

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI  
COLLEGE OF ENGINEERING  
DEPARTMENT OF MATERIALS ENGINEERING

**GOVERNANCE CONSTRAINTS TO SUCCESSFUL REDD+ IMPLEMENTATION IN  
GHANA**

**By**

**NANA DARKO COBBINA**

**February, 2013**

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI  
COLLEGE OF ENGINEERING  
DEPARTMENT OF MATERIALS ENGINEERING

**GOVERNANCE CONSTRAINTS TO SUCCESSFUL REDD+ IMPLEMENTATION IN  
GHANA**

**By**

**NANA DARKO COBBINA**

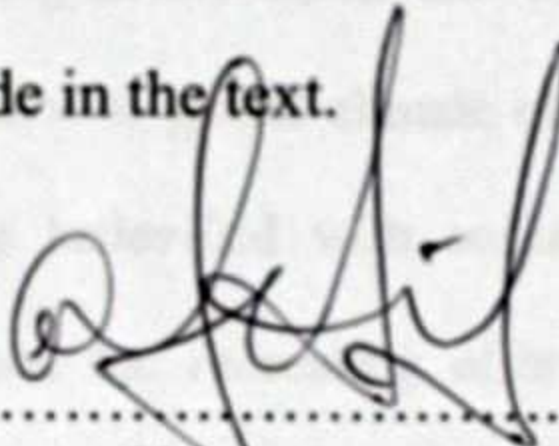
**February, 2013**

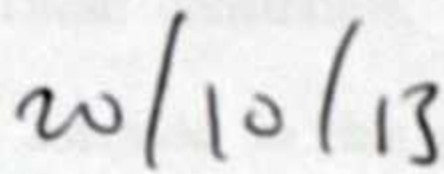


## DECLARATION


I hereby declare that the submission is my own work towards the award of MSc. Environmental Resources Management and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any degree of the University, except where due acknowledgement has been made in the text.

Nana Darko Cobbina  
Candidate

  
.....  
Signature

  
.....  
Date

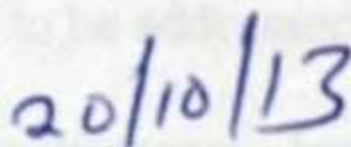
Dr. Emmanuel Marfo  
Supervisor

  
.....  
Signature

  
.....  
Date

Mr. Godfred Owusu-Boateng  
Supervisor

  
.....  
Signature

  
.....  
Date

Certified by:

Prof. Samuel Kwofie  
Head of Department

  
.....  
Signature

  
.....  
Date



## ABSTRACT

In spite of the notable effort to reverse the trend of deforestation, Ghana's forest estate continues to dwindle at alarming rate. This coupled with threat to growth and development of general society due to human-induced impacts on global climate has stimulated action to formulate a solution to avert the menace. One of the interventions, REDD+, an evolving international forest resource management policy aimed at tackling deforestation and forest degradation in the bid to halt atmospheric carbon build-up to ameliorate global climate offers hope in this quest. Yet REDD+ implementation in Ghana could be bedevilled with constraints. These constraints, from the perspective of forest governance and the redressing efforts were assessed in this study via questionnaire and personal interviews with 35 experts identified in the areas of climate change, forest policy and governance and REDD+, and are members of the multi-stakeholder REDD+ working group in Ghana. The study employed juxtaposition of key principles for REDD+ implementation and forest management to identify key gaps that need to be addressed if REDD+ is not to suffer the same fate as previous policies. Results show that governance, indicated by 33 (94%) of 35 experts and became operational via its elements; unclear tenure and skewed benefit-sharing systems (closely linked to less transparency and poor accountability), is the most crucial constraint. While tenure regimes of land and tree are characterized by ambiguity, carbon rights issues were the most poorly understood. Financial (84%), technical (77%) and political-will (60%) were the other constraints identified. The need for tree tenure reforms (including carbon rights) and review of framework for fair REDD+ implementation benefits sharing cannot be glossed over. Against the backdrop that the 1994 forest and wildlife policy is less effective in addressing carbon rights, benefits-sharing and tenurial issues which are key to the subject, one would not be far from right in ~~applauding the finalization~~ and adoption of the revised policy which articulates more substantive commitments in addressing identified constraints while at the same anticipating its effective implementation.



## ACKNOWLEDGEMENT

Certainly this study would have been impossible without the sustained support of Mrs Korkor Cobbina, my lovely wife, whom I continue to have more cause than most to be grateful to.

Throughout the period since I began this study, I have been accumulating a formidable debt of gratitude to several distinguished personalities.

First of all to Dr. Emmanuel Marfo, my supervisor, who not only aroused my intellectual interest in the thesis topic, but provided quality and invaluable inputs not least through highly constructive criticism of various aspects of this work.

Second, to Mr. Godfred Owusu Boateng, my second supervisor and a lecturer at the Faculty of Renewable Natural Resources. I am yet to see one who pays more attention to detail. His technical insights have been invaluable.

Third, to Dr. Benjamin Betey Campion – a lecturer at the Faculty of Renewable Natural Resources – for the time he continually availed to carry out intermittent reviews and for the very helpful feedback he provided, even in very difficult circumstances.

There are many other people, ranging from all those who shared their knowledge as respondents to those who accommodated and fed me on my numerous travels to Kumasi. You are not forgotten and I say a big thank you to you all.

LIBRARY  
KWAME NKRUMAH  
UNIVERSITY OF SCIENCE & TECHNOLOGY  
KUMASI



## TABLE OF CONTENTS

DECLARATION .....	iii
ABSTRACT.....	iv
ACKNOWLEDGEMENT .....	v
TABLE OF CONTENTS.....	vi
LIST OF FIGURES .....	ix
LIST OF TABLES.....	xi
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.1 Background.....	1
1.2 Problem Statement and Justification.....	3
1.3 Objectives .....	5
1.4 Research Questions .....	6
CHAPTER TWO .....	8
LITERATURE REVIEW .....	8
2.1 Theoretical Background.....	8
2.2 Sustainable Development.....	8
2.3 Climate Change.....	9
2.4 Forest and Forestry .....	10
2.5 Governance and Good Governance .....	12



2.7 Forest Governance .....	13
2.8 Forest Governance in Ghana.....	16
2.9 RED, REDD and REDD+.....	21
2.9.2 REDD-plus – the Mechanism.....	21
2.9.2 REDD+ in Ghana .....	25
2.10 Context, Drivers and Direct Causes of Deforestation in Ghana .....	26
CHAPTER THREE .....	30
METHODOLOGY .....	30
3.1 The Setting .....	30
3.1.1 Location and geographic characteristics of Ghana .....	30
3.1.2 Population of Ghana .....	31
3.1.3 Economy of Ghana .....	32
3.1.4 Governance and decentralization structures.....	33
3.2 Sample Frame and Sampling Methodology.....	34
3.3 Data Collection Methods and Analyses.....	36
3.4 Response Rate and Data Handling.....	38
CHAPTER FOUR.....	40
RESULTS AND DISCUSSION .....	40
4.1 Respondent Profile.....	40
4.2 Identifying Constraints to REDD+ Implementation in Ghana .....	40
4.3 Various Governance Constraints .....	43
4.3.1 Tenurial Issues.....	45



4.3.2	Benefit-Sharing Issues .....	48
4.3.3	Issues on Policy and Legislation .....	52
4.4	The 1994 Policy and Identified Constraints.....	53
4.5	Draft Revised Policy and Identified Constraints .....	56
CHAPTER FIVE .....		59
CONCLUSION AND RECOMMENDATION.....		59
5.1	Conclusions.....	59
5.2	Recommendation .....	60
REFERENCES .....		62
APPENDICES .....		68
Appendix 1: Questionnaire .....		68
Appendix 2: Interview Protocol.....		73



## LIST OF FIGURES

Figure 2.1 Pyramid of Good Governance.....	16
Figure 3.1 The vegetation map of Ghana.....	31
Figure 3.2 Distribution of respondents among the different stakeholder groups in .....	36
Figure 4.1 Identified constraints to REDD+ implementation in Ghana. ....	41
Figure 4.2 Distribution of response to the strength of governance as constraints to REDD+ implementation in Ghana. N = 35.....	43
Figure 4.3 Respondents' views on most important governance constraints to REDD+ implementation in Ghana.....	44
Figure 4.4 Respondents' weighting of tenure, benefits-share and policy and regulation as critical governance constraints to REDD+ implementation in Ghana. N = 35.....	45
Figure 4.5 Respondents assessment of land tenure, tree tenure and carbon rights as pertinent tenurial issues to be addressed for successful REDD+ implementation in Ghana. ....	46
Figure 4.6 Respondents' views on 1) elite capture of benefit at community level, 2) problematic enforcement of constitutional benefit-sharing regime and 3) inequitable sharing of benefits at the national level as pertinent benefit-sharing issue. ....	50
Figure 4.7 Distribution of respondents opinion on representation at local level as a barrier to effective REDD+ implementation in Ghana. N = 35.....	51
Figure 4.8 Respondents level of concurrence that weak policy implementation, inadequate policies, poor legislation, inadequate legislation and weak law enforcement are pertinent issues for policy and legislation. ....	53
Figure 4.9 Respondents' perception on the contribution of the Ghana Forest and Wildlife Policy (1994) in addressing the constraints of REDD+.....	54
Figure 4.10 Number of Policy principles, objectives and strategies addressing REDD+ implementation constraints. ....	55



Figure 4.11 A comparison of how critical constraints are addressed in the structural frameworks of the '94 and the revised draft policies ..... 57

Table 4.2 Policy Issues Addressing Critical Constraints ..... 59

LIBRARY  
KWAME NKRUMAH  
UNIVERSITY OF SCIENCE & TECHNOLOGY  
KUMASI



## LIST OF TABLES

Table 4.1 Tenure contexts in Ghana. ....	48
Table 4.2 Policy Sections Addressing Critical Constraints .....	55



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

It is widely reported that global climate change presents a profound threat to growth and development. According to Stern (2010), compelling scientific evidence points to increasing risks of severe, irreversible significant impacts from climate change associated with business-as-usual (BAU) paths for emissions. The causes of climatic change are attributed to varied human-induced sources including power, industry, transport, buildings, and agriculture and by no means the least; unsustainable land-use practices (UNFCCC, 2005; Daviet *et al.*, 2007; Fern, 2010a; Harvey *et al.*, 2010). In 1997, under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), the meeting of the Conference of Parties (CoP) in Kyoto, Japan, agreed to a landmark protocol aimed at cutting global emissions of greenhouse gases as well as measures to cope with the present and future impact of climatic change (UNFCCC, 1997). In the year 2005, at the UNFCCC CoP Eleven in Montreal; Papua New Guinea, Costa Rica and eight other parties requested a new agenda item under the convention that sought to draw attention to the role of forests in combating climate change (UNFCCC, 2005). A review of the economics of climate change by Stern (2006), highlights the merits of reducing greenhouse gases (GHG) through redressing deforestation in tropical developing countries.

Reducing Emissions from Deforestation and forest Degradation (REDD), the creation of financial value for the carbon stored in forests, is an effort of offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.

The advanced or enhanced form of REDD, REDD plus (REDD+) on the other hand goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks. These emerged on the international stage as the forestry sector's possible contribution to global efforts in dealing with



catastrophic climate change (Daviet *et al.*, 2007). Widely acclaimed is the perception that forests have the potential for contributing to the global greenhouse gas (GHG) emissions as well as acting as sinks for carbon storage (Fern, 2010a).

Deforestation alone accounts for nearly a fifth of global GHG emissions - larger than the entire global transportation sector (Stern, 2010). According to the Stern (2010), forest carbon sinks store more carbon than both the atmosphere and the world's oil reserves together. Karky (2008) also notes that deforestation not only releases carbon into the atmosphere, but also has a negative impact on biodiversity, watershed and soil protection, and local climate regulation. It is increasingly believed that the function of forests as carbon sinks would soon attract significant funds to ensure sustainability of that function through rewarding the people responsible for protecting and growing forests. Butler (2006) estimates the potential earnings from REDD+ for Cambodia at between \$85m-\$875m per year. Lessons from past experiences however reveal that weak implementation of essential governance requirements have often derailed attempts at ensuring conservation and sustainable forest management efforts (Fern, 2010b).

Therefore, to ensure the success of REDD+, there is the need for national and institutional policies or procedures to protect against social and environmental harm, the need for capacity to identify, evaluate, minimize, and mitigate the adverse impacts of any intervention and to provide a general focus on sustainable development. Thus, what are the essential governance-related requirements that need to be met in order that REDD+ implementation in Ghana becomes a successful endeavour; as well as what critical barriers currently exist that would constrain the ability of REDD+ efforts to achieve sustainable results remain important questions that need to be addressed. Answering these questions are important so that REDD+ does not suffer similar fate as previous interventions – including such efforts as the ‘globally significant biodiversity area’ concept of the High Forest Biodiversity Conservation Programme – aimed at conservation and sustainable management of forests in Ghana.



## 1.2 Problem Statement and Justification

Despite notable efforts to reverse the trend, deforestation in Ghana continues at alarming rates (Owubah *et al.*, 2001; Richards, 2007; Asare, 2010; Forestry Commission, 2008) Ghana's forest estates continue to dwindle at an estimated annual rate of two percent that is about sixty-five thousand ha per year (Boon *et al.*, 2009 & 2010; FAO 2010; Asare, 2010). This is valued at an annual degradation cost of ten percent of Ghana's gross domestic product (Hamilton Resources, 2008). REDD+ is thus envisaged as the international forest policy tool intended to be applied in national and/or sub-national contexts with a view to effectively tackling deforestation and forest degradation that contributes to- and exacerbates global climate change (Karky, 2009; Reddnet, 2010).

According to the European Tropical Forest Research Network [ETFRN] (2009), it is now commonly understood that tools, methods and data are available and that the science is robust enough to monitor and estimate emission from deforestation and forest degradation. Fern (2010a) also recounted that the main outstanding issues are policy and forest governance concerns. For example, Rights and Resources Initiative (2008) has observed that political will in support of climate interventions like REDD-plus is inadequate in many contexts. Reddnet (2010) also notes the growing consensus that – although the technological challenges are great – there has been a lot of progress and there are good reasons to believe that the methodological obstacles will be overcome in due time. It is also a source of concern that REDD+ implementation may overlook and/or adversely affect rights, livelihoods and land tenure of vulnerable stakeholder groups (Griffiths, 2007; Cotula *et al.*, 2008; Egle *et al.*, 2008; Sunderlin *et al.*, 2008; Angelsen *et al.*, 2009; Barry *et al.*, 2008).

Despite these views, it is perceived, from the posturing of Ghana and several other countries, that in getting ready for REDD+ implementation, the overriding concern is the carbon capture agenda – rather than governance reform (Fern, 2010a). In an overview of REDD+ proposals, Fern (2010b)



laments that while addressing governance issues and clarifying land tenure is the first step in protecting forests, only a few countries suggested this path.

In the light of this objective and particularly against the background that past attempts at addressing alarming rates of deforestation have achieved less than desired results (Boon *et al.* 2010), there is seemingly justified widespread doubt about the prospects of REDD+. The reasons for this doubt is derived from a range of issues including those of technical, methodological, political, governance and financial undertones amongst others (Daviet *et al.*, 2007; Fry, 2008; Boucher, 2008; Parker *et al.*, 2009; Scherr *et al.*, 2009; Ashton *et al.*, 2009). Particularly, questions are being raised about the robustness and credibility of forest governance regimes in all REDD+ eligible countries (Fern, 2010a and b). Also, with disproportionate emphasis in overcoming technical, methodological and financial constraints, in-depth understanding of country-specific governance requirements for effective REDD+ implementation appears to be largely ignored (Chagas *et al.*, 2010).

In an examination of readiness plan idea notes- R-PINs of Ghana and twenty-four other countries, Dooley *et al.* (2008) reveal an over-emphasis on technicalities and expressed concern that emerging REDD+ programmes may lead to a narrow technical focus rather than understanding and strengthening governance capacities. Also, the complexities of forest governance in many countries remain to be investigated and therefore are still very poorly understood. Ghana is not an exception to the foregoing assertion. For instance, there have been increased calls for clarification and reform of the rights regime in land and trees, better implementation of benefit sharing regime and improved multi-stakeholder dialogue and decision-making (Kufour, 2010; Forest Watch Ghana [FWG], 2009; Asare, 2010; Agidee, 2011). Particularly, Marfo *et al.* (2012) assert that tenure security and unaccountable representation – leading to unjust benefit-sharing – serve as critical constraints to the socio-political potential for REDD+.



There appears therefore, the considered view that the success of a REDD+ scheme will greatly depend on finding the right answers to questions of forestry governance (Barrett *et al.*, 2005; Asare, 2010, Fern, 2010b). Currently in Ghana, efforts are being made to set out an architecture for REDD+, including putting the implementation systems in place. And the Forestry Commission (FC), the lead agency for developing and implementing REDD+ in Ghana has been tasked to develop among others a benefits-sharing mechanism as well as a dispute and conflict resolution mechanism. The fact that key parameters such as tenure and carbon rights issues are yet to be ironed out to the satisfaction of key stakeholders makes the current objective of the FC even the more tasking and a lot more complex than straightforward. Upon what basis would incentives accruing from future REDD+ be shared when rights, ownership and accessibility issues remain undefined. The outcome of this study will shed some light on this presently grey area. Also the extent to which sector reforms currently being discussed in Ghana will address these constraints remain largely unexplored and not yet systematically analysed.

It is imperative, therefore to obtain detailed knowledge of the critical governance constraints to REDD+ implementation and gain an improved understanding of how these are dealt with in policy and practice. Therefore this research which focuses on determining the response to the aforementioned research needs and also involves the experts, offers a penetrative understanding of the complex situation for the needed recommendations towards effective implementation of REDD+ in Ghana and its contribution to Global Climate amelioration.

### **1.3 Objectives**

The objectives of the ~~research~~ were therefore to:

1. Identify and examine the critical constraints militating against REDD+ implementation in Ghana.



2. Evaluate the extent to which REDD+ implementation constraints are addressed in current formal policy.
3. Analyze the extent to which new evolving policy addresses REDD+ implementation constraints and identify issues yet to receive policy attention.

## 1.4 Research Questions

These objectives were addressed through provision of answers to the following questions

1. What is REDD+ and what are the governance constraints to its successful implementation?
2. What pertinent issues underlie the governance constraints to REDD+ implementation in Ghana?
3. How are constraints to REDD+ implementation addressed in extant formal policy?
4. What are the weaknesses and opportunities in current policy objectives and strategies?
5. How does the new draft forest policy address identified constraints and related pertinent underlying issues?
6. What pertinent issues identified are yet to receive policy attention?

The next chapter explains the main concepts underlining this work in order to provide a theoretical framework to shape the analysis and discussion of the empirical results. It also explains the operational framework developed for the study by using the concepts in the theoretical framework. Chapter three elaborates the research methodology, presents a geo-political context in which the research is situated and details the sampling frame and methodology of the study. The antepenultimate chapter presents and discusses the results of the research. It identifies critical constraints to REDD+ implementation in Ghana and discusses related pertinent issues. The penultimate chapter summarises the conclusions. Recommendations from the research are outlined in chapter six.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Theoretical Background**

This chapter situates the current study in relation to previous research through re-appraisal of scholarly articles, books and other sources which are of relevance to the issue and illuminates a spot for the research. It explains the main concepts underlining this study in order to provide a theoretical framework to shape the analysis and discussion of the empirical results. It also explains the operational framework developed for the study by using the concepts in the theoretical framework.

#### **2.2 Sustainable Development**

The word 'sustainable' first came to us from the European foresters of the late 18<sup>th</sup> century (Reubens, 2010). At the time, forests were being clear-felled in order to provide the wood that was required to fuel Europe's developing economies. To deal with the deforestation of vast tracts of land, 'sustainable' (then also referred to as 'scientific') forestry was developed. In 1962, Rachel Carson published 'silent spring', widely considered a turning point for understandings about the links between the environment, the economy and social wellbeing. A decade later, in 1972, 'limits to growth' was published by the Club of Rome. The report was extremely controversial since it predicted that 'the earth's limits will be reached in 100 years if population and resource depletion continued at the current pace'.

In 1987, the World Commission on Environment and Development (WCED) chaired by Gro Harlem Brundtland, former Prime Minister of Norway published 'our common future', which recognised that human resource development in the form of poverty reduction, gender equity, and wealth redistribution was crucial to formulating strategies for environmental conservation. It also recognised that environmental-limits to economic growth in industrialised and industrialising



societies existed. Sustainable development referred to a mode of human development in which resource use aims at meeting human needs while preserving the environment and not compromising the ability of future generations to meet their own need (Smith, *et. al.*, 1998). It is about improving the standard of living by protecting human health, conserving the environment, using resources efficiently and advancing long-term economic competitiveness. It requires the integration of environmental, economic and social priorities into policies and programs and requires action at all levels - citizens, industry, and governments.

Sustainable development is closely linked to environmental sustainability, the process of making sure current processes of interaction with the environment are pursued with the idea of keeping the environment as naturally as possible so that the sum total of nature's resources (described as natural capital) is not used up faster than it can be replenished. The demand placed on society to ensure that while all activities are designed to meet human needs the same design must ensure indefinite preservation of the life support systems of the planet.

## 2.3 Climate Change

Climate change refers to the disruption of the global climate and weather system – beyond any naturally occurring cycle – due to man-made GHG emissions (ETFRN, 2009). It may also be described as a significant and lasting change in the average weather conditions, or in the distribution of weather around the average conditions (i. e. statistical distribution) of weather patterns over periods ranging from decades to millions of years. Both internal (natural processes) and external (natural and anthropogenic processes) forcing mechanisms are responsible for climate change.

Man-made emissions of GHGs have pushed up dramatically the level of GHGs in the atmosphere and increased the greenhouse effect (Stern, 2010). This has caused an unnatural warming of our atmosphere, land surfaces and oceans. Besides temperature increases, other indicators of climate change are varying rainfall patterns, more extreme weather events (including storms, floods,



droughts and heat waves), sea-level rise, rapidly changing seasons, ocean acidification and glacial melting (UNFCCC, 2007). These changes are already having important socio-economic effects; as well as depletion of natural resources, damage to ecosystems and loss of biodiversity (Barrett *et al.*, 2005; Karky, 2009).

Since 1992, a global effort is being coordinated to address the worrying levels of carbon dioxide (CO<sub>2</sub>) in the atmosphere (mitigation) as well as dealing with the devastating impact of a changing climate [adaptation] (Motel *et al.*, 2008). Instruments such as the Joint Implementation (JI) and CDM are being implemented, whereby developed and developing countries alike are provided an opportunity to proportionately increase carbon dioxide emissions reductions (ETFRN, 2009).

## 2.4 Forest and Forestry

Forests are well known for the resources they provide globally. The benefits associated with the continuing existence of the forest can therefore not be over emphasized. They are among the most precious natural resource providing a variety of benefits including both tangible and intangible benefits. The tangible benefits are timber, food and other non-timber products meant for domestic use and export. The other benefits include supporting considerable biodiversity, protection of watershed and water bodies, improvement of soil fertility, control of erosion and flooding, maintenance of the ecosystems health, climate amelioration and serves as tourist attraction sites. Forests play an important role in the global carbon cycle; by acting as both a source and a sink of carbon dioxide (Stern, 2010).

Locatelli *et al.*, (2011) observed that mitigation (reducing the sources or enhancing the sinks of greenhouse gases) and adaptation (reducing the impacts of climate change) are two well established basic different approaches by which climate change can be addressed and that forest ecosystems play an important role in both adaptation and mitigation and there is a need to explore the linkages between these two options in order to understand their trade-offs and synergies. In forests, potential trade-offs can be observed between global ecosystem services, such as the carbon



sequestration relevant for mitigation, and the local ecosystem services that are relevant for adaptation (Locatelli, 2010).

The global forest is confronted with a range of challenges. The FAO (2001) reported that global forests are dwindling at a faster rate with loss of tropical rainforest at a rate of 15.2 million ha/yr. Response to the challenge calls for recognition of the need for explanations of theories followed by effective ideas, plans and principles of environmental policies that could result in sustainable and transparent management of the resource. According to Kauppi *et al.* (2006) changing rates of deforestation correspond to a trajectory of forest cover change-from abundant forest and low rates of forest loss, to accelerating deforestation and often massive loss of forest cover. Eventually, deforestation slows and forest cover reaches a nadir beyond which afforestation occurs, either naturally on abandoned land, or through strategic land use planning mostly as plantations. Afforestation and reforestation are therefore key strategies for ensuring sequestration of climate-harmful carbon.

The above benefits of forests underscore the need for the existence of quality forests. It is imperative therefore to address the problem of deforestation if positive and gainful strides are to be made in the fight to stem the rise of carbon dioxide into the atmosphere (Motel *et al.*, 2008). Ghana's forestry sector employs more than 100,000 people and supports the livelihoods of 2.5 million people. About twenty-two percent (21.7%) of land in Ghana is covered by forest, equivalent to 4,940,000 hectares of the land (FAO, 2010). Eight (8%) of forested land (395,000 hectares) is classified as highly bio-diverse and carbon dense primary forest, and plantations account for 260,000 hectares.

Forestry is the science, art, and craft of creating, managing, using, conserving, and repairing forests and associated resources in a sustainable manner to meet desired goals, needs, and values



for human benefit. Forestry consists of those biological, quantitative, managerial, and social sciences that are applied to forest management and conservation; it includes specialized fields such as agroforestry, urban forestry, industrial forestry, non-industrial forestry, and wilderness and recreation forestry (Helms, 1998).

Forestry has been institutionalized in Ghana since the turn of the century, with the enactment of legislation in 1909 and establishment of a Forestry Department in 1906. At the time, the total extent of the national forest estate totaled about 8.2 million hectares. This figure has dwindled to about 1.6 million hectares, leaving many to question the ultimate effectiveness of forestry and forest management in Ghana.

## **2.5 Governance and Good Governance**

Governance is an evolving concept whose basic elements are widely recognized although its bounds and scope remain contested. While academic debates continue, the concept is being shaped and operationally defined via initiatives using indicators to measure and assess governance at different levels, from project site to international levels. Since early efforts in the 1990s, country governance quality assessments parameters have gradually been moving from external to national assessments, relying less on international experts and more on national institutions and local expertise. Purely technical approaches are making way to better integration of political and managerial issues. In the forest sector, similar shifts are underway at a time when forest governance quality assessments are assuming greater significance in the context of global climate change discussions.

According to Higman *et al.* (2005), governance is a notion commonly held to be very close to that of government—more or less, what governments do, but also note that increasingly governance as a term has become commonly used in a range of sectors. Governance is defined as the traditions, institutions and processes that determine how power is exercised, how citizens are given voice and how decisions are made on issues of public concern (Chowdbury, 2005). It encompasses the



systems, 'rules of the game' and other factors that determine how political and economic interactions are structured and how resources are allocated (Grindle, 2008).

Sebudubudu (2010) suggests a certain misunderstanding about the term when he argues that, while the term 'good governance' has generated mounting international and national discourse, there still exists widespread confusion about its meaning. Grindle (2008) appears to support this assertion by maintaining that good governance means different things to different people. In other words, the meaning attached to it may largely be a function of the intent and purposes of the analyst. As a concept, it is perceived to be problematic in the sense that it is value-loaded and therefore subjective (Omotola, 2007). According to Higman *et al.* (2005), good governance is about good decisions over matters of public concern. Interestingly, the proponents of this idea of good governance are the first to admit that its grandiose and idealistic, even probably vague.

In general good governance is perceived as a normative principle of administrative law, which obliges the state to perform its function in a manner that promotes the values of efficiency, transparency in allocation of- and equity in the distribution of- resources (Chowdbury *et al.*, 2005). In the context of human development, the United Nations Development Programme (2002) defines good governance as '...democratic governance', meaning respect for human rights, participation in decision-making, accountability, equity, inclusiveness, absence of discriminatory practices and effectiveness'. This definition intersects with that posited by Hyden *et al.* (1994) and Leftwich (1994) as cited in (Sebudubudu, 2010) which incorporate predictable legal framework, transparency and information in the management of national resources (Hyden *et al.*, 1994). According to the World Bank (2005), good governance is a structural necessity for market reform.

## **2.7 Forest Governance**

Purely technical approaches are making way to better integration of political and managerial issues. In the forest sector, similar shifts from purely technical approach are currently in progress



at a time when forest governance quality assessments are assuming greater significance in the context of global climate change discussions. Forest governance refers to how decisions are made about the management and use of forest lands and resources. It is about the policy, legal and institutional conditions that affect how people treat forests – and refers generally to the quality of decision-making processes – their transparency, accountability and equity – rather than the formal political structures of government (Higman *et al.*, 2005). The decisions are shaped and influenced by a complicated web of actors, rules, and practices both within and beyond the forest sector. The quality of governance often determines whether forest resources are used efficiently, sustainably and equitably, and whether countries achieve forest-related development goals. Poor forest governance contributes to problems such as unplanned forest conversion, conflict over forest resources, illegal logging, and corruption. It is often characterized by low levels of transparency, accountability, and public participation in decision-making, as well as weak coordination across different sectors and levels of government. These ripple effects often reflect overall weakness in governance within a country. These underlying governance challenges remain a persistent obstacle to achieving sustainable and equitable management of forests in many countries (IIED, 2010).

Many individuals and organizations have made and continue to make unrestrained efforts to strengthen society's understanding of how state and non-state institutions and actors shape decisions about the conservation and use of forest resources around the world. The need for a comprehensive analytical framework to diagnose, assess and monitor forest governance is widely recognized among forest stakeholders. A widely accepted, comprehensive analytical framework will facilitate efforts within and across countries to improve forest governance. A framework facilitates description, diagnosis, monitoring, assessment and reporting on the state of governance in a country's forest sector. It features a globally relevant and comprehensive list of the major elements that describe forest governance. It also provides a frame of reference for organizing governance-relevant information that can be used within and across countries to assess and



monitor the governance of forests and forest resources. It can assist countries in reflecting on and responding to critical issues in forest governance in ways that can be measured, tracked and improved over time. By enabling informed discussions among stakeholders on governance in the forest sector, the Framework also seeks to foster opportunities for wider national discussions on overall governance beyond the forest sector.

In their seminal treatment of forest governance, Higman *et al.* (2005) established a framework and identified key principles for good forest governance. These included rule of law: fair legal frameworks that are impartially enforced; transparency: decisions taken in accordance with agreed rules, accessibility of information; equity: all citizens have fair stake in- and not excluded from society, particularly, marginal groups have opportunity to improve their well-being; efficiency: citizens and institutions produce results that meet societal needs while making best use of resources at their disposal; and accountability: being answerable to those affected by actions. They go further to draw on the reckoning that the foregoing tenets of good governance depend on and reinforce each other, citing for instance that, accountability depends on transparency and equity is reinforced by the rule of law. Furthermore, they maintain that values, structures and history of government (at all levels) plus economic and ecological factors influence good governance. Improving forest governance requires a systematic approach to identifying areas of weakness, devising and implementing suitable responses, monitoring results, continuing adaptation and learning to ensure progress.

**5. Verification.** Audit, certification or participatory review undertaken.

**4. Extension.** Promotion of SFM to consumers and all those linked to forests undertaken.

**3. Instruments.** Coherent set of 'carrots and sticks' for implementation in place.

**2. Policies.** Forest policies, standards for SFM and legislation in place.



**1. Roles.** Institutional roles in forestry and land use negotiated and developed.

## **FOUNDATIONS**

Property/tenure rights and constitutional guarantees, mechanisms for engagement with extra-sectoral influences, transparency and accountability in management of revenue, equitable benefit-sharing, market and investment conditions.

*Figure 2-1 Pyramid of Good Governance.*

Source: Adapted from Higman *et al.*, (2005).

## **2.8 Forest Governance in Ghana**

### *Historical Antecedents (1906 – 1948)*

Forestry in Ghana has come a long way since the introduction and institutionalisation of empire forestry in the premier decade of the last century. Half a century into the formalisation of colonial rule (1844-1957), forestry legislation was passed in 1906, a forestry department established in 1909 and active efforts – albeit through painstaking consultative processes – to annex and appropriate forest lands initiated with a sense of immediacy were fiercely resisted by the chiefs (Kotey *et al.*, 1998). Initial ‘native authority’ opposition to Governor-sanctioned take-over and control of forest lands was eventually overcome with the enactment of the Forest Ordinance in 1927, which provided powers to the forestry department (through central government) to establish and manage forest reserves and encouraged native authorities to do same (Birikorang, 2003), amid (their) unclear understanding of the socio-political implications. Also at this time, the native authorities’ ordinance (1927) was enacted, thus formalizing ‘native authority’ of paramount chieftaincy and traditional councils (Birikorang, 2003).

Within a period of twelve years, ending in 1935, demarcation and constitution of most of the country’s forest reserves had been completed. Longstanding tenure rights of communities were therefore effectively curtailed (Opoku, 2003). By 1939, with the promulgation of the Concessions Ordinance (Cap 139), a system of harvesting rights and timber revenue collection was introduced (Birikorang, 2003). Promulgation of the forest ordinance (1927) also meant institution of



regulations restricting access to- and use of- certain forest products, mainly timber. Before 1924, natives held forest concessions and sold wood upon the same basis as Europeans. However, in a government administrative order (1924), it was declared that a native could not cut and sell wood except for his own use, without making a deposit with the government of 2,500 francs – which was considered prohibitive (Larson *et al.* 2010). Beneficial rights of communities were however recognised in the report of the Reserve Settlement Commissioner. Consistent with the forest ordinance, successive governments have maintained the colonial policy of access restriction to economic trees and even gone a step further by imposing increasingly punitive measures for ‘wrongful’ access to- and use of – forest products. Indeed, as Opoku (2006) notes, policy makers saw forest fringe communities as nuisances to be regulated rather than as ‘clients’ whose interests should be systematically furthered or even ‘assets’ to be managed.

#### *Political Economy (1951 – 1994)*

The enactment of the Local Government Ordinance in 1951 and subsequent introduction of elected local councils marked the start of the decline in formal influence of the traditional authorities (Birikorang, 2003). In 1962, native authorities were abolished, ownership of “stool” lands was vested in the President and the state vested all timber concessions in it-self and centralised the administration of royalties (Kotey *et al.*, 1998; Birikorang, 2003; Opoku, 2004). These were facilitated by the Administration of Lands Act, Act 123 (1962) and the Concessions Act, Act 124 (1962). Act 123 vested in central government, the management of stool lands (and collection of revenues) while Act 124 vested in same the right to grant timber concessions and management of forest reserves. It is widely believed that the grant of concessions was characterised by rent-seeking behaviour both on the demand and supply side. Prior to 1962, landowning communities were entitled to no less than two-thirds of the gross revenue generated in forest reserves (Treue, 2001).



Under the Act 124, however, that entitlement was cancelled and revenue was used to first pay the running costs of the Forestry Department (now Forestry Commission), with a proportion of the remainder returned to local authorities and communities (Treue, 2001). Successive governments slanted the balance of power in favour of the state by continuation and consolidation of various colonialist policies including extending the legislation designed for forest reserves to off-reserve areas (Trees and Timber Decree, 1974). Of course, the timber industry had undergone some structural changes since being controlled by rich colonial timber merchants and was now being dominated by politically savvy local actors and as a result wielded substantial powers (Kotey *et al.*, 1998; Opoku, 2006).

Timber industry and forestry department powers grew at the expense of chiefs' and local community powers. If the role of chiefs had declined at this time, then that of local communities was substantially diminished. Asante (1975) noted a decline of traditional authorities from a position of unqualified dominion to mere subject. This was amply demonstrated by the situation whereby the state and timber industry captured a significant portion of economic rent at the expense of communities. This trend has continued to this day with particularly desperate deterioration in the circumstances of local communities. Why the 'traditional authorities' appear to be relatively better off is discussed in the next section.

In the early 80's, a combination of an environmental and economic crisis resulted in a decline of the sector. The national economy was virtually crippled as a result of substantial declines of leading productive sectors including mining and agriculture. The desperation of the then Rawlings Military Junta (1981-1992), led it to embrace neo-liberal economic policies championed by dominant multi-lateral institutions. The prescribed elixir was a heavy dose of export-oriented measures intended to balance the country's external payments. For the timber industry, it meant an intensification of logging with spectacular rapidity. No doubt, some economic gains were chalked but the social and environmental costs were colossal, as unscrupulous timber merchants plundered



timber resources occurring in the off-reserve areas – also the location of most farms. Aided to a large measure by weakened enforcement of legislation by a weak and compromised forestry institution, loggers wreaked havoc on farmlands, where farm owners received no dividend from harvested trees and little or no compensation for damaged farms from logging. Interim measures (1995) were instituted as an emergency response to a desperate situation following the institution of a ban on log export in 1994. Debate was initiated for a review of sector policy to reflect prevailing realities. It seemed then, that past mistakes had been identified, never to be repeated again.

#### *Emerging realities (1994 – Date)*

Despite the finalisation of the forest and wildlife policy (1994) and enactment of some parent (Timber Resources Management Act [1997], Act 547) and subsidiary legislation (Timber Resources Management Regulation [1998], L.I. 1649) and their respective amendments, there appears to be much concern about progress achieved in forest governance in Ghana. While there exist broad consensus that good governance is the cornerstone of the sector's sustainable development, the literature is replete with deep worries about progress achieved in the sector reform agenda since the late eighties. According to Opoku (2006), Ghana's forestry sector is in deep crisis and he notes a number of policy, statutory and legislative challenges. Mayers *et al.* (2010) asserts that without a major rethink of forest policies, the economic benefits the country can derive from its forest resources will decline rapidly, within the next decade.

Birikorang (2003) identified a lack of good governance in the forestry sector and cited lack of recognition of rights, transparency and accountability issues and skewed sharing of forest benefits among stakeholders. Boakye *et al.* (2007) identified a lack of effective participation from resource owners and communities in forest management decision-making as major constraints to attainment of sustainable forest management. Boon *et al.* (2009) observed that most forest policies have failed to address the fundamental challenges of forest management in Ghana. TBI (2005) also noted that



forest policy in Ghana has suffered from poor implementation, adding that the forest and wildlife policy (1994) remains a set of fine intentions on paper yet to be effectively implemented.

In a communiqué issued by FWG (2007), calls were made for broad governance reforms in the sector, alleging that current legislation does not adequately capture the aspirations expressed in the forest and wildlife policy and claiming further that, Ghana's legislation is not internally coherent. Upon this basis, FWG made clear demands for devolution of forest management responsibility and strict enforcement of the statutory fiscal regime. In concurrence, Opoku (2006) maintained that aspects of sector legislation are incongruent with policy and that policy is generally weak in many areas. Birikorang (2003) in a study of sector policies, laws, rules and regulations recommended the promotion of governance and in particular transparency and accountability at all levels. Boon *et al.* (2009) clearly articulated and summarized the principal challenges bedevilling forest resource management in Ghana as very complex land tenure system, the conversion of forests to farmlands, a skewed benefit-sharing system, weak institutional and governance structures, and ineffective involvement of relevant stakeholders. A lack of political will and commitment, weaknesses in the implementation and enforcement of laws and lack of transparency and accountability further compounds the governance situation of Ghana's forest sector (Asare, 2010). Marfo *et al.* (2012) affirm weak governance arrangements in many parts of Africa including Ghana. Following their study on constraints to improving community benefits under climate change mitigation schemes in Ghana, they conclude that without necessary governance reforms the situation of fractured tenure; unaccountable representation and elite benefit capture will remain dominant features of forest resource governance.

In Ghana, numerous stakeholders, actors or interest groups are associated with forest resource management. They range from the traditional landowning authorities to the local community farmers and NTFP (non-timber forest products) gatherers and users, from central government to local government, from the wood and non-wood industries to the general civic society (Owusu,



2003). These parties make diverse contributions to forest conservation and in return expect some form of benefit.

## **2.9 RED, REDD and REDD+**

Critical interventions such as Reducing Emissions from Deforestation (RED), Reducing Emission from Deforestation and Forest Degradation (REDD) and the expanded form which includes Reducing Emissions from Deforestation and Forest Degradation in Developing Countries; and the role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks or pool (REDD+ or REDD-plus) are currently being actively discussed by nations with the aim of possibly arresting the threatening effect of the world's climate.

Good governance may reasonably be assumed to be a pre-requisite for REDD+ good and will support REDD+ by providing solid foundations and policy and institutional framework. Presumably, REDD+ is likely to work best in a regime of good governance. It has further been argued that any successful initiative to reduce deforestation and forest degradation (DD) must begin with governance reform and the real danger that REDD+ will follow in the footsteps of previous failed initiatives to address DD have been widely noted (Fern, 2010a; Accra Caucus, 2011). Good governance including transparency, accountability, justice and the rule of law have all been mentioned as factors in the political environment favourable to sustainable resource management and development (Barrett *et al.*, 2005; Fry, 2008; Agidee, 2011; Asare, 2010). Tropenbos International [TBI] (2007) also asserts that good governance must be adopted as the cornerstone of Ghana's forest policy failing which the underlying causes of forest decline would not only remain but would ~~escalate~~ to defeat the purpose of the forest and wildlife policy.

### **2.9.2 REDD-plus – the Mechanism**



The REDD+ concept as defined in the Bali Action Plan (UNFCCC Dec 1/CP.13) and subsequent COP decisions relates to 'reducing emissions from deforestation and forest degradation, including the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (UNFCCC, 2007). Under this policy, there is an effort to reduce carbon dioxide emissions from terrestrial ecosystems by reducing rates of deforestation and forest degradation, through financial compensation for beneficial countries willing to implement land use changes consistent with this goal. Essentially, countries are obliged to carry out an analysis of deforestation and forest degradation, identify the proximate causes and drivers and implement measures to address these (Fry, 2008; Karky, 2009).

However, a range of obstacles have been conceptually envisaged in broad and global terms. The REDD+ debate at the level of the UNFCCC revolves around scope: whether the agreed mechanism should be limited to RED, REDD, REDD+ or REDD++, and whether the mechanism should be operational at national or sub-national level; financial mechanism: singular or separate vis-à-vis its relation with existing Kyoto Protocol arrangements; fund-based or market-based funding; determination of reference scenarios; monitoring, reporting and verification (MRV): the difficulty of accurately monitoring improved performance; risks relating to permanence: the need to ensure that those forested areas that have generated offsets remain intact over time; leakage: movement of DD activities from participating to non-participating countries; additionality: the need for the intervention to add up to existing and planned efforts; determination of reference levels: the difficulty in characterizing the emissions from DD; recognition of local people's rights and wider governance issues in the location where REDD+ is implemented.

Discussions on the concern of scope have seen notable progress to the stage where consensus appears to have been reached on REDD+. Progress in discussions on financial and funding mechanisms is widely held to be positive (Fern, 2010a). While detailed analysis of MRV and determination of reference scenarios fall outside the purview of this research, there is justified



believe that there exists ample tools, methods and data as well as robust enough science to address issues relating to determination of reference scenarios and MRV (ETFRN, 2009). It is reasonably deduced therefore that, the overriding dominant concern is how a negotiated REDD+ mechanism will fare during implementation in the reality of challenging governance regimes of beneficial contexts, not least Ghana.

Fry (2008) has made a start at defining principles for REDD+ implementation. Amongst others he identifies tenets such as ensuring transparency, sustainability, pro-poor, promoting sustainable livelihoods and strengthening civil society. He further states that REDD+ shall increase public awareness and participation, shall not diminish legal or customary rights of communities, shall strengthen legal institutions and support sustainable forest management. More specifically, Fry (2008) argues that a developed REDD+ mechanism would need to spell out how carbon rights are defined, how these rights would affect land ownership and/or use and whether there are adequate legal provisions to protect rights of local communities.

REDD+ has the potential to deliver benefits for indigenous peoples and forest communities as well as critical ecosystem functions such as biodiversity. There are however also risks that REDD+ implementation could do harm to communities and the ecological functions of forests. Safeguards (environmental and social) are devised to prevent negative social and environmental impacts. Safeguards also seek to ensure the full and effective participation of indigenous peoples, forest communities, women and other relevant stakeholders, and guarantee their timely access to appropriate and accurate information. Equitable benefit-sharing, the development of land and tenure rights and good governance are other important issues that can be stimulated through safeguards.

In adding to Fry's normative ideas, the Cancun Agreements (2010) outlines 'safeguards' to be incorporated in all REDD+ implementation efforts, including the need for transparent and effective



national forest governance structures, taking into account national legislation and sovereignty; respect for knowledge and rights of indigenous people and local communities by taking into account relevant international obligations, national circumstances and laws; and the full and effective participation of relevant stakeholders.

The need for REDD+ to be implemented under a regime of good governance is widely acknowledged (RRG, 2007; Pirard; Forest Trends; 2009; Parker *et al.*, 2009; Fern; Harvey *et al.*; Reddnet; Asare 2010). Harvey *et al.*, (2010) outline five main issues that will be critical for REDD+ success. These include creating effective on-the-ground partnerships and capacity, ensuring that forest carbon initiatives are backed by rigorous technical and scientific analyses, attracting the needed financial resources, successfully engaging stakeholders in project design and ensuring active government support to field activities. RRG (2007) defines a broad governance framework for REDD+ that includes building institutional partnerships and structures, designing field interventions, establishing monitoring and verification systems, attracting and distributing finance, clarifying legal aspects, engaging stakeholders and developing benefit-sharing mechanisms. RRG (2007) further notes important questions to be raised and answered in any national-level implementation of any Payment for Ecosystem System (PES) effort, including REDD+. Do prospective PES sellers have legal rights to engage in economic activities? Are there other users of the land? Do local or national laws enable (or at least not prohibit) PES?

Furthermore, RRI (2008) asserts that a REDD+ infrastructure requires clear, secure and comprehensive recognition of customary rights of forest dependent communities as well as their full support and involvement. Accordingly, it is pointed out that recognition of land tenure rights and clarification of ownership rights are a basic condition for any effective REDD+ effort (Harvey *et al.*; Asare, 2010; Agidee, 2011); Aggarwal *et al.* (2009) identifies the key parameters of assessing REDD+ readiness as an effective legal and policy framework, robust institutional



arrangement, capacities for MRV and secure tenure and community rights. He is also of the view that dialogue and participation are central tenets of REDD+. Key questions relating to REDD+ governance that are being touted include concern over what types of incentives are likely to maximize (local) participation and how should they be structured, types of processes, institutions, policies and laws that are required to enable local communities to take advantage of REDD+ incentives and to ensure they get an equitable share of benefits and that these benefits are equitably shared among community members, safeguards that can/must be put in place to ensure that local communities are not unfairly shut out of forest needed to sustain their livelihoods?

### **2.9.2 REDD+ in Ghana**

Ghana is one of the first African countries to initiate the development of a national strategy on REDD+ and also participates in negotiations on the development of international mechanisms on REDD+. In 2007, Ghana embarked on a journey aimed at getting ready for REDD+, by completing a number of defined steps. First in 2007, the country prepared a Readiness Plan Idea Note (**R-PIN**) providing an outline of the current context, including the institutions involved in forest utilisation and governance. Ghana's **R-Plan** (Readiness Plan) development phase began in April 2009 following the acceptance of the country's R-PIN in July 2008. The R-Plan provided a roadmap toward achieving REDD+ Readiness in Ghana. The implementation of the R-Plan (2009-2012) is the phase in which Ghana will fully develop its technical, policy and institutional approach to REDD+. According to the FC (2010), through a comprehensive and exhaustive multi-stakeholder consultations process, Ghana developed and got approval from the World Bank to implement the REDD+ Strategy document from 2010-2013.

Ghana is currently developing its national REDD+ strategy with support from public sources of finance and multilateral initiatives. The country's Readiness Preparedness Proposal (R-PP) submitted in January 2010 and recently approved by the Forest Carbon Partnership Facility (FCPF)



of the World Bank highlights a range of focus areas and activities to be promoted within the Ghanaian national REDD+ strategy. These include improved timber supply and timber stock enhancement on reserve and off-reserve areas. The timber supply improvements focus on improving the sector's efficiency. This is envisaged to occur via reforms to tree tenure amongst others. Site level actions would include improved forest management, incentives to increase the development of plantations, and/or rewarding community forest management activities that increase timber supply. Also issues on Land and carbon rights with special emphasis on review of tree tenure arrangements to optimize the incentives for tree conservation and replanting from the perspectives of both timber production and the enhancement of carbon stock.

## **2.10 Context, Drivers and Direct Causes of Deforestation in Ghana**

Deforestation is the direct human-induced conversion of forested land to non-forested land (Decision 16/CMP 1, UNFCCC). FC (2008) in Ghana's readiness plan idea note (R-PIN) defines deforestation as the change in land cover status from forest to non-forest (that is when harvest or the gradual degrading of forest land reduces tree cover per hectare to below country's definition of forest). Forest degradation is the reduction of tree cover and forest biomass per hectare, via selective harvest, fuelwood cutting or other practices, but where the land still meets the country's definition of forest (FC, 2008). Thompson (1908) described very early on, described alarming rates of deforestation in Ghana

Originally, Ghana's forests covered about 36% (84000km<sup>2</sup>) of the total land area of the country (EU, 2006; Rice and Counsell, 1993 as cited in Boon *et al.* 2009). The degradation of forest and the loss of biodiversity in Ghana have increased sharply in recent decades (Dixon *et. al.* 1996 cited in Boon *et al.* 2009). About one-third of Ghana's forest is estimated to have disappeared in 17 years between 1955 and 1972 (Hawthorne *et al.* 1995). Between 1990 and 2005, Ghana lost 25.9% of her forest cover, which translates into 1.931 million hectares of lost forests, giving an annual



deforestation rate of 2% (FC, 2010). Ghana currently loses about 65,000 hectares of forest per year (Marfo, 2010; FC, 2008). Given the foregoing evidence, it is interesting that Agyarko (2007) in his Ghana case study of the forestry outlook study for Africa (FOSA) report notes that the rate of deforestation has seriously declined. Fifty percent of the country's forest reserves are classified as degraded or worse (TBI, 2007). In the Dome River forest reserve, for example, two-thirds of the forest that existed in 1990 had been lost by 2007, while the non-forest area had expanded four-fold (Mayers *et al.* 2010). In a recent International Union for Conservation of Nature [IUCN] analysis (Forster, 2008) showed that most of the substantive blocks of forestland outside forest reserves (OFR) that existed in Ghana's Western Region in 1990 had been converted to other land uses by 2007.

The drivers of deforestation in Ghana have been noted to include regulatory, policy, socio-economic, political, economic and cultural. Others describe the main drivers of deforestation in Ghana to include weak forest governance and cite particularly, the lack of secure tenure rights, equity and exclusion (Asare 2010; Fern, 2010a; Agidee, 2011). The Accra Caucus (2011) notes that evidence from a range of countries affirm that deforestation is exacerbated by unclear tenure and weak forest governance. This is supported by Agidee (2011), who states that the underlying causes of DD in Ghana include weak and inadequate legal and institutional framework, uncertainty in land, forest and tree tenure system and centralized control of forest management. According to TBI (2009), perverse incentives and illegal logging among others continue to primarily drive deforestation. Opoku (2006) maintains that poor forest governance is a dominant driver of deforestation. Okrah (1999) affirms that the underlying causes of deforestation include bad government policies including a lack of participation in forest policy. In addition to burgeoning population in rural and urban areas, increasing local and international demand for agricultural and wood products, policy and market failures (especially the timber sector) continue to drive deforestation. Contrary to widely held views, Geist and Lambin (2002) as cited in Fry (2008) suggest that shifting cultivation is not the primary driver of tropical deforestation and argue that



farming as a cause of deforestation has been apportioned disproportionate weight in the analysis of the deforestation problem. However, according to the FC, in Ghana, most deforestation occurs outside the forest reserves (FC, 2010), where extensive farming occurs. But it is also extensively argued that farmers lack the incentives not to directly or indirectly engage in deforesting practices (Kotey *et al.*, 1998; Asare; TFD (2010); Marfo, 2010). Particularly, Birikorang (2003) argued that existing land tenure arrangements does not provide security for sustainable investment in trees and farmers lack the confidence that their rights would not be expropriated in the medium to long term. Similarly, he reiterates that while communities have to bear the opportunity cost of deprivation of access to potential agricultural land, they have not experienced an equitable distribution of benefits. As a result, there is the tendency to lend efforts to chainsaw operations, which could be very destructive.

Direct causes of deforestation are attributed to logging (both legal and illegal), fire, mining, agricultural expansion (principally export oriented), plantation and Taungya farms (Hawthorne *et al.*, 1995). The FC (2008) insists that the main causes of DD are agricultural expansion (50%), harvesting for fuel-wood and charcoal, illegal logging, wildfires and biomass burning (35%), population and development pressure (10%) and exploitation of minerals (5%). Deforestation and forest degradation have also been exacerbated (especially in the 1980s) by a push from Ghana's donors for economic 'structural adjustment' that supported the acceleration and expansion of timber exports to increase revenue (Kotey *et al.* 1998; 2000; TFD, 2010). Although some authors have cited subsistence farming, Hawthorne *et al.* (1995) argue that while self-feeding shifting agriculture had occurred for centuries, the rate of deforestation begun to accelerate only a century ago. This period coincided with the then dominant interest of expanding cash crop production as well as expanding timber industry; both intended to feed high-appetite foreign processing mills. Efforts at addressing forest loss and degradation include various initiatives to tackle illegal logging such as Ghana-EU Voluntary Partnership Agreement (VPA) under the Forest Law Enforcement,



Governance and Trade (FLEGT) action plan; and addressing sustainable forest management challenges such as FSC Forest Certification Programme and the Natural Resources and Environmental Governance Programme (NREG).

## 1.1 The Setting

### 1.1.1 Location and geographic characteristics of Ghana

Ghana is located in West Africa at latitudes 4° 30' to 11° North and longitudes 1° 10' to 3° 25' West. The total land area of the country is 238,533 sq km, including a land area of 233,543 sq km and 4,990 sq km respectively (World Fact Book, 2014). It is bordered to the east by Togo (577 km), Côte d'Ivoire (363 km) to the west, and Burkina Faso (349 km) to the north. The Atlantic coastline (539 km) lies to the south of the country (World Fact Book, 2014). Ecologically, the country is divided into two main regions: the forest zone to the south, comprising 57% of the land area (3 million hectares), and the savanna zone (13.7 million hectares) to the north, and a transition zone (1.7 million hectares) (FAO, 2014).

The climate is tropical, warm, and humid, with the southern coast receiving high rainfall and precipitation in the south-west, and with an increasingly hot and dry climate in the north of the country (World Fact Book, 2014). Annual temperature ranges from 24°C to 32°C. The prevailing winds are the Trade Winds, North-East, and South-East. However, the most important factor in Ghana is the Volta with the world's largest man-made lake. The man-made Volta Lake stretches from the Akosombo Dam in southern Ghana to the town of Yapei, 120 km to the north (Akosombo, 2014). Natural resources found in Ghana include gold, timber, bauxite, diamonds, and other minerals.



## CHAPTER THREE

### METHODOLOGY

This chapter elaborates the research methodology presenting a geo-political context in which the research is situated. It explains the sources of data, how the data was collected, analyzed and presented. It includes the description of the research models, the key variables involved and the sampling techniques employed.

### 3.1 The Setting

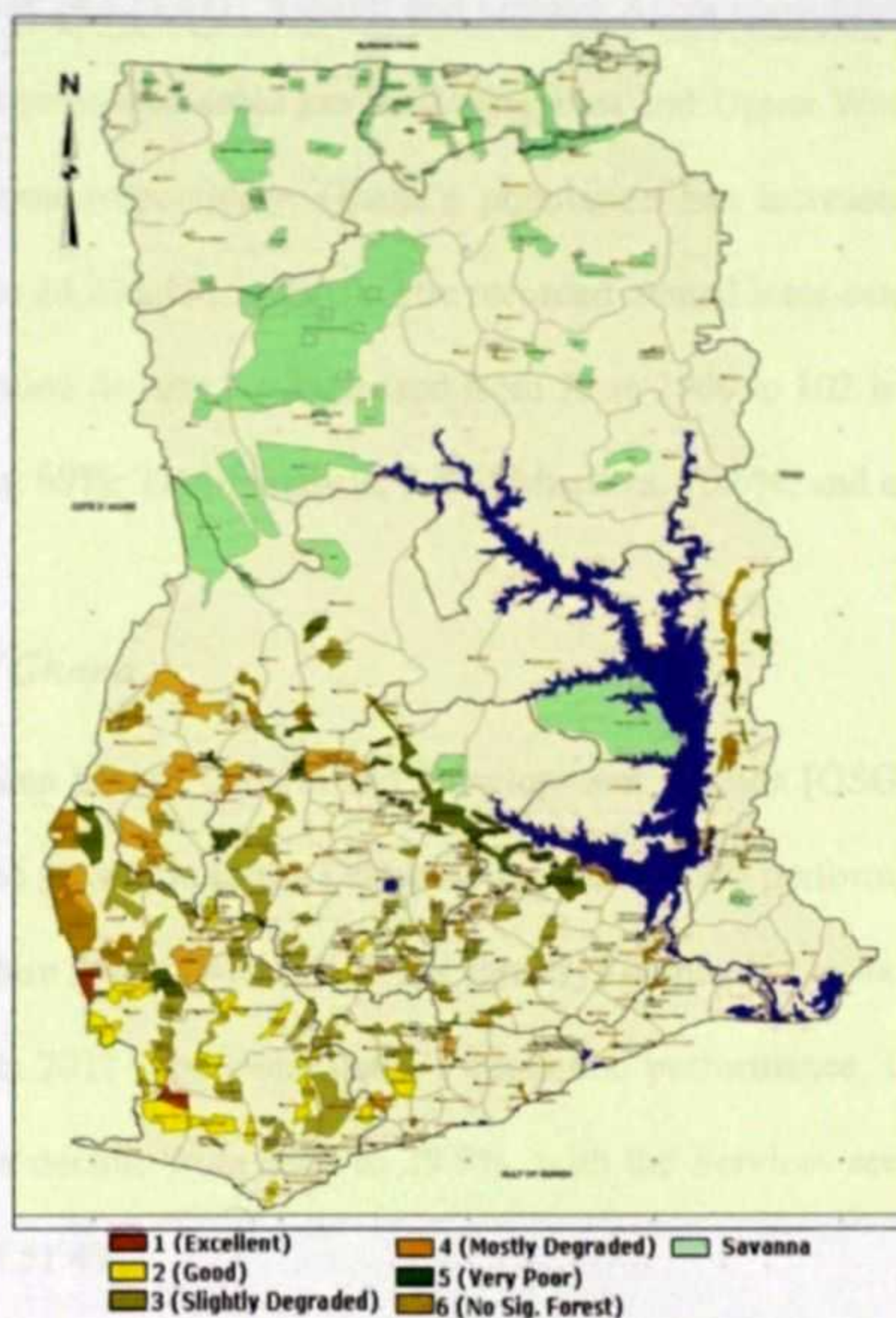
#### *3.1.1 Location and geographic characteristics of Ghana*

Ghana is located in West Africa on Latitudes 4° 30' to 11° N and Longitudes 1° 10' E to 3° 15' W. The total land area of the country is 238,533 sq km including a land and water areas of 227,533 and 11,000 sq km respectively (World Fact Book, 2011). It is bordered to the east by Togo (877 km), Cote d'Ivoire (668 km) to the west, and Burkina Faso (549 km) to the north. The Atlantic coastline (539 km) lies to the south of the country (World Fact book, 2011). Ecologically, the country is divided into a high-forest zone to the south-west, accounting for about a third of the land area (8 million hectares), a savannah zone (14.7 million hectares) mostly in the north, and a transition zone (1.1 million hectares) (ITTO, 2009).

The climate is tropical, warm, and comparatively dry along the southeast coast with high mean annual precipitation in the south-west and with an extremely hot and dry climate in the north of the country (World Fact book, 2011). Several important rivers abound in Ghana; the prominent ones include Tano, Ankobra, Pra, Oti, and Ofin rivers. However, the single most important river in Ghana is the Volta with the world's largest manmade lake. The manmade Volta Lake extends from the Akosombo Dam in southern Ghana to the town of Yapei, 520 km to the north (Anonymous, 2008). Natural resources found in Ghana include gold, timber, industrial diamonds, bauxite,



manganese, petroleum, silver, salt and limestone. Fisheries resources are abundant (World Fact Book, 2011).



*Figure 3.1 The vegetation map of Ghana*  
Source: Forestry Commission (2008)

Forests are concentrated in the south-western parts of the country (Figure 3.1). The structural integrity of most forest reserves (an estimated 11 per cent of the country's land area) can be said to be diminished as a good many of the reserves are categorized as degraded, particularly in and around the transition zone. An inverse relationship is established between poverty and deforestation and forest deforestation.

### **3.1.2 Population of Ghana**



The results of the 2010 (published in 2012) Population and Housing Census show that the total population of Ghana is 24,223,431. Ashanti and Greater Accra constitute 35.6 percent of the total population. The least populated areas are the Upper East and Upper West regions making up 4.3 percent and 2.8 percent respectively. Ghana's population has increased by 28.1 percent from 18,912,079 in 2000 to 24,223,431 in 2010. The recorded annual inter-censal growth rate in 2010 is 2.4 percent. Population density has increased from 79 in 2000 to 102 in 2010. The population is made up of Christians, 69%; Traditionalists, 8.5%; Muslims, 15.6%; and others, 6.9%.

### ***3.1.3 Economy of Ghana***

According to the Ghana Shared Growth and Development Agenda [GSGDA] (2010), the country has recorded sustained growth in Gross Domestic Product (GDP) performance since 2001. During this time, the agriculture sector (which includes forestry) dominated in its share of contributions to GDP. However, in its 2011 report on Ghana's economic performance, Ghana Statistical Service [GSS] (2011) noted a decline from 35% to 29.9%, with the Services sector assuming the lead in GDP contributions of 51.4%.

Forestry and logging contributes 3% to GDP. However, according to Ghana Statistical Service (2011), the cost of environmental degradation is rising and this was estimated to have accounted for 6% of GDP in 2006 up from 5.5% in 2005. Cocoa and Gold dominate exports with timber accounting for 7.6% of exports at fourth place behind Tourism. It is estimated that about 120,000 people are formally employed by the forest and wildlife sector, while the sector serves as a source of livelihood for about 2 million people. About 11 million people live in forest areas of which about 67% of their livelihoods are supported by forest activities. The primary indigenous energy sources in Ghana are from the forestry sector comprising of 94.5%. Biomass in the form of firewood and charcoal dominate the total energy consumed in the country, averaging 67% in 2008 (draft revised forest policy, 2011).



The Ghana Living Standard Survey report of 2008 indicated an improvement in poverty in recent years. According to the report released by the GSS, poverty indicators are showing a remarkable improvement. The report indicated that the proportion of Ghanaians described as poor in 2005/06 stood at 28.5% falling from 1998/99 levels of 39.5% while the proportion of Ghanaians described as extremely poor reduced from 26.8% to 18.2% (GSS, 2008). However, the survey indicated that the achievements in poverty reduction were concentrated in the forest region (both urban and rural).

### ***3.1.4 Governance and decentralization structures***

Local governance in Ghana has seen substantial changes over time, with patterns ranging from manipulation through traditional authorities by the Colonialists to elections of local officials at independence to the appointment of local government officials to district assemblies by successive governments. The accountability, transparency, resource allocation and capacity of district assemblies are widely deemed to be inadequate, leading to questions of effectiveness and efficiency.

The British governed the Gold Coast colony through local authorities in a system of 'indirect rule'. The colonial government determined and approved of the paramount and divisional chiefs and rewarded those most loyal to the Crown with leadership positions on municipal and native councils. Following independence, Nkrumah attempted to side-line chiefs because the most powerful ones assumed an opposing political posture. Article 240 of the 1992 Constitution establishes and lays out the specifics of the District Assemblies to include elections for 70% of council members, and presidential authority to appoint the remaining 30% in consultation with chiefs and special interest groups (Guri, 2006; Ahwoi, 2010). Consultations for appointed members rarely occur, however. Four layers of government exist below the national-level in Ghana today. These are the metropolitan, municipal and district assemblies, with the last being the unit



committee. It's been argued that there is a less than an avid popular participation in all of these sub-national structures.

Since the era of colonization, Ghanaian governments have struggled with how to use traditional authorities to achieve their own objectives without making chiefs more powerful than themselves. Since Independence, the roles of chiefs have been less formal. While chiefs still hold a consultative role through the House of Chiefs, it is undeniable that they are influential in local government, albeit informally. The current decentralization review is exploring the possibility of a larger role for chiefs at the local level through more formal incorporation into district assemblies.

According to Kimble (1963), the 1878 Native Jurisdiction Ordinance formally recognised chiefs as the authorities of Native Councils. This gave chiefs the authority to make and enact bylaws enforced in both criminal and civil courts. While chiefs had always collected 'tribal' revenues, the Native Administration Ordinance was passed in 1927, which gave chiefs financial, judicial and administrative authority through State Councils. Today, the management (collection and distribution) of revenue to the traditional authorities is a function of the Office of the Administrator of Stool Lands (OASL), an appendage of the State. Brempong (2006), notes that the chieftaincy that emerged from colonialism was 'deformed', because 'the reasons for its existence, its modes of operations and its financial system were recast to suit the purposes of indirect rule and it no longer was rooted in its natural customs or traditions'. The observation has thus been made that under indirect rule, downward accountability of chiefs to the people was substantially diminished and replaced by upward accountability to the colonial authorities – and then to successive post-independent governments, to date.

### **3.2 Sample Frame and Sampling Methodology**



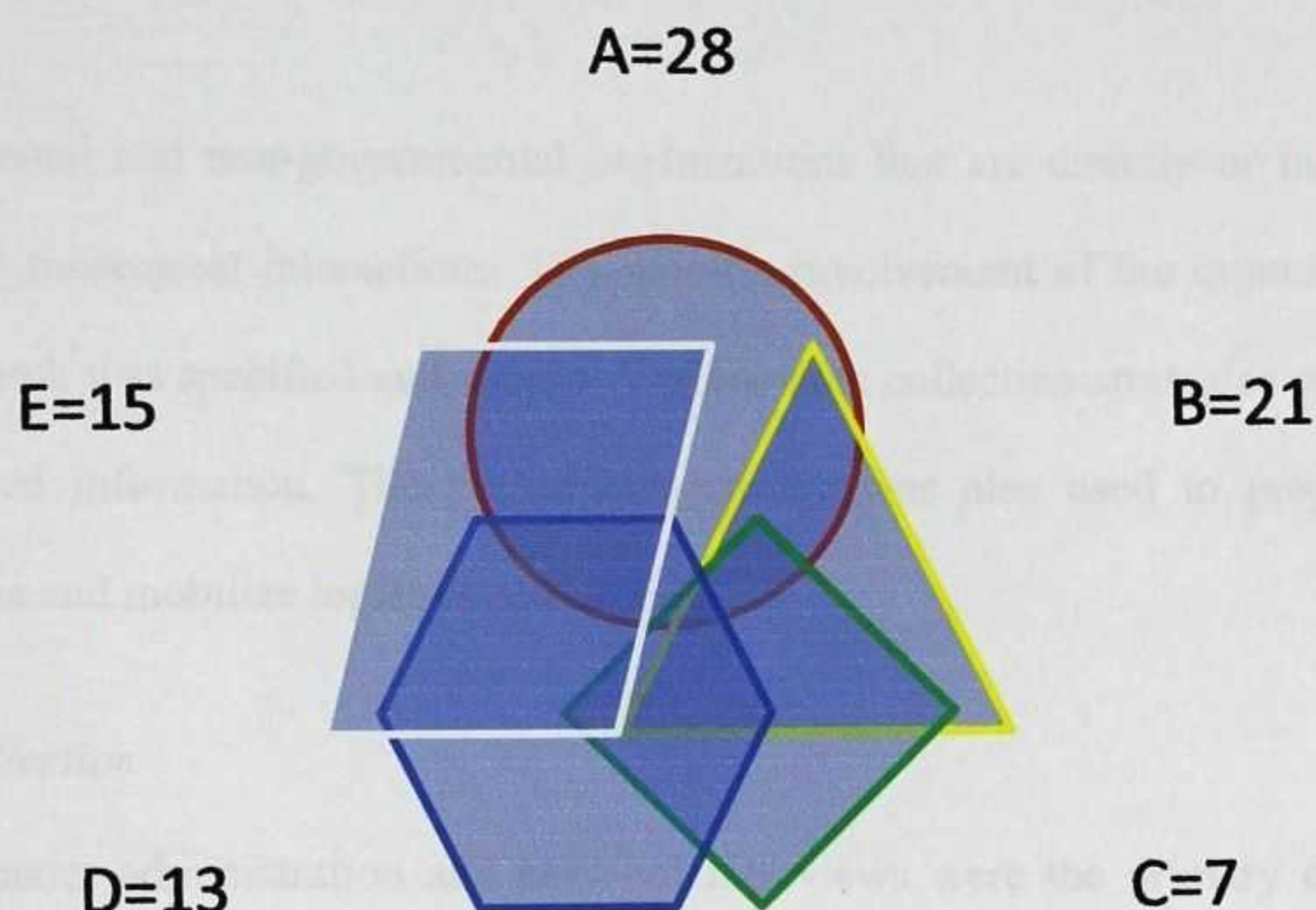
This research draws heavily on expert opinion as well as extensive and in-depth review of secondary data. Therefore experts in the areas of climate change, forest policy (and governance) and REDD+ were targeted. The multi-stakeholder REDD+ working group in Ghana comprising:

- the technical, strategy and communication working groups (A)
- the National Climate Change Committee (B) and
- the Forest Policy Review Team (C)

were identified as the prevailing authoritative structures on REDD+, forest governance and climate change. It is important to note a certain degree of overlap in membership of these structures.

Also included in the sample frame were participants of two landmark expert workshops on REDD+ carried out in Accra – the REDD+ Opportunities Scoping Exercise (ROSE) Expert Workshop (D) and ‘REDD+ Readiness Dialogue (part of the internationally-acclaimed ‘the forest dialogue series), represented in Figure 3.2 as F. Again, the overlap in workshop participants and aforementioned structures must be noted. Sampling criteria was such that each respondent is a member of at least two of the structures (i.e. the three REDD+ sub-working groups) and has participated in at least one of two expert workshops. Of the total number of eighty-four, forty-five met the established criteria and thirty-five responded to the questionnaire. The five respondents may exhibit some degree of overlap (Figure 3. 2).





*Figure 3.2 Distribution of respondents among the different stakeholder groups in (A = technical, strategy and communication working groups; B = National Climate Change Committee; C = Forest Policy Review Team; D = Participants at ROSE workshop and E = Participants at the Forest Dialogue workshop).*

The total number of criteria that can possibly be met is five. In which case a respondent is a member of all three structures and has participated in both expert workshops. An analysis of the respondent distribution using the established criteria showed that seventeen respondents satisfied two criteria, i.e a member of one structure and had participated in one workshop. Eight satisfied three criteria and ten satisfied four criteria. One respondent was a member of all three structures. None of the respondents achieved a score of five indicating that no respondent was a member of all three structures and had participated in both expert workshops. In sum, a total number of thirty-five respondents constitute the sample size of this research.

### **3.3 Data Collection Methods and Analyses**

#### *Preliminary survey*

The study was preceded with a preliminary survey which aimed at identifying, getting familiarized with and establish the needed rapports and protocols with all stakeholders both



governmental and non-governmental organizations that are directly or indirectly relevant to the study for subsequent interactions. The specific involvement of the organizations or personnel in this research was specified and sought. Various data collection strategies were employed to solicit the needed information. The preliminary survey was also used to prepare itinerary for field operations and mobilize logistics/resources.

### *Data Collection*

Questionnaire administration and personal interviews were the primary data collection methods used for collecting the views of identified experts. Secondary data was collected through extensive and in-depth review of literature. The developed questionnaires (Appendices 1 and 2) were pre-tested on randomly sampled respondents during the preliminary survey to determine their effectiveness in capturing the information needed for the research. The questionnaires were revised, based on the pre-testing response before the final administration. On February 20<sup>th</sup> 2011, a pre-notification was sent to all target respondents, notifying them and soliciting their cooperation for the process. Questionnaires and cover letters were delivered by electronic mail or hand two weeks later. Four weeks after the questionnaires were sent out; email and telephone reminders were made where necessary. Face-to-face interviews were then followed up with respondents to achieve a better understanding of issues raised.

The primary data collection effort was designed in two parts. Two sets of questionnaires were designed to collect two sets of distinct data. The first set of questionnaire was used as a means to address the first objective of the study that involves identification of the constraints to REDD+ implementation in Ghana as well as the pertinent issues for each identified constraint. Constraints identification is crucial to the study in order to facilitate a coherent discussion of the range of related pertinent issues.

Although it is important that the core set of principles and criteria for assessing and monitoring forest governance be made as generic as possible for wide application, the necessity for this same



forest governance principles and criteria to meet specific application requirements cannot be ruled out. For this reason, the second set of questionnaire was designed to evaluate experts' perceptions on how forest policy addresses these constraints (in the context of REDD+ implementation in Ghana) as indicated in the remaining objectives. In the bid to achieve this, respondents were asked to agree or disagree (with varying degrees of emphasis) on how aspects of policy such as principles, objectives and strategy addressed these constraints (using an adaptation of Birikorang's framework for policy analysis with an embedded gap analyses (Birikorang, 2003).

Both quantitative and qualitative analyses were carried out, albeit, with a greater emphasis on qualitative (content and discourse analysis). Quantitative analysis has largely been descriptive. Questionnaires contained scale, weighted, fixed and open-ended questions. The scale questions were used to assess respondents' understanding or belief in key concepts, using a scale of 1-5, anchored by 1 = strongly disagree to 5 = strongly agree. This measured respondents' level of agreement with various questions addressing issues on forest governance including forest policy and laws, forest management, deforestation, and REDD+. Additionally, fixed-response questions and open-ended questions were included in the questionnaire to make available grey areas that may be explored by respondents through expression of their thoughts and views on issues not covered in the scale and fixed format questions.

### **3.4 Response Rate and Data Handling**

Forty-five (45) respondents were identified and hence forty five copies of the two sets of questionnaire administered (by e-mail) out of which ten (10) were undelivered or not returned. This brought the eligible target population to thirty-five (35). With the assumption that adequate number of respondents were identified, Diaw *et al.* (2002) recounted that it is the size of a target population that determines the sample size and that community with a population of five hundred (500), 10% sampling intensity is appropriate, also from 501 to 1000, 5% but above 1000, an



intensity of 2.5% is appropriate. All questions were completely answered by respondents. Survey data were entered into two database of the Microsoft Excel software. The first was used to keep records of returned and undelivered instruments. The second data base, accompanied by coded survey variables, was used to store responses from each respondent in a manner that facilitates further analysis of the data.

#### 4.1 Respondents' Profile

All the respondents purposefully selected were deemed appropriate following the research criteria and deemed to be relevant to the research goal. Each of these respondents has been engaged in the REDD+ discourse in various ways and has actively been participating in a number of forest policy processes at global and expert meetings on REDD+ in particular both locally and internationally.

#### 4.2 Identifying Constraints to REDD+ Implementation in China

The constraint to REDD+ implementation in China is expected to identify what critical constraints are present that will make successful implementation of REDD+ a problem in the specific case of China. Respondents were provided with the broad possible constraint categories to REDD+ implementation in China (based on extensive literature review) and asked to respond with any constraint that they felt was a constraint to REDD+ implementation in China (Figure 4-1).



## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

Research results constitute a very important stage of a research exercise and that it is an integral part of the survey being affected by its overall quality (Yin, 2003a). In this chapter, the results of the primary and secondary data obtained for the study are presented. It focuses essentially on the critical factors militating against Ghana's implementation of REDD+, the associated current constraints and anticipated issues for policy attention. Also an extended discourse with which the researcher's opinions inferred from results of the current study are viewed against literature and forms the basis to influence existing knowledge on the research topic.

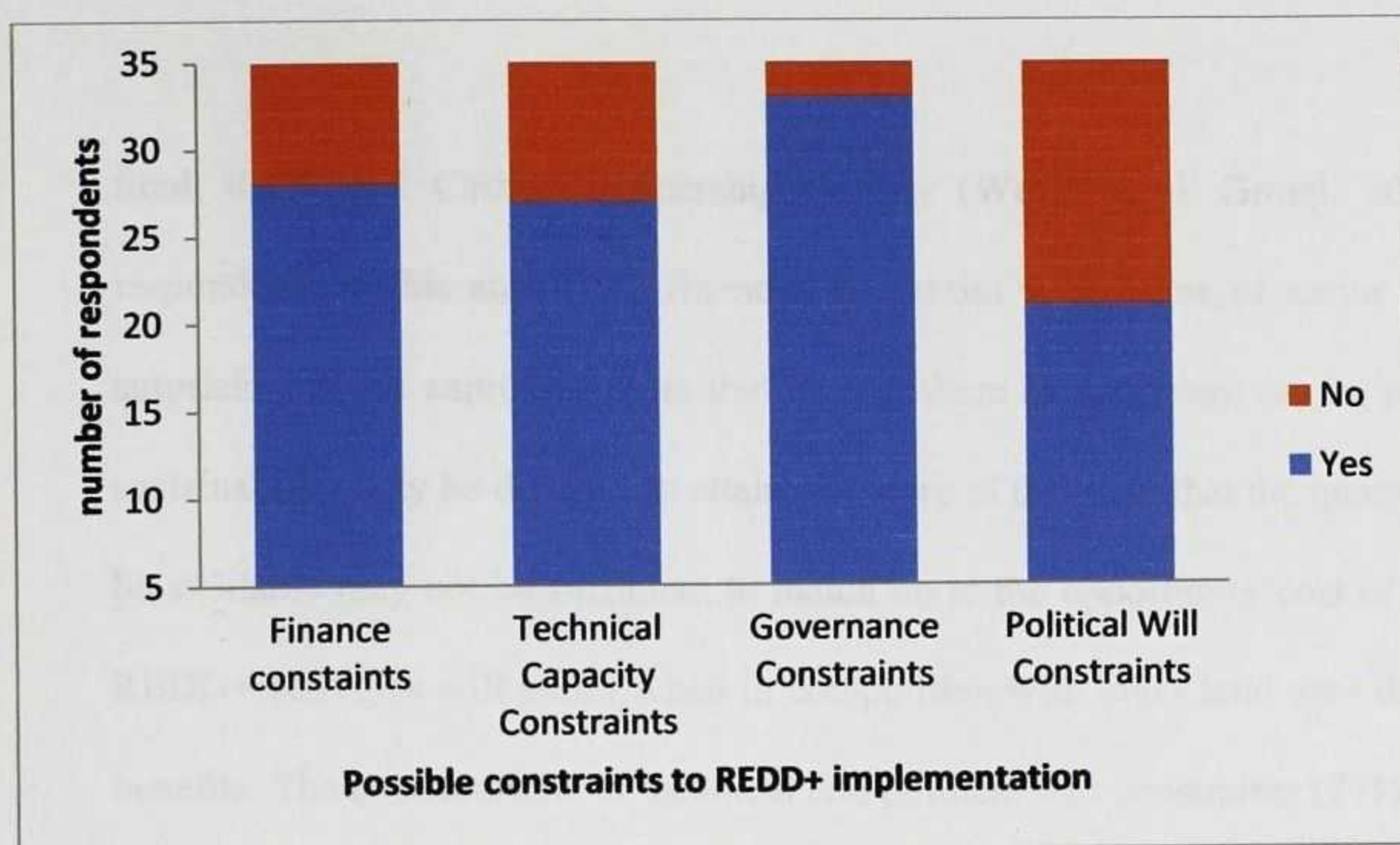
#### **4.1 Respondents' Profile**

All the respondents, purposively selected were deemed appropriate following the technical nature and demand in response to the research goal. Each of these respondents has been engaged in the REDD+ discourse in various ways and has actively been participating in a number of forest policy processes in general and expert meetings on REDD+ in particular both locally and internationally.

#### **4.2 Identifying Constraints to REDD+ Implementation in Ghana**

The constraints to REDD+ implementation in Ghana investigated to identify what critical constraints are existent that will make successful implementation of REDD+ a problem in the specific case of Ghana. Respondents were provided with four broad possible distinct challenges to REDD+ implementation in Ghana (based on extensive literature review) and asked to indicate what they considered in their view as challenges to REDD+ implementation in Ghana (Figure 4.1).





*Figure 4.1 Identified constraints to REDD+ implementation in Ghana.*

Recognition of governance as a major constraint was overwhelmingly acknowledged as 33 of 35 (94%) of respondents either agreed or strongly agreed with the statement that governance posed a challenge to implementing REDD+ in Ghana. Second to governance constraints was financial constraint (84%). Because REDD+ project preparation, consultation, implementation and monitoring will be costly, it is important that expectations among stakeholder groups as to the possible level of REDD+ payments are realistic. Respondents explained that there is uncertainty about the nature and flow of future finance, citing the protracted debate at the UNFCCC negotiations as evidence to confirm their perception. Respondents also pointed out that REDD+ has received strong support and push from international organizations and International Financial Institutions. Although the World Bank presently plays an important role in the progression of REDD+ activities declaring its commitment to fight against climate change, and as one of the financial contributors for the REDD+ programme, many civil society organisations and grassroots movements around the world view with scepticism the processes being developed under these funds. Among some of the most worrying reasons are the weak (or inexistent) consultation processes with local communities (Butler, 2009). It has, as of the year 2009 created a \$300 million



fund, the Forest Carbon Partnership Facility (World Bank Group, 2007). The view held by respondents in this study that financial constraint is an issue of major concern is therefore not surprising. Some expressed fears that even if there is agreement on the mechanism of finance, its sustainability may be difficult to attain and were of the view that the quantum of finance that might be available may not be sufficient to match up to the opportunity cost of land use. In other words REDD+ activities will suffer when in competition with other land uses that offer greater financial benefits. The contributions of technical and political will constraints (77%) and (60%) respectively as factors constraining successful REDD+ implementation in Ghana were substantial and therefore needs to be appreciated. The implications may be that, in the developing countries where implementations of environmental programmes are usually characterized by greater political interferences and undertones and hence weaken the efficacy of enforcement institutions, the possibility that the successful implementation of REDD+ would be smothered cannot be ruled out. To further confirm the critical importance or strength of governance as constraints to REDD+ implementation in Ghana, respondents were asked to indicate their agreement or otherwise on the subject by providing response to the statement that governance constraints were the most important factors on a 5-point Likert scale. Seventy-seven percent (77%) of respondents were in agreement, with 57% indicating strong agreement (Figure 4.2). It should however be observed that this is 17% less than the percentage of respondents (94%) who generally consider governance as constraints. Nine (9%) and three (3%) disagreed and strongly disagreed respectively with 11% neither agreeing nor disagreeing. Therefore 23% of respondents did not agree that governance constraints were the most important. For such respondents, finance, technical or political will constraints were the more important. Viewing this against the backdrop of the spectrum of experts considered in the study, appreciation of the factor as a constraint by such a large percentage (94%) of such experts in itself signal a worrisome situation therefore calling for attention. This coupled with the proportion (about 82%) of experts with such strong opinion suggests that one would not be far from right in



The dominant expert opinion that governance constitutes the most important constraints to REDD+ in the context of Ghana is still valid, thereby affirming widely held views that governance remains the most important issue to tackle if REDD+ is to succeed (Accra Caucus, (2011), ETFRN (2009), Reddnet (2010), Aggarwal (2010), Fern (2010a) and RRI (2008).

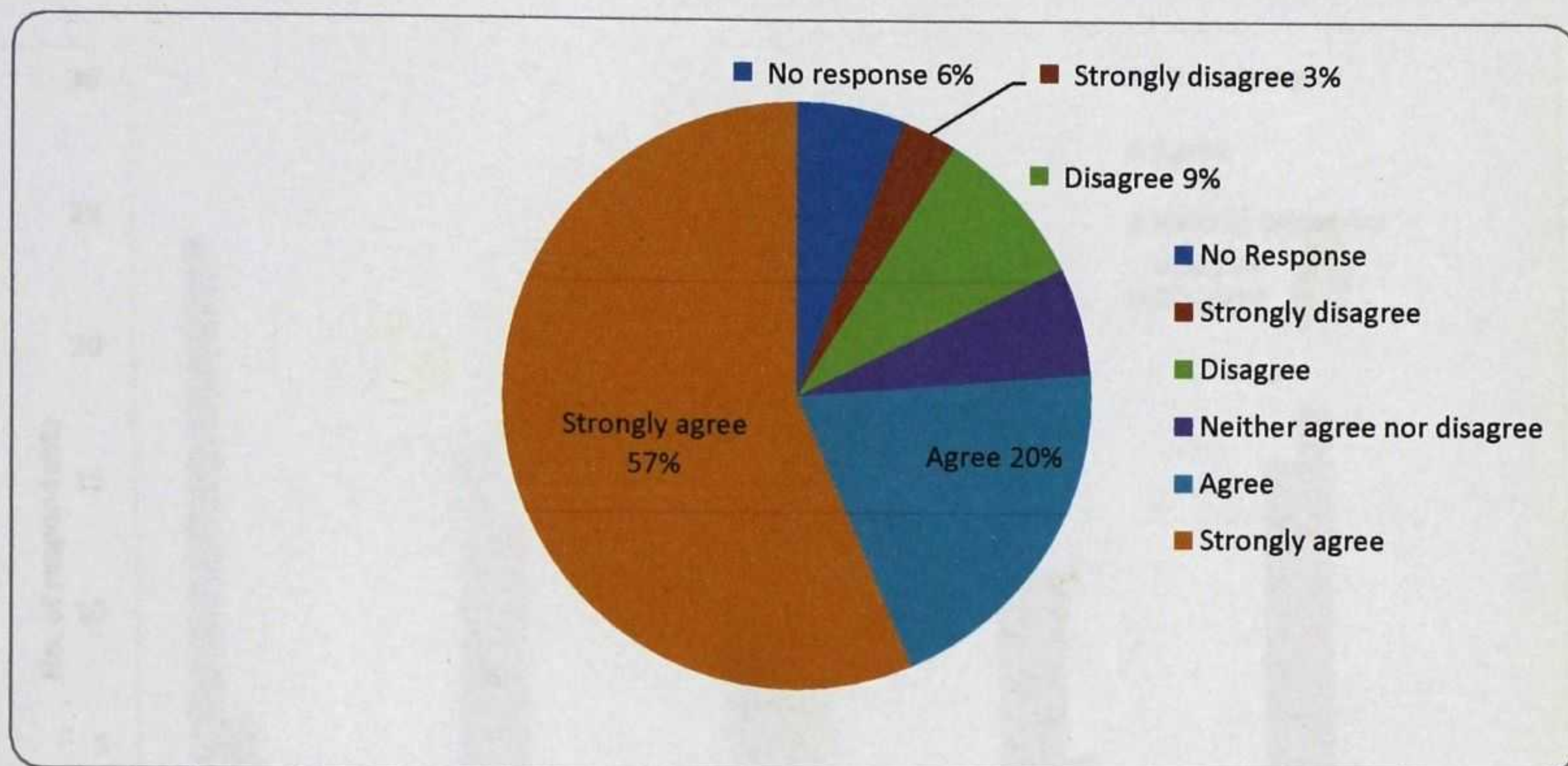


Figure 0.2 Distribution of response to the strength of governance as constraints to REDD+ implementation in Ghana. N = 35

### 4.3 Various Governance Constraints

A spectrum of identified governance constraints was assembled for determination of their strength of importance as perceived by respondents. This was necessary in order to inform policy with regards to prioritization in allocation of the usually scarce resources (ODI, 2002). They included tenurial issues, benefits-share arrangements, institutional capacity, transparency and accountability, representation and participation and policy and regulation factors (Figure 4.3). Majority of respondents (91%) rated policy and regulation as the most important governance constraints. This was followed by tenurial (86%), benefit-sharing on one hand and transparency and accountability on the other (83% each) and finally, institutional capacity (71%). Respondents, however, established



constraints. This was followed by tenorial (86%), benefit-sharing on one hand and transparency and accountability on the other (83% each) and finally, institutional capacity (71%). Respondents, however, established that issues relating to transparency and accountability in forest benefits (forest revenue) sharing are strongly linked, and indicated that there was neither transparency nor accountability. This underscored the necessity for an in-depth discussions on benefit-sharing.

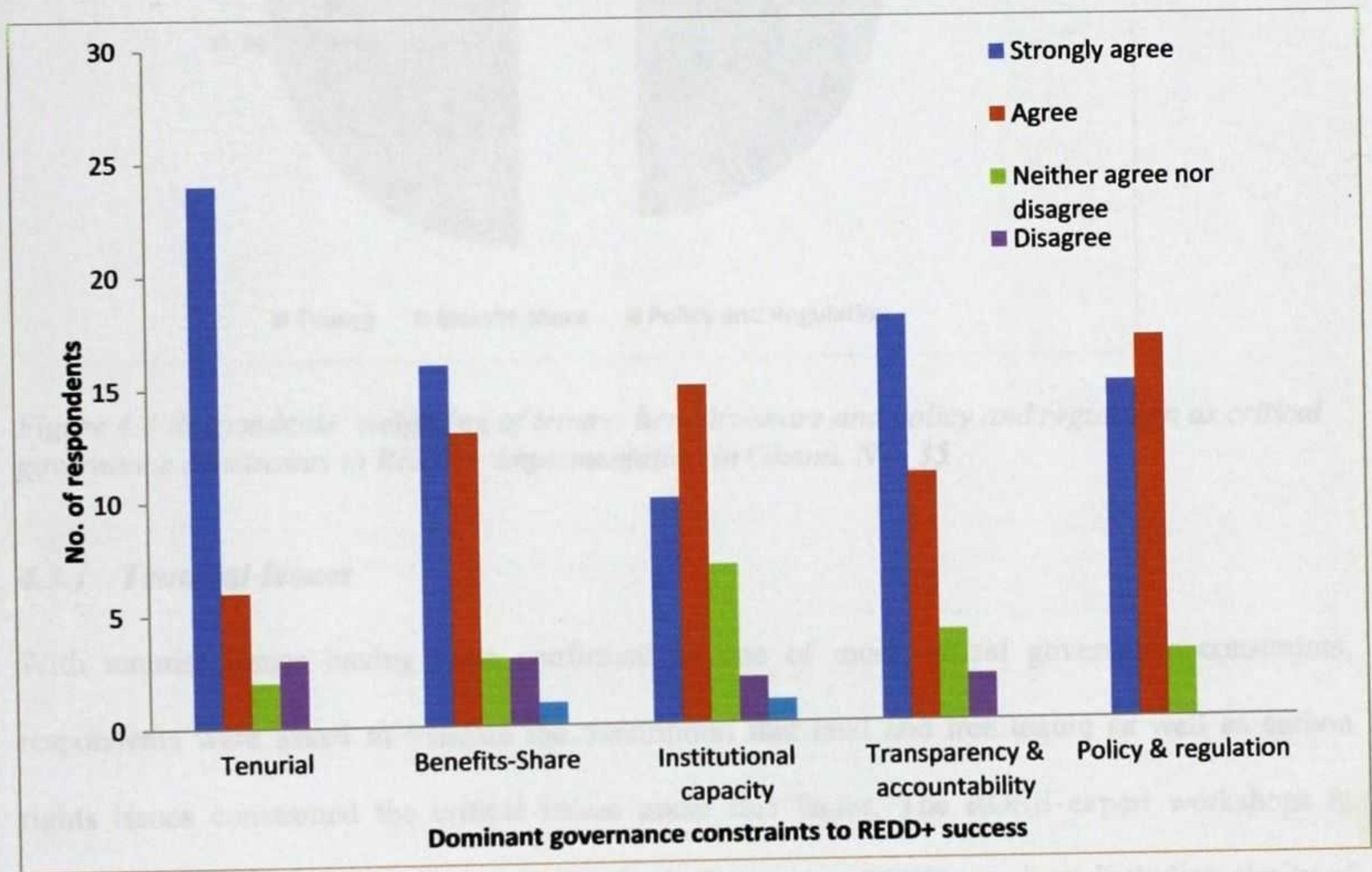
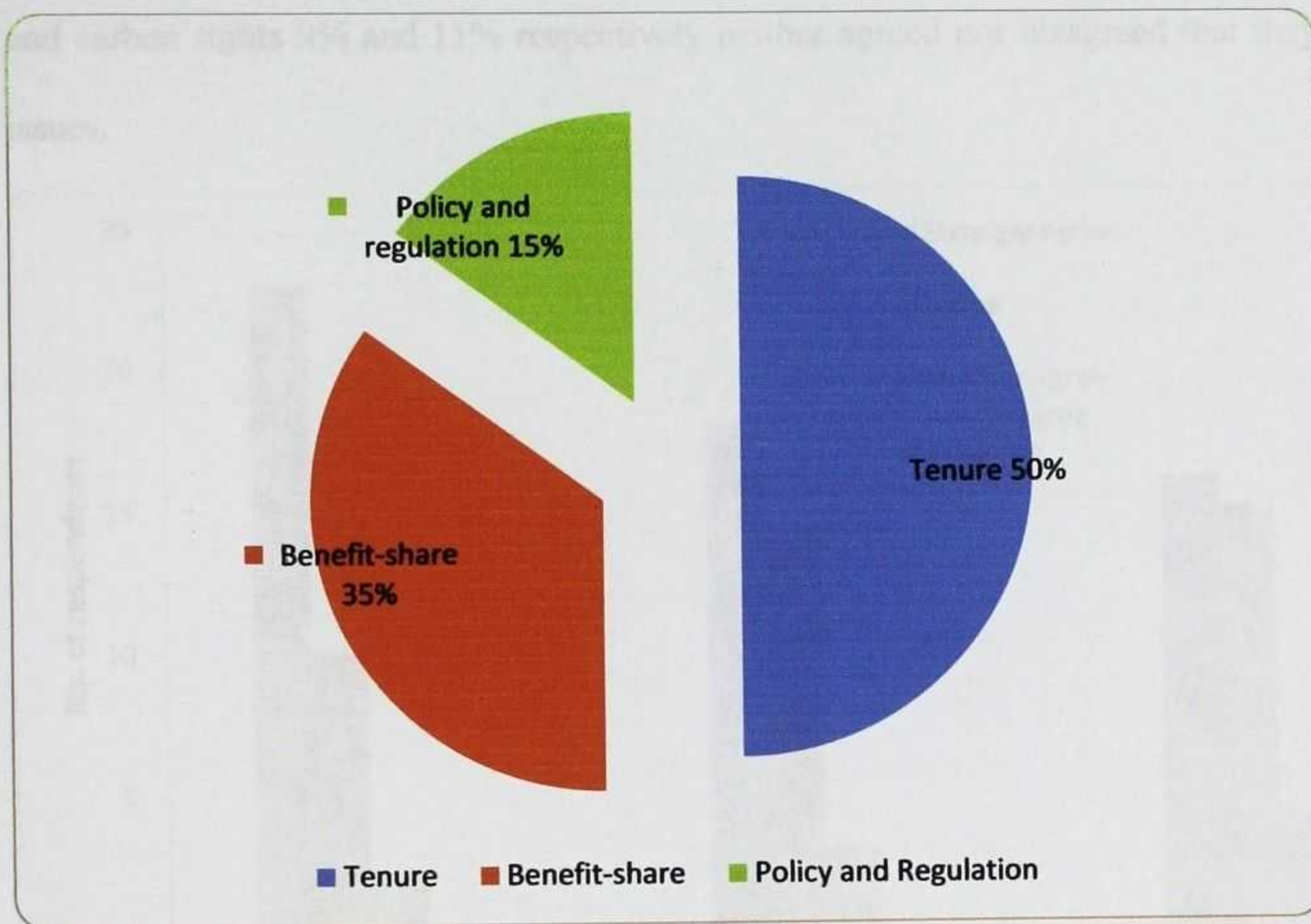


Figure 4.3 Respondents' views on most important governance constraints to REDD+ implementation in Ghana.

In a ranking exercise to determine what specific governance issues respondents considered to be most critical, the following scores (Figure 4.3) were obtained for tenorial, benefits-share and policy and regulation issues.





*Figure 4.4 Respondents' weighting of tenure, benefits-share and policy and regulation as critical governance constraints to REDD+ implementation in Ghana. N = 35*

#### **4.3.1 Tenurial Issues**

With tenurial issues having been confirmed as one of most critical governance constraints, respondents were asked to validate the assumption that land and tree tenure as well as carbon rights issues constituted the critical issues under this factor. The ROSE expert workshops in Tanzania, Uganda and Ghana defined 15 criteria for scoring REDD+ projects including clarity of land/tree tenure and carbon property rights amongst others (RRI, 2008). Respondents were asked to indicate their level of agreement or disagreement with each of the aforementioned sub-factors on a Likert scale of 1-5. Ninety-four percent (94%) of respondents agreed or strongly agreed that land tenure issues were important and 6% neither agreeing nor disagreeing. Ninety-one percent (91%) of respondents agreed and indicated different levels of agreement that tree tenure issues were pertinent. Issues relating to carbon rights issues were held as important by 81% of respondents as reflected by their agreed or strongly agreed responses (Figure 4.5). For tree tenure



and carbon rights 9% and 11% respectively neither agreed nor disagreed that they were pertinent issues.

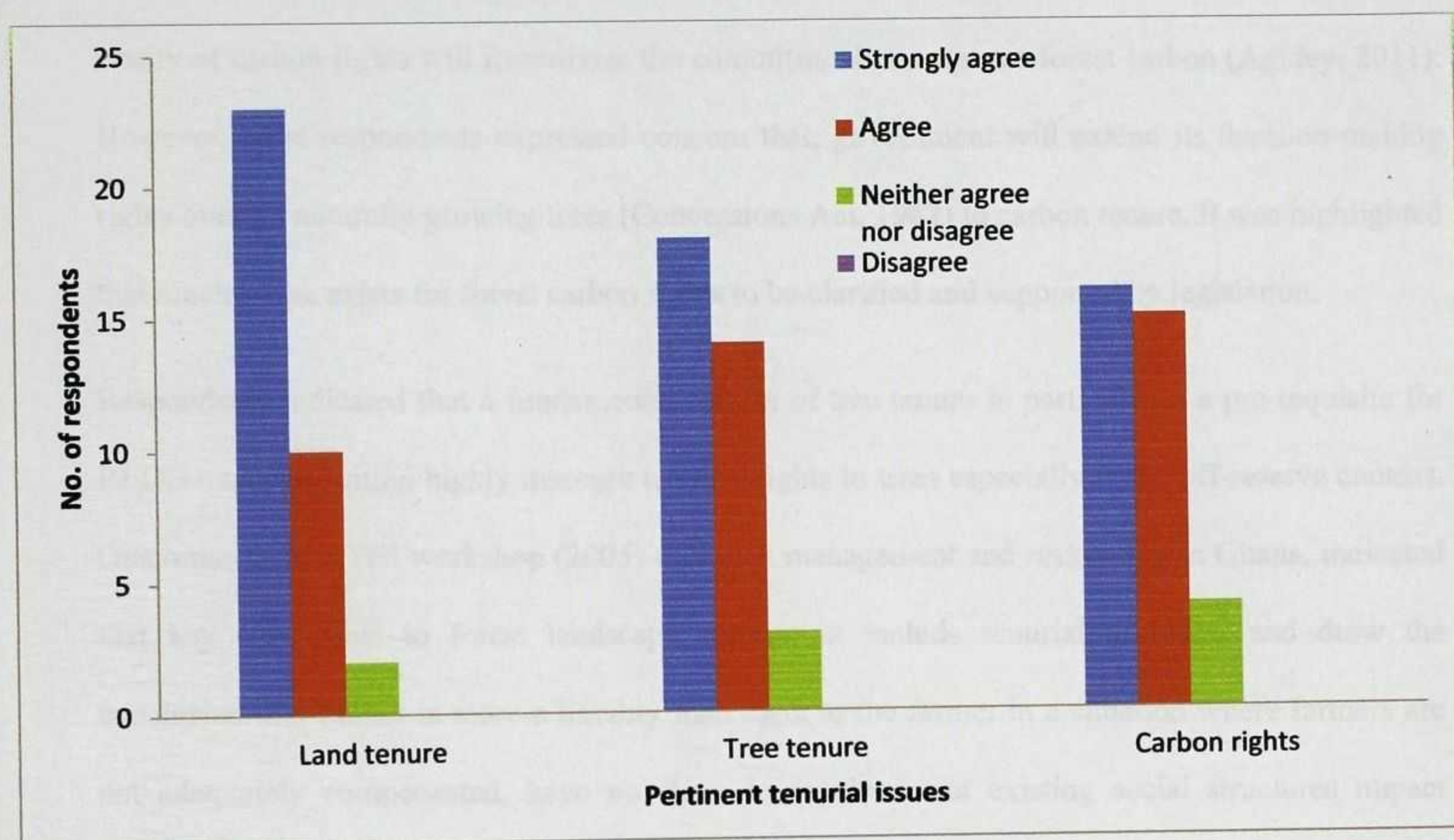


Figure 4.5 Respondents assessment of land tenure, tree tenure and carbon rights as pertinent tenurial issues to be addressed for successful REDD+ implementation in Ghana.

It is widely documented that land tenure in Ghana is complex (Boon *et al.*, 2009; Marfo, 2009) particularly in the off-reserve contexts where a customary system of land allocation and distribution prevails. However, land tenure rights underpin how forests are managed and exploited (Larson *et al.* 2010, Global Witness, 2011) and also considered as the key mechanism shaping the distribution of risks, cost and benefits arising from resources. Tenure security therefore plays a vital role in the structure of incentives that underpin successful forest management (Ostrom *et al.*, 2006; Sunderlin *et al.*, 2008; Campbell, 2009). All respondents noted lack of long-term security to land for most farmers as a huge disincentive that draws back their commitment to growing trees to sequester carbon.



A major concern for respondents was who will have the rights to carbon credits, as it is noted that clarity of carbon rights will incentivise the commitment to conserve forest carbon (Agidey, 2011). However, most respondents expressed concern that, government will extend its decision-making rights over all naturally growing trees (Concessions Act, 1962) to carbon tenure. It was highlighted that much scope exists for forest carbon rights to be clarified and supported by legislation.

Respondents indicated that a fundamental reform of tree tenure in particular is a pre-requisite for REDD+ success, citing highly insecure tenurial rights to trees especially in the off-reserve context. Outcomes from a TBI workshop (2005) on forest management and restoration in Ghana, indicated that key constraints to forest landscape restoration include tenurial problems and drew the conclusion that timber is more a liability than asset to the farmer in a situation where farmers are not adequately compensated, have no share in royalties and existing social structures impact adversely on benefit-sharing.

It can be summarised from interviews with respondents that there is general agreement that successful implementation of REDD+ would entail clearly spelling out how tree tenure and carbon rights are defined, how these rights would affect land ownerships or use and whether there are adequate legal provisions to protect rights of local communities and farmers. In addition to benefits-sharing, all respondents considered clarification of tree and carbon tenure rights as priority measures to be implemented, in effect agreeing with Dooley *et al.*, (2008) who posited that recognition of land tenure rights and clarification of ownership rights has been pointed out by various scientists and research institutions as a basic condition for any effective REDD+ programme – and is also considered the most fundamental resource tenure because it underpins most others (Deininger *et al.*, 2003; WRI *et al.*, 2005).

Ghana has four main tree tenure contexts: production forest reserves, protection forest reserves, off-reserve areas (mainly trees on farms) and community forests (dedicated forest and CREMAs)



(Table 4.1). The state effectively owns timber in the production, protection and off-reserve contexts. However, respondents noted the greater challenge that is presented in the off-reserve areas where farmers have management rights but lack exclusion and alienation rights. In this regard, most respondents noted strong disincentives particularly for effective management by farmers and identified the twin problems of unclear decision-making rights and considerable disbenefits suffered by farmers from logging activities in this context. Tree tenure was considered highly problematic in the off-reserve areas unless CREMAs or dedicated forest can be introduced. It was noted that cocoa farmers in off-reserve areas face perverse incentives for the management and retention of timber trees. Respondents perception of tenure contexts in the forest vegetation zones of Ghana with regard to tenure rights of farmers may be categorized and illustrated (Table 4.1).

*Table 0.1 Community and farmers' Tenure contexts in Ghana.*

Bundle of Rights/Tenure Contexts	Forest Reserve	Off-Forest Reserve	Dedicated Forest/CREMA
Access	Yes	Yes	Yes
Use (withdrawal)	Yes	Yes	Yes
Management	No	Yes	Yes
Exclusion	No	No	Not clear
Alienation	No	No	Not clear

Source: Field data (2012)

#### **4.3.2 Benefit-Sharing Issues**

Benefit-Sharing is one of the critical factors that define the system and determines (or limits) its performance. Developing an equitable mechanism for sharing REDD+ benefits is a central challenge. The clarification of rights over carbon tenure and the use of forests are important for the development of equitable benefit-sharing mechanisms. There is a growing consensus that



protection of forest resources in tropical countries where customary tenure is the norm can be viable only if local people are consulted and share the benefits from carbon project (Adhikari, 2009). Also Angelsen (2008), notes that lack of clear benefit-sharing and tenure rights could undermine the development and implementation of REDD+ programmes.

To validate the submission that pertinent benefits-share constraints comprised inequitable sharing of benefits at the national level, problematic enforcement of constitutional benefit-sharing arrangement and elite capture of benefits at the community level, respondents were asked to indicate their level of agreement or disagreement on a Likert scale of 1-5. Results (Figure 4.6) show that 80%, 77% and 74% generally agreed that elite capture of benefits, problematic enforcement of constitutional benefit-sharing arrangement and inequitable sharing of benefits at the national level constituted important benefits-share issues. A cross-cutting concern for all three issues was that there is reduced transparency and accountability in the sharing of benefits at all levels, particularly at the local level. Interviews with experts also revealed that, the issue of lack of transparency and accountability in the share of benefits at the local level were also strongly linked by respondents to unaccountable representation, particularly in situations where traditional authorities and local political administrations (district assemblies) are characterized by poor downward accountability, thereby reinforcing elite-capture at the local level.

Seventy-four percent (74%) of respondents were of the opinion that both chiefs and the district assemblies were not accountable to communities (including farmers), affirming the assertion that none of the institutions identified in the constitution (stool, traditional authority and district assembly) to represent community interest is in practice accountable to communities (Opoku, 2006). There is a further concern that the current system of benefit-sharing including the stumpage and social responsibility agreement (SRA) regimes is inadequate and that benefits do not reach communities. But as noted by Agidee (2011), there will be no incentive for local communities to keep forests standing unless the benefits from REDD+ are equitably shared between stakeholders.



A respondent noted with concern that a review by the World Bank's FCPF scored Ghana's R-PP low on transparent and accountable REDD+ revenue management and benefit-sharing indicators, lamenting that such development was not reassuring and tended to promote anxiety. The expectation was that, the review recommendation further elaboration on the strengths and weaknesses of existing benefit-sharing systems and how lessons will be incorporated into the development of revenue management and benefit-sharing for REDD+ be adhered to.

A government official argued strongly that benefit sharing may involve direct payments or creation of non-cash benefits, with the latter being more likely to be the most sustainable.

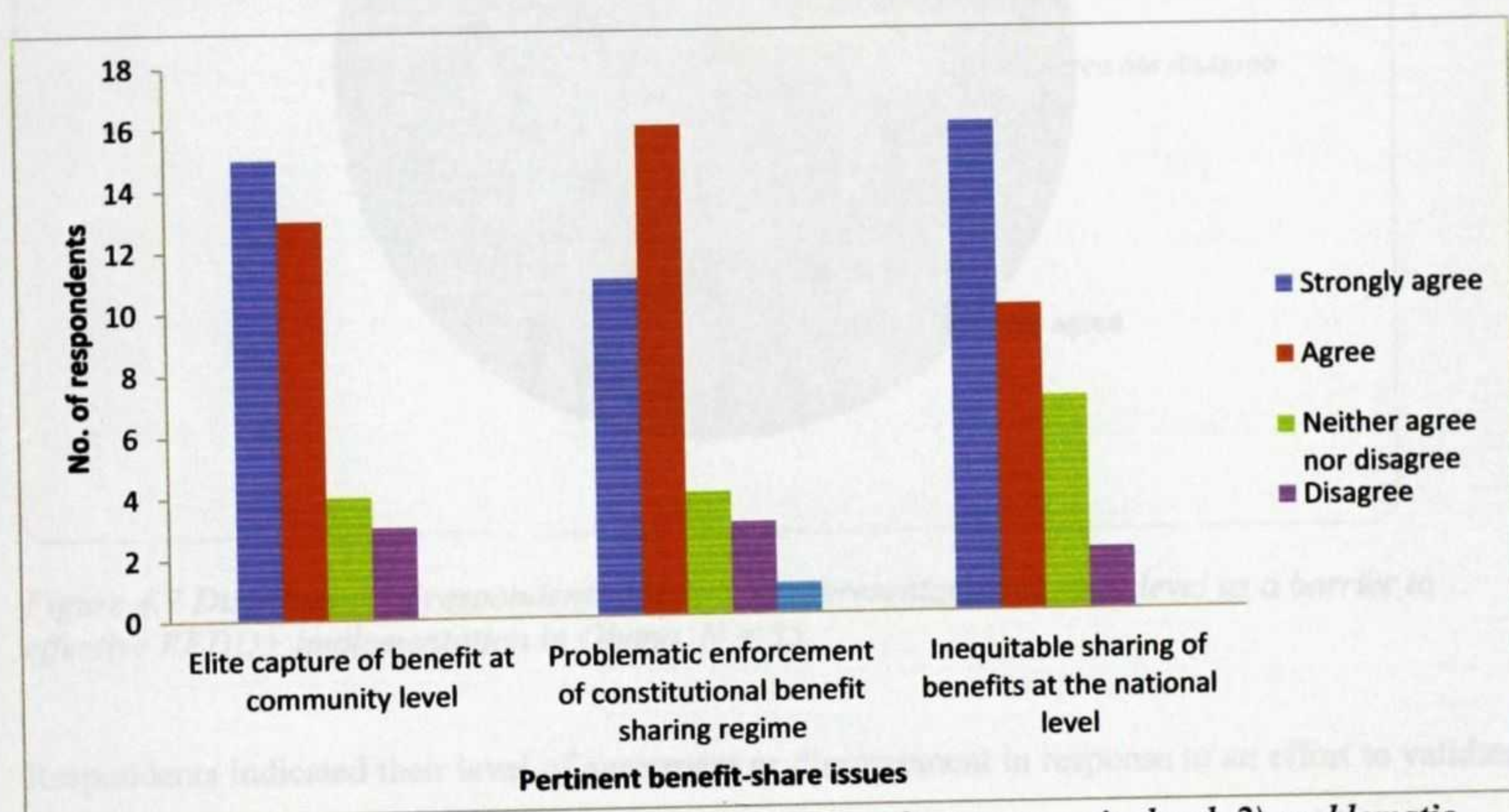


Figure 4.6 Respondents' views on 1) elite capture of benefit at community level, 2) problematic enforcement of constitutional benefit-sharing regime and 3) inequitable sharing of benefits at the national level as pertinent benefit-sharing issue.

Inequitable sharing of benefits at national level was largely linked to the question of problematic enforcement of the relevant constitutional provision whereby the current regime for benefit-sharing as outlined in section 267 of the 1992 Constitution was not strictly enforced. In practice, the management of the Forestry Commission (FC) and regulation costs are deducted in addition to the statutory deduction of 10% of proceeds for the Office of the Administrator of Stool Lands (OASL)



before the remainder is shared in accordance with the constitutional formula. There are concerns that the determination of FC's management fee is arbitrary and therefore attracts the disapproval by communities (Opoku, 2006).

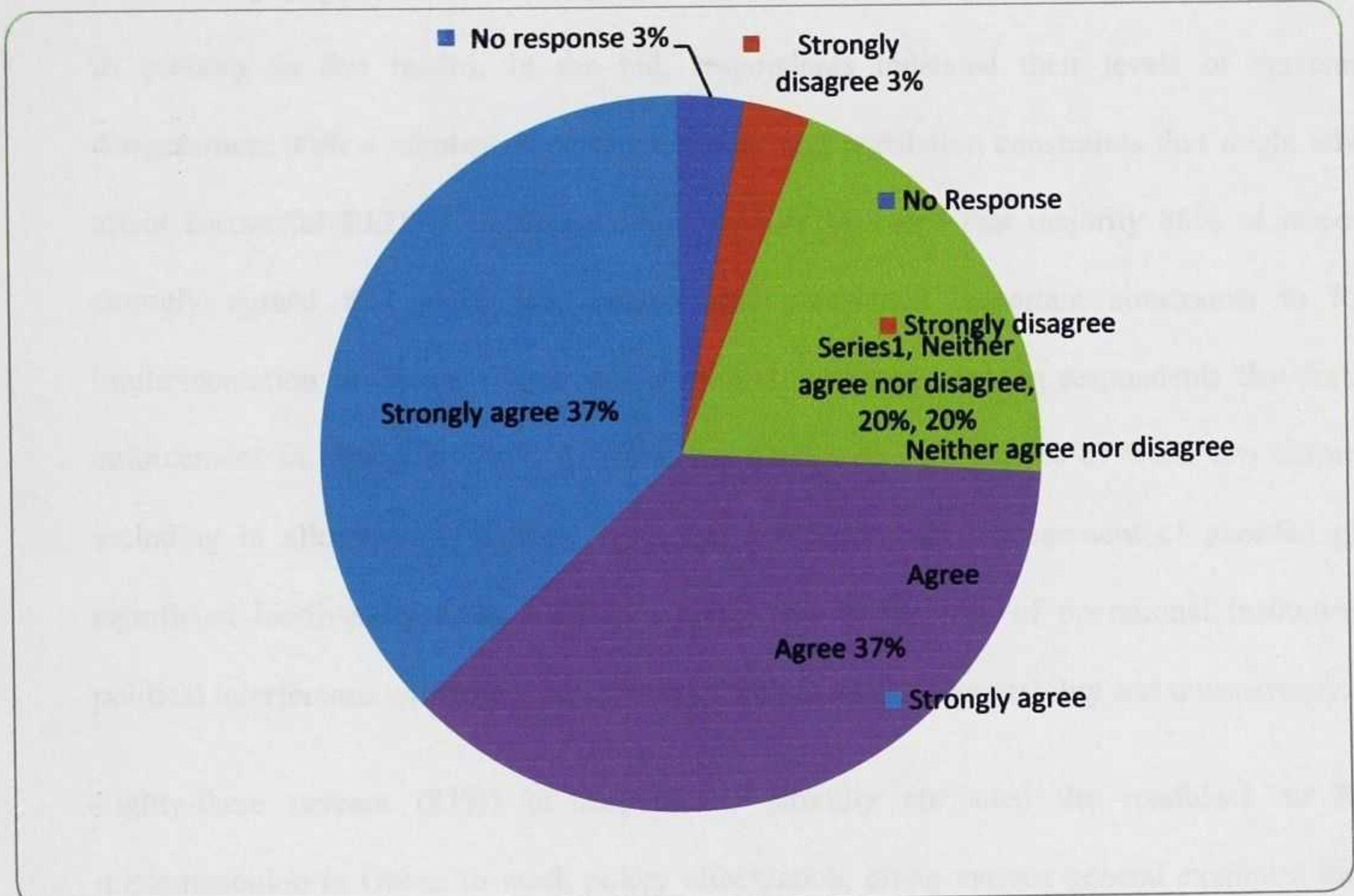


Figure 4.7 Distribution of respondents opinion on representation at local level as a barrier to effective REDD+ implementation in Ghana. N = 35.

Respondents indicated their level of agreement or disagreement in response to an effort to validate the submission that unaccountable representation at local level constituted a barrier to effective REDD+ implementation, respondents (Figure 4.7).

While 74% of respondents agreed or strongly agreed and 3% strongly disagreed unequivocally, quite a significant 20% neither agreed nor disagreed. Again, the question of unaccountable representation is effectively linking to the issue of transparency and accountability of benefit-sharing, particularly at the local community level was not played down (Opoku, 2006).



### **4.3.3 Issues on Policy and Legislation**

Policy and legislation as a factor that militates against smooth implementation of REDD+ as perceived by respondents was considered in detail and subjected to analysis in order to discover its potency in this regard. In the bid, respondents indicated their levels of agreement or disagreement with a number of pertinent policy and legislation constraints that might adversely affect successful REDD+ implementation. Results indicated that majority 86% of respondents strongly agreed that weak law enforcement constituted important constraints to REDD+ implementation in Ghana. There was a general acceptance among respondents that forest law enforcement in Ghana is weak. Respondents cited various instances of weak law enforcement including in allocation of timber rights and protection and management of gazetted globally significant biodiversity areas (GSBAs), partly due to the lack of operational institutions and political interference with law enforcement as well as weak accountability and transparency.

Eighty-three percent (83%) of respondents strongly attributed the roadblock to REDD+ implementation in Ghana to weak policy effectuation, citing various general examples including weak implementation of such policies as joint/participatory forest management, the SRA mechanism and forest certification to buttress their position on the issue. Forty percent (40%), 60% and 57% of respondents opined that inadequate policies, poor legislation and inadequate legislation respectively did not constitute policy and legislation issues.



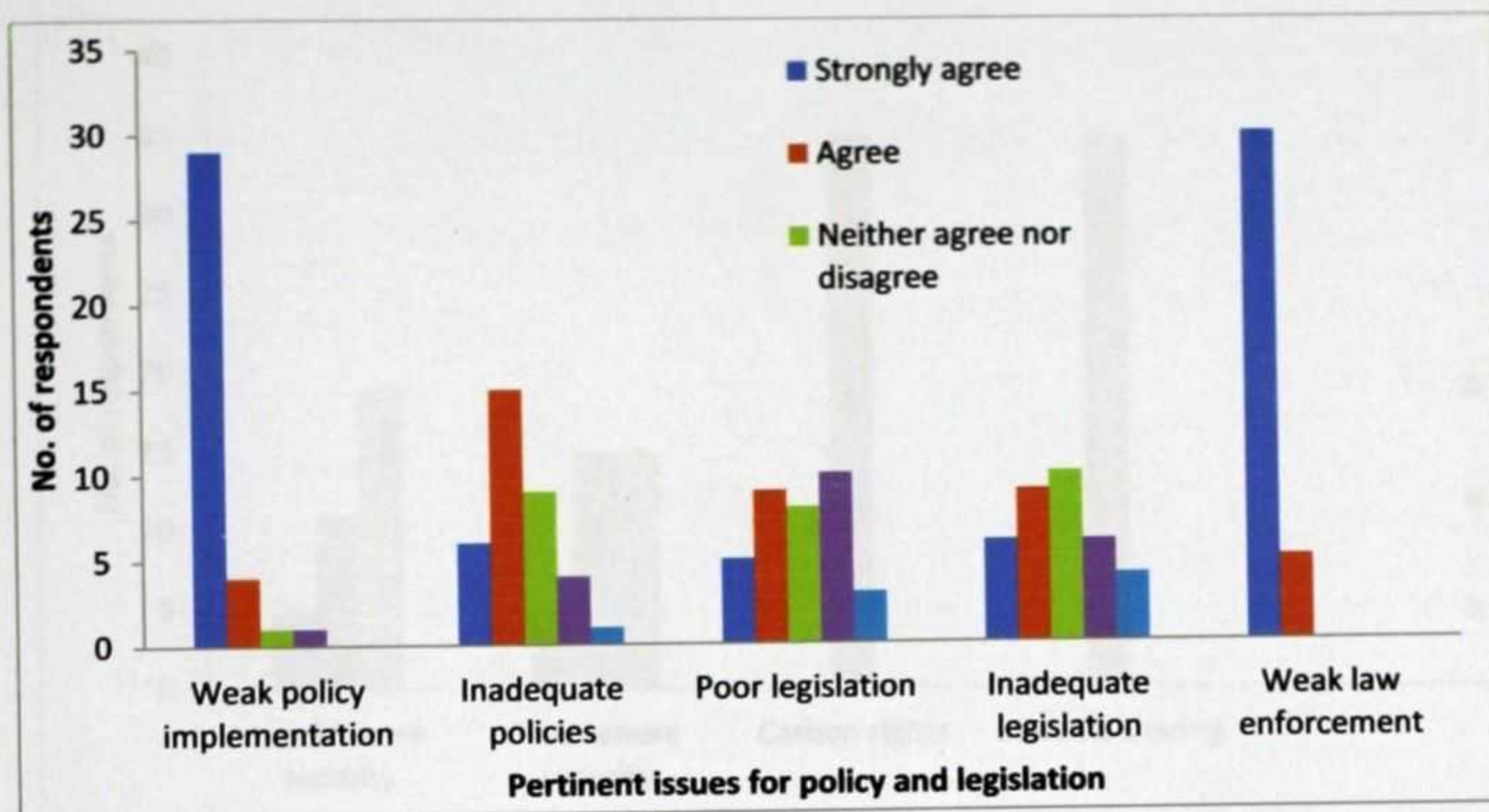
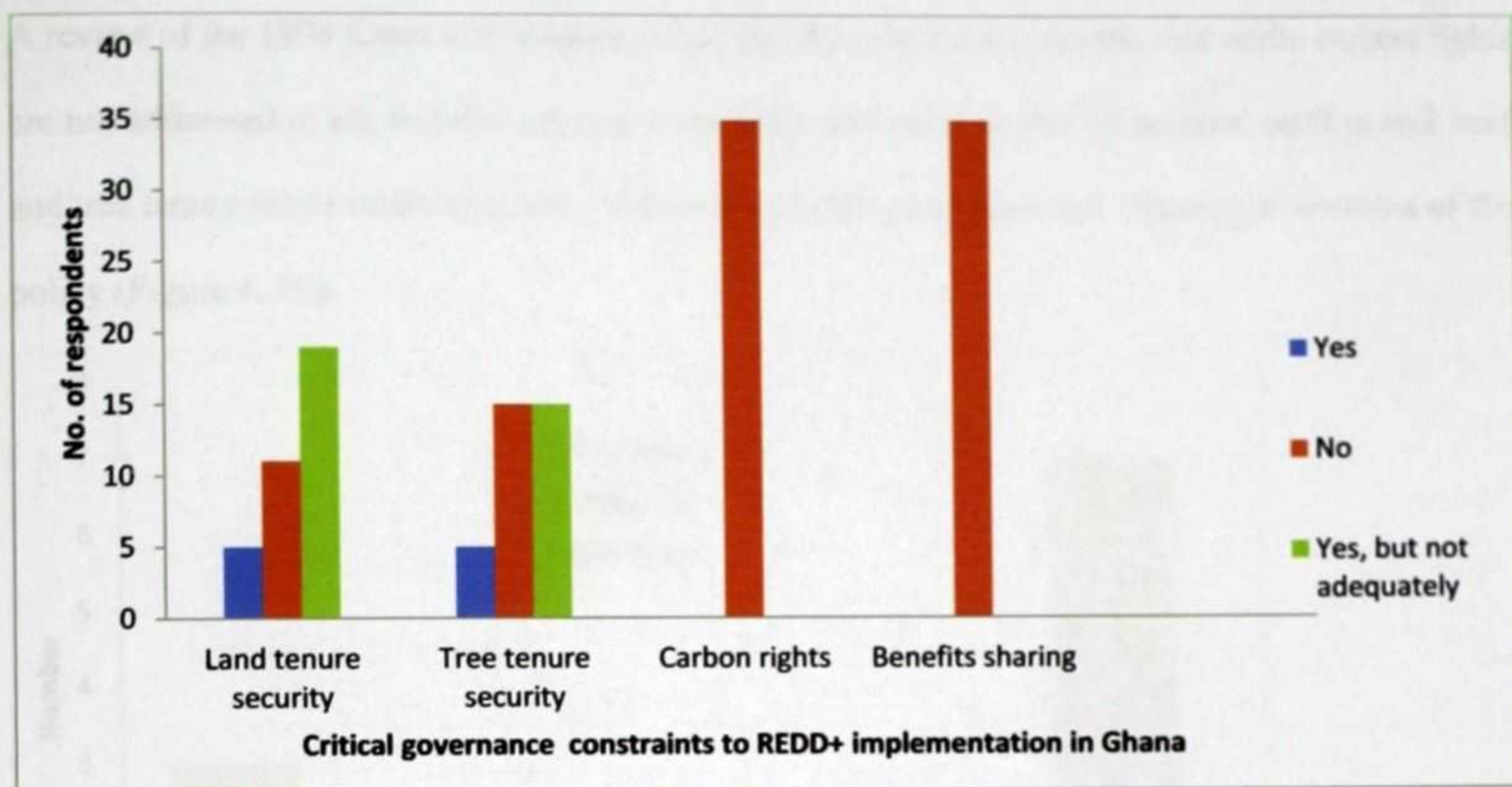


Figure 4.8 Respondents level of concurrence that weak policy implementation, inadequate policies, poor legislation, inadequate legislation and weak law enforcement are pertinent issues for policy and legislation.

#### 4.4 The 1994 Policy and Identified Constraints

This section examines the extent to which the identified constraints are addressed in the 1994 Forest and Wildlife Policy (FWP) on the theoretical premise that policy is a statement of intent. Two approaches have been used to complete this task against the defined set of – critical constraints – requirements. First the views of the respondents including the forest policy review team were sought about whether the Forest and Wildlife Policy addresses these constraints. Then using an adaptation of Birikorang's (2003) framework for policy analysis (with an embedded gap analysis), key policy components (guiding principles, objectives and strategies) were critically studied. The results of both exercises then served as the frame of reference and grounds for comparison against emerging ideas toward a new forest policy, notably the draft revised Forest and Wildlife Policy (2011).



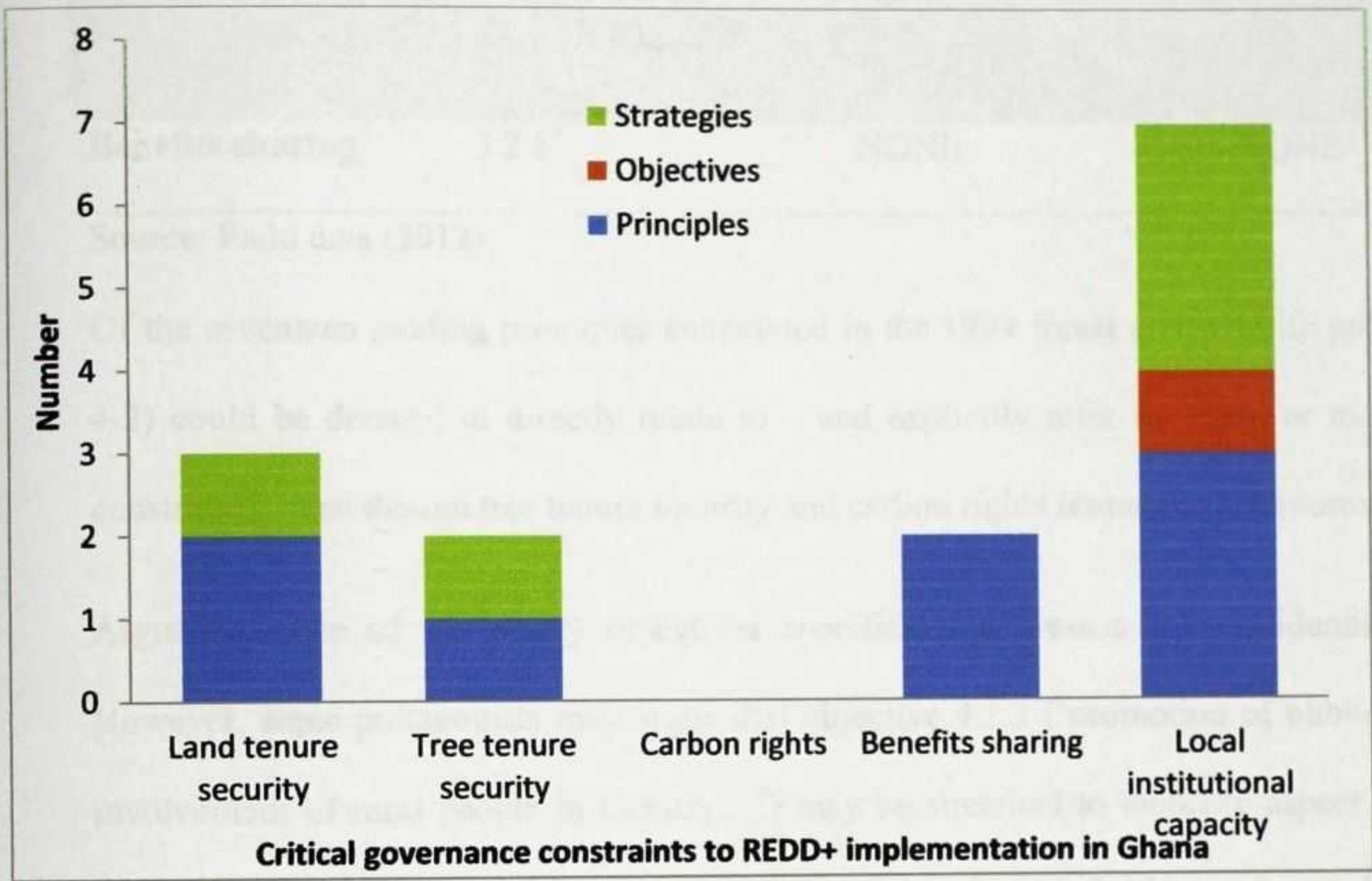


*Figure 4.9 Respondents' perception on the contribution of the Ghana Forest and Wildlife Policy (1994) in addressing the constraints of REDD+.*

There was a unanimous agreement among respondents that the forest policy neither addressed carbon rights nor benefits sharing issues (Figure 4.9). Respondents noted that the 1994 FWP including its stated objectives and defined strategies falls significantly short of in addressing carbon rights and benefits-share issues. On the other hand, responses to the question of whether policy addressed tenure (land and tree) issues were mixed but to a good measure, respondents' views on this question were at best, inconclusive. With as many as 15 (out of 35) respondents indicating that tree tenure was not addressed in policy, an equal number thought it was, albeit, inadequately. Respondents who opined that tenure issues were inadequately addressed, added that while land and tree tenure are highlighted in the policy principles, articulation of these in the policy strategies are weak; hence, the argument that the 1994 FWP does not explicitly address key issues of benefits-sharing, carbon rights and land and tree tenure as part of developing its strategic options. Respondents further noted that operationalizing carbon rights based on the existing problematic forest and land tenure systems may spell doom for REDD+ success in Ghana. It has been argued that policies and laws impinging on land use, ownership and tenure require careful scrutiny, when considering the design of positive incentives for land users or forest managers.



A review of the 1994 forest and wildlife policy (by the researcher), reveals that while carbon rights are not addressed at all, benefits-sharing is partially addressed in the ‘principles’ section and land and tree tenure are to minimal extent, addressed in both ‘principles’ and ‘strategies’ sections of the policy (Figure 4. 10).



**Figure 4.10** Number of Policy principles, objectives and strategies addressing REDD+ implementation constraints.

Varying degrees of adequacy of identified critical constraints namely; land tenure security, tree tenure security, carbon rights and Benefits sharing as REDD+ implimentation constraints may be under the various policy sections (Table 4.2).

**Table 4.2** Policy Sections Addressing Critical Constraints

	Principles (n = 17)	Objectives (n = 5)	Strategies (n = 44)
<b>Land tenure security</b>	3.2.13 <sup>1</sup>	4.2.3 <sup>2</sup>	5.3.10 <sup>3</sup>
		NONE	5.5.5

<sup>1</sup>The Importance of appropriate and efficient land use and security of land tenure for sustainable development of forest and wildlife resources.

<sup>2</sup> Promote public awareness and involvement of rural people in forestry...

<sup>3</sup>Encouragement of local community initiative to protect natural resources for traditional, domestic and economic purposes, and support with the reservation of such lands to enable their legal protection, management and sustainable development.



<b>Tree tenure security</b>	NONE	NONE	5.3.10
			5.5.5 <sup>4</sup>
<b>Carbon rights</b>	NONE	NONE	NONE
<b>Benefits sharing</b>	3.2.8 <sup>5</sup>	NONE	NONE

Source: Field data (2012)

Of the seventeen guiding principles enunciated in the 1994 forest and wildlife policy, two (Table 4-2) could be deemed to directly relate to – and explicitly refer to – one or more of identified constraints, even though tree tenure security and carbon rights issues are not addressed.

Arguably, none of the policy objectives specifically addresses any of identified constraints. However, some protagonists may argue that objective 4.2.3 ('promotion of public awareness and involvement of rural people in forestry...') may be stretched to embrace aspect of all identified constraints in one way or the other. However, this is not definitive and may be judged to be inadequate in addressing identified constraints in clear and specific terms. Of the forty-four strategies outlined in the policy document, four are noted to address constraints to varying degrees. While, none addresses carbon rights and benefits-sharing, two each somewhat relate to land and tree tenure security (Table 2), although they are neither clear nor specific. Structuring the reasons provided from the opinions of experts expressed earlier as a frame of reference and grounds for comparison, an analysis of the draft revised policy is carried out with a view to determine the extent to which identified constraints are addressed.

#### 4.5 Draft Revised Policy and Identified Constraints

<sup>4</sup>Development of consultative and participatory mechanisms to enhance land and tree tenure rights of farmers and ensure access to local people to traditional use of natural products.

<sup>5</sup> A share of financial benefits from resource utilization should be retained to fund the maintenance of resource production capacity and the benefit of local communities.



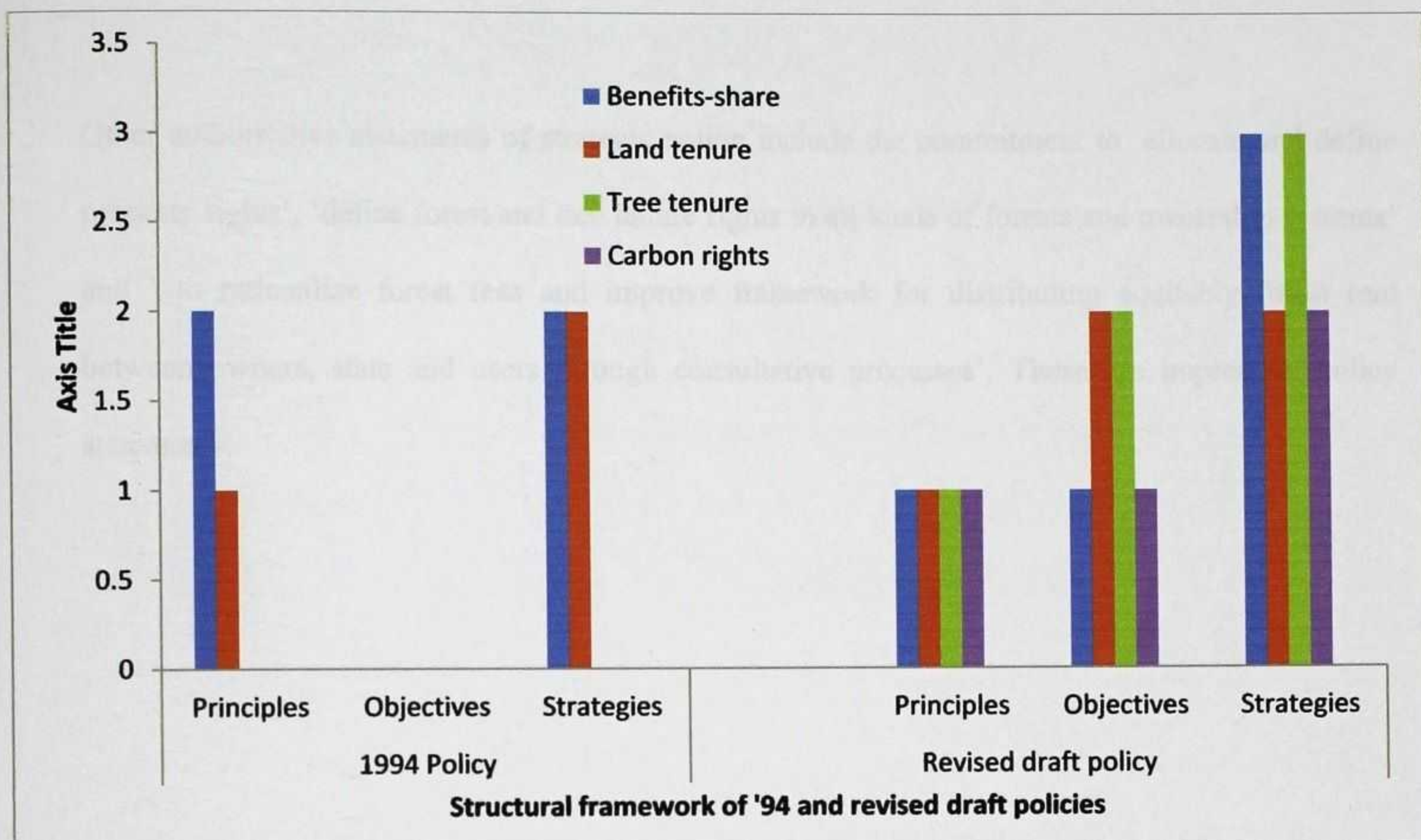


Figure 4.11 A comparison of how critical constraints are addressed in the structural frameworks of the '94 and the revised draft policies

There occurs a general improvement in the number of principles, objectives and strategies addressing the critical constraints in the draft revised policy. For instance, carbon rights and tree tenure get mentioned in all sections (principles, objectives and strategies) of the draft revised policy document (Figure 4.11). There is an improvement in the number of strategies addressing benefit-sharing. More remarkably, the draft revised policy makes more substantive explicit statements in addressing identified constraints. For instance, strategic statements for both land tenure and benefits-share are defined in clearer, stronger and more specific terms. For example, the draft revised policy asserts as a strategic action to 'enact the necessary legislation to guide allocation of carbon rights and related matters' and also to 'enact the legislation that will enable communities and individuals to benefit from trees on their farms and fallow lands, provide off-reserve tree tenure security, authority to legally dispose of resources and allocate greater proportion of benefits accruing from resource management to community members, individuals or collectively'.



Other authoritative statements of strategic action include the commitment to 'allocate and define property rights', 'define forest and tree tenure rights in all kinds of forests and ownership systems' and 'to rationalize forest fees and improve framework for distributing equitably forest rent between owners, state and users through consultative processes'. These are impressive policy statements.



## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATION

#### 5.1 Conclusions

Despite the fact that the building blocks for effective REDD+ implementation exist in Ghana, achieving successful REDD+ implementation will be a challenging endeavour, given the prevailing forest governance conditions not least uncertainty in land, forest and tree tenure systems. There is much scope for placement of land and tree tenure on a satisfactory footing.

The fundamental requirements for REDD+ are improved forest governance including clarification of tenurial, benefits-share arrangements and carbon rights. Essentially, successful REDD+ will need to be amenable to results of efforts to understand current legal and policy framework, particularly in regard to identified critical constraints – tenure (land, tree and carbon) and benefits-share arrangements. How forest carbon rights and benefits are allocated – and the transparency and accountability with which benefits are administered – remain primary and prominent problems to be posed, and addressed. The question of who will own the carbon and receive the benefits remains a critical one since ownership and tenure issues are key factors in any national REDD+ strategy. Currently, there is much uncertainty around carbon property rights which have yet to be addressed by policy and law. Thankfully, the impending forest and wildlife policy is a marked improvement of the current policy document, and offers some cause for hope.

There is considerable affirmation amongst experts that governance through unclear tenure and poor benefit-sharing arrangements remains the most important issue to tackle if REDD+ implementation in Ghana is to succeed. The constraint of benefit-sharing is inextricably linked with the challenge of inadequate transparency and downward accountability, especially by traditional authorities and district assemblies. This situation greatly undermines equitable benefit-sharing, particularly at the local community level and enhances elite capture. While tenure regimes



of land and tree are widely perceived to be inchoate and ambiguous, REDD-plus-related carbon rights issues are deemed to be poorly understood. There is currently no legal reference for carbon right clarification. It is also agreed that a fundamental reform of tree tenure is a pre-requisite for REDD+ success, especially in the off-reserve context – where questions remain unanswered with respect to naturally regenerated trees, which are nominally owned by communities but managed by government with regard to the rights of farmers and landowners to credits for helping to conserve carbon, for instance.

The 1994 Forest and Wildlife Policy falls significantly short in addressing carbon rights and benefits-share issues – with much doubts expressed about its adequacy in addressing land and tree tenurial issues. It is argued that operationalizing carbon rights based on the existing problematic land and tree tenure systems may spell doom for REDD+ success in Ghana.

By comparison, there is a marked improvement in the provisions of the draft revised Forest and Wildlife Policy which articulates more substantive commitments in addressing identified constraints.

## 5.2 Recommendation

With a situation whereby farmers are highly incentivized to clear land/fell trees for agricultural purposes, it should be recognized that reforming tree tenure would result in more powerful incentives for farmers to retain trees. Particularly, inclusions of carbon rights into existing land/forest tenure laws need to be urgently considered. This will provide a sound basis for effective benefit-sharing.

Fair benefit sharing schemes will be essential for the success of the REDD+ mechanism in Ghana.

Only if all stakeholders involved in REDD+ activities are rewarded according to their conservation contributions to reducing deforestation and forest degradation, forest conservation and stock



enhancement, will REDD+ be measurable and lasting. While stakeholders, including communities and farmers should be concerned about fair benefit sharing, the Government of Ghana should confront the challenge of enacting broad-based policy reforms. Subsequently, it is further strongly recommended that government through the Forestry Commission, should pilot a sub-national benefit sharing mechanism to understand and document useful lessons. Useful lessons should then feed into national benefit sharing mechanism as a fundamental component of a wider REDD+ programme. Also, financial mechanisms for revenue distribution under different benefit sharing mechanisms will need to be assessed. The important need therefore, for creating a national framework for sharing benefits from REDD+ cannot be overemphasized.

The introduction of CREMAs or DFs in OFRs, since these represent a shift to increased local control and participation in natural resource management, increase the scope for farmer rights over trees (and possibly over carbon), provide a facilitating framework or platform to sort out land tenure issues and for the design of equitable benefit-sharing mechanism.

It will be expedient to very speedily finalize and adopt the draft revised forest and wildlife policy as it represents a paradigm shift in the establishment and enhancement of a national forest governance vision for the country, particularly its bold and emphatic strategic provisions on addressing age-long constraints with regard to tenure and benefits-sharing arrangements.



## REFERENCES

- Accra Caucus. (2011). Is REDD-readiness taking us in the right direction?: case studies from the Accra Caucus. Accra Caucus on forests and climate change. London, UK.
- Adhikari, B. (2009). Reduced emissions from deforestation and degradation: Some issues and considerations. *J. For. Livelihood*, 8, 14–24.
- Agyarko, T. (2007). Forestry outlook study for Africa – Ghana. Ministry of Lands and Natural Resources, Accra, Ghana.
- Aggarwal, A., Des, S. and Paul, V. (2009). Is India ready to implement REDD+: A preliminary assessment. The Energy and Resources Institute. Delhi, India.
- Agidee, Y. (2011). Forest carbon in Ghana: Spotlight on CREMAs. Katoomba Group's legal initiative country study series. Forest Trends: Washington D.C.
- Ahenkan, A. and Boon, E. (2010). Assessing the impact of forest policies and strategies in promoting the development of NTFPs in Ghana. Human Ecology Department, Vrije Universiteit Brussels, Belgium.
- Angelsen, A. (ed.). (2008). Moving ahead with REDD: issues, options and implications. Center for International Forestry Research (CIFOR), Borgor, Indonesia.
- Angelsen, A. and Kaimowitz, D. (1999). Rethinking the causes of deforestation: lessons from economic models. *The World Bank Research Observer*, 14(1), 73-98. Washington DC, USA.
- Angelsen, A. with Brockhaus, M., Kanninen, M., Sills, E., Sunderlin, W.D. and Wertz-Kanounnikoff, S. (eds). (2009). Realising REDD+: National strategy and policy options. CIFOR, Borgor, Indonesia.
- Asante, S.K.B. (1975). Property law and social goals in Ghana. Ghana University Press, Accra, Ghana.
- Asare, R.A. (2010). Implications of the legal and policy framework for tree and forest carbon in Ghana: ROSE, Forest Trends, Washington D.C.
- Ashton, R. and Clairs, T. (2009). Legal and institutional foundations for the national implementation of REDD: Lessons from early experience in developing and developed countries. Policy briefs 4, The Terrestrial Carbon Group Project.
- Avoided Deforestation Partners. (2008). The various levels of REDD: making REDD work for the forest nations and local stakeholders – Policy Brief.
- Barrett, C., C. Gibson, B. Hoffman and M. McCubbins. (2005). The complex links between governance and biodiversity. *Conservation Biology* 20(5), 1358-1366.
- Birikorang, G. (2008). Alternative tenure and enterprise models in Ghana – a country-level study. Hamilton Resources, Accra, Ghana.
- Birikorang, G. (2003). Study of forest sector policies, laws, rules and regulations.



- Boakye, K.A. and K.A. Baffoe (2007). Trends in forest ownership, forest resource tenure and institutional arrangements – a case study from Ghana.
- Boon, E., A. Ahenkan and B.N. Baduon. (2009). An assessment of forest resources policy and management in Ghana. In IAIA09 conference proceedings, 16-22 May, 2009.
- Boucher, D. 2008. Out of the woods: a realistic role for tropical forests in curbing global warming. Union of Concerned Scientists. Cambridge, Massachusetts.
- Brown, D., M.B. Vabi and R. Nkwinkwa. (2003). Governance reform in the forest sector: a role for community forestry. Paper prepared for the XII World Forestry Congress held in September 2003, Quebec City, Canada.
- Butler, R. (2006). Calculating the value of avoided deforestation. Retrieved from: <http://news.mongabay.com/2006/1031-deforestation.html>
- Butler, R. (2009). "Are we on the brink of saving rainforests?" Accessed at <http://new.mongabay.com-redd.hotmail>, 2013-2-20.
- Campbell, B.M., (2009). Beyond Copenhagen: REDD+, agriculture, adaptation strategies and poverty. *Global Environmental Change*, 19:4, 397-399.
- Care Ghana. (2005). Legal timber in Ghana. Ghana land and forestry policy support facility. Accra, Ghana.
- Central Intelligence Agency (CIA). (2011). The CIA World Fact Book. Washington DC. Retrieved from: <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
- Chagas, T., R. O'Sullivan, C. Bracer and C. Streck. (2010). Consolidating national REDD+ accounting and sub-national activities in Ghana. The Katoomba Group, Forest Trends and Climate Focus. Washington DC, USA.
- Chowdbury, N. with Skarstedt, C.E. (2005). The principle of good governance, Oxford UK.
- Cotula, L. and Mayers, J. (2009). Tenure in REDD – start-point or afterthought? Natural Resource issues No. 15. International Institute for Environment and Development. London, UK.
- Daviet, F., H. McMahon and R. Bradley. (2007). REDD flags: What we need to know about options, World Resources Institute, Washington D.C.
- Deininger, K., Feder, G., Gordillo de Anda, G., and Munro-Faure, P. (2003). Land policy to facilitate growth and poverty reduction. Land reform, land settlement and cooperatives, 3, 5-18.
- Dooley, K., T. Griffiths, H. Leake and S. Ozinga. (2008). Cutting corners – World Bank's forests and carbon fund fails forest and peoples. FERN and Forest People's Programme. Moreton in Marsh, UK.
- Egle, S. and Palmer, C. (2008). Painting the forest REDD? Prospects for mitigating climate change through reducing emissions from deforestation and degradation. Working paper 3. Institute for Environmental Decision. Zurich, Switzerland.



- European Tropical Forest Research Network (ETFRN). (2009). Forests and climate change. ETFRN, Issue No. 50. November 2009.
- FERN. (2010). Is REDD undermining FLEGT? FERN, Gloucestershire, U.K.
- FERN. (2010). Lessons learned from FLEGT for REDD. FERN, Moreton in Marsh, UK.
- Food and Agriculture Organisation (FAO). (2010). Global forest resources assessment. FAO, Rome, Italy.
- Forest Watch Ghana (FWG). (2007). Civil society forest governance communiqué issued 3<sup>rd</sup> August, 2007 at the Institute of Local Government Studies, Accra, Ghana.
- Forest Watch Ghana. (2009). Civil society statement on forest Governance in Ghana issued 29 April 2009 at the Institute of Local Government Studies, Accra, Ghana.
- Forestry Commission, (2008). Forest Carbon Partnership Facility: Readiness Plan Idea Note. Ministry of Lands and Natural Resources, Accra, Ghana.
- Fry, I. 2008. REDD: opportunities and pitfalls in developing a new legal regime. Blackwell Publishing Ltd. Canberra, Australia.
- Geist, H.J and E.F Lambin. (2001). What drives tropical deforestation? LUCC report series, Vol. 4, University of Louvain.
- Geist, H.J and E.F. Lambin. (2002). Proximate causes and underlying driving forces of tropical deforestation. *Bioscience* 52, 143-150.
- Ghana Statistical Service (2011). Report on Ghana's economic performance. Ministry of Finance and Economic Planning (MOFEP), Accra.
- Global Witness (2011). Making the forest sector transparent – annual transparency report for 2011 Global Witness London.
- Griffiths, T. (2007). Seeing 'RED'? Avoided deforestation' and the rights of indigenous peoples and local communities. Forest Peoples Programme. Moreton-in-Marsh, UK.
- Grindle, M. (2010). Good governance: the inflation of an idea.
- Harvey, C.A., O. Zerbock, S. Papageorgiou and A. Parra. (2010). What is needed to make REDD+ work on the ground? Lessons learned from pilot forest carbon initiatives. Conservation International, Arlington, USA. 121pp.
- Hawthorne, W.D. and Abu-Juam, M. (1995). Forest protection in Ghana. IUCN/ODA/Forest Department Republic of Ghana.
- Higman, S., Mayers, J., Bass, S., Judd, N., Nussbaum, R. (2005). The sustainable forestry handbook. Earthscan, UK
- Hoffman, B.D., Metzroth, K.M. (2010). The political economy of decentralization in Ghana.
- ITTO (2009). Annual Report. Osaka-Japan.



Karky, B.S. (2009). Reducing emissions from Nepal's community-managed forests. *Journal of forest and livelihoods*, Vol. 8 (1), Jan 2009.

Katoomba XV (2009). Realising REDD: Implications of Ghana's current legal framework for trees. *Forest Trends*. Washington DC, USA.

Kimble, D. (1963). A political history of Ghana: the rise of Gold Coast nationalism (1850-1928) Vol. 1, Clarendon Press, London.

Kotey, N.A., Amanor, K.S. Owusu, J.G.K., (1998). Falling into place: Policy that works for forests and people. International Institute for Environment and Development, UK.

Kuffour, K.O. (2010). Forest management in Ghana: towards a sustainable approach. *Journal of African Law*, Vol. 44 No. 1 (2000), pp. 52-64. Cambridge University Press, UK.

Larson, A.M., Barry, D., Dahal, G.R. and Colfer, C.J.P. 2010. Forests for people – community rights and forest tenure reform.

Locatelli, B. (2010). *Local, Global: Integrating Mitigation and Adaptation*; Perspective Forests/Climate Change No. 3; Cirad: Paris, France.

Locatelli, B., Evans, E., Wardell, A., Andrade, A. Vignola, A. (2011). Forests and climate change in Latin America: linking adaptation and mitigation. *Forests* 2, 431-450; doi:10.3390/f2010431.

Marfo, E. 2010. Chainsaw milling in Ghana: Context, drivers and impacts. Tropenbos International, Wageningen, the Netherlands.

Marfo, E., Achaempong, E. and Opuni-Frimpong, E. (2012.) Fractured tenure, unaccountable authority and benefit capture: constraints to improving community benefits under climate change mitigation schemes in Ghana. *Conservation and Society* 10(2): 161-172, 2012.

Mayers, J., Maginnis, S., and Arthur, E. (2010). REDD readiness requires radical reform. The Forest Dialogue, Yale University, USA.

Motel, P.C., R. Pirard and Combes, J. L. (2008). A methodology to estimate impacts of domestic policies of deforestation: compensated successful efforts for avoided deforestation. *Ecological Economics*, 2008. Clermont Ferrand, France.

ODI. (2003). Making environmental management more responsive to local needs: decentralisation and evidence-based policy in Ghana. Overseas Development Institute (ODI) Forestry Briefing No. 3.

Omotola, J.S. (2007). Democratization, good governance and development in Africa: the Nigerian experience. *Journal of Sustainable Development in Africa* 9, 4

Opoku, K. (2006). Forest governance in Ghana. FERN, Moreton in Marsh, UK.

Opoku, K. (2003). Forest sector legislation and forest fringe communities. Care International-Ghana.

Overseas Development Institute. (2002). Forestry as an entry point for governance reform. ODI briefing No. 1.



Owubah, C.E., D.C. Le Masler, J.M. Bowker and J.G. Lee. (2001). Forest tenure systems and sustainable forest management in Ghana. *Forest Ecology and Management* 149 (2001) 253-264.

Pagiola, S., Arcenas, A. and Platais, G. (2005). Can payments for environmental services help reduce poverty? An exploration of the issues and the evidence to date from Latin America. *World Dev.*

Parker, C., A. Mitchell, M. Trivedi and N. Mardes. (2009). The little REDD book. Global Canopy Programme, Oxford, U.K.

Pirard, R and A. Karsentry.....Climate change mitigation: Should AD be rewarded? *Journal of sustainable forestry*.

ReddNet. (2010). Carbon governance in the context of REDD. Workshop proceedings, 12-14 May, 2010, Costa Rica.

Reubens, R. (2010). Bamboo in sustainable contemporary design. International Network for Bamboo and Rattan (INBAR), China.

Rights and Resources Group. (2007). Transitions in forest tenure and governance: drivers, projected patterns and implications. An issues paper prepared for Chatham House. London, UK.

Scherr, S.J. and Sthapit, S. 2009. Farming and land use to cool the planet. *State of World 2009: into a Warming World*. The Worldwatch Institute. Washington DC, USA.

Sebudubudu, D. (2010). The impact of good governance on development and poverty in Africa: Botswana – a relatively successful African initiative. *African Journal of Political Science and International Relations* 4(7), 249-262

Stehr, N and Storch, H. V. (2005). Introduction to papers on mitigation and adaptation strategies for climate change: Protecting nature from society or protecting society from nature? *Environ. Sci. Policy* 2005, 8, 537-540.

Stern, N. (2010). *The economics of climate change: the Stern Review*, Cambridge, UK.

Sunderlin, W.D., Hatcher, J., and Liddle, M. (2008). From exclusion to ownership? Challenges and opportunities in advancing forest tenure reform. Rights and Resources Initiative. Washington DC.

The Katoomba Group, Forest Trends and NCRC. (2009). The ROSE for Ghana: ROSE expert workshop report, Forest Trends, Washington D.C.

Tropenbos International (2007). Restoration and sustainable management of forests in Ghana. Tropenbos International – Ghana workshop proceedings 6.

Tropenbos International (2009). Strengthening off-reserve timber resource management in Ghana – Ghana workshop proceedings 7, Accra-Ghana.

UNDP, (2002). Human Development Report. Washington.

UNFCCC 2010. Cancun Agreements. Retrieved from:  
[http://unfccc.int/meetings/cop\\_16/items/5571.php](http://unfccc.int/meetings/cop_16/items/5571.php)



UNFCCC, (1997). Report of the Subsidiary Body for Scientific and Technological Advice on the Work of its Fifth Session, Bonn, Germany

UNFCCC, (2005), Report of the conference of the parties on its eleventh session, Montreal, Canada.

UNFCCC. (2007). Report on the second workshop on REDD. FCC/SBSTA/2007/3, UNFCCC, Bonn, Germany.

World Bank Group, (2007). Two New World Bank Facilities Will Help Fight Climate Change and Deforestation". Accessed at <http://go.worldbank.org>, 2013-2-22.

World Bank (2010). World development indicators 2010. Washington DC: World Bank.

World Resources Institute (WRI), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP) and World Bank. (2005). The wealth of the poor – managing ecosystems to fight poverty. Washington DC, WRI.



## APPENDICES

### Appendix 1: Questionnaire

#### ANALYSIS OF CRITICAL CONSTRAINTS TO REDD+ IMPLEMENTATION IN GHANA

#### KEY-INFORMANT STAKEHOLDER SURVEY

OCTOBER 2011

#### STUDY OBJECTIVES

1. Identify and examine the critical constraints militating against REDD+ implementation in Ghana.
2. Evaluate the extent to which REDD+ implementation constraints are addressed in current formal policy.
3. Analyze the extent to which new evolving policy addresses REDD+ implementation constraints and identify issues yet to receive policy attention.

#### Background Information

A. Name and Institution.....

B. Please tick which of the following stakeholder categories best applies to you.

- ☐ Government
- ☐ Research/Academia
- ☐ CSO/NGO
- ☐ Community Representative
- ☐ Private Sector

C. I have been involved in forestry issues for (please tick one)

- ☐ 1-3 years
- ☐ 4-6 years
- ☐ 7-10 years
- ☐ 10-15 years
- ☐ Over 15 years

D. I have been involved in REDD+ in the following ways

- ☐ Research
- ☐ Discourse level
- ☐ Advocacy



## PART ONE

For each of the statements below, please indicate (by underlining appropriate answer) your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
<b>1) As a country (Ghana),</b>					
We clearly understand causes and drivers of deforestation and degradation	1	2	3	4	5
We have made progress in tackling deforestation	1	2	3	4	5
We have rich experiences in forest protection	1	2	3	4	5
Sustainable forest management practice is gaining ground	1	2	3	4	5

For each of the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
<b>2) The drivers of deforestation in Ghana are</b>					
Policy and market failures in timber sector	1	2	3	4	5
Expanding populations	1	2	3	4	5
Increased demand for wood	1	2	3	4	5
Forest industry over-capacity	1	2	3	4	5
Heavy dependence on charcoal	1	2	3	4	5
Limited technology in agriculture	1	2	3	4	5
Increasing slash and burn agriculture	1	2	3	4	5



For each of the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
<b>3) The direct causes of deforestation in Ghana are</b>					
Legal logging	1	2	3	4	5
Illegal logging	1	2	3	4	5
Fire	1	2	3	4	5
Subsistence farming	1	2	3	4	5
Cash crop production	1	2	3	4	5
Taungya	1	2	3	4	5
Industrial plantations	1	2	3	4	5

For each of the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
<b>4) The following have provided/provide useful governance lessons for forest protection</b>					
Interim measures (1995)	1	2	3	4	5
GSBA implementation	1	2	3	4	5
SRA implementation	1	2	3	4	5
NFDP (Plantations)	1	2	3	4	5
FLEGT/VPA programme	1	2	3	4	5
Forest Certification implementation	1	2	3	4	5



5) The following are important constraints to REDD+ implementation in Ghana.  
Please tick as many as appropriate.

- Finance constraints
- Technical capacity constraints
- Governance constraints
- Political Will constraints

For each of the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
	1	2	3	4	5
6) Of the above governance factors are the most important to address					

For each of the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
	1	2	3	4	5
7) The most important governance constraints to REDD+ implementation in Ghana are:					
Tenorial	1	2	3	4	5
Benefits-share	1	2	3	4	5
Institutional capacity	1	2	3	4	5
Transparency and accountability	1	2	3	4	5
Representation and participation	1	2	3	4	5
Policy and regulatory	1	2	3	4	5
Other.....					

For each of the statements below, please indicate your level of agreement or disagreement with the following statements by circling the single most appropriate number after each statement



**8) The pertinent issues for Tenure are:**

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
	1	2	3	4	5
Land tenure insecurity	1	2	3	4	5
Tree tenure insecurity	1	2	3	4	5
Carbon rights issues	1	2	3	4	5
Other.....					

**9) The pertinent issues for benefit sharing are:**

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
	1	2	3	4	5
Elite capture of benefits at community level	1	2	3	4	5
Problematic enforcement of constitutional benefit-sharing regime	1	2	3	4	5
Inequitable sharing of benefits at the national level	1	2	3	4	5
Other.....					

**10) The pertinent issues for institutional capacity are:**

	<b>Strongly Disagree</b>		<b>Neither agree nor disagree</b>		<b>Strongly Agree</b>
	1	2	3	4	5
Weak local level governance structures	1	2	3	4	5
Inadequate national institutional capacity	1	2	3	4	5



11) The pertinent issues for transparency, accountability, representation and participation are:

	Strongly Disagree		Neither agree nor disagree		Strongly Agree
Unaccountable representation at local level	1	2	3	4	5

Other.....

12) The pertinent issues for policy and regulatory are:

	Strongly Disagree		Neither agree nor disagree		Strongly Agree
Weak policy implementation	1	2	3	4	5
Inadequate policies	1	2	3	4	5
Poor legislation	1	2	3	4	5
Inadequate legislation	1	2	3	4	5
Weak law enforcement	1	2	3	4	5

Other.....

## PART TWO

Thank you for taking time to complete the first part of the survey. I look forward to your co-operation in completing a follow-up survey (part two) in three weeks.  
Your contribution is deeply appreciated!

## Appendix 2: Interview Protocol

### ANALYSIS OF CRITICAL CONSTRAINTS TO REDD+ IMPLEMENTATION IN GHANA INTERVIEW PROTOCOL APRIL 2012

In a previous survey, the following were identified as governance constraints to successful REDD+ implementation in Ghana. The following interview seeks to gain an understanding of experts views on how these constraints are addressed in policy and to identify issues yet to receive policy attention.



1. How are constraints to REDD+ implementation addressed in extant formal policy?
  - a. What's your general view on how formal policy addresses constraints?
  - b. Can you provide details of why you think formal policy addresses/does not address identified constraints?
2. What are the weaknesses and opportunities in current policy objectives and strategies?
3. How does the new draft forest policy address identified constraints and related pertinent underlying issues?
  - a. Are all pertinent issues addressed?
  - b. To what extent does this happen?
  - c. Would you consider the provisions substantive?
  - d. Why? Why not?
4. What pertinent issues identified are yet to receive policy attention?
  - a. What the gaps between formal policy and the range of these pertinent underlying issues?
  - b. Should a revised policy incorporate and address these issues more substantively and comprehensively?