West District Assembly Representative, 06/04/18

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