

**ASSESSMENT OF ACTORS' BROKERAGE STRATEGIES AND POWER
STRUGGLES IN THE NATIONAL REDD+ PROCESS IN TANZANIA**

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**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
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ABSTRACT

Deforestation and forest degradation are among the sources of greenhouse gases emissions. Therefore, reducing emissions from deforestation and forest degradation, 'plus' forest conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+) are considered as a unique opportunity of improving forest governance in developing countries. REDD+ has already been included as a mitigation mechanism in the Paris Agreement on climate change. Tanzania is among the countries that embarked on instituting REDD+ governance structures. This study investigated brokerage strategies and power struggles in the national REDD+ process in Tanzania. Data were collected between 2012 and 2014. The study was conducted in Dar es Salaam and some selected districts namely Kilosa, Kondoa, and Rufiji where some REDD+ demonstration projects have been undertaken. Data were collected by using PRA, focus group discussions, structured questionnaire, semi-structured and unstructured interviews as well as participant observation. Structured questionnaire was conducted on 68 actors from government, parastatal organizations, development partners, private sector and non-governmental organizations (NGOs). Secondary data were obtained from NGO pilot project documents, policy briefs, published and unpublished documents and reports. Data were analysed using SPSS version 20 and Social Network Analysis (SNA) with UCINET 6 and NetDraw software. Results revealed that the National Fund and Market Based systems are the emerging National REDD+ governance structures in Tanzania. The study also found that the majority of actors have vested interests in the national REDD+ governance processes. Consequently, both governmental and non-governmental actors strive to be brokers in the national REDD+ governance process in order to advance or protect their interests. The brokerage strategies deployed include: provision of consultancy services, financial resources, and technical services. Other brokerage strategies revealed include: the use of non-state diplomacy or insider-

outsider relations, acting as observers, advisers, lobbyists and pressure groups. The study also indicated that power struggles that involved government and non-government actors emerged during the national REDD+ governance process. The factors underlying power struggles include: the number of assigned roles and responsibilities; the level of awareness and knowledge of actors on REDD+, economic expectations of carbon credits, the level designation or position of actors and ownership of forests. Other factors that contributed to power struggles include membership in the national REDD+ Task Force and organization mandates of actors. The study concludes that brokerage strategies and power struggles may spark legitimacy concerns and subsequently affect performance of the emerging governance structures. The study recommends for the assessment of performance of the emerging governance structures in order to enhance their legitimacy. The study also recommends for the establishment of a national REDD+ dialogue platform to debate and deliberate on REDD+ issues as both national and global lessons unfold. In addition, the study recommends for the revision of National Forest Policy, Livestock Policy, Agriculture Policy, National Land Policy and other legislations to align them with the implementation of REDD+.

DECLARATION

I, **KANIZIO FREDRICK KAHEMA MANYIKA** do hereby declare to the Senate of Sokoine University of Agriculture that this thesis is my own original work done within the period of registration and that it has neither been submitted nor being concurrently submitted in any other institution.

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DEDICATION

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LIST OF ABBREVIATIONS

AR4	Assessment Report 4
AR5	Assessment Report 5
AWF	Africa Wildlife Foundation
CARE –T	Care Tanzania
CBFM	Community Based Forest Management
CBOs	Community Based Organizations
CDM	Clean Development Mechanism
CERs	Certified Emissions Reductions
CoP	Conference of the Parties
DC	District Council
DNA	Designated National Authority
DoE	Division of Environment
DPGE	Development Partners Group on Environment
EU ETS	European Union Emission Trading Scheme
FAO	Food and Agriculture Organization of the United Nations
FOF& NC	Faculty of Forestry and Nature Conservation
FBD	Forestry and Beekeeping Division
FGD	Focus Group Discussions
ForumCC	Forum for Climate Change
FTI	Forestry Training Institute
GHGs	Green House Gases
GRL	Green Resources Limited
IPCC	Intergovernmental Panel on Climate Change
IRA	Institute of Resource Assessment
JFM	Joint Forest Management

JGI	Jane Goodal Institute
LC	Local Communities
LEAT	Lawyers and Environmental Association of Tanzania
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MCDI	Mpingo Community Development Initiative
MDA	Ministry, Departments and Agencies (MDAs)
MJUMITA	Mtandao wa Jumuiya Utunzaji Mimitu Tanzania
MLSD	Ministry of Lands and Human Settlement Development
MNRT	Ministry of Natural Resources and Tourism
MoF	Ministry of Finance
MRV	Monitoring, Reporting and Verification
NAFORMA	National Forest Resources Monitoring and Assessment
NAMAs	Nationally Appropriate Mitigation Actions
NCCFM	National Climate Change Financing Mechanism
NCCSC	National Climate Change Steering Committee
NCCTC	National Technical Climate Change Committee
NCMC	National Carbon Monitoring Centre
NEMC	National Environment Management Council
NGOs	Nongovernmental Organizations
NORAD	Norwegian Agency for Development Cooperation
NRTF	National REDD+ Task Force
PARL	Parliament of Tanzania
PES	Payment for Environmental Services
PFM	Participatory Forest Management
PMO-RALG	Prime Minister's Office- Regional Administration and Local Governments
PO-CSM	President's Office Civil Service Management

PRA	Participatory Rural Appraisal
REDD+	Reducing Emission from Deforestation and Forest Degradation plus Conservation and Enhancement of Carbon Stocks
REDD+ SIS	REDD+ Safeguard Information System
RNE	Royal Norwegian Embassy
SNA	Social Network Analysis
SPSS	Statistical Package for Social Sciences
SUA	Sokoine University of Agriculture
TAFORI	Tanzania Forestry Research Institute
TANGO	Tanzania Association of Non Governmental Organizations
TAWA	Tanzania Wildlife Authority
TBC	Tanzania Broadcasting Corporation
TFCG	Tanzania Forest Conservation Group
TFS	Tanzania Forest Service
TMA	Tanzania Meteorological Agency
TNRF	Tanzania Natural Resources Forum
TOR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change
URT	United Republic of Tanzania
VPO	Vice President's Office
WB	World Bank
WCST	Wildlife Conservation Society of Tanzania
WMA	Wildlife Management Areas
WWF	World Wildlife Fund

CHAPTER ONE

1.0 INTRODUCTION

1.1 Climate Change and Greenhouse Gases

According to the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC) climate change is happening at an alarming rate, and that, to a large extent, an increase in global average temperatures results from an increase in anthropogenic greenhouse gases (GHGs) concentration (IPCC, 2007). GHGs include Carbon dioxide (CO₂); Methane (CH₄); Fluorinated gases such as Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulfur Hexafluoride. The report estimates that “global atmospheric concentration of carbon dioxide, the most abundant gas in the atmosphere, has increased from a pre-industrial value of about 280 parts per million (ppm) to 379 ppm³ in 2005”, driven mainly by economic and population growth (IPCC, 2014).

Literature on GHG emissions (e.g. Stern, 2007; UNFCCC, 2007; Obergassel *et al.*, 2015) show that deforestation and forest degradation activities are among the sources of GHG emissions that are also on the rise. Currently, it is estimated that about 17 - 20% of the global annual carbon emissions result from loss of tropical forests in the form of deforestation and forest degradation (IPCC, 2007; UNFCCC, 2007; Phelps *et al.*, 2010). Studies by FAO (2012) show that deforestation and forest fires in the Amazon rain forests have the potential to contribute up to 55% of the degradation. Forests store large amounts of carbon and provide numerous environmental and social functions (FAO, 2012). A number of studies (e.g. Stern, 2007; FAO, 2012; IPCC, 2014) reveal that the reduction of emissions from deforestation and forest degradation is a cost-effective way of reducing GHGs. In this respect, the reduction of emissions from deforestation and forest degradation, including forest conservation, sustainable management of forests and

enhancement of forest carbon stocks (REDD+) is considered as a unique opportunity of improving forests governance in developing countries (Korhonen-Kurki *et al.*, 2014).

1.2 The National REDD+ Governance Process

REDD+ is a multilevel governance (i.e. global-national-local) system that aims at reducing emissions and increase carbon stocks (Angelsen *et al.*, 2009) in developing countries. Studies (e.g. Vatn and Angelsen, 2009; Thompson *et al.*, 2011; Manyika *et al.*, 2013; Gebara *et al.*, 2014; Kajembe *et al.*, 2015) show that many actors in the tropical forest countries are enthusiastic about exploring opportunities under REDD+ initiative. Apparently, the deep-seated inspiration of developing countries of adopting REDD+ is based on the expectation that developed countries are expected to provide incentive to those countries which take measures to reduce deforestation and forest degradation (Karsenty, 2008; Angelsen and Wertz-Kanounnikoff, 2008). In the meantime, large sums of funds have already been pledged for demonstrable reduction of GHG emissions through the REDD+ initiative (FAO, 2012; Angelsen and McNeill, 2012; Brockhaus and Angelsen, 2012).

While the debate on REDD+ is still intense, the concept has already been included in the Paris Agreement as a policy approach and incentive mechanism for the pre-2020 climate change regime (UNFCCC, 2016, Obergassel *et al.*, 2016). From its conception, many advocates of the REDD+ initiative have been pointing out at two main attributes that both developing and developed countries can realize: Firstly, REDD+ is seen as an opportunity to incentivize developing countries to reduce emissions from deforestation and forest degradation (Stern, 2007; Eliasch, 2008; Angelsen *et al.*, 2009; Phelps *et al.*, 2010; Corbera and Schroeder, 2011; Cadman and Maraseni, 2012; Brockhaus and Angelsen, 2012; Angelsen and McNeil, 2012). Secondly, through REDD+, developed

countries expect to use the perceived low cost credits to achieve their emission reduction targets under Kyoto Protocol (Stern, 2007; Eliasch, 2008; Vatn and Angelsen, 2009; Vatn and Vedeld, 2011; Corbera and Schroeder, 2011; Angelsen and McNeil, 2012; Brockhaus and Angelsen, 2012) and post 2020 agreement (Obergassel *et al.*, 2016).

In order to achieve REDD+ goals, developing countries are encouraged to adopt appropriate national governance structures that can guarantee delivery of the expected benefits (Angelsen *et al.*, 2009; Vatn and Angelsen, 2009; Pacheco *et al.*, 2010; Bushley and Khatri, 2011; Kweka *et al.*, 2015). The REDD+ governance structures are envisaged to facilitate measuring, verification and reporting (MRV) of reduced emissions. In this context, REDD+ governance structures are emerging at global, national and local levels (Manyika and Nantongo, 2012). While different government initiatives to institute REDD+ structures are also evolving rapidly (Bushley and Khatri, 2011; Manyika *et al.*, 2013), there is a fierce debate on the choice and design of these structures at different levels (Angelsen, 2009; Rosendal and Andresen, 2011; Angelsen and McNeill, 2012). There are a number of concerns raised by the discourses on the establishment of REDD+ governance structures. Scholars (e.g. Angelsen *et al.*, 2009; Vatn and Angelsen, 2009; Vatn and Angelsen, 2009; Pacheco *et al.*, 2010; Bushley and Khatri, 2011; Pacheco *et al.*, 2010; Karsenty, 2008; Angelsen and Wertz-Kanounnikoff, 2008; Korhonen-Kurki *et al.*, 2014; Kweka *et al.*, 2015) are skeptical towards the possibility of REDD+ process to reinforce the existing imbalance in the forestry sector. Their skepticism is grounded on these seemingly potential imbalance of power in the REDD+ governance process (Kashwan and Holahan, 2014).

Furthermore, REDD+ governance processes are evolving at different paces in various countries (Angelsen *et al.*, 2012). Since their establishment, REDD+ governance

structures have become a political issue. Studies (e.g. Kweka *et al.*, 2015; May *et al.*, 2011) reveal the politics that involve government and non-governmental actors in different fora. For example, the designing of governance structures and implementation of REDD+ at various levels reveal that actors are struggling for attaining more power and sustained prestige in the process (e.g. May *et al.*, 2011; Cronkleton *et al.*, 2011; Kweka *et al.*, 2013). Indeed, there are already fears that under the envisaged reforms the would-be losers from among the powerful actors and agencies are likely to block the REDD+ governance process (Thompson *et al.*, 2011; Angelsen and McNeill 2012). In addition, some actors are sceptical that governments may not invest in the proposed tenure reforms and incentive mechanisms (Kashwan and Holahan, 2014). Other scholars (e.g. Dkamela *et al.*, 2014; Aguilar-Støen, 2014) cite the scope of inadequate engagement of different actors and their respective influences on the national REDD+ governance process. This stems out the fact that actors in the national REDD+ governance process have different financial resources, technical capacities and information on REDD+ (Aguilar-Støen and Hirsch, 2015). Besides, there is a contention that the existing forest governance structures are ill-fitted to address REDD+ (Clements, 2010).

While all these are happening, REDD+ is being translated into different policies and measures through different political processes at global, national and local levels (Angelsen *et al.*, 2009; May *et al.*, 2011). Globally, various REDD+ governance structures and approaches have been proposed from which developing countries can adopt to fit their own national contexts (Wertz-Kanounnikoff and Angelsen, 2009). However, a body of literature (e.g., Brockhaus and Angelsen, 2012; Angelsen and McNeill, 2012) reveals contestation on what should be the possible options of the design of REDD+ governance structures. The discourse, among others, focus on the choice between fund based and market based governance structure and the design of the

monitoring, reporting and verification (MRV) system (Angelsen and McNeill, 2012). In addition, discussions on REDD+ governance structures are also fueled by the fact that many past governance efforts failed to stop tropical deforestation (Angelsen *et al.*, 2009; Brockhaus and Angelsen, 2012) in many countries.

Furthermore, as the international debate on REDD+ governance process continues to escalate, several governments have embarked on the establishment of national governance structures as part of the REDD+ readiness (Karsenty, 2008; Angelsen and McNeil, 2012). Through such national governance processes, countries are expected to choose and establish appropriate national REDD+ governance structures (Vatn and Velled, 2011). The design and choice of governance structures determine how REDD+ is going to work in a particular country (Katoomba, 2009; Vatn and Angelsen, 2009).

Moreover, as various national REDD+ governance structures continue to emerge, many actors come into the scene with different – often conflicting agenda and interests (Vatn and Angelsen, 2009; Rantala, 2012; Manyika and Nantongo, 2012; Gebara *et al.*, 2014) to defend their choices. However, owing to divergence of interests, various actors are reported to be striving to broker or influence REDD+ governance processes (e. g. Rantala, 2012; Dkamela *et al.*, 2014; and Gebara *et al.*, 2014). In this context, some actors in the national governance process are using this as an opportunity of acquiring strategic positions that can help them advance their own interests (May *et al.*, 2011; Manyika *et al.*, 2013). As the REDD+ governance process evolves, new actors and new brokerage strategies also unfold at various levels (Rantala, 2012). Consequently, developing countries are progressing at different paces on readiness and capacity building activities (Di Gregorio *et al.* 2012).

1.3 Problem Statement and Study Justification

Tanzania is among the REDD+ pioneering countries that have instituted National REDD+ governance structures as one of the readiness measures towards the implementation of REDD+ activities (URT, 2009a; Mwakalobo *et al.*, 2011; Mustalahti *et al.*, 2012, Manyika *et al.*, 2013). The national REDD+ governance process in Tanzania started after signing a Letter of Intent with the government of Norway in 2008 (URT, 2013a). Through the national REDD+ governance process and measures, both local and national level governance structures were instituted (Manyika *et al.*, 2013, Kajembe *et al.*, 2015). Since the formulation of national REDD+ governance structures entails a decision about where, how, and to whom REDD+ funds are expected to flow (Vatn and Angelsen, 2009), diverse interpretations exist on the potential benefits of REDD+. Some actors (i.e., foresters and conservationists) view REDD+ as a way of enhancing forest management while others (e.g. local communities, NGOs) perceive REDD+ as an opportunity of receiving formal recognition of their traditional rights (FAO, 2012). On the other hand, other actors (e.g. consultants and investment agencies) view REDD+ as an opportunity to market their services (FAO, 2012). These issues are considered critical in the selection of appropriate design of national REDD+ governance structures.

While, REDD+ governance structures are emerging at global, national and local levels, and their initiatives to institute them also rapidly gaining momentum (Bushley and Khatri, 2011; Manyika *et al.*, 2013), a lot of concerns have been raised. For example, scholars (e.g. Karsenty, 2008; Angelsen *et al.*, 2009; Vatn and Angelsen, 2009; Vatn and Angelsen, 2009; Angelsen and Wertz-Kanounnikoff, 2008; Pacheco *et al.*, 2010; Bushley and Khatri, 2011; Korhonen-Kurki *et al.*, 2015; Kweka *et al.*, 2015) observe that power imbalance in the forestry sector and the manner of overcoming it remains an obvious challenge in the national REDD+ governance process. There are also concerns on how

different actors are engaged in the establishment of REDD+ governance structures and their respective influences (Dkamela *et al.*, 2014; Aguilar-Støen, 2014). Consequently, different interpretations and expectations that are likely to trigger competition and conflict among actors at various levels have emerged (La Porte, 2012). This can lead to not only concerns over the legitimacy of the national REDD+ governance process but also the acceptability and effectiveness of the emerging governance structures.

Furthermore, in Tanzania, both national and local level REDD+ governance processes are emerging simultaneously. Since the national REDD+ governance process involves decision and power transfers among different actors (Vatn *et al.*, 2009; Mustalahti and Rakotonariv, 2014) some actors seem to be proposing governance structures that protect their own interests. According to some scholars (e.g. Manyika *et al.*, 2013; Brockhaus *et al.*, 2014), some actors may resist such policy reforms, or defend the existing governance structures. In addition, as REDD+ governance processes continue to unfold, some actors take the opportunity to acquire strategic positions (May *et al.*, 2011; Rantala, 2012; Manyika *et al.*, 2013; Gebara *et al.*, 2014). Consequently, power struggles are intrinsically embedded in and influencing the ongoing national REDD+ progress (Manyika *et al.*, 2013; Brockhaus *et al.*, 2014).

The concerns on the legitimacy, brokerage and power struggles over the establishment of national REDD+ structures call for investigation of the national REDD+ governance process. Currently, as far as we know there are only a few national-level studies which focus on national processes and governance (Korhonen-Kurki *et al.*, 2014). Studies on the REDD+ initiative (e.g. Vatn and Velded, 2011; Rantala, 2012; Manyika and Nantongo, 2012; Manyika *et al.*, 2013) have already been conducted in Tanzania. However, some of these studies (e.g. Mosi, 2013; Kajembe *et al.*, 2013; Mustalahti and

Rakotonarivo, 2014) focused only on local level REDD+ governance process and did not fully discuss the legitimacy. Thus, there is inadequate information on the legitimacy of national REDD+ governance process.

Moreover, some studies on national REDD+ in Tanzania (e.g. Vatn and Velded, 2011; Rantala, 2012; Manyika *et al.*, 2013; Rantala and Di Gregorio, 2014;) reveal only initial stages of the national REDD+ governance process. A study by Rantala and Di Gregorio (2014) covered a very short period (i.e., between March and June 2011), and did not investigate the changes in the entire actor discourses and influence over time. Since the national REDD+ governance process is still rolling, new issues and interests might evolve. In this respect, there is inadequate information on the brokerage strategies and dynamics of power and power struggles in the national REDD+ governance process. This can pose problems during the process as well as the implementation of the REDD+. Therefore, this study aimed at investigating the emerging national REDD+ governance process focusing on governance structures, actors' brokerage strategies, legitimacy and power struggles, in Tanzania.

1.4 Study Justification

The results of this study would contribute to bridging knowledge and information gaps on REDD+ governance processes as several governments strive to put in place governance structures which are required in facilitating and supporting the implementation of REDD+. The study would help to reveal the challenges facing national REDD+ governance process and will to some extent offer relevant solutions as well as measures to redress the challenge. The study was a way to link the on-going global dialogue on REDD+ governance with the experience from national level processes.

The results from this study will also help to reveal the design of the emerging REDD+ governance structures at national level, power struggles and brokerage strategies of different actors engaged in Tanzania while providing lessons for other countries with similar situations. In addition, the results will help to reveal key issues concerning the legitimacy of national REDD+ governance structure. Furthermore, the results will provide useful information for other future national governance processes in Tanzania.

1.5 Research Objectives

1.5.1 Overall objective

The overall objective of the study was to investigate the national REDD+ governance process.

1.5.2 Specific objectives:-

- i. To examine emerging governance structures in the national REDD+ readiness process in Tanzania.
- ii. To examine the legitimacy of the national REDD+ governance process.
- iii. To assess brokerage strategies of actors in the national REDD+ governance process.
- iv. To identify and analyze power relations and power struggles between actors in the National REDD+ governance process.

1.5.3 Research questions

- i. What are emerging governance structures and what characterizes the emerging REDD+ governance structures?
 - a. Which governance options were considered and what were the arguments of the actors?

- b. Which actors are involved and what are their roles and responsibilities in the national REDD+ governance process?
 - c. What governance structures were selected?
 - ii. What are the legitimacy concerns of the national REDD+ governance process in Tanzania?
 - a. What were sources of power in the national REDD+ process?
 - b. Which actors were most influential/powerful in the national REDD+ process?
 - iii. What are brokerage strategies in the national REDD+ governance process?
 - a. What are the interests of actors in national REDD+ governance process?
 - b. What are the actors' brokerage strategies and their effects in the national REDD+ process?
 - iv. How are power struggles in the national REDD+ governance process?
 - a. How the perception of actors on the power struggles is?
 - b. Which actors are involved in the power struggles?
 - c. What factors are underlying powers struggles in the national REDD+ process?

1.6 Hypothesis

The hypotheses tested were:

Null Hypothesis (H_0): $\beta = 0$: Power struggles in the national REDD+ governance process are not contributed and influenced by socio-economic factors underlying the REDD+ governance process.

Alternative Hypothesis (H_1): $\beta \neq 0$: Power struggles in the national REDD+ governance process are contributed and influenced by socio-economic factors underlying the REDD+ governance process.

1.7 Theoretical and Conceptual Framework

The conceptual framework underlying this study was developed from the theories of governance, power relations, and brokerage. The framework also used social network analysis to examine power relations, power struggles, legitimacy and brokerage in the REDD+ governance process. It used the concept of governance process developed by Vatn *et al.* (2011) and Brockhaus and Angelsen (2012), which illustrate that the establishment of governance structure comprises actors and institutions with three core elements, namely: the actors involved, institutions defining the rules for the political process, and the institutions defining the rules for the economic process (Fig. 1, as adapted from Vatn, 2011 and Cash *et al.*, 2006).

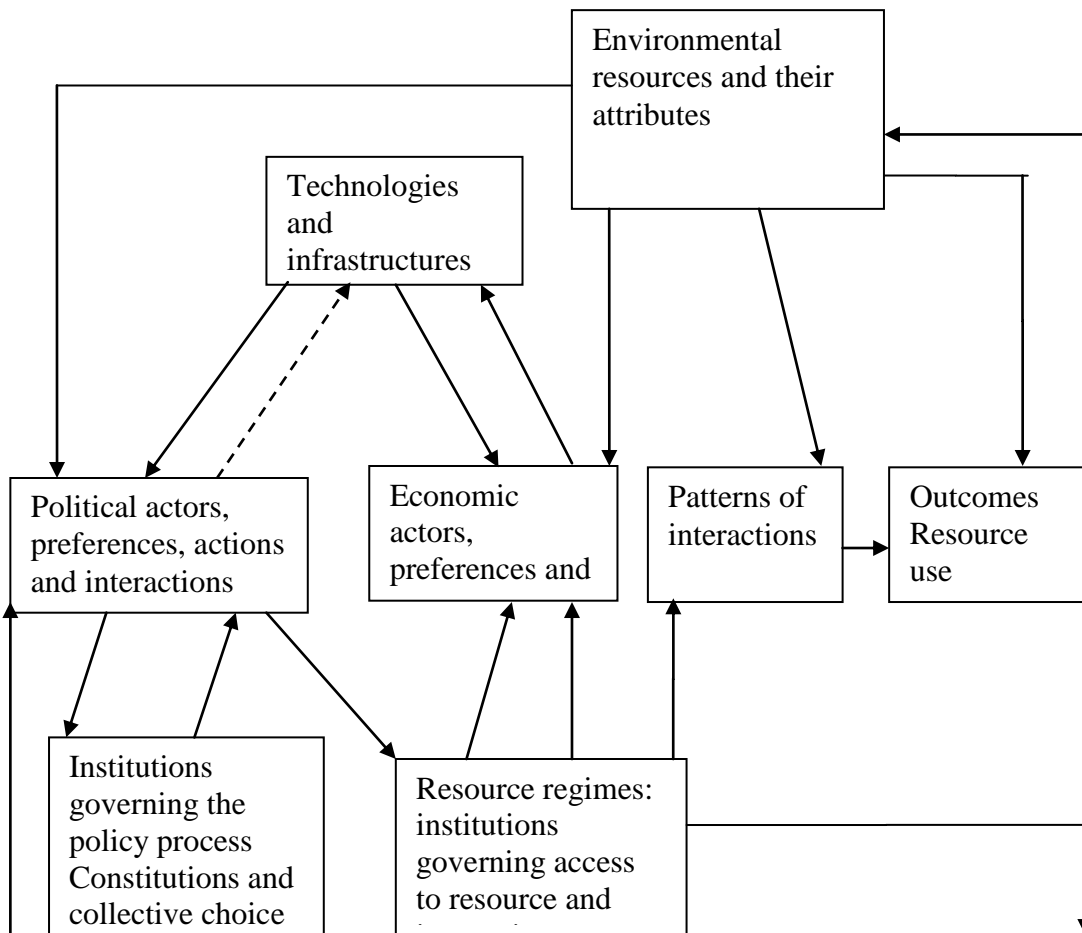


Figure 1: Core elements of the governance system

Key: Direct influence

Indirect influence

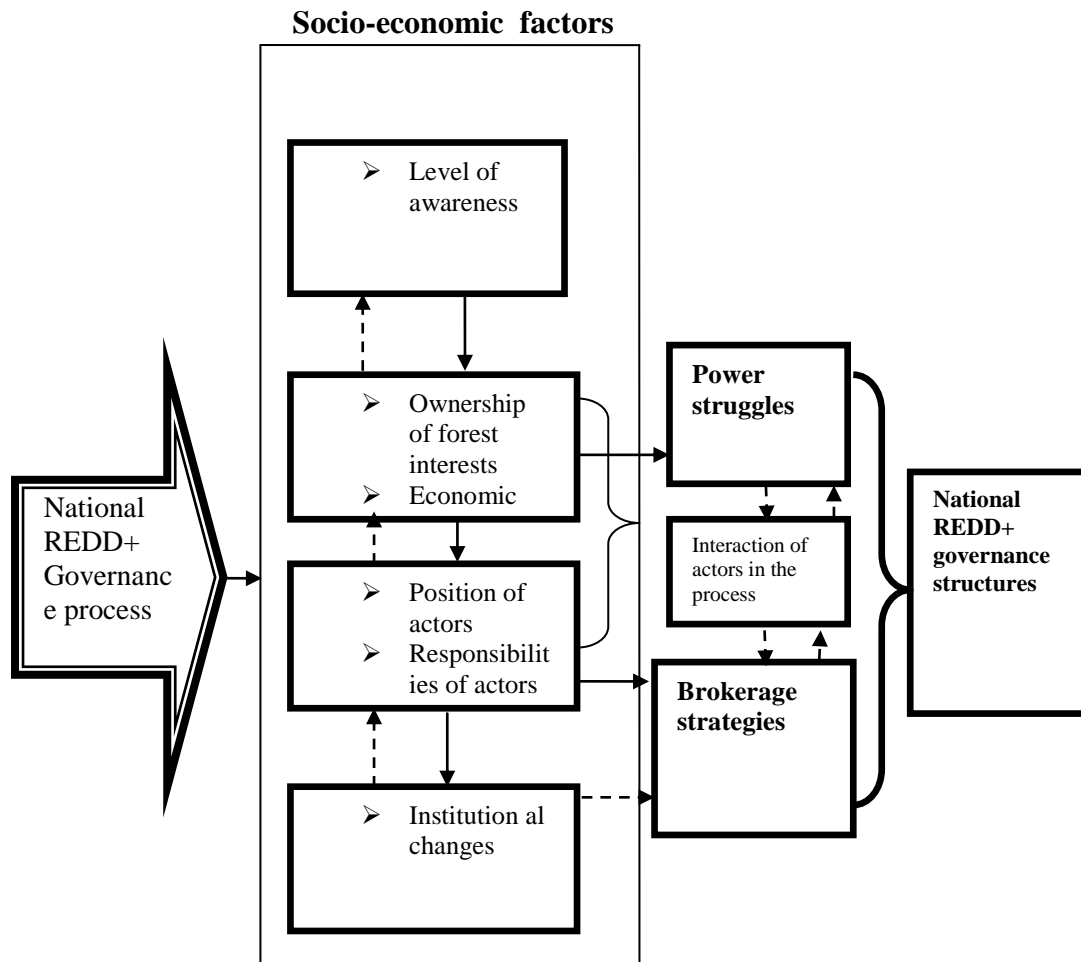
The framework assumes that institutions governing the policy process; resource regimes that govern access to resources and interaction between actors - both political and economic actors and their preferences; and the patterns of interaction among actors are decisive elements in the establishment of national REDD+ governance structures. However, this study did not look directly at the resource regimes as they were outside the scope of focus.

The framework illustrates further that in analyzing REDD+ governance process, it is fundamental to understand the factors underlying power struggles and brokerage

strategies, and legitimacy dimensions that pose challenges to the legitimacy and sustainability of emerging national REDD+ governance structures (Fig. 2).

Furthermore, in recognizing the existence of diversity of perspectives of institutions, this study adopted by (Vatn, 2005a) who defines of institutions as the “conventions, formal rules and norms that shape the actors and regulate the interaction between actors”. Moreover, the study used a combination of Marxist Weber and Facoult’s conception of power relations to define power “as the capacity to influence outcomes, with or without their legitimacy to do so” (Biermann *et al.*, 2010).

Since governance engages organizations with determined institutional structures, this study also adopted Luke’s perspectives of power relations. Therefore, the study combines the concept of influence of power (i.e., *power over* and *power to*) with the concept of power relations (strategic, institutional and structural power). The study therefore adopted the normative and empirical classification of power relations as strategic, institutional and structural power (e.g. Nuijten, 2005 and Lemke, 2003) in describing legitimacy, brokerage strategies and power struggles among actors in the national REDD+ governance structures discourse.



Key: —→ Direct influence

---→ Indirect influence

Figure 2: Simplified theoretical and conceptual framework underlying the study

Furthermore, the framework further recognizes that there are various types of actors interacting differently with diverse interests and responsibilities in the establishment of national REDD+ governance structures. These actors have different roles, responsibilities, perceptions, power, power bases and power relations which influence the process. Given the diversity of actors' interests, motivation and power asymmetry in the governance process, the legitimacy of the REDD+ governance process and emerging national governance structures depend on distribution and dynamics of power. In this study, legitimacy refers to the acceptability of the governance process and emerging

REDD+ governance structures. This definition is in-line with the definition by Suchman (1995, p. 574) that legitimacy is a “generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions”. To this end, the study employed the theory of input legitimacy (e.g. Bäckstrand, 2006, Vatn, 2015) to assess acceptability of the national REDD+ governance process.

Moreover, the framework also deploys the concept of actor brokerage and social network analysis (SNA) to depict the kind of interaction in the national REDD+ process as it evolves. The study assumed that the national REDD+ governance process (which can also be called a REDD+ policy) is being undertaken through a network of various stakeholders. To this end, the policy process emerges from a network of interdependent state and non-state actors (Babon and Gowae, 2013). Thus, in this study the concept of policy network was employed to examine the national REDD+ governance process. The study employs Policy or Governance network theory which reveals that despite political and state actors being vested with final decision-making powers, policy emerges from a network of interdependent state and non-state actors (Babon *et al.*, 2012). The study perceives brokers as actors who perform crucial nodes ranging from different economic activities to political relationships in various arenas of control and power (Bebbington *et al.*, 2008).

The study defines national REDD+ governance process as the process of instituting or establishing REDD+ governance structures that are needed for the implementation of REDD+ initiative in Tanzania.

In the next chapter the basic concepts on which this study was based are further elaborated and described.

1.8 Study Limitations

During data collection, the researcher encountered the following challenges and limitations which in one way or another affected the process of collecting data from the organization representatives:-

- i. Scheduling of interview with respondents – scheduling of interview with respondents was exigent during data collection. Most of the targeted respondents had to be contacted several times before they could agree to meet the researcher for an interview. Therefore, in most cases the interview timetable/schedule had to be reviewed to suit respondents' convenience. Consequently, the researcher had to fit in the schedule of each participant, which was challenging since in some cases some the respondents cancelled appointments without or at short notice. Other respondents asked for a change of the meeting-time and this subsequently frustrated the schedule of the day or week. These interruptions caused the interview to take longer time than expected as it was difficult to meet the demands of each respondent.

In order to align with the respondents' schedules, the researcher had to travel to various areas such as Arusha, Bagamoyo, Morogoro, and Zanzibar where some respondents were participating in workshops or meetings related to REDD+. In other cases the respondents preferred the questionnaires to be sent through emails; however few respondents could fill the questionnaire without several close-follow ups. On the other hand, travelling to various workshops and meetings provided the

researcher with added advantage as he was often invited to participate in those meetings and workshops which enabled the researcher to gather additional useful information by listening to and following the discussions.

- ii. Slowness of the national REDD+ governance process: Making decisions on some national governance structures or putting them into operation (e.g. National REDD+ Trust Fund) occurred slowly such that some questions which focused the completion of governance structures decision process were either shelved or completely dropped out during the administration of research questionnaires. However, some questions were revised and data were collected accordingly.
- iii. Lack of confidence by some respondents –Owing to the seemingly politics of REDD+ that surrounded the initiative at the time of commencing the study, some respondents were not comfortable when they were responding to the research questions. However, the researcher tried to be as open and transparent as possible to the respondents so as to restore confidence. The respondents were also informed that the information they would provide would not be divulged to any one and that their identities would remain strictly confidential.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 The Concepts of Institutions and Governance

There is no universal definition of institutions agreed across or within social sciences, thus, different disciplines define institutions differently. Therefore, perspectives of institution theories are described differently by various positions, authors and schools of thought (e.g., North, 1990; Scott, 1995; Hall and Taylor, 1996; Young, 2002; Ostrom, 2005; Vatn, 2005a; Vatn, 2005b; Vatn, 2009). Amidst these different positions among anthropologists, economists and sociologists regarding institutions, Vatn (2005a) looks at the concept of institutions from two fundamental camps: social constructivist and individualist ontology. The social construct camp believes that institutions are a result of social condition under which they (such institutions) group together, live learn, and develop social abilities. According to this perspective people are the product of social conditions under which they live in and grow up; as such both social capabilities of individuals and the way they perceive the world are socially constructed (Vatn, 2005a; Vatn, 2015).

Moreover, sociologists such as Berger and Luckmann (1967) view institutions as reciprocal typification of habitualized actions by actors. According to the position of these authors, institutions enable people to act by defining which acts should be performed in specific situations (Vatn, 2005a). However, critics of this school of thought argue that institutions are constituted through discourse and that it is not action *per se* that provides the basis for institutionalization but, rather, the texts that describe and communicate those actions (Phillips *et al.*, 2004). Through these texts, information about actions is widely distributed and thus influences the actions of others (Phillips *et*

al.,2004). In this school of thought, institutions are seen as products of the discursive activity that influence actions.

On the other hand, the individualists or new institutional economists such as North, (1990) and Richter (2001) perceive institutions as external rules that have no roles in informing individuals. Thus, even though society consists of individuals, institutions are seen as constraints to individual choices (Vatn, 2005a).

Moreover, the neo-institutionalists such as North (1990), Ostrom (1990), and Lowndes (2002) see institutions as the working rules or rules of the game or codes of conduct that define practices, assign roles and guide interactions. In this school of thought, institutions are seen as external rules that constrain human choices as they transact to maximize their own utility. Since transactions are costly, institutions are hence developed to reduce the costs (North, 1990). However, the perception of institutions based on the 'rule of the game' has received criticisms from some authors. For example, Wilson (2003) argues that the functions of institutions are broader than just 'rules of the game' but also they have to pattern actual behaviour, and this patterned behavior is how these rules are expressed and reproduced. In line with the neo-institutionalism school of thought, Scott (1995) points out that institutions have both cognitive and normative dimensions. The cognitive dimension constitutes 'what counts what', and the normative dimension describes institutionalized behavior pattern of experience as normal behaviour (Scott, 1995). In Scott's view, 'institutions' are perceived as cognitive, normative and regulative structures that shape social behaviour. Therefore, Scott (1995) integrates aspects from both social constructivist and individualist epistemologies. However, this broadened scope of defining institutions used by Scott (1995) and Wilson (2003) to include what counts what as well as the cognitive and normative dimensions still reflects that

institutions are social constructions derived from rational choice and represent rules of the game as described by North (1990) and Ostrom (1990).

Nevertheless, some social constructivist such as Vatn (2005a) has built their position based on Scott's three dimensions. According to Vatn (2005a), institutions are seen as "conventions, norms and formally sanctioned rules of a society. They provide expectations, stability, and meaning essential to human existence and coordination. Institutions regularize life, support values, and protect and produce interests" (Vatn, 2005a).

Furthermore, another aspect of institutions is based on the effects of possession. In this perspective, institutions are not just concerned with solving common problems, or prompting shared values, they are also sites of power and reflect and entrench power hierarchies and interests of powerful actors (Hurrell, 2005) in the institutional structure (Gaski, 1984; Lemke, 2003; Avelino and Rotmans, 2009). According to Vatn and Angelsen (2009), institutions determine who has access to which resources and who has the powers to make decisions.

Mbeyale (2009) and Katani (2010) combine different aspects of institutions to include policies, laws, rules and regulations and core values of an organization, operational plans and procedures, incentive mechanism, accountability mechanisms, norms, traditions, practices and customs. Katani (2010) further distinguishes institutions basing on rules, regulations, and norms generated by governmental, non-governmental, political and social organizations. However, Hodgson (2000) cautions that any attempt to define institutions in terms of policy outputs runs into stern complexities; thus, the author discourages the normative approach towards institutionalism.

Another distinction of institutions is based on whether they are formal or informal. According to North (1994), informally established procedures, norms, practices and patterns of behaviors, even though are not written-down form part of the institutional framework. Bandaraga (2000) argues that, due to their tenacious nature, informal rules have a tendency of superseding formal rules, subsequently constraining enforcement of formal rules. However in many cases, formal rules have suppressed informal ones owing to the formal power attached to them. In this regards Wegerich (2001) considers institutions as social resources, which determine relations of individuals, groups and organisations, and they can enable or disable developments of society.

In the REDD+ governance process, institutions are seen as sites of power safeguarding the interaction of powerful actors. They can create winners and losers among actors through defining who gets some REDD+ payments (Kajembe *et al.*, 2013). Therefore, institutions in the national REDD+ governance process are likely to promote different interests and values for different actors in the decision making process (see Barnett and Duvall, 2005).

In summary, the definition of institutions is still broad across disciplines and the debate continues to generate new perspectives. However, this study, adopts a definition by (Vatn, 2005a) who define “institutions as conventions, formal rules and norms that shape the actors and regulate the interaction between actors”.

2.2 Institutional Change

According to Wegerich (2001) every institution is vulnerable to influences and change either determined through inner and outer influences, which encourage changes, either in information or in the behaviour of individuals. While Vatn (2015) cites the difficulties in

defining institutional change theory, a vast body of literature (e.g. North, 1990; 1994; Vatn 2005a; Ambale, 2011) depicts different approaches of theories and dynamics of institutional change. According to Vatn (2005a) and Vatn (2015) institutional change concerns both altering contemporary institutions as well as establishing new institutions where they did not exist before. These changes concern both formal and informal institutions and are caused by exogenous and endogenous sources (North, 1994). The direction of change is determined by path dependency. According to North (1994) both external sources of change and unanticipated consequences of their policies may weaken the power of the existing organizations, strengthen or give rise to organizations with different interests and change the path. However, there is a fixed cost which is attached to any institutional change (see Wegerich, 2001; Amable, 2011). It is in this context that some inefficient institutions may continue to exist because a sufficiently powerful coalition has a vested interest in their survival, or due to lack of coordinated actions of the agents to change them (Amable, 2011). Likewise inefficient institutions may continue to exist when they have the necessary support or the cost of breaking them seem exceed the benefit (Wegerich, 2001).

Furthermore, scholars (e.g. Lewis and Steinmo, 2012) applied “generalized Darwinism” to explain how institutions evolve and change in different environments. The authors conclude that institutional evolution clearly operates in ways distinct from Darwinism theory (biological evolution) as human agents intentionally design social institutions. This perspective is similar to what North (1994) and Vatn (2015) termed a deliberate institutional change of institutions. According to North (1994), the agent of change is an actor or the decision maker(s) in an organization, while the sources of change are the opportunities or perceived interests. These sources may either be external changes in the environment or the acquisition of learning and skills, information and their

incorporation in the mental constructs of the actors (see Wegerich, 2001). A mixture of external change and internal learning triggers the choices that lead to institutional change (North, 1994). However, the outcomes of change may not necessarily be efficient, linear, or optimizing institutions (Lewis and Steinmo, 2012).

While there are many ways of explaining development and institutional change, Vatn (2005a; 2011; 2015) categorize institutional changes into four types. The first is spontaneous institutional change- which is non-intentional changes. In this case the changes are not always intended but can happen spontaneously (Vatn, 2005a) or based on mistakes (see Wegerich, 2001). The second is designed institutional changes, (i.e. a change that is intentional and aims at increasing efficiency). This is what North (1994) calls a deliberate institutional change which comes as a result of the agent of change. Although institutions are the basis for creating new actors, the actors also change institutions (Vatn, 2015). Some scholars such as Clevaer (2012) and Vatn (2015) are critical of the perspectives of designed institutional change pointing out the limited room for maneuvering of the existing institutions and failure to take into account informal power structure that can inhibit changes in case they do not serve the interests. The third is institutional change in response to interests, values, and/or power: this type of institutional change has its origin from the concept of property right. And the fourth type of institutional change is institutional change as a reaction to crises or external stimuli.

In line with this school of thought, Wegerich (2001) describes two types of institutional changes, namely: Demand induced change or bottom-up change and Supply induced changes or change from above and from outside. The bottom up institutional change is based on common property regimes to private property regimes as illustrated by North (1994). The bottom up approach highlights institutional changes that emanate from

within the firm fuelled by change in technology, prices and property rights (Wegerich, 2001). The bottom up approach perspectives is similar to what Vatn (2005a) call intentional changes, since the agent of change is the individual entrepreneur responding to the incentives embodied in the institutional framework. However, critics of the demand induced change approach (e.g. Hechter, 1990) argue that demand alone is insufficient to induce institutional changes, unless it is associated with the powerful factors (Wegerich, 2001). In addition, the author points out that demand approach does not take into consideration changes that can be induced from above or outside the society.

On the other hand, according to Binswanger and Ruttan (1978), the supply-side induced or top down change is the one “which change is either be induced from above, within the institution, or change can also be induced through outsiders”. This approach takes into account that changes that may occur as a result of advances in the supply of knowledge about social, economic behaviour and organisation change (Binswanger and Ruttan, 1978). In both cases change is possible through advances in knowledge in the specific disciplines. In the case of institutions, change could be induced by shifts in knowledge in the social sciences and their related professions (see Wegerich, 2001). Nevertheless, Wegerich (2001) criticises this approach arguing that outside knowledge does not necessarily change the whole institutions but only parts, which are directly influenced by new knowledge. However, “for these parts the knowledge is provided from above and changes are implemented in a top-down approach” (Wegerich, 2001).

Despite their disagreement on the approaches in describing institutional change, scholars (e.g. North, 1990, 1994; Wegerich, 2001; Vatn, 2005a; 2015; Lewis and Steinmo, 2012) seem to agree that sources of institutional change are both endogenous and exogenous and apply to both formal and informal institutions. The overarching reason for

institutional change is the protection of interests and values (see North, 1990, 1994; Wegerich, 2001; Vatn, 2005a; 2015; Lewis and Steinmo, 2012).

In the REDD+ governance process, most scholars (see Angelsen 2009; Pesskett and Brochaus, 2009; Peskett *et al.*, 2009; Herold and Skutch 2009; Angelsen *et al.*, 2008; Schmidt, 2009; Streck, 2009; Pistorious *et al.*, 2010; Burgess *et al.*, 2010; Vatn *et al.*, 2011; Vatn and Velded, 2011; Mukama, *et al.*, 2012; Stringer, 2012; Rantala, 2012, Mosi, 2013; Bushley, 2014; Korhonen-Kurki *et al.*, 2014; Kweka *et al.*, 2015) admit that REDD+ was initiated at global level. In this regards the envisaged institutional changes in the REDD+ process can be considered top-down since they originated from international level and then transformed into national and local levels (see Mosi, 2013). Scholars like Manyika and Nantongo (2012) and Mosi (2013) reveal that institutional changes in the national REDD+ process are meant to transform the status quo in the management of forest resources that fit the REDD+ at different levels so as to foster emission reductions. Nonetheless, the bottom up institutional change related to REDD+ is also occurring as different governments and local actors strive to devise governance structures based on their local context. However, Vatn (2015) cautions that changes in the institutional structures can also change the perception of the problem at hand. This concern is critical in the designing of REDD+ governance structures.

2.3 Governance and Governance Structures

The term “governance is about forming institutional structures” (Vatn, 2010), and concerns making social priorities, resolving conflicts and facilitating human coordination” (Vatn, 2010). . In the realm of sustainable forest management, governance is increasingly informing the dimensions of forest discourse (MFAF, 2012). Biermann *et al.* (2010) use the concept of governance architecture to illustrate an “overarching system

of public or private entities, principles, norms, regulations, decision-making procedures and organizations that are valid or active in the specific area which is regulated by more than one institution". Scholars such as Barnett and Duvall (2005) sees governance as involving rules, structures, and institutions that guide, regulate and control social life; which are fundamental elements of power. In this context, Barnett and Duvall (2005) definition of governance seems to be similar to that of Biermann *et al.* (2010). Other scholars (e.g. Manasani *et al.* (1999) see governance as something that includes the state's institutions and structures, decision-making processes, capacity to implement and the relationship between government officials and the public. In the views of these authors (i.e., Manasani *et al.*, 1999), governance has both political and technical dimensions. This perception is similar to that of Barnett and Duvall (2005), Vatn and Velded (2011), and Biermann *et al.* (2010) on governance. In the process of evaluating or choosing new governance structures, Vatn (2015) emphasizes the importance of power relations.

In the REDD+ process, governance seems to dominate discussion from its conception. Some authors such as Vatn and Velded (2011) used the term *governance* interchangeably with the word *architecture* in the REDD+ process. Other authors (e.g. Vatn and Angelsen, 2009; Vatn and Vedeld, 2011; Vatn *et al.*, 2011) suggest that REDD+ governance structures encompass interaction between different actors and institutions. On the other hand, Vatn and Angelsen (2009) describe REDD+ architecture as a system of institutions and actors, and as an institutional structure defining capacities and responsibilities of different actors involved and the rules of their interaction. As the type of actors involved in the interaction influence the outcome, the type of interaction between actors affects the capacity of the overall system (Vatn and Vedeld, 2011). Thus, interaction of actors is fundamental in the national REDD+ governance process.

In the forest sector, REDD+ is considered as a form of governance that can improve the existing weak control on the resources (Korhonen-Kurki *et al.*, 2014; Kweka *et al.*, 2015). However, the ongoing debate on REDD+ architecture raises concerns over the key aspects related to governance, institutions, and in particular property rights; and power relations among actors in the process (Rantala and Di Gregorio, 2014). This perception of governance reflects the “type of actors involved, their capabilities, and competencies as well as the structures facilitating the interaction/coordination between the actors” (Vatn and Vedeld 2011). It reflects coordinating actions within and between different sectors of public administration as well as between such administration and the private sector.

Moreover, realizing REDD+ benefits presupposes a national architecture that facilitate comprehensive actions that are expected to deliver on carbon mitigation outcome (Vatn and Agelsen, 2009; Kweka *et al.*, 2015). REDD+ architecture also involves establishment of systems for monitoring and verification of the results obtained from various actions (Vatn and Velded, 2011). A study by Kweka *et al.* (2015) reveals that emerging governance structures will be used to channel resources from international sources to support actions of local communities in order to reduce deforestation and forest degradation. In this regard, different options are presented by different stakeholders in the governance process (Vatn and Velded, 2011). On the other hand, Vatn (2015) suggests that studying governance structures and their legitimacy should emphasize on output.

2.4 Options for Establishing REDD+ Governance Structures

Although there is “one size-fits all” standards for REDD+ governance structures (Forsyth, 2009; Mustalaht and Rakotonariv, 2014), a growing body of literature on REDD+ (e.g. Vatn and Angelsen, 2009; Vatn and Velded, 2011; Kweka *et al.*, 2015) identify four different options as alternatives, namely (a) market/project based

architecture, (b) a system with national REDD funds outside the existing national administrations, (c) a national REDD+ fund organized under the present national administration, and (d) conditional budget support (Vatn and Angelsen, 2009). Even though these options are not mutually exclusive, they are important in helping countries to make choices that are relevant to their national circumstances (Vatn and Angelsen, 2009). However, several studies (e.g. Angelsen *et al.*, 2009; Burgess *et al.*, 2010; Manyika and Nantongo, 2012; Benard *et al.*, 2014; Babon *et al.*, 2014) indicate that choices between different options (i.e., market-based versus fund options) are key in deciding the type of incentive mechanism to be adopted in a country. On the other hand, other scholars (e.g. Vatn and Velded 2011; Vatn and Angelsen 2009) are skeptical of the market/project based governance systems considering it as the weakest alternative in terms of political legitimacy, their capacity in addressing leakage, permanence, coordination, transaction costs, and expected delivery on co-benefits.

Scholars (e.g. Vatn and Velded, 2011) observe that funds for REDD+ can be channeled through a state administration and budgetary support systems. Advantages cited for using such administration and budgetary support systems include high accountability/democratic processes, low transaction costs, smooth coordination across sectors, and capacity to avoid leakage and ensure co-benefits delivery (see Angelsen *et al.*, 2008; Benard *et al.*, 2014; Babon *et al.*, 2014). However, other scholars (e.g., Pearse and Bushley, 2012; Vatn and Angelsen, 2009; Kweka *et al.*, 2015) have a reservation on the administration and budgetary fund based approach citing potential bureaucracies and corrupt practices. For example, according to Korhonen-Kurki *et al.* (2014), Pearse and Bushley (2012), Kweka *et al.* (2015), corruption allegations has dominated the forestry sector in most developing countries for a long time, making the fund based approach unattractive to stakeholders. However, scholars (e.g. Helod and Skustch, 2009; Korhonen-

Kuki *et al.*, 2012; Gebara *et al.*, 2014) believe that countries need to consider establishing REDD+ governance systems that reflect better the broader interests of stakeholders at different levels.

In addition, debates on governance structures have been on national monitoring, reporting and verification (MRV) versus sub-national governance system (URT, 2013a). In the view of Zahabu *et al.*(2012) and Herod and Skustch (2009), REDD+ stakeholders expect a credible MRV governance system to measure carbon stocks. However, such governance systems are missing in most developing countries (Herold and Skustch, 2009). Thus, the choice between sub-national and national level MRV governance structures is also paramount but remains a concern in the selection of REDD+ governance structures. In view of this, Vatn and Angelsen (2009) recommend for the evaluation of the REDD+ governance structures based on their overall political legitimacy, good governance, coordination capacity and interplay with broader reforms and a range of stakeholders.

2.5 Power and Power Relations

2.5.1 Power concepts and discourse

According to Gaski (1984) sources of power and power relations of actors are important in any governance process. The concept of power traverses across disciplines but is still highly disputed among various authors and disciplines. Thus, power is defined differently by philosophers, economists, psychologists, sociologists and political scientists (e.g., Belaya and Hanf, 2009) and among power discourses (e.g. Emerson, 1962; Barraclough and Stewart, 1992; Jones and Sergot, 1996; Reed, 1997; Keltner *et al.* 2000; Karlberg, 2005; Lukes, 2007; Biermann *et al.*, 2010). Interestingly, across different disciplines, both the source of power and power relations underpin its discourse (Gaski, 1984).

Sociologists drawing from much of the work by Weber (1922) and Foucault as well as Marxist theories, emphasize on the interdependence of power on social interactions (Emerson, 1962; Lemke, 2003; Schiffer, 2007). However, some authors such as Schiffer (2007) try to differentiate Foucault's school of thought from Marxist (Weber, 1992) theories of power relation arguing that the former is less concerned with the oppressive aspect of power, but more with the resistance of those whom the power is exerted upon. From the Marxist view, power is usually understood as the capacity of an agent to impose his or her will over the will of the powerless (Schiffer, 2007). In this respect, power is considered as a possession and something owned by those in power. However, critics of this opinion (e.g. Hinds, 1982) believe that power is not something which can be possessed by individuals, but rather it is embedded in actions and manifests itself in a certain way and thus it is more of a strategy and individuals are the vehicles of power and not points of application (Schiffer, 2007). On the other hand, scholars (e.g. Foucault, 1982; Thorelli, 1986) underline the importance of capacity to determine the power of actors.

Furthermore, some authors (e.g. Keltner *et al.*, 2000; Pfeffer, 1982) classify power according to resource control or dependency, position and the way it operates. This resource based approach holds that those in control of resource are able to manipulate the flow of resource and are said to have power, while those who depend on these resources are powerless (Barraclough and Stewart, 1992). However, critics of the approach argue that both the resource dependence and position perspectives are considered as subject of power but not its defining characteristics (Barraclough and Stewart, 1992). For example, Wallbott (2014) revealed that local communities despite being often excluded from state-led, formal decision making procedures, and disfavored with regard to the distribution of

material resources, they were able to develop alternative capabilities to exert immaterial power resources which influenced the outcome of UNFCCC.

Furthermore, a plethora of social science literature reveals that power operates only where there is a social interaction and social relationship or interaction of people (Mannheim, 1950; Schiffer, 2007). In this context, power is the prime force in social relationships (Keltner *et al.*, 2000). In the same context, Hanneman and Riddle (2005) perceive power as a consequence of patterns of relations, and that is why the amount of power in different social setting varies. In its relative terms, power characterizes relationships between individuals or groups. It is not a fixed characteristic of a person (or organization) neither is there a provision for any individual to have a certain absolute “amount” of power (Emerson, 1962; Schiffer, 2007). Schiffer (2007) observes that some authors have devised concepts or spheres of power that take into account different circumstances of the existence and influence of power (Keltner *et al.*, 2000; Emerson, 1962). For example, power can be elevated or reduced depending on social circumstances (Keltner *et al.*, 2000). It can also be legitimized or illegitimized (Emerson, 1962). Legitimized power is embedded in social structures and the subjects accept it (Emerson, 1962). Wallbot (2014) uses the term imported *power* to describe legitimized power accorded to actors.

Furthermore, in an attempt to describe the existence or influence of power, authors have taken different approaches. For example, Etzioni (1969), Biermann *et al.* (2010); Emerson (1962), Pfeffer (1992) and, Keltner *et al.* (2000) define power based on its potential influence to others, with or without their will. In this context, scholars such as Karlberg (2005) and Biermann *et al.* (2010) describe power based on ‘power to’ and ‘power over’. Whereas “power to” is the basis of models in the physical and natural

sciences, “power over” according to Karlberg (2005) and Belaya and Hanf, 2009) highlights issues of social conflict, control, and coercion. However, Lukes (1974) is a critic of both perspectives considering them as too simplistic, since power can be exercised over others through false consciousness, or cultural hegemony. According to Lukes (1974) “power to” theories end up “conceding from view the central aspects of power which they define out of existence”. Despite this criticism, the *power over* concept has been widely used to describe power relations. For example, Emerson (1962), Dahl (1969), and Biermann *et al.* (2010) describe *power over* by pointing out that an Actor X is said to have *power over* Actor Y if X can force or influence Y to do what X wants, similarly Actor Y has *power over* Actor Z if Y can force Z to do things Y wants to be done and vice-versa. However the review work done by scholars like Lokenzi (2006) and Swartz (2007) show that this approach received criticism from Lukes (1974) for not taking into account what does not occur in decision-making area. According to Swartz (2007) power can be exercised through non-issues and non-decision making as well. According to Lonzi (2006, p.88) aspects of power that are least accessible to observation also need to be considered. In this regards, power can be held even where it is not used or needed Lonzi (2006, p.88).

Other scholars(e.g. Keltner *et al.*, 2000) describe power based on how it is produced, where it is located and how it is distributed and what is its unit of analysis (e.g. institutions, groups, dyads, the individual). Thus, Keltner *et al.* (2000) define power based on individual’s capacity to change other states. They consider these conceptions as different from other definitions arguing that power can be experienced in the absence of observed behaviour. However, by attributing power to the capacity to change other states, Keltner *et al.* (2000) is in agreement with many authors (e.g. Emerson,

1962; Etzioni, 1969; Dahl, 1969; Biermann *et al.*, 2010; Pfeffer, 1992) who describe power based on how it is distributed, and its unit of analysis.

Moreover, other scholars (e.g. Emerson, 1962; Dahl, 1969; Biermann *et al.*, 2010) have examined power by looking at how strong or weak the actor is in relation to others within a particular social setting. However, strong /or weak based approach of power analysis still reflects the influence based approach of power and underscores the importance of social interaction in power relations. From this perspective, Treadway *et al.* (2013) depicts two-fold dimensions of power; first power is not only attached within the legitimate formal social structures but it also rests in a fluid informal relationships which permeates the perpetual interactions of the complex social fabric of the entire environment. This position is in line with that of Emerson (1962), Lemke, 2003 and Schiffer, (2007) who describe power based on social interactions.

Therefore, according to management literature from the sociological perspectives (e.g. Pfeffer and Salancik, 1978; Karlberg, 2005; Kajembe, 2007), power acquisition, in most cases, involves resource possession and/or dependence or position attributes. This perspective is similar to resource dependency model explained by Emerson (1962), and Keltner *et al.* (2000). However, some critics of sociological/structural power perspectives (e.g. Mintzberg, 1983) argue that individuals need political will and political skill in order to gain power. Since power does not come simply from filling a structurally strategic position in a relationship network (e.g. Brass, 1984; Burt, 1992; Brass and Burkhardt, 1993) to allow for the influence of personal characteristics on power acquisition. Power may involve manipulating circumstances for others (Lukes, 1974). Power can also be attributed to individuals' knowledge and astuteness, for this matter, people with greater knowledge about their social and relational contexts tend to be the

ones with the most power and also that individuals high in power generally possess greater communication and relational skills (Krackhardt, 1990; Treadway *et al.*, 2013).

Furthermore, the sociological/structural conception of power has received denunciation from authors such as Lockie (2001); Treadway *et al.* (2013); Brass (1984); Brass and Burkhardt (1993); Burt (1992); and Mintzberg (1983). According to the critics of this concept, individuals need political will and political skill in order to gain power (Mintzberg, 1983), and power is continually challenged and negotiated (Lockie, 2001). For example, as a result of continued negotiations and political discourse between central and local government, many national governments are devolving power to local communities in political and natural resource management. For example, Kilahama (2013) shows that Participatory Forest Management (PFM) regime in Tanzania has been a result of long negotiations and challenges over sustainable forest management.

2.5.2 Power relations

Most scholars (e.g. Emerson, 1962; Reed, 1997; Lukes, 2007; Keltner *et al.*, 2000; Riddle, 2005; Mannheim, 1950; Schiffer, 2007) tend to link power to social interactions or relations. Therefore, according to the social theories, power relations and the outcome of any particular exchange depends upon the relative power of participant actors (Belaya and Hanf, 2009). In this context, power is viewed as the mechanics that can explain these relations among participating actors (Belaya and Hanf, 2009). However, according to Vatn (2005a), power relations, as system related, may become invisible or facts through its incorporation into institutional structures of the society. The existing power relations can act as an obstacle or facilitator of the process; thus it needs to be taken into account, changed or encouraged (Nuijten, 2005). Power relationship has connotation for the development of partnerships since the structure of the power-dependence relationship

depends on the level and features partnership and the performance outcomes (Belaya and Hanf, 2009).

Nuijten (2005) and Lemke (2003) describe three types of power relations as follows (i) *institutional or government power*; (ii) *strategic power*; and (iii) *structural or domination power*. *Institutional or government power* refers to regulated and more or less systematized mode of power. Institutional power is about exercising of power through administrative and discursive rituals or regulation of conduct by rational application of appropriate procedures. However, this classification of power reflects only one aspect of power based on authority but it ignores the aspect of influence and legitimacy which are key in the decision making process as revealed by Forst (2009).

Furthermore, according to Nuijten (2005) and Lemke (2003) *Strategic power* refers to power relations that are manifested through daily interactions between individuals in a household, community, or group. These power relations can take many forms, such as, ideological manipulation, rational argumentation, moral advice or economic exploitation; however, this does not necessarily mean that power is exercised against the interests of other parts of a power relationship; neither does it signify that “to determine the conduct of others” is intrinsically “bad (Foucault, 1980). It structures possible fields of action of others by an actor or stakeholder. This perception of power is in agreement with Schiffer (2007) who describes power as not something that can be possessed by individuals, but rather is embedded in actions and manifests itself in a certain way and thus it is more of a strategy and individuals are the vehicles of power and not points of application. According to Schiffer (2007), power of one actor is assessed by finding out how strong or weak this actor is in relation to others within a certain social setting and concerning the achievement of a certain set of goals. In this perspective, it is the influence of one actor over another which

matters in social relations. For instance, Wallbott (2014) showed that some actors use ‘*imported power*’ to influence decisions. Therefore, the *strategic power* conception reflects the *power over* concept which has been described and used by many scholars (e. g. Emerson, 1962; Etzioni, 1969; Dahl, 1969; Pfeffer, 1992; Keltner *et al.*, 2000; Biermann *et al.*, 2010).

Moreover, according to Nuijten (2005) and Lemke (2003) *structural or dominant power* refers to power relations that are stable and hierarchical, fixed and difficult to reverse. It refers to asymmetrical power relations in which the subordinated persons have little room for maneuver because the margin of liberty is rather limited. This categorization is similar to the sociological/structural power perspectives described by Pfeffer and Salancik, (1978); Kajembe, (2007) and Karlberg, (2005). However, some critics of sociological/structural power model (e.g. Brass, 1984; Brass & Burkhardt, 1993; Burt, 1992) argue that power does not come simply from filling a structurally strategic position in a relationship network to allow for the influence of personal characteristics on power acquisition. In this respect, power is a consequence of patterns of relations, and that is why the amount of power in social structures varies (Hanneman and Riddle, 2005). Therefore, the structural power concept despite recognizing the influence of informal institutions, it ignores the legitimacy or illegitimacy or importation of power which is embedded in social ramifications whose subjects need to accept as described in Emerson (1962) and Wallbot (2014) .

According to Nuijten (2005), the three typologies of powers are embedded in people’s livelihood and cannot be easily separated from each other. Mbeyale (2009) used this approach to analyze power relations in the common pool resources (CPR) and concludes that these three types of power are closely linked in some cases. However, three types of

power relations still reflects the main concepts of ‘*power over*’ and ‘*power to*’ concepts as described by Schiffer (2007) and Keltner *et al.* (2000).

In sum, from the preceding theoretical orientation of power, the sociological conception of power seems to combine most of the related concepts (economist theory of rational choice, resource dependence, network exchange and political theories). In the preceding description, the perception of power appears to be mostly linked to influencing decisions, actions, and behaviour of others for own profit and represents optimal and efficient behaviour of power holders or actors. Therefore, several scholars seem to project the importance of capacity, social interaction and legitimacy in defining power of actors. Therefore, this study adopts a definition of social perspective of power that defines “Power as the capacity to influence outcomes or decisions, with or without the legitimacy to do so” (Biermann *et al.*, 2010). This definition is relevant and fits the circumstance under national REDD+ governance process which takes into account the fact that people are likely to be forced to take positions that are not in their interest after being manipulated or influenced through different power relations (see Vatn, 2015).

2.6 Perspectives of Power Struggles and Power Struggles in the REDD+ Governance Process

The work of the Marxis – Lenin about class struggles in the 1960s inspired several scholars in sociology to write about power (Brown, 2015). While the factory was the major cause of class struggles due to workers’ discontent, exploitation, and subordination (Bell and Cleaver, 2002), increasing body of literature (e.g. Miliband, 1993; Amanzi, 2011; Voß and Bornemann, 2011; Wesselink *et al.*, 2013; Brown, 2015) maintain that power struggles emerge from a broader range of scenarios, including markets, politics, technology and resources, power relationship, need for recognition, definition and the

provision of the common good. On the other hand, scholars such as Bell and Cleaver (2002) emphasize that contradiction between the productive forces and the forms of social intercourse also fuel power struggles. According to Fisher (2000), power struggles occur between individuals, groups or between nations. However, a broad range of literature affiliated to Marx theory, power struggle is perceived to take place between the state and polity. In addition, Engels' theory of competition (i.e., between capitalists, between workers, and between classes) and crisis reveals that conflicts between the working classes and the state ultimately led to French revolution (Miliband, 1993).

On the other hand, Miliband (1993) criticizes the perspectives which view the state as the 'instrument' of a ruling class and thus introduces a secondary view in which state is seen 'as independent from and superior to all social classes. In this regard, state is seen as the guardian of the interests of a society and of law as the embodiment of freedom. In his view, the author argues that, the state should strive to safeguard the interest of all stakeholders to avert power struggles. Short of this, conflicts and power struggles are more likely to continue to emerge. However, according to Miliband (1993), both internal and external factors can cause plurality of competing groups, interests, and actors interacting in society, and all of these together fuel power struggles. For instance, power struggle between monarchy and republic occurred because democracy was alienated from the republic (Miliband, 1993).

Furthermore, power struggles embedded in the Marxism theories imply that power struggles emerge due to the existence of classes (i.e. oppressor against the oppressed) and the need for abolition of proletariat. However, many scholars (e.g. Miliband, 1983; Hindess, 1982; Bell and Cleaver, 2002; Kajembe *et al.*, 2015; Brown, 2015) describe power struggles from seemingly two perspectives. Firstly, there are scholars that perceive

power struggles as struggles of the less powerful against the powerful (e.g. Castless, 2009) or conflicts between superiors and subordinates (Keller, 2009). On other hand, other scholars (e.g. Hindess, 1982; Belaya and Hanf, 2009) describe powers struggles as a result of competing interests and influence among various actors. However, most scholars seem to combine the two perspectives.

While both perspectives still hold, this study, conceives power struggle as the situation whereby various actors or people compete to command or maintain power in a given arena (see Hindess, 1982; Castless, 2009; Belaya and Hanf, 2009; Dupont, 2006). The concept of competing interests and influence has been used by a number of authors (e.g. Johnstone, 1992; Dupont *et al.*, 2003; Kitula, 2011; Amanzi, 2011; Kajembe *et al.*, 2013, Manyika *et al.*, 2013) to describe power struggles.

Furthermore, power struggles may lead to positive or negative results but normally manifest in different social relations. They may include among others, cordial or conflicting relationships, power shift or power balance, efficiency, cooperation, competition, emergence of new or hybrid structures or (e.g. Fisher 2000; Dupont *et al.*, 2003; Lindblom *et al.*, 2007; Keller, 2009; Yilmaz, 2010; Voß and Bornemann, 2011; Amanzi, 2011; Kitula, 2011). In elaborating the outcome of power struggles, fundamentals challenges remain on how to distinguish conflict from power struggles. Some authors (e.g. Keller, 2009; Fischer, 2000) use the words conflicts and power struggles interchangeably. Fisher (1990) defines “conflict as an incompatibility of goals or values between two or more parties in a relationship, combined with attempts to control each other and antagonistic feelings toward each other”. According to Kriesberg (2015), conflict is socially constructed, dynamic, and interrelated with many others and are more likely to be broadly beneficial or loss. Conflict can escalate to power struggles

(Kriesberg, 1998). Daniel Katz (1965) cited by Fisher (2000) highlights three main sources of conflict: economic status, value, and power. According to Fisher (2000), “economic conflict involves competing motives to attain scarce resources, while value conflict involves incompatibility in ways of life, ideologies – the preferences, principles and practices that people believe in. On the other hand, power conflict occurs when each party wishes to maintain or maximize the amount of influence that it exerts in the relationship and the social setting” Fisher (2000). However, Fisher (2000) argues that most conflicts are not of a pure type, but involve a mixture of sources and therefore difficult to differentiate them. This probably reflects a fundamental reason as to why authors (e.g. Keller, 2009) decide to use the term conflict and power struggles interchangeably. Interestingly, the perceptions of power conflict by Fisher (2000) still reflect the definition of power struggles provided by Hindess (1982), Belaya and Hanf (2009).

Furthermore, according to Lockie (2001) power is continually challenged and negotiated and it is also attributed to individuals’ knowledge and astuteness. Therefore, power struggles are likely to emerge as stakeholders continue to be aware and attain some knowledge. In addition, position of actors in an organization can fuel power struggles. According to Greer (2014) people who rise to the top of an organization or management tend to prioritize their own goals and desires. Consequently, sidelining other actors resulting into conflict or power struggles as they fail to take other people's perspectives into account or ignore other people's feelings. Greer and Van Kleef (2010) argue that understand the view of another person decreases negative conflict effects.

Moreover, Foucault (1982) shows that power struggles may arise against a technique, a form of power or domination in the political or governance arena. On the other hand,

insome cases, other actors such as governments, media, trade unions and the general public can intervene in these struggles, and use their own specific resources to further their interests (Dupont, 2006).

Moreover, Dupont *et al.* (2003) and Johnstone (1992) argue that power struggles can lead to the emergence of hybrid structures that are neither public nor private. Dupont (2006) shows that in some cases, competition has forced public organizations to embrace private management practices and implement cost-recovery programs, or even market their own services in order to compete with the private sectors. Dyckman (2002) reveals that using a participatory approach some conscientious planners found themselves competing with local communities.

2.6.1 Power relations and power struggles in the national REDD+ governance process

In the REDD+ process, certain types of power are likely to be accumulated around one type or group of actors (e.g. NGOs, government, and indigenous people) (Brockhaus and De Gregorio, 2014). In this context, there is a great fear of power imbalance that is attributed to vested interest of presumably elite actors in the REDD+ process (Karsenty, 2008; Angelsen and Wertz-Kanounnikoff, 2008; Korhonen-Kurki *et al.*, 2014; Kweka *et al.*, 2015). Currently, various actors are playing a crucial role in shaping the ongoing national REDD+ governance process (Angelsen and McNeill 2012). Through provision of financial resources and interactions, powerful actors strive to influence policy making so as to be aligned with their interests, ideas, and beliefs (Brockhaus and De Gregorio, 2014). A study by Aguilar-Støen, (2015) reveals that control of key resources¹ like

¹Key resources refer to the strategic control of financial resources and information as well as control or ownership over land and engagement in broader networks (Aguilar-Støen, 2015, p.38).

forests and carbon rights, information and data and networks in REDD+ process provide power for actors. In addition, ideological affiliation² of actors, in particular, whether it is a proponent of market or non-market based governance structure determine space for participation in the REDD+ process (Aguilar-Støen, 2015).

Currently, debates on power of various actors dominate most literature on REDD+ governance (e.g. Kanninen *et al.*, 2007; Baginski and Wollenberg, 2010; Brockhaus *et al.*, 2014; Rantala and Di Gregorio, 2014; Springate- Gebara *et al.*, 2014, Manyika *et al.*, 2013) and it is likely to continue so. Despite the prominence of power discourse, there is no common classification of typology power of actors across the existing scholarship on REDD+ governance. However, most authors share common views and concerns with respect to the existence of powerful elite creating unequal access and asymmetric power relations (e.g. Vatn, 2010; Bushley, 2014; Brockhaus *et al.*, 2014; Rantala and Di Gregorio, 2014; Bushley, 2014; Kajembe *et al.*, 2015).

2.6.2 Factors underlying power struggles

Actors or stakeholders interact under different social and institutional settings (see Magesa, 2011) or governance process. According to Brockhaus *et al.* (2014) governance processes are attributed to interaction of actors that lead to power struggles. In the natural resource management, power struggle may emanate from a variety of socio-economic factors. For example, power struggle may result from dwindling resources, immigration, and unequal distribution of income/revenue due to differences in interests, lack of clear boundaries, accountability and misuse of common resources and competing use of resources (see Magesa, 2011; Kitula, 2011). Additionally, Dyngeland and Ericksson

²Ideological affinity refers to the closeness of discourses, positions and values between actors participating in REDD+ spaces (Aguilar-Støen, 2015, p.38).

(2011) and Kovacevic (2014) found that unclear responsibilities between the central government and local/regional governments can lead to power struggles. Likewise, Kovacevic (2014) found that power struggle existed in Mexico despite the government efforts of transferring power to local and regional governments because the later attempted to retain its strategic power over key decisions. For example, Larson and Ribot (2009) reveal decentralization of forest management may fail even where it is legislated because of either too little power transfer or power being transferred to non representative authorities. This can lead to continued power struggles in a bid to maintain status quo or acquire more powers (Caselli, 2006; Dupont, 2006).

In the REDD+ process, many authors (e.g. Dkamela *et al.*, 2014; Bushley, 2014; Kajembe *et al.*, 2015) highlight issues that can lead to competition, conflicts, or power struggles. These include new economic incentives and information, new actors, and coalitions (Manyika *et al.*, 2013; Aguilar-Støen, 2015). On the other hand, Dupont (2006) shows that different actors deploy a myriad of counteracting strategies such as call for justice, equity and accountability in order to maintaining influence over competing organizations. Studies by Kanninen *et al.* (2007) and Dkamela *et al.* (2014) reveal that economic and political elites often use their positions of power to leverage economic control over forest resources and contribute to unsustainable exploitation.

Moreover, existence of opportunities or perceived interests, the emergence of new actors and the emerging governance structures in different interpretations of REDD+ benefits (see Springate-Baginski and Wollenberg, 2010; Aguilar-Støen, 2015; Kejembe *et al.*, 2015) result into power struggles. A number of scholars (e.g. Springate-Baginski and Wollenberg, 2010, Aguilar-Støen *et al.*, 2015) also cite unequal power assemblage, differences in ideological beliefs, control of resources, and entry of new actors or

technology, lack of trust in the decision making process and failure of the existing governance structures as factors contributing to power struggles. Besides, power struggles in national REDD+ governance process are related to decision making process and agents of change or actors involved (Brockhaus *et al.*, 2014; Springate-Baginski and Wollenberg, 2010; Larson and Ribot, 2009). Thus, power struggles may be fuelled by the need to gain more power and prestige by some actors (May *et al.*, 2011). According to Wallbott (2014), most indigenous people are unaware on the implication of REDD+ on their livelihood. Thus, increased awareness and knowledge on REDD+ can increase their participation and power struggles in the national governance process (Manyika and Nantongo, 2012; Manyika *et al.*, 2013). Manyika *et al.* (2013) argue further that participation and interests of local communities are likely to change as the level of awareness and understanding of the process continued to grow.

Other factors contributing to power struggles in the REDD+ process include political environment, incentive, equity and perceived impacts (see Springate-Baginski and Wollenberg, 2010; Kovacevic, 2014; Aguilar-Støenet *et al.*, 2015; Kejembe *et al.*, 2015). At the local level Kajembe *et al.* (2015) reveals that REDD+ initiatives have caused contested interests between the state and the local communities. Besides, unanswered question as who will own the carbon credit payment in the REDD+ mechanism (Vatn, 2015) increases the chances of power struggles.

2.7 Actors, Stakeholders, Organizations, Interests and Participation

2.7.1 Actors

The term actor is used differently in different disciplines and school of thoughts. Frooman (1999) considers actors as individuals, organizations and networks that participate in decision-making. This perspective is shared by Emerson (1962) who sees

an actor as a person or a group of people who interact with each other for their own interests. In some contexts, the term ‘actors’ is used interchangeably to imply ‘stakeholders’. Scholars (e.g. Krishnarayan, 1998; Renard *et al.*, 2001) use the term actors interchangeably with stakeholders. For example, Krishnarayan (1998) refers to actors as stakeholders who are active and interact with each other in accordance with their own interests. However, this interconnection of words causes confusion since all stakeholders are not necessarily active in all processes. In the view of Vedeld (2002), participation can also be passive particularly in instances where stakeholders are being told what is going to happen/what has happened.

Moreover, Frooman (1999) and Vatn and Vedeld (2011) categorize stakeholders based on their power, influence, and legitimacy. Other scholars classify stakeholders according to their interests. Vatn and Angelsen (2009) and Vatn and Vedeld (2011) use typology of actors involved in the national REDD+ governance process and their subsequent patterns of interaction to classify stakeholders. In the view of this, actors involved in the REDD+ process at the national level include private and public (i.e. the state and state bureaucracies and municipal/district councils) (individual households and firms), community organizations (Village councils, Non-government organizations -NGOs and other community based organizations- CBOs), and development partners/donor communities. A similar classification is adopted by URT (2013b).

In addition, Vatn and Vedeld (2011) emphasize further that an important distinction between actors should be on the capacities or powers they command in the REDD+ governance process. Therefore, actors can be identified and categorized by assessing their power, influence, and legitimacy (Frooman, 1999). This categorization is extremely important particularly in the REDD+ governance process. Actors in the national governance process

may interact/coordinate via trade, negotiations, command/legal regulation, redistribution and voluntary cooperation (Vatn and Vedeld, 2011). For example, the states being political actors play three different roles; firstly, they are involved in policy formulation and implementation. Secondly, they manage state owned lands and forests. Thirdly, they are responsible for handling conflicts among actors (individuals, firms).

In the REDD+ governance process, other actors include individuals who are part of the communities with less formalized entities; but they are also at the receiving end of the REDD+ and they also have economic interests (Vatn and Angelsen, 2009). Besides, NGOs as actors in the REDD+ process are expected to play different roles in the REDD+ initiatives, such as advocacy, or project development. They may also be active in defending interests of member groups or land users. NGOs may also act as intermediaries between buyers and sellers of carbon sequestration services in REDD+ (Vatn and Vedeld, 2011).

According to Vatn (2011) and Vatn and Vedeld (2011), actors in the REDD+ governance process can be divided further into two main clusters, namely (i) economic actors: those having access to productive resources, in other words, the government, communities, and private individuals, and (ii) political actors, who often have the power to influence access and interaction rules. The political actors do differ depending on the spheres of influence, that is, local, national or international levels. In the REDD+ context, the type of actors involved in the interaction influence the outcome. Similarly, the type of interaction between actors affects the capacity of the overall system (Vatn and Vedeld, 2011).

Furthermore, in the view of Vatn and Angelsen (2009) and Vatn (2010) institutional structures also influence the way actors conceive issues and what motivates their actions.

Consequently, motivations across both types of actors and forms of interaction in the governance process do vary. Therefore, when it happens that some governance issues give rise to competition or cooperation or mixed-motives in such incidences some actors are either incentivised to cooperate or they opt to promote their own interests (Sacco and Hugenberg, 2012). According to Sacco and Hugenberg (2012) successful collaboration is grounded upon the ability to discriminate between those who are willing cooperate and those who are not—both competitive and cooperative situations. On similar note, different institutions foster different interests and values (Reich, 2003; Vatn, 2010). Different actors are likely to place different values on REDD+ initiatives (Forsyth, 2009). Bushley and Khatri (2011) found out that some actors act strategically during the process so as to advance their own interests.

Furthermore, Brockhaus *et al.* (2012) advocate for the identification of core actors in the national REDD+ process. *Core actors* are actors (organisations) that take part in substantive national policy debates and initiatives on REDD+, and that consider themselves and are perceived by others as relevant actors in the REDD+ process arena' (Brockhaus *et al.*, 2012). These actors may include government, business, individuals, NGOs and international actors relevant in the national policy domain. They are deemed necessary for the multi-stakeholders policy process. In order to influence decision process and outcome, actors form networks or alliances to strengthen their influences. According to Forsyth (2009), actors with different objectives and degrees of political influence may be connected by horizontal links.

2.7.2 Stakeholders

Mayers (2005) describes stakeholders as all those who affect, and/or are affected by policies, decisions and actions of a certain system. Kitula (2011) sees stakeholders

as groups of people, organisations, and sometimes even individuals and may be classified as *primary*, *secondary*, and *tertiary*, depending on the interests and influences. Stakeholders can occupy any level or position ranging from local, national to international; from individuals to groups (Murphree and Mazambani, 2002). In most cases, stakeholders operate in connection to one another and they interact and communicate in various ways through established networks. Scholars (e.g. Mbeyale, 2008; Kitula 2011; Amanzi, 2011) use resource based regimes to categorize stakeholders into three groups, namely regulators, facilitators, and users. However, such classification is abstract when the resource regime is not directly involved. In the REDD+ governance process, other scholars (e.g. Frooman, 1999; Vatn and Vedeld, 2011; Angelsen *et al.*, 2009) classify stakeholders based on their resources, power, influence, and legitimacy. This approach also reflects Murphree and Mazambani (2002) perception of stakeholders.

2.7.3 Organizations

North (1990; 1994) sees organizations as groups of individuals bound by a common purpose. Organizations are a key as they set up relationships among people through allocation and control of resources and rewards.

North (1990) also views organizations as purposive entities designed by their creators to maximize income, or other objectives defined by opportunities afforded by institutional structures of the society. Other scholars such as Bromley and Cernea (1989), define organizations as networks of behavioural roles organised into hierarchies to elicit desired individual behaviour and coordinated actions obeying a certain system of rules and procedures.

In the REDD+ initiatives, Rantala (2012), and Rantala and Di Gregory (2014) seem to merge the concepts of organizations and actors as well as stakeholders, but still reflects classification of actors based on their resources power, influence, and legitimacy as pointed out by most scholars (e.g. Frooman, 1999; Vatn and Vedeld, 2011; Angelsen *et al.*, 2009).

2.7.4 Stakeholders and Organizational Interests and Roles

Stakeholders' interests are difficult to define since one stakeholder may have several interests (Brokaw, 2006). Interests may originate from organizational mandate, geographical proximity, historical/identity, association and livelihood's dependence, economic and a range of other capacities and concerns (Crona *et al.*, 2009; URT, 2009b). Authors such as Sutherland and Nicholas (2006) define stakeholders' interests in terms of sovereignty, jurisdiction, administrative, community rights, littoral rights, ownership, lease, license, permit, quota, customary rights, collective rights, public rights, rights of use the public good. Interests are also attributed to different levels at which they are attached, ranging from international, national, sub-national to local levels. As Vatn (2015) observes, interests influence perception and the expected truth. Interests may also be defined by social belonging, economic position, or profession (Vatn, 2015). On the other hand, actor roles, which determine the scope of power relations, are important indicators of interest (Brockhaus *et al.*, 2013). According to Vatn (2015), interests of an actor are strongly influenced by the rights and roles in which an individual actor operates.

Kitula (2011) used resource, institutional, and economic perspective to describe interests and roles of key stakeholders on mangrove ecosystem. According to the author these interests may be conflicting, complementary or cordial. Whereas Conflicting interests occur when different stakeholders compete over overlapping mandates, complimentary

relations occur when stakeholders have shared common roles and responsibilities. In addition, interests are supplementary when roles and responsibilities are enhanced or complemented unintentionally over resource use or management.

In the REDD+ process, Brockhaus and Angelsen (2012) refer to interests as potential material advantage to be accrued in the REDD+ initiative. The roles of an actor are essential in informing REDD+ governance structures and establishment process (Brockhaus *et al.*, 2013). According to Peskett and Brockhaus (2009), different stakeholders are concerned with their interests at different levels. For example, some actors in developing countries are worried about the negative effects of REDD+ mechanism, inadequate involvement of indigenous and forest communities in negotiations, human rights, land rights, conflicts, presence of indigenous peoples, and lack of clear commitments in intergovernmental REDD+ process (Springate-Baginski and Wollenberg, 2010). The conflicting interests could make it difficult to overcome key challenges; such interests could also hamper coordination which could reduce efficiency in formulating and implementing REDD+ actions (Brockhaus and Angelsen, 2012). However, different agenda of actors involved in policy formulation at national level reflect those interests at international level (Peskett and Brockhaus, 2009).

Furthermore, Forsyth (2009) describes REDD+ interests in terms of various uses and economic interests which pose challenges in balancing these interests in the REDD+ arena. According to Angelsen *et al.* (2012), REDD+ process presents battlefields between interests of *business-as-usual* and interests of transformational change in many countries. Since REDD+ was perceived as a win-win solution for most actors from the onset, it received unprecedented support from both government and from non state actors (Angelsen *et al.* (2012). However, the support remains high despite criticisms by some

authors and actors as REDD+ realities continue to unfold on the ground. According to Angelsen *et al.* (2012), the current high support to REDD+ is partly explained by its vagueness objectives that are broad enough to accommodate different volatile interests and viewpoints of various actors. Therefore, the successful REDD+ governance structures are the ones which are expected to establish and strengthen broad coalition and be able to serve diverse interests in order to secure strong and sustained political support (Angelsen *et al.*, 2012).

2.8 Participation and Legitimacy

2.8.1 Participation

Parry *et al.* (1992) define participation as a public involvement in the processes of formulation, passage and implementation of public policies. This definition is supported by Bäckstrand and Kuyper (2017) who argue that citizens affected by the exercise of authority should have the opportunity and ability to be involved in how that authority is wielded. On the other hand, Snodden and Fox (2002) still consider participation as a contested concept and is virtually beyond consensus on meaning and use. It is also a concept and process intimately connected to the political and economic dynamics of particular geographical and historical contexts within which it is being applied (Snodden and Fox, 2002). In this respect, participation remains a diverse concept that traverses across multiple disciplinary fields - including development studies, sociology, geography, anthropology, and resource management. Approaches to explain participation are many and different authors (e.g. Nanang and Inoue, 2000; Paudel *et al.*, 2007) have approached the term differently. For instance Vedeld (2002) uses process model to describe participation, and that the process model links participation concept with legitimacy and an increase of efficiency, and thereby participation is perceived as an *instrumental and goal-oriented process*.

In the natural resource management, participatory approach is increasingly being criticised for its failure to address deeper issues of power relations (Snodden and Fox 2002; Paudelet *et al.*, 2007) which are key to governance structures. Authors such as Sneddon and Fox (2002) emphasize on the importance of linking power relations when assessing participation as well as maintaining connections (both directly and indirectly) between state-initiated forums for participation and direct community engagement with local and national political processes and actors (see also Bäckstrand and Kuyper, 2017). Even in cases where all stakeholders, through participatory processes, support the design of future institutions, empirical evidence suggests the existence of some gaps between the planning and actual outcomes of the interventions (Fischer *et al.*, 2009). According to Bäckstrand and Kuyper (2017), equality of participation may often rest upon certain forms of representation as individuals cannot always be directly involved in all decision-making processes. In view of this, scholars like Vedeld (2010) and Larson and Ribot (2009) link devolution of authority and power, resource, distribution of rights and duties from state and other actors to describe the perspective of local participation in the decision making process. Therefore, representatives or self-appointed representatives (interest groups, non-governmental organizations (NGOs, etc.) can all help to connect individuals with sites of authority (Bäckstrand and Kuyper, 2017). By linking participation with power relations in the decision-making process (Vedeld, 2002) is in agreement with Inoue (1998) and Bäckstrand and Kuyper (2017) perspectives.

Moreover, authors such as Vedeld (2002) and Nanang and Inoue (2000) have categorized participation into three levels namely: (1). Participatory top-down approach: this is the blueprint approach where residents are considered to be wage laborers, volunteers, fund providers, and the like (2). Professional-guided participatory approach: this is a relatively flexible blueprint approach where drafts of plans made by

professionals are examined by residents and citizens, and are modified through discussions, workshops, and similar fora. (3). Endogenous bottom-up approach: this is the learning approach where professionals act as facilitators. However, in the assessment of most development programmes, many scholars analyze participation as relative power of different actors, in other words, whether is at the level of household and community dynamics, at the level of state-community relations, or across divisions of gender, age, class, and ethnicity - to, alternatively, hinder or advance purported aims of empowering marginalized actors and producing better development outcomes (Sneddon and Fox 2002). On the other hand, Bäckstrand and Kuyper (op.cit) classify participation based on agenda setting and decision making, namely: significant (agenda setting and decision making is consistently equal and inclusive), limited (agenda setting and decision making is sometimes unequal and exclusive), nascent (when agenda setting and decision making is systematically unequal and exclusive and, absent (when participation is entirely absent).

In the REDD+ process, participation of stakeholders ranges from manipulative, passive, interactive, material incentive, mobilization to functional depending on the type of stakeholders and level of awareness. Likewise, participation is considered as a key to enhancing legitimacy of the governance process as well as emerging REDD+ governance structures. According to Aguilar-Støen and Hirsch (2015), participating in REDD+ governance process can be affected by control of key resources such as forests and carbon rights, information and data, and networks of actors. In addition, power relations of the actors also affect participation (Larson and Ribot, 2009). There plethora of literature (e.g. Larson and Ribot, 2009; Thompson *et al.*, 2011; Bushley, 2014; Kowler *et al.*, 2014; and Aguilar-Støen, 2015) show that power of actors is likely to affect participation in the REDD+ governance process. Given the evolving nature of the National REDD+ governance process, it is prudent to combine Vedeld (2002), Nanang

and Inoue (2000) and Bäckstrand and Kuyper (2017) to assess participation and legitimacy in the National REDD+ governance process.

2.8.2 Legitimacy and Participation of Actors in the Governance process

Despite the debate between rational choice and social constructivists' positions on what should be the main emphasis in public choice when assessing governance structures, many scholars (e.g. Karlsson-Vinkhuyzen and Vihma, 2009) underscore the importance of legitimacy. According to scholars (e.g. Suchman, 1995; Junne, 2001), despite having a large number of scholars using the term legitimacy, very few of them define it. According to these authors, the complexity in describing legitimacy at national and international scales stems out of the subjectivity of the criteria applied or deployed by actors. As a result, legitimacy remains a highly subjective concept (Suchman, 1995). On the other hand, most scholars attempt to describe legitimacy basing on different perspectives. For example according to some scholars (e.g. Bernstein, 2004; Buchanan and Keohane 2006; Beisheim and Dingwerth, 2008; Bäckstrand and Kuyper, 2017), the term legitimacy has both normative (and "philosophical") and empirical (or "sociological") dimensions. Despite various approaches in explaining legitimacy, there seem to be a convergence on what appear to be the sources of legitimacy, and these include things such as justice, correct procedure, representation, transparency, effectiveness, and charisma (e.g. Junne 2001; Bernstein, 2004; Buchanan and Keohane, 2006). This creates a common ground for attempting to describe the term legitimacy.

Scholars (e.g. Bäckstrand, 2006; Kowler *et al.*, 2014; Beisheim and Dingwerth, 2008) differentiate between input/process legitimacy and output legitimacy. Input legitimacy relates to decision-making process and who is responsible in making policies, while output legitimacy relates to the outcomes, for example how resources are distributed,

effectiveness and efficiency of governance structures (Vatn and Velded 2011; Bäckstrand, 2006). Therefore, a legitimate process is that which is open and inclusive and allows participation of all stakeholders (Kowler *et al.*, 2014). In this regard, the definition adopted in this study centres on input legitimacy focusing on legitimacy of the authority and how decision making powers are delegated, transparency of the process and how decision maker can be made accountable and the forms and conditions of participation in the process (Vatn, 2015). In this respect, scholars such as Junne (2001) cautions that as numbers of actors increase to become relevant to the process, chances are very high that they will hold different perceptions with regards to the legitimacy of such process demanding more accountability, effectiveness, and possession of power at both national and global scale (see Bäckstrand and Kuyper, 2017).

In the REDD+ process, legitimacy is not only about transparency and accountability, but it is also about distribution of power and REDD+ financial flows (Kowler *et al.*, 2014) and how different actors are able to participate in the decisions. In addition, Larson and Ribot (2009) argue that that legitimacy of REDD+ centres on the effectiveness, efficiency and equity. According to Thompson *et al.* (2011) and Aguilar-Støen (2015), participation in the REDD+ decision making process grants authority and legitimacy. However, the power of actors is likely to affect participation and legitimacy in the REDD+ governance process (Larson and Ribot, 2009; Thompson *et al.*, 2011; Bushley, 2014; Kowler *et al.*, 2014; and Aguilar-Støen, 2015). This is because REDD+ has continued to attract new actors and entrants as it evolves (Manyika *et al.*, 2013).

Moreover, drawing from the concepts of legitimacy, Vatn *et al.* (2009) argue that the national REDD+ governance process is expected to be legitimate if it is deemed acceptable by national authorities, civil societies/local communities, development

partners and other international organizations. Likewise, Vatn (2015) emphasizes the importance of cost-effectiveness in assessing legitimacy. Accordingly, legitimate national REDD+ governance structure is expected to be the one derived from transparent and impartial process which is acceptable by all actors (Vatn *et al.*, 2009) and which is effective and cost-effective (Larson and Ribot, 2009; Vatn, 2015). In addition, Forsyth (2009) calls for a multi-actor governance process in order to enhance legality, legitimacy, and participation (i.e., inclusiveness in the decision making) in the REDD+ governance process. According to Parry *et al.* (1992), participation in the decision making process grants authority and legitimacy. This is in line with Bernstein (2004) perception who links participation with the acceptance and justification of shared rule by the community, which is a combined empirical measure of legitimacy (i.e., acceptance of a rule or institutions as authoritative and a normative argument concerning whether or not the authority possesses legitimacy).

Moreover, stakeholders' participation in the REDD+ governance can be assessed in different ways. One of the methods of identifying, characterizing, and prioritizing stakeholders has been to assess the urgency, legitimacy, and power of potential stakeholders in relation to the issues in question (Mitchell *et al.*, 1997). This may involve evaluating and ranking the type, source, and the level of power that different stakeholders possess. However, such a process has been criticized for prioritizing top-ranking (often more powerful) stakeholders, leading to inadequate representation of lower ranking groups (Calton and Kurland 1996; MacArthur 1997). In addition, this method may explicitly exclude remote, weak, disinterested, or considered "non-legitimate" actors (Calton and Kurland 1996). Criticisms to such approaches hinge on the inadequacy of such approaches in explaining other core issues in the relationship such as the role which communication networks can play in categorizing and understanding stakeholder

relationships. Rantala (2012) used an approach which combines the concept of ranking the type, source, and level of power as well as information communication networks of different stakeholders which provide a remedy to the problem of inadequacy.

2.9 Brokerage, Governance Networks and Position of Actors

2.9.1 Brokers and brokerage strategies

Economists view brokers as occupiers of crucial nodes between different economic activities and political relationships in various arenas of control and power (Babington *et al.*, 2006, cited by Mendoza and Nygren, 2011). According to Gould (1993), and Knoke and Yang (2008 cited in Gebara *et al.*, 2014) the broker is the occupier of the brokerage positions and influences other actors in the network. On the other hand, anthropologists and sociologists perceive brokers as having particular competencies, strategies, and careers (Bierschenk *et al.*, 2002).

According to Gould and Fernandez (1989 cited in Gebara *et al.*, 2014) coordination and liaison are broker indices that can be used to investigate brokerage of actors. While coordinator broker indicates actors who have a mediating role in coordinating actors from the same actor category, liaison brokers emphasizes actors who have a structural role on connecting actors from different sectors (Gebara *et al.*, 2014). The higher the degree of centrality in the network indicates a position of brokerage (see Mosse, and Lewis, 2006; Hannemann and Riddle 2011).

In the REDD+ initiative, a number of scholars (e.g. Rantala, 2012; Bushley, 2014; Gebara *et al.*, 2014) show that brokerage of actors has characterised the national REDD+ processes in different countries from its initial stage. Different indicators are used to examine the brokerage strategies (e.g. Rantala, 2012; Rantala and De Gregorio, 2014;

Gebara *et al.*, 2014). Generally, in the social network analysis, the central position of actors is considered a good indicator of power and status in the social or policy network analysis (Rantala, 2012). However, Thorelli (1986) argues that it is not only the position of the actors that is key in determining the brokerage ability, but also roles, relationship with actors and the power inherent within the actors.

2.9.2 Governance networks

A broad body of literature reveals that stakeholders do not operate in isolation but in a network of interconnected relations in the course of governance process. Governance network is a growing concept that is increasingly gaining popularity in the policy process. As literature on REDD+ governance continues to bulge, most authors (Babon *et al.*, 2012, Brokhaus *et al.*, 2014; Gebara *et al.*, 2014) show that policy process emerges from a network of interdependent state and non-state actors. Provan and Kenis (2008) define network as “groups of autonomous organizations that work together to achieve not only their own goals but also a collective goal”. Such networks may be self-initiated by network members themselves, or may be mandated or contracted as is often the case in the public sector (Provan and Kenis, 2008). Networks consisting of nodes or positions and links that are embedded with the interaction of positions (Thorelli, 1986). There are various reasons for the formation of networks. Provan and Kenis (2008) argue further that organizations may join or form networks in need of gaining legitimacy, serve clients more effectively, attract more resources, and/or as they strive to address common problems. Networks can have few or many actors, and one or more kinds of relations between pairs of actors (Hannemann and Ridle, 2005). Networks have proved to be instrumental in the success of various initiatives. In the past, many conservation initiatives proved failure because little attention was paid to the interests and characteristics of stakeholders’ networks (Grimble and Wellard, 1997).

According to Thorelli (1996) and Brockhaus *et al.* (2014), power of actors is central in the network analysis. Meanwhile, Social Network Analysis (SNA) is emerging and gaining popularity as one of the best ways of assessing actors in many participatory natural resource management initiatives (Mushove and Vogel, 2005). SNA offers a solution to these limitations. Stakeholder analysis can be used to avoid inflaming conflicts, ensure that marginalization of certain groups is not reinforced, and fairly represent diverse interests (Prell *et al.*, 2009). This is because the analysis of social networks looks beyond attributes of individuals to also examine the relations among actors, the position of actors within a network, and power relations into the overall network patterns (Wellman and Frank, 2001). Similarly, SNA helps to identify which individuals and categories of stakeholders play more central roles in the network and which are more peripheral in the network (Prell *et al.*, 2009). The units of analysis for SNA are most commonly persons or organizations, but in principle any units that can be connected to other units can be studied as nodes (Marin and Wellman, 2009).

In the context of REDD+ governance process, the concept of network is the core element. Several types of network governance are likely to arise in the REDD+ governance process. It is in this context that authors such as Brockhaus *et al.* (2014) emphasize the relevance of employing policy network in the REDD+ process. In the meantime, several policy network studies (e.g. Atela and Quinn, 2014; Brockhaus *et al.*, 2014; Dkamela *et al.*, 2014) show that both state and non-state actors are interacting and influencing each other's interests, making power and brokerage key concepts in the REDD+ policy network process.

2.9.3 Strength of the relationship between stakeholders

In an attempt to explain the relation in the network, both social network and resource management literature discuss different ways in which social networks influence individual actors and groups. For example, Prell *et al.* (2009) describe the strength of relations between actors showing how strong or weak ties relate to different kinds of outcomes. Strong ties are the ones where actors share an emotionally intense relationship with one another and/or communicate frequently with one another (Prell *et al.* 2009). According to Easley and Kleinberg (2010), stronger links represent closer friendship and greater frequency of interaction. Actors sharing a strong tie tend to: (i) influence one another more than those sharing a weak tie; (ii) share similar views; (iii) offer one another emotional support and help in times of emergency; (iv) communicate effectively regarding complex information and tasks; and (v) is more likely to trust one another (Schneider *et al.* 2003; Bodin and Crona, 2006 as cited Prell *et al.* 2009). Therefore, stakeholders with strong ties are more likely to influence one another, and thus, create strong ties among diverse stakeholders and they can enhance mutual learning and sharing of resources and advice (Bodin and Crona, 2006; Newman and Dale, 2007). The advantage of strong ties is that stakeholders who have shared a strong tie for a long period of time tend to have the same information and knowledge regarding resource management (Bodin and Crona, 2006). Strong ties lead to closeness of groups or actors where transactions can be trusted, and in the way they link different groups and thereby enable the fusion of different sources of information which is available in these groups (Easley and Kleinberg, 2010).

On the other hand, a weak tie is often characterized by less frequent communication, diverse information and new ideas flow through weak ties (Prell *et al.*, 2009). However, weak ties tend to offer individuals and the network as a whole access to diverse pools of

information and resources through performing bridging roles between otherwise disconnected segments of a network and they can make a network more resilient and adaptive (Burt, 2001). On the other hand, some authors (e.g. Prell *et al.* 2009) caution that weak ties may be easy to break. Other authors (e.g. Burt 1992) warn that actors in the weak tie may lack trust and understanding needed for in-depth dialogue over environmental issues. Conversely, Prell *et al.* (2009) argue that stakeholders who have similar characteristics are better able to communicate tacit, complex information, as they tend to have higher mutual understanding between themselves. However, such homogeneity of actors can be problematic since some projects require different views and opinions to be recognized and brought into discourse (Crona and Bodin 2006; Newman and Dale 2007). In sum, classification of stakeholders based on their weak and strong ties, to a large extent, still reflects the approach by Mitchell *et al.* (1997) who classify actors based on power and legitimacy in relation to the issues in question.

In the National REDD+ governance process some actors are considered to be weak or strong based on the type of information and technological needs as well as resource requirements and existing governance structures (see Korhonen-Kurki *et al.*, 2014; Peskett and Brockhaus, 2009; Atela and Quinn, 2014). Atela and Quinn (2014) generalize that stakeholders in Africa in the process are weak partly due to numerical and technical underrepresentation in the global process networks. The scholars perceive actors to be weak because their focus is more on REDD+ funds recipient rather than being sources of technological solutions. As a result there is a lack of capacity at national level leading to implementation capacity gaps as they rely on expertise from outside.

2.9.4 Position of actors (Betweenness and centrality) in the network

According to Hannemann and Riddle (2005) three approaches (i.e., degree, closeness, and betweenness) are used to describe the locations of individuals in a network. A highly centralized network is characterized by one or a few individuals holding the majority of ties with others in the network (Prell *et al.*, 2009). Such networks are helpful for the initial phase of forming groups and building support for collective action (Olsson *et al.*, 2004; Crona and Bodin 2006). However, in a long run centralized networks are considered disadvantageous for long-term planning and problem solving.

Moreover, Bodin *et al.* (2006) distinguish between two types of centrality: that is, degree centrality and betweenness centrality. Degree centrality refers to how many other stakeholders than actors are directly connected to stakeholders with a high degree centrality and who are seen as important players for mobilizing the network and bringing other stakeholders together (Bodin *et al.* 2006). A high degree centrality indicates a large number of connections between a node and its neighbours (Huang *et al.*, 2014). Hannemann and Riddle (2005) observe that measures of centrality and power of an actor are based on actor degree or alternative trading partners that defines the advantage or disadvantage of the position. According to Hanneman and Riddle (2005), actors who have more ties have greater opportunities because they have choices, an autonomy which makes them less dependent on any specific actor, and play a powerful role in the network by having great influence over what flows in and out of the network. According to Rantala (2012), the central position of an actor in a social network is usually considered as a good indicator for power and status. Actors in this (central) position are considered to have more added advantages than others (Hannemann and Riddle, 2005).

Moreover, betweenness in the network of communication and collaboration illustrate that actors are potentially in strategic positions for information and resource flow (Rantala, 2012). Conversely, Sozen and Sagzan (2009; 2010) argue that centrality of an actor does not mean an actor's has a total control over the flow in the network because some actors who have less but effective ties with others can have more opportunity of accessing and manipulating the flow. This argument is shared by Prell *et al.* (2009) who point out that even though highly (degree) central stakeholders can be trusted to use their links to diffuse information and potentially mobilize the group to action, there are no guarantees that they can significantly influence those to whom they are tied to. This criticism on the centrality is shared by Calton and Kurland (1996) and MacArthur (1997) who caution that the ranking of stakeholders basing on their power can lead to inadequate representation of lower ranked groups or remote and disinterested actors.

However, many scholars (Brass 1992; Prell 2003; Bodin *et al.*, 2006) reveal that stakeholders holding high betweenness centrality are important for a long-term resource management planning. This is due to the fact that such actors perform a broker role of bringing together disconnected segments of the network, thus bringing diversity and new ideas to the network. Some scholars (e.g. Knoke and Yang 2008, cited by Gebara *et al.*, 2014; Bushley, 2014; Rantala and Di Gregorio, 2014; and Dkamela *et al.*, 2014) show that both betweenness degree and in-degree centrality are used as indicators of brokerage. According to these authors, the betweenness centrality reflects the type of brokerage and the potential control that a particular actor exerts over information exchange or resource flows. The centrality is differentiated in terms of in-degree or out-degree (Hanneman and Riddle, 2005). High out-degree centrality scores refer to such actors who are able to exchange with many others, or make many others aware of their

views. In view of this, actors who display high out-degree centrality are often considered to be influential (Hanneman and Riddle, 2005) in the network.

In the National REDD+ governance process Bushley (2014) and Poudel *et al.* (2014) show that central actors revealed both positive as well as negative influences of REDD+ process and governance pattern in Nepal. This is because the central actors such as NGOs and forest department are striving to influence the process for their own interests. In addition, Gebara *et al.* (2014) national NGO dedicated to environmental research and activism and government actors had the highest in-degree of influence in the network of national REDD+ governance process in Brazil.

2.9.5 Closeness of actors in the governance network

Closeness is one of the measures of the degree of centrality which shows how an individual is near to all other individuals in a network (Hannemann and Riddle, 2005). While some betweenness in the network may imply strategic positions of actors in information and resource flow (Marsden *et al.*, 1984; Freeman *et al.*, 1991; Rantala, 2012), authors such as Sabidussi (1966) recommend the measure of centrality be according to closeness of unit or node. Literature on social network analysis (e.g. Freeman, *et al.*, 1991; Hou *et al.*, 2013; Hannemann and Riddle, 2005) shows that closeness is expressed in terms of distance among various points. In the governance network, closeness is regarded as a measure of how long it will take to spread information from one node to other nodes sequentially (Hannemann and Riddle, 2005; Newman and Dale, 2007). In this regard, the closer the actors or the nodes, the faster the interaction with others because of closeness. Some authors (e.g. Huang *et al.*, 2014) consider closeness as a preferable measure to degree of centrality, because it takes into account both direct and indirect connections among units. According to Freeman *et al.* (1991), there are two

perspectives that are used to describe closeness. The first links closeness to higher status, access to information; power and prestige (e.g. Burt 1982; Bonacich 1987; Sabidussi, 1966; Freeman *et al.*, 1991). In the view of these authors, an actor who is close to others will have an advantage of having access to more information, accorded higher status, more power, greater prestige and influence than others (Freeman *et al.*, 1991). On the other hand, Freeman *et al.* (1991) purport that actors who are “close can facilitate or inhibit the communication of others and are, therefore, in a position to mediate the access of others to information, power, prestige or influence”.

Conversely, some scholars such as Hou *et al.* (2013) caution that despite closeness being considered as a preferable measure, there is need to have it carefully assessed. This is because, in some cases an actor can be very close to a relatively close subset or moderately close to every actor in a large network - and receive the same closeness score but in reality, the two are very different (Hou *et al.*, 2013). However, according to Freeman *et al.* (1991), since information of communication pass through channels of communication, pair of individuals who are socially close are connected by a channel of large capacity, while pairs which are less close are connected by channels of lower capacity of communication.

In the REDD+ governance process, closeness of actors reflect frequency of communication, prestige, power and potential of information sharing. Rantala (2012) found that based on resource and information flow, there are two groups, namely: densely connected actors (“leaders”), and a periphery of other actors (“followers”) in the REDD+ governance process. These two groups, i.e. leaders and followers, are located in different positions but each has different influence and importance. Studies (e.g. Thompson *et al.*, 2011; Bushley, 2014; Dkamela *et al.*, 2014; Gebara *et al.* (2014) show that both

government and non-government actors have used their technical expertise to forge different working relationships with actors at various levels. For instance, Bushley (2014) and Gebara *et al.* (2014) reveal that power relations, position, and collaboration of actors influenced the progress of the national REDD+ governance process by either facilitating or brokering information exchange in the REDD+ governance process. This influence is assumed to be linked to the occupation of advantageous network positions (Huo *et al.*, 2014) in the REDD+ governance process. Rantala (2012) found that some organizations which were privileged to acquire REDD+ knowledge and information strived to occupy strategic positions in the networks of REDD+ communication and information. Gebara *et al.* (2014) also found that national NGOs were well connected with each other and occupied bridging positions in the national governance process in Brazil.

In the next section, the concept of actors' brokerage in relation to REDD+ governance process network is described.

2.9.6 Actors' brokerage strategies in the policy network

The concept of brokerage is diverse across disciplines. In the economists' perspectives, brokers are occupiers of crucial nodes between different economic activities and political relationships in various arenas of control and power (Bebbington *et al.*, 2008). Some authors use the term 'brokers' interchangeably with the word 'gatekeepers'. For example, Mendoza and Nygren (2011) consider strategic gatekeepers or brokers as actors who are able to capture many of the critical resources targeted for community or group for a specific intervention. Brokers can act as a consultant, representative or a liaison (Burt, 1992). In some circumstances, an actor can develop a brokering relation between two

members of the same group, but he/she is not him/herself a member of that group resulting to the so called a "consulting" brokerage role (Burt, 1992).

In the social network analysis, Hanneman and Riddle (2005) use the concept 'betweenness' to express a broad concept of "centrality" in the network. According to Hanneman and Riddle (2005), an ego or node is between two other actors if an ego lies on the shortest directed path from one to the other. Therefore, the concepts of brokerage and betweenness have slightly differing ways of indexing just how central or powerful an ego is within their own neighborhood (Hanneman and Riddle, 2005). According to these authors, actors lying more centrally and visibly in the network seem to have more likely potential allies for other powerful actors, hence rendering them more powerful. However, this conception has been criticized by many authors including Prell *et al.* (2009), Calton and Kurland (1996) and MacArthur (1997) who urge that even centrality of stakeholders do not guarantee power and influence to other stakeholders as some networks are not easily accessible or do not interact easily.

Moreover, anthropologists and sociologists perceive brokers as having particular competencies, strategies, and careers (Bierschenk *et al.*, 2002). Thus, this paper adopts and uses the perspectives of both economists and sociologists to describe brokers.

According to Burt (2004) and Sozen and Sagzann (2010), there are four levels of brokerage types whereby an actor can create value in the policy process. These include:-

- a. informing the sides about interesting issues and difficulties;
- b. transferring best applications to both sides so that unconnected sides can receive information about activities of each other over the broker;
- c. transferring of information about strategic similarities and dissimilarities of the sides; and

- d. Creating synthesis by collecting information about beliefs and behaviours of the other sides.

So, each actor may have many opportunities to act as a "broker" which makes it necessary to examine what kind of actors are involved in the network (Hanneman and Riddle, 2005). Therefore, it is proposed to examine brokerage roles played by a given actor, by looking at where that actor lies on the directed path between two others.

In the REDD+ process, Manyika *et al.* (2013) reveal that different actors have employed different strategies to act as brokers, leading to power struggles and conflicts. The strategies include establishment of insiders and outsiders relations (Lundberg, 2013). According to Lundberg (2013), the insiders influence policy making through both informal and formal channels. The insider relations increase privilege of actor's access in the decision-making process (Lundberg, 2013). This is similar to the concept of non-state actor diplomacy in which a non-state actor is allowed to directly engage with government as described by Wallbot (2014).

On the other hand, outsiders are perceived as actors who influence policies through more indirect means, such as the media and the mobilization of citizens (Walker, 1991). In outsider relations, non-state actors are said to represent the interests of their respective constituencies, and provide policy advice (Betsill and Corell, 2008 cited by Wallbot, 2014). Other authors (e.g. Rantala and Di Gregorio, 2014; De Bruycker, 2011; Wallbot, 2014; Powell *et al.*, 2005) point out shaming and blaming, importation of power and knowledge as brokerage strategies that are used by actors to influence governance process. In the public domain, Bouwen and McCown (2007) show that interest groups seeking to shape policy and regulation can use lobbying or litigation strategies to pursue policy changes. Additionally, some authors (e.g. Wallbot, 2014, Rantala and Di Gregorio,

2014) show that actors can form alliances with strong actors that help them to successfully influence the outcome. On the other hand, brokers can take a form of consultants, representatives, or liaisons (Burt, 1992). This can lead to the so called *consulting brokerage* (Lundberg (2013) as earlier described. More *et al.* (2003) revealed that well positioned non-state actors are able to tap resources that are meant for other beneficiaries. Such brokerage strategies are likely to be deployed at local and global scales and might affect national REDD+ governance processes (Corbera and Schroeder, 2011).

Furthermore, brokerage strategies in the national REDD+ governance process are attributed to the control of resources, production of information, knowledge, power and economic benefits related to the initiative (see Aguilar-Støen, 2015; Rantala, 2012, Manyika *et al.*, 2013). According to Aguilar-Støen (2015), some actors are likely to control co-production of REDD+ science by fostering linkages between specific science and policy networks. This might happen through for example, providing or directing funds for certain types of research or research organizations, or by engaging certain actors in research (Aguilar-Støen, 2015). In addition, a number of actors (e.g. National Task Force and demonstration activities) seem to have used the opportunity of being included in the REDD+ process to gain legitimacy of knowledge to be labelled as REDD+ experts or carbon experts (e.g. Atela and Quinn, 2014; Aguilar-Støen, 2015). Besides, Wallbot (2014) and Bernard *et al.* (2014) argue that non-state actors (e.g. NGOs and Private sectors) tend to deploy insiders – outsiders relations and diplomacy strategies to influence decision at both national and international climate change dialogue.

2.10 REDD+ Process and International Discourse

REDD+ started as a global initiative (Wertz-Kanounnikoff and Angelsen 2009) which was introduced at the 11th Session of the Conference of the Parties (COP11) of the United Nations Framework Convention on Climate Change– UNFCCC held in Montreal, Canada in 2005 (UNFCCC, 2006). Several authors and literatures describe the reason behind the emergence of REDD+ initiative. According to IPCC (2007) and FAO (2012), the promotion of REDD+ is based on the fact that current carbon credits mechanisms under Kyoto Protocol exclude management of natural forests which faces deforestation and degradation and has not met the expectations of many developing countries. Articles 12 and 17 of the Kyoto Protocol allows Parties which have committed themselves to reducing their emissions to a level below 5% of the 1990 levels to meet their commitments through either setting joint implementation projects with other Annex I countries, or invest in clean development mechanism (CDM) project activities in developing countries during the first commitment period (UNFCCC, 1998).

Currently, it is only afforestation and reforestation that are eligible forms of CDM project activities (Zahabu *et al.*, 2012; FAO, 2012). In addition, none of these schemes is recognized within the framework of the European Trading System (EU ETS) (FAO, 2012). Moreover, within the existing schemes, requirements for carbon accounting are very strict, limiting the participation of small scale farmers (FAO, 2012). A number of efforts have been undertaken to try to simplify CDM rules, but they are yet to meet the expectations of many development countries. REDD+ initiative was officially included under Bali Action Plan for demonstration of REDD+ activities and thus considered as a potential mechanism in the second commitment period regime at COP 13 in Bali, Indonesia, in 2007. The second commitment period started on 1st January 2013 after the adoption of Doha amendment at COP 18.

In addition, Parties under the convention, during COP 16 held in Cancun, Mexico, 2010, agreed that REDD+ should also aim at reversing/halting forest loss (UNFCCC, 2010). Since then, the discourse on REDD+ has remained dynamic and evolving. Despite dynamism, IPCC (2014) underscores that REDD+ related policies such as agriculture and forestry are more effective when involving both mitigation and adaptation. According to the UNFCCC (2010), REDD+ will be implemented in three phases (see Wertz-Kanounnikoff and Angelsen, 2009; Zahabu *et al.*, 2012) as follows:-. Phase 1 - involves development of national strategies or action plans, policies, and measures, and capacity-building activities on monitoring, reporting and verification (MRV), and pilot project activities; Phase 2 - involves designing and implementation of national policies and measures and national strategies or action plans to reduce emission and verifiable results-based demonstration activities; and Phase 3 – involves results-based actions that can be verified and receive payments (UNFCCC, 2011, Wertz-Kanounnikoff and Angelsen, 2009). Wertz-Kanounnikoff and Angelsen (2009) perceive phased approach as an opportunity for developing countries to participate in REDD+ activities according to their national circumstances such that countries with monitoring, reporting, and verification (MRV) systems and which have well developed frameworks may start with phase 3. Conversely, countries with less capacity can start at Readiness phase and proceed to Phase 3 in which they expect payment solely for reduced emissions and enhanced carbon stocks based on the agreed reference levels.

Given the institutional and technical challenges facing most tropical countries, it was expected that the majority of the countries will start with phase 1 (Wertz-Kanounnikoff and Angelsen, 2009). Currently, many potential REDD+ countries are undertaking readiness and capacity building activities including putting in place governance structures

(Peskest and Brockhaus, 2009). According to Peskest and Brockhaus (2009), the ongoing REDD+ activities are coupled by domestic REDD+ debates, which are shaped by a variety of actors operating at different scales and levels. According to FAO(2012),high expectations onREDD+ benefits haveattracted many actors. Some of these actors consider REDD+ initiative as a means to strengthen their own agenda developed over years or even decades ago (FAO,2012). For instance, while REDD+ is seen as a way to enhance forest management by foresters and conservationists, other actors such as indigenous people, local communities, NGOs, perceive REDD+ as a chance to receive formal recognition of their traditional rights. In addition, consultants and investment agencies perceive REDD+ as an opportunity to market their services, and some may even exaggerate the potential benefits in order to convince many actors to participate (FAO, 2012).

2.11 Overview on REDD+ GovernanceProcess in Tanzania

The United Republic of Tanzania commenced her national REDD+ governance process following signing of a Letter of Intent with the Government of Royal Kingdom of Norway in 2008.Prior to the signing of the letter of Intent, rumours had spread that the Government was selling part of Ruvu Forest reserve to the Royal Government of Norway. Such rumours generated pro and anti- REDD+ initiative followers. However, following a national workshop that was held in Kibaha, all doubts were cleared and common understanding was reached among different stakeholders (URT, 2009a). According to URT (2013a),the common understanding paved a way for the development of National REDD+ Framework. The national REDD+ Framework identified and mapped out relevant stakeholders and their responsibilities (URT, 2009a). The Framework set a mechanism on how REDD+can be implemented in the country including formulation of the National REDD+ Strategy.

Moreover, a national REDD+ Task Force was established to oversee the development of the national REDD+ Strategy. The formulation of the national REDD+ strategy went parallel with the demonstration projects and research activities at local levels. The types of various actors that were engaged in the national REDD+ governance process included the Government, private sector, research organizations, non-government organizations (NGOs) (URT, 2013b; UTR, 2009a). The formulation of the national REDD+ strategy involved a series of stakeholder consultations at both national and local levels (Rantala and Di Gregorio, 2014).

Furthermore, the national REDD+ governance process drew inputs from REDD+ pilot projects and in-depth studies were conducted by NGOs and research organizations (URT, 2013a). Since actors had different preferences and interests in the REDD+ initiative, various governance structures were proposed at both national and local levels. These structures are highlighted by URT (2013a) and discussed by Manyika *et al.* (2013). Through the National REDD+ process, Tanzania proposed the establishment of National REDD+ Trust Fund and the National Carbon Monitoring Centre (NCCM). While the National REDD+ Trust Fund is still underway, the NCCM has already been established and it is operational (URT, 2009a, 2010, 2012, 2013a, LEAT, 2010). The National REDD+ Fund is expected to consolidate and distribute funds to different stakeholders at the national level (URT, 2013b). On the other hand, the proposed NCCM is expected to provide technical services on measuring, reporting, and verification of REDD+ activities and serves as a depository of data and information on REDD+ (URT, 2013b). In addition, at the local level, some parallel governance structures for REDD+ have emerged through NGOs pilot projects (see TFCG, 2008; MDCl, 2009; Manyika *et al.*, 2013). The

emergence of the REDD+ governance structures are at the centre of the national REDD+ governance process in Tanzania.

CHAPTER THREE

3.0 STUDY AREA AND METHODOLOGY

This section presents the description of the study area, characteristics of forest governance in Tanzania, description of the research design and sampling strategy as well as data collection and analysis methodologies.

3.1 Study Location and Description of the Study Area

The study was conducted as case study focusing at the national REDD+ governance process and the actors involved in the United Republic of Tanzania (URT). URT comprises Tanzania mainland and Zanzibar. It lies south of the Equator, between latitudes 1 and 12°S, and longitudes 29 and 41°E (URT, 2009b) and shares borders with Kenya and Uganda in the north; Rwanda, Burundi, and Democratic Republic of Congo in the west; Zambia and Malawi in the south-west, Mozambique in the South; and Indian Ocean in the East (Fig. 3). It covers a total area of 945087 km², land mass of 883 749 km² (881 289 km² mainland and 2 460 km² Zanzibar), plus 59 050 km² of inland water bodies. Fig.3 is the Administrative Map of Tanzania showing regional boundaries, forests, and wildlife areas.

2015b). Environment and forestry issues remain non-Union matters in both old and proposed new Constitution. Furthermore, even though the capital of the United Republic of Tanzania is Dodoma, the Head Quarters of most ministries and organizations in charge on the establishment of national governance structures as well the diplomatic missions were located/ based in Dar es Salaam at the time this study was conducted.

3.1.2 Actors at the national level REDD+ governance process

The study focused on the national level actors (the state/government actors – ministries and its agencies; the private and civil society’s organizations) who were involved in the national REDD+ governance process. The ministries, departments and agencies in the Government were according to 2010 - 2015 government structure/instrument. In this context, the government ministries and agencies that were studied are:- President’s Office–Civil Service Management Department (PO-CSMD); President’s Office, Cabinet Secretariat (PO-CS); Vice President’s Office, Division of Environment (VPO- DOE); Prime Minister’s Office Regional Administration and Local Government (PMO- RALG); Ministry of Constitution and Justice (MCJ); Ministry of Finance (MoF); Ministry of Natural Resources and Tourism (MNRT); Tanzania Forest Service (TFS); Wildlife Division (DW- MNRT); Ministry of Agriculture and Food Security (MAFS); Ministry of Minerals and Energy (MEM); Ministry of Livestock Development and Fisheries (MLDF); Ministry of Lands, and Human Settlement Development (MLHSD); and National Environmental Management Council (NEMC). Other groups were Academic and Research organizations such as Sokoine University of Agriculture (SUA), particularly the former Faculty of Forestry and Nature Conservation (now known as College of Forestry, Tourism, and Wildlife); University of Dar es Salaam- Institute of Resource Assessment (IRA) National REDD+ Secretariat; as well as the National Land Use and Planning Commission (NCLUP), Parliaments of Tanzania and selected districts.

On the other hand, the Development Partners and Non-Governmental Organizations - NGOs working on Climate Change, Tanzania Association of Non-Governmental Organizations- TANGO and the National REDD+ Task Force were also studied. These organizations were considered as agents or key nodes/actors in the process.

3.2 Methodologies

3.2.1 Research design

A cross-sectional research design was used to collect data for the selected study units at the national level and the selected districts. This approach was used because it was relatively cheaper in terms of time and cost as it allows the collection of data on more than one case at a single point in time (Bryman, 2008). A combination of methods was used to triangulate information so as to increase reliability and precision (Odell, 2001) and avoid bias.

3.2.2 Sampling unit

In this study, sampling unit was an actor representing an organization because it was a basic unit from which data were obtained. Its characteristics represented the organizations involved in the national REDD+ governance process.

3.2.3 Sampling design and sample size

Since some data/information was to be provided by only one respondent in the process, purposive sampling was applied to interview all identified actors. To obtain representation of interests of actors, the groups were stratified into five categories, namely: Government, Parastatal organizations, Non-governmental Organizations - NGOs, Private sectors and Development partners.

Initially, based on the knowledge and experience in the field, a preliminary list of potential Organizations for questionnaire interviews was produced taking into account the types of actors identified in the National REDD+ Framework, the National REDD+ strategy development process, and the REDD+ Readiness Preparation Proposal (R-PP) processes as well as the UNREDD Programme initiative (URT, 2009a). The preliminary list was then shared with what was considered a panel of experts in the national REDD+ governance process. The panel of experts consisted of six members of the National REDD Task Force, one representative from National REDD+ secretariat; and one representative from the private sector, namely Green Resources Tanzania Ltd. The six national REDD+ members included all members from VPO and MNRT. The mapping produced a preliminary list which included a total of 111 organizations. To constitute a feasible sample using the criteria of relevance and potential influence on the national REDD+ governance process, all organizations that were mentioned by the panel of experts were included. However, 43 organizations were dropped from the preliminary list for questionnaire survey and interviews due to lack of direct engagement in REDD+ policy process and non responses. The dropped organizations were from development partners, private sector and parastatal organizations.

In addition, a two-stage snowball method was used to identify actors, and these were asked to identify other actors who were engaged in the national REDD+ governance process. The actors were first asked to name organizations they collaborate with on the REDD+ process, then each of those who were identified were asked about their ties to each other. This technique was used because REDD+ was still a new concept and was not well known by most stakeholders at the initiation of the study.

Besides, three districts, namely: Kilosa, Kondoa and Lindi Rural (as Government actors) were included in the list deliberately to make a linkage between the national and the local/district level REDD+ governance processes. However, this small sample of districts was not considered representative of all districts and thus its aim was not to draw any conclusive interpretation about the involvement of districts in the national REDD+ policy process, but to shed light on eminent issues and ideas that were relevant to stakeholders at these levels as described by Rantala (2012).

The types of actors were further divided into two main categories of interests, namely political and economic actors as described by Vatn and Velled (2011). This categorization was done in order to shed light on the perception and interests of various actors with regards to REDD+. The sampling frame for this study which included all ministries and parastatal organizations of the URT was obtained from the President's Office as per 2010 -2015 Government structure. On the other hand, the names of private sector working on REDD+ were obtained from the Designated National Authority (DNA), (i.e., The Vice President's Office) which is also the UNFCCC National Focal Point in Tanzania. In this context, a total of 5 private entities among the 8 private sectors involved in the carbon business were interviewed. Further, 5 out of 15 Parastatal organizations working on carbon credit and REDD+ initiative were involved. Moreover, 16 NGOs were selected from 27 NGOs which were involved in the carbon credit initiatives. The list of NGOs working on REDD+ was obtained from the national REDD+ secretariat, Designated National Authority (DNA) and Tanzania Forum for Climate Change (ForumCC) (an umbrella organization for NGOs working on climate change in Tanzania). On the other hand, the names of development partners working on REDD+ were obtained from Development Partners Group on Environment, Natural Resources and Climate Change (DPGE). Five development partners out of 17 members of DPG-

Ewere selected from the list. In total, Sixty eight (68) actors were selected during stakeholders' mapping. Fig.4: shows organizations involved in the study.

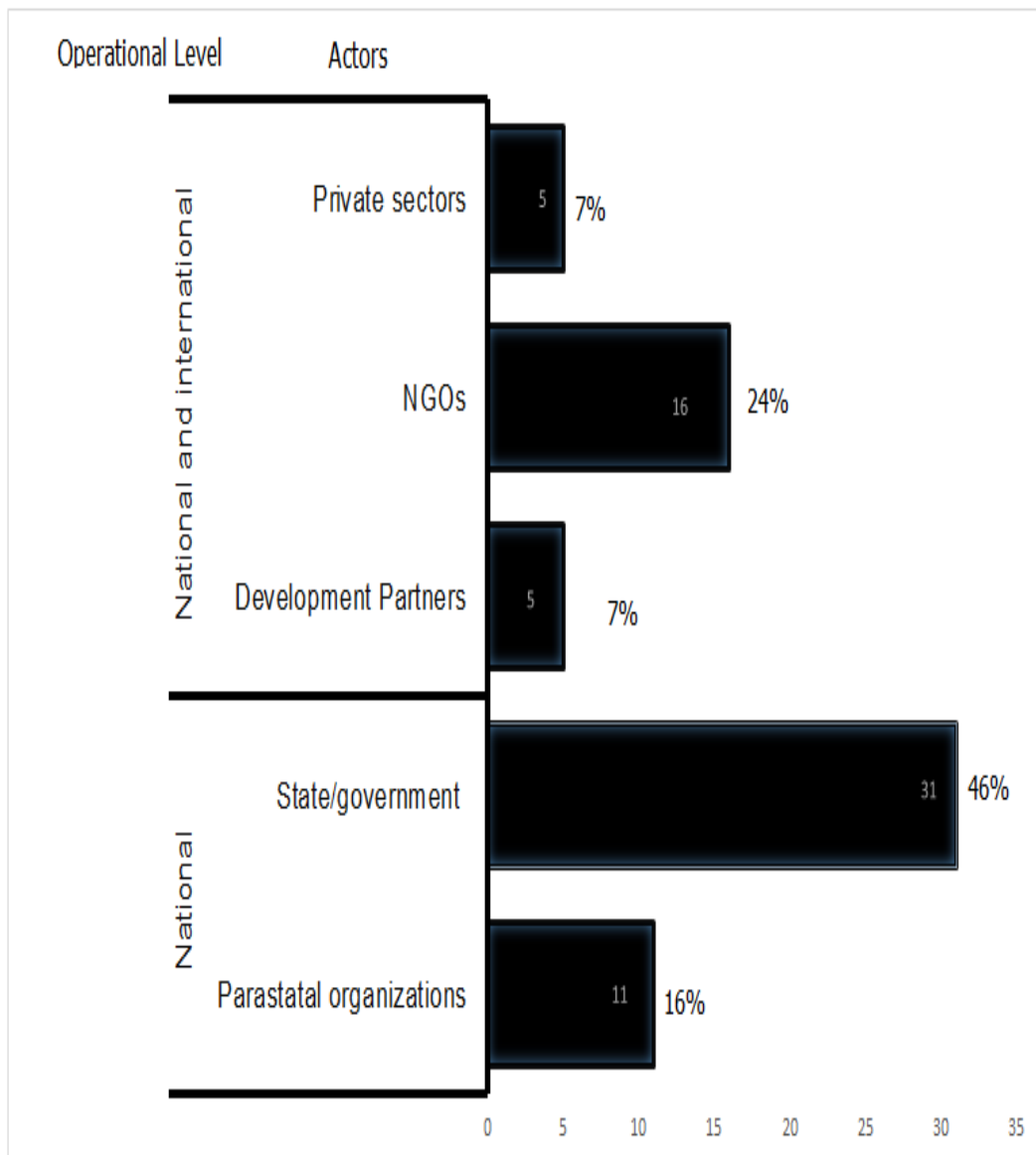


Figure 4: Organizational actors in the national REDD+ governance process

3.2.4 Data collection

3.2.4.1 Primary data collection

Both qualitative and quantitative data were collected using a combination of methods including standard social and anthropological methods. Socio-economic data were collected through Participatory Rural Appraisal (PRA) tools, Participant observation, semi structured interview and structured questionnaire and keyinformants' interview. This combination of techniques helped the researcher to compliment limitation by one technique to allow crosschecking and verification (triangulation) (Mikkelsen, 1995).

The survey was initiated by mapping up all actors from organizations which were considered Core organizations³.The questionnaires were administered to 68 representatives from Core organizations. The survey was intended to collect information from heads of organizations or their representatives. Primary data were collected using structured questionnaire; semi structured and unstructured interviews to the key informants from government actors, REDD+ task force members and other actors. This technique was aimed at collecting information on the perception of the proposed governance structures, perceived influenced of actors, power and power struggles, brokers and brokerage strategies of actors in the national REDD+ governance process. Data collected during interview with key informants included informationonthe attributes of resource provision, collaboration and exchange of information, roles and responsibilities of actors, perceptions on the existence of power struggles and brokers, factors underling power struggles and power relations among key stakeholders and perceived influences of actors in the national REDD+ governance process.

³Core organizations were defined as all organizations that consider themselves as part of the REDD policy domain and are perceived by others as such and thus able to influence (to varying degrees) the agenda setting, formulation and implementation of national REDD policies (Rantala, 2012, p.6)

Furthermore, respondents were asked to identify key/limitation of specific individual organizations which they perceive to have strong ties in the national REDD+ governance process. The criteria used were participation in the national REDD+ process, perceived influence, resource provision, preferred governance structures for both monitoring and sharing of REDD+ benefits. In addition, this assessment helped to examine brokers and brokerage strategies and source of power in the REDD+ governance process. The legitimacy assessment involved interviewing key actors to collect their views on the perceived influences, sources of power; and participation of actors in the national REDD+ process. The assessment was intended to generate data on sources of power, power relations, participation of actors, influential/powerful actors, effects of power on the legitimacy of the national REDD+ process, access to the decision making process, power relations, influence of actors and legitimacy concerns of various actors. Power mapping tool, which allows for the analysis of power structures within actors involved in the governance process as recommended by Schiffer (2007) was also used to assess the power of actors. In addition, this tool provided a better understanding of the role of power and legitimacy in the governance processes.

The following tools were used in data collection:-

i) Participatory Rural Appraisal (PRA)

PRA is an exploratory approach that aims at identifying relevant variables, their cause-effect relationship and the weight of each variable through participatory communication and analytical techniques. PRA entails relaxed relationship, open conversation and mutual sharing of views between the researchers and the communities (Kothari, 2005). In this study, variables assessed using PRA included stakeholders' interests, power relations, roles and responsibilities and interaction of actors, the existence of power struggles and factors underlying power struggles, power relations, brokers, and preferred REDD+

governance structures. PRA tools deployed in the study include pair wise ranking and scoring (for ranking power relations, dominant actors, as well as brokers which were dominating in the national REDD+ process). The ranking involved three categories of power relations namely strategic, structural and institutional power over national REDD+ process (Appendix 3). In addition, score points on power relations were used to assess the influence of various actors.

Likewise, Venn diagrams (for dominant actors and brokers) were used. Venn represent social relationships among actors and power differences among them. Venn diagram was used to identify: organisations/actors that were active in the national REDD+ governance process, who participates by position/designation and finding out how the different organisations and groups that relate to each other in terms of contact, co-operation, collaboration, flow of information and provision of services such as training on REDD+, printed REDD+ information, contractual agreements, and project reports in the national REDD+ governance process network.

ii) Focus group discussion (FGD)

FGD was conducted with a group of key informants in the national REDD+ governance process. According to Metrick (1993), Key informants are people who are accessible, willing to talk and have wide knowledge with respect to the issues under discussion. In this case, Key informants included:- The National task force members, project implementers/piloting NGOs; Members of the National REDD+ secretariat, Directors from Division of Environment Vice President's Office (VPO) and Forestry and Beekeeping Division Ministry of Natural Resources and Tourism -MNRT and experts from Sokoine University of Agriculture (SUA), and the Institute of Resource Assessment (IRA). Questions asked to stakeholders reflected issues related to their interests, type of

actors, brokers and brokerage strategies, power relations, power struggles and their underlying factors, and compromises among actors (a checklist of questions used to guide the discussion is shown in Appendix 2).

Prior to the discussion, the objectives and themes of the exercise were explained to the participants, and a request was made to such participants to participate in the discussion. A total of 5-15 participants were involved in each group in order for the researcher to have a good control of group dynamics. The types of information collected included: -the perception of power struggles, factors underlying power struggles, actors' power relations, preferred design of REDD+ governance structures, interests and expectations, and brokers and brokerage strategies of actors in the national REDD+ governance process.

iii) Structured questionnaire interview

Structured questionnaire was administered to actors selected for the purpose of collecting both quantitative and qualitative data. The structured questionnaires with both open and closed questions were administered to 68 actors representing organizations (Appendix 4). The target respondents were individual Heads of the organizations, but in most cases other staff/officers of the organizations that were considered knowledgeable and aware of the national REDD+ process were selected to respond to the questions. This method aimed at quantifying issues with special ties raised during PRA and FGD exercise. The data collected included the type of actors, designation or position of actors, actors' interests, respondents' perceptions on the existence of brokers and power struggles, provision of financial resources and factors underlying power struggles in the national REDD+ governance process.

iv) Semi structured and unstructured interviews

Semi structured and unstructured interviews were used to supplement information collected from key informants, FGD, participant observations, and structured questionnaire interview. A checklist was used to collect information (Appendix 5), which guided the exercise of questioning and probing in semi-structured interview (SSI). On the other hand, unstructured interviews involved talking casually with the respondents on particular issues without prior appointment or telling the purpose of the conversation. In this study, key informants included the National Task Force members, National UNFCCC Focal point members, representatives/project coordinators from NGOs which were piloting REDD+ projects, and researchers on REDD+. This method was used in tandem with snow ball technique whereby the respondent recommended other key informants to be interviewed next. Questions asked focused mainly on issues related to the roles and responsibilities of various actors, interests on REDD+ process, the resources provided or received, who are perceived influential/powerful actors in the national REDD+ process, brokers and brokerage strategies, power relations, preferred and proposed governance structure, perception of power struggles, factors affecting power struggles, brokerage strategies and legitimacy concerns in the national REDD+ process.

v) Participant observations

Participant observation gave the researcher deeper insider experience of many issues pertaining to the national REDD+ governance process. The researcher participated in different workshops and meetings which involved the National REDD+ Task Force; NGO workshops, national consultations meetings (during formulation of National REDD+ Strategy) and other events organized by actors who were involved in the national REDD+ governance process. This method helped to gain understanding of the type of actors participating in the National REDD+ governance process, their interests and

motivation, types of REDD+ governance structures being proposed, power relations, the existence of brokers and their brokerage strategies as well as awareness and knowledge of those actors on respect to REDD+. Attendance at the meeting provided a platform and an important relationship with different actors and how these organizations collaborated in the national REDD+ governance process. The observation improved understating of the context with which power struggles and brokerage strategies operate. Likewise, participant observation provided the researcher with an added advantage as an insider to probe more on some issues that were partially addressed by the respondents during interview and workshops.

3.2.4.2 Secondary data collection

Empirical data on the national REDD+ governance process were collected from written documents and texts such as published and unpublished documents, reports from the National REDD+ Task Force, Letter of Intent, email messages, and newspaper articles. The process was carried out continuously for almost throughout the study period. These data sources helped the researcher to generate information on power of the actors, roles and responsibilities of various actors, proposed governance structures, brokers and brokerage strategies, networks in the national REDD+ governance process. In addition, the following policies were reviewed: National Environment Policy (1997), National Forest Policy (1998), draft Revised National Forest Policy (2015), draft revised National Environment Policy (2016); Zanzibar Environment Policy (1992); Zanzibar Forest Policy (1999); Agriculture Policy (2013); and National Livestock Policy. Legislations and other legal frameworks reviewed include: Environment Management Act (2004); Forest Act (2002); Land Act (1995), Village Land Act (1995) Cap 114; and Amended Land Act (2004); National REDD+ strategy (2013), and National Climate Change Strategy (2012). Online web resource search was also conducted.

3.3 Data Analysis

3.3.1 Quantitative data analysis

Both descriptive and inferential statistical analyses were undertaken. Statistical Package for Social Sciences (SPSS) version 20 and Microsoft Excel was used to analyze the data. Descriptive analysis was used to produce distribution of responses, central tendencies, and dispersion. Cross tabulation and multiple response analyses were also performed to ascertain responses and frequencies. According to the World Bank (2002), cross tabulation is a powerful means of communicating information and the commonest way of data presentation. Inferential statistical analysis was used to show whether the patterns described in the samples are likely to apply in population from which the sample was taken (Gentle, 2002).

Logistic regression model was employed to show the relationship between dependent (Power struggles) and independent variables (factors underlying power struggles).

Logistic regression analysis

The analysis of factors underlying power struggles in the national REDD+ governance process.

A logistic regression model was adopted to assess the likelihood of occurrence of power struggles in the National REDD+ governance process. The model was applied because of the limited dependent variables (i.e. 0 and 1) and the data collected were categorical in nature. The existence of power struggles in the national REDD+ process was a dependent variable and was conceived as dichotomous dummy variable with the value of 1 if the response was YES, and ZERO value if the response was NO. Using regression coefficients (β), the prediction model was developed. The independent variables

(factors) underlying power struggles in the national REDD+ governance process included: designation or position of the actor in an organization, actors ownership of forests, organizations mandates of actors, membership in the National Task Force, the level of awareness and knowledge of actors, organizational mandates of actors, number of roles and responsibilities of actors in the national REDD+ process.

A stepwise logistic regression procedure was employed in the analysis underlying power struggles in the national REDD+ governance process. According to Dayton (1992), a stepwise logistic regression is useful when data collected include both continuous and categorical data. The dependent variable (Power struggles (y_i)) was assessed as the function of the explainable variables/factors (designation or position of actors in the organizations, ownership of forests by an organization, Organizational mandates of actors, Membership in the national REDD+ Task Force, the level of awareness and knowledge of actors, number of tasks and responsibilities assigned to actors) in the national REDD+ governance process. Only significant variables were included in the estimation of the model to attest likelihood of power struggles in the national REDD+ governance process.

The logistic model predicts the likelihood of occurrence of the event (Menard, 1995), which is predicted by odds ($Y = 1$).

That is the ratio of the probability that $Y = 0$ to the probability that $Y = 1$.

This was given by (Equation 2)

$$\text{Odd } Y = P(Y = 1) / (1 - P(Y = 1)) \dots \dots \dots (2)$$

The logit (Y) was given by the natural log of Odds (Equation 3)

$$\ln p(Y_i = 1) = \log \text{Odds} = \text{logit}(Y) \dots \dots \dots (3)$$

$1 - p(Y_i = 1)$: Where:

$Y_i = i^{\text{th}}$ observed value of power struggles.

The logistic regression model II specification was in a form: (Equation 4)

$$Y_{i1} = 1$$

$$\ln p(Y_i = 1) = \beta_0 + \sum \beta_1 X_1 + \dots + \sum \beta_k X_k \dots \dots \dots (4)$$

$$1 - p(Y_i = 1)$$

Where:

Y_i = dependent variable, power struggles in the national REDD+ governance process

$X_i - X_k$ = explanatory variables

β_0 = constant term of the model without the independent variables.

β_1 = independent variable coefficients.

Independent variables (explanatory) for factors underlying power struggles in the national REDD+ process

X1 = Level of position/designation of actor in an organization

The level of Designation or position of actors in the organization plays an important role in the development of governance structures. The position of the actor tends to stimulate confidence, motivation, and positive attitude towards organizational goals and control over the national governance process and its outcome. The level of Designation/position was as follows: 1. Junior Officer; 2. Senior Officer; 3. Assistant Director and 4. Executive Director. Then, these scales were re-categorized, scale for positions 1 and 2 to imply Non-managerial position and assigned a value of 0, whereas positions 3 and 4 were

re-categorized into Managerial positions and were assigned a value of 1. It was assumed that actors with managerial positions place more interests in the process compared to actors with non-managerial positions, therefore the former are more likely to be involved in power struggles. The level of position of an actor was recorded with respect to the managerial position held in the organization (e.g. Executive Director or Director or assistant). The expected sign of the regression was positive ($+\beta$).

X2 = Actor's ownership of forests

Ownership of forests by an organization could increase the likelihood of power struggles because of the high expectations and interests on REDD+ benefits attached by the actors to the national REDD+ governance process. Engagement of many actors who owned forests were likely to increase power struggles because forest owners have high expectations. This group was also concerned over how the REDD+ funds would flow under new REDD+ regime. Actor's ownership of forests was coded with value '1' if respondent own forests and '0' if otherwise (i.e., actor does not own forest) and the expected sign of the regression coefficient was positive ($+\beta$).

X3 = Organizational mandates of participating actors

Organizational mandates of actors participating in the national REDD+ process was assumed to have a positive sign to estimate β . This is because actors from organizations who had the mandate related to the National REDD+ governance process are likely to attach more interests in the process. Therefore, participation of actors from organizations with mandates on forest resources and environment increased the likelihood of occurrence of power struggles in the national REDD+ process. The organizational mandates were as follows: 1. Coordination of environmental agreements, 2. environmental management, 3. Forest management. 4. Advocacy, 5. Research and training, 6. Other activities. The scales

1- 4 were re-categorized as Mandates relevant to REDD+ and assigned a value of 1, while scale 5 and 6 were re-categorized as Mandates not relevant to REDD+ and were assigned a value of 0. The expected sign of the regression coefficient was positive ($+\beta$).

X4 = Membership in the national REDD+ Task Force

Membership in the national REDD+ Task Force has an implication on access and influence on the decision making in the national REDD+ process. Participation of actors as members of the national Task force was assumed to have a positive sign on the parameter estimate β as the engagement of actors in the national REDD+ task force increased the likelihood of being involved in the power struggles. Non membership in the National REDD+ Task Force lowers the chances of being engaged in power struggles because those actors will have little information on the potential benefits of REDD+ initiative and decision making process. This means that engagement of actors in the national REDD+ Task force increased the chances of power struggles in the national REDD+ governance process. Participation of actors in the national REDD+ task force was recorded with respect to whether or not a respondent was a member of the task force. Participation of actors in the national REDD+ task force was coded with value '1' if the respondent participated as a member in the task force and '0' if the actor was a non member of the task force and the expected sign of the regression coefficient was positive ($+\beta$).

X5 = Level of Actor's awareness and knowledge on REDD+ initiative

The level of awareness and knowledge of actors on national REDD+ process was assumed to have a positive sign to estimate β . The level of awareness and knowledge of actors on REDD+ initiatives have an impact on expectation on REDD+ benefits and power struggles. It was assumed that actors with high level of awareness and

knowledge on the REDD+ initiatives have high interests and motivation in the REDD+ process and increased their likelihood to be involved in power struggles. Awareness of actors was measured by assessing whether or not any actor has undertaken or participated in any initiative related to REDD+. The scale were as follows: 1. Established REDD+ Unit, 2. Attended workshop on REDD+, 3. Undertook Research on REDD+, 4. Implemented REDD+ pilot project, and 5. Not involved in activity related to REDD+. The level of awareness was recorded as 1. High awareness (for actors that were found to have all activities. from 1- 4) followed by 2. Medium awareness; 3. Low awareness; 4. No awareness. Awareness, while scale 4 and 5 were re-categorized as No awareness (i.e., 0). The scale for the level of awareness from 1 to 3 was re-categorized as 1, while the scale 4 and 5 were re-categorized as 0. Dummy variable with value '1' was assigned for the respondents who indicated of being aware and have knowledge on REDD+ or 0 if otherwise. The expected sign of the regression coefficient was positive ($+\beta$).

X6=Number of roles and responsibilities of actors in the national REDD+ governance process

The number of tasks and responsibilities of actors in the national REDD+ process could increase the likelihood of the occurrence of power struggles. This is due to the tendency of actors who were assigned different roles and responsibilities in the national REDD+ initiative to seem to use such an opportunity to advance their own interests. The variable was recorded with value '1' if the actor was assigned some roles and responsibilities or '0' if otherwise, and the expected sign of the regression was positive ($+\beta$).

3.3.2 Qualitative data analysis

i. Content analysis

Data obtained through participant observation and semi structured and unstructured interviews; key informants were subjected to content analysis. According to Stemeler (2001), content analysis is a systematic and replicable technique for compressing any words of text in few content categories based on explicit rule of coding. Content analysis helped to reduce the volume of recorded information or communication to a set of categories that represent some characteristics of the research. Both conceptual analysis (i.e., establishing the occurrence and importance of concepts and phenomenon in a text or communications) and relational analysis (i.e., which refers to examining the relations among concepts and situations) were applied in content analysis. Data collected through PRA were analysed with the assistance of PRA participants.

Desk top analysis was done to documents such as National Environment Policy (1997), National Forest Policy(1998), draft Revised National Forest Policy, draft revised National Environment Policy; Zanzibar Environment Policy (1992); Zanzibar Forest Policy (1999); Agriculture Policy (2013); and National Livestock Policy. Legislations and other legal frameworks were reviewed to explore provisions for organizations source of power and conflict and organizational mandates. These documents included Environment Management Act (2004); Forest Act (2002); Land Act (1995), Village Land Act (1995) Cap 114; and Amended Land Act (2004); National REDD+ strategy (2013), and the National Climate Change Strategy (2012). . Detailed analyses of some documentary materials were done so as to generate information that can be used to explain the national REDD+ governance process.

3.3.3 Social network analysis

Social analysis also known as policy analysis was used to analyze data collected through interviews. Social analysis was done by using UCINETsocial network software package.

The data were converted to numerical values and analysed using UCINET 6 version 6.523 and NetDraw software (Borgatti *et al.*, 1999, Borgatti *et al.*, 2009; Borgatti *et al.*, 2002). SNA is a useful tool for studying relationships and flows of information and resources among actors in policy network (Schneider *et al.*, 2003; Schneider, 2010; Wasserman and Faust, 1997, Borgatti and Everett, 1997; Wasserman and Galaskiewicz, 1994; Scott, 2004 cited by Bushley, 2014). Thus, SNA was undertaken to determine power relations, dominant or influential actors, the presence of brokers, information exchange and communication in the national REDD+ governance network process.

For social network analysis (SNA), data from excel were imported to SNA software. Social analysis was done by using UCINET social network software. SNA through network visualization was used to examine the relations among actors, how actors are positioned and how relations are structured in the overall governance process (Wellman and Frank, 2001). SNA was used to generate degree and betweenness centrality scores for each actor (Wasserman and Galaskiewicz, 1994). Three types of centrality measures were used in capturing the positional scores of the actors (i.e., 68 respondents) in the governance process. In-degree measures were used to examine centrality of actors with respect to sources of information, perceived influence, resource provision and collaborations. In-degree centrality measure in social network analysis was also used to ascertain actors' level of influence.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Existing and Emerging Governance Structures related to REDD+

4.1.1 Existing arrangement for coordination of REDD+ initiative

The study found that, some national coordination governance structures related to REDD+ and climate change issues existed in the different organization before they were officially launched in Tanzania.

The existing coordination structures include National Climate Change Steering Committee (NCCSC), National Climate Change Technical Committee (NCCTC); National Climate Change Focal Point (NCCFP) and Zanzibar Climate Change Focal Point (ZCCFP). These coordination structures were vital during initiation of REDD+ in the country as it was a stepping stone to bring together all potential actors. Table 1 shows the existing and coordination structures, responsibilities, and affiliation related to REDD.

4.1.1.1 National Climate Change Steering Committee (NCCSC)

NCCSC is an inter-ministerial committee that brings together Permanent Secretaries (PSs) from the Ministry of Energy and Minerals, the Ministry of Finance and Planning, the Ministry of Industry and Trade, the Ministry of Natural Resources and Tourism; the Ministry of Constitutional Affairs and Justice; the Ministry of Lands, Housing and Human Settlement Development; the Ministry of Agriculture and Livestock; and the Ministry of Foreign Affairs and East Africa Cooperation. This committee is chaired by the Permanent Secretariat from VPO. NCCSC was established to provide policy guidance on all climate change related issues.

Table 1: Existing and coordination structures, responsibilities and affiliation related to REDD+

S/ N	Name of existing coordination structure	Responsibilities in the National REDD+ governance process	Location/Affiliation
1	National Climate Change Steering Committee (NCCSC)	<ul style="list-style-type: none"> Provides overall policy guidance and oversees implementation of the national climate change strategy and other related strategies. Overseeing implementation of REDD+ initiative 	Vice President's Office
2	The National Climate Change Technical Committee (NCCTC)	<ul style="list-style-type: none"> Provides technical advice to NCCSC and the National Climate Change Focal Point (NCCFP) regarding the development of the national REDD+ strategy 	Vice President's Office, Division of Environment
3	National Climate Change Focal Point (NCCFP)	<ul style="list-style-type: none"> Prepares national climate change frameworks, plans, guidelines and other relevant national documents related to coordination of climate change issues 	Vice President's Office, Division of Environment
4	Zanzibar Climate Change Focal Point (ZCCFP)	<ul style="list-style-type: none"> Coordination of climate change issues in Zanzibar Responsible in implementation of National REDD+ Strategy and coordination of REDD+ strategy in Zanzibar 	Ministry responsible for Environment in Zanzibar

It also provides overall guidance and oversees implementation of the national climate change strategy and other related strategies. NCCSC receives technical advice from the National Climate Change Technical Committee (NCCTC).

4.1.1.2 National Climate Change Technical Committee (NCCTC)

NCCTC is composed of Directors from ministries and organizations related to environment and climate change. The Directors that form this committee are from ministries which constitute the NCCSC. During the REDD+ process, NCCTC was responsible for overseeing all technical issues related to the implementation of climate change issues, including development of the National REDD+ Strategy. NCCTC is also charged with the provision of technical advice to the National Climate Change Focal Point (NCCFP) on issues related to REDD+ initiative.

4.1.1.3 National Climate Change Focal Point (NCCFP)

The Vice President's Office- Division of Environment (VPO-DoE) is both the NCCFP and the Designated National Authority (DNA) under the UNFCCC and the Kyoto Protocol (KP), respectively. NCCFP is charged with the preparation of national climate change frameworks, plans, guidelines and other relevant national documents related to the coordination of climate change issues.

4.1.1.4 Zanzibar Climate Change Focal Point (ZCCFP)

ZCCFP is an entity charged with the coordination of climate change issues in Zanzibar (RGoZ, 2014). ZCCFP is responsible for the implementation of National REDD+ Strategy and coordination of REDD+ strategy in Zanzibar. In addition, Zanzibar has its own climate change strategy which serves as a framework for climate change issues in Zanzibar. However, there was no platform for ZCCFP to meet with other bodies from Tanzania mainland to discuss REDD+, except through the national REDD+ Task Force. However, due to the fact that REDD+ is not among union matters, Zanzibar has its own REDD+ process.

4.1.1.5 The National REDD+ Task Force and National REDD+ Secretariat

The study found that the National REDD+ Task Force was established following mutual agreement of two ministries (i.e., VPO and MNRT) to coordinate the governance process through the national REDD+ secretariat. The national REDD+ Task Force initially composed of 7 members from VPO, MNRT and Zanzibar. The National REDD+ Task Force comprised of six (6) representatives from the Ministry of Natural Resources and Tourism and the Vice President's Division of Environment was formed to facilitate the implementation of the agreement and initiative. In addition, one representative from Zanzibar was later included to bring the number of task force members to seven (7). However in 2012, the national Task Force was expanded to 12 members including one representative from NGOs.

Furthermore, the National Task Force was served by an Interim REDD+ secretariat under the Institute of Resource Assessment (IRA) of the University of Dar es Salaam. The main tasks and responsibilities of the National REDD+ Task Force included guiding development of the national REDD+ strategy. Both National REDD+ Task Force and its secretariat operated on interim basis during the development of the national REDD+ Strategy. The National REDD+ Secretariat force coordinated day to day activities of national REDD+ governance process on behalf of the national Task Force. On the other hand, the National REDD+ Task Force had a limited mandate in approving both projects and financial resources because it was not facilitated by the Government but rather by a development partner (i.e. RNE).

On the other hand, these results imply that even though new national REDD+ governance structures were formed to cater for REDD+ initiative, some national governance structures related to REDD+ initiative existed and were used to coordinate the national

REDD+ governance process. While the existing governance structures were important in bridging REDD+ in the country, the newly formed governance structures became an important platform for facilitating dialogues and deliberations on REDD+. These results suggest that REDD+ initiative can be used to strengthen the existing structures while aligning with the emerging structures at various levels. Therefore, both the existing and new governance structures were critical in facilitating the national REDD+ governance process. The results compare well with those by Kajembe *et al.* (2015) who reported that despite the establishment of special committees for REDD+ implementation in the villages by African Wildlife Fund (AWF) in Kondo, the existing committees and institutions played a great role in facilitating the introduction of REDD+ project. Similarly, several authors (Petkova *et al.*, 2011; Clements, 2010; Kanninen *et al.*, 2007) found that new governance structures were being aligned with the existing REDD+ governance structures in Burkina Faso, China, and Indonesia.

4.2 Emerging National REDD+ Governance Structures

4.2.1 Options for establishing National REDD+ governance structures

Two main options on the governance structures dominated the global discourse and development of REDD+ governance structures. The results revealed that National Fund and market based systems (both at national and local levels) feature as the main options preferred by various actors in Tanzania. Through the National REDD+ Framework and National REDD+ Strategy, most government actors proposed and favoured a centralized management body (National REDD+ Trust Fund) that can be used to effect REDD+ payments to the beneficiaries. On the other hand, most non-state actors preferred a market based governance structure or sub-national governance structure. Table 2 shows responses from actors on preferred options for national REDD+ payment governance structures.

Table 2: Responses of actors on preferred REDD+ governance options

Type of actors	REDD+ governance structure options			
	Autonomous National REDD+ Fund	Semi autonomous National REDD+ Fund	Budget support system	Market based system
Government	29 (n=20)	10(n=7)	3 (n=2)	3 (n=2)
Parastatal organizations	13 (n=9)	1.5 (n= 1)	0 (n=0)	1.5 (n= 1)
Development Partners	1.5% (n=1)	0 (n=0)	0 (n=0)	6 (n=4)
Private sector	0 (n=0)	0 (n=0)	0 (n=0)	7 (n=5)
NGOs	3 (n=2)	0 (n=0)	0 (n=0)	21 (n=14)
Total	47(n=32)	12(n=8)	3 (n=2)	38(n =26)

4.2.1.1 Autonomous National REDD+ Fund

Table 2 shows that the Autonomous National REDD+ Fund (47%) was the most preferred governance structure as payment system for REDD+ activities. The results show further that most actors who preferred the National REDD+ Fund were from the Government. This means that they envisaged the proposed fund to be hosted within government department/agencies where they can access the funds easily. The argument put forward by government actors was that autonomous national REDD+ Fund is free from interference by international communities and is expected to support REDD+ activities based on national policies and priorities.

Moreover, proponents of the autonomous national REDD+ fund based option argued that it is easy to manage and disburse funds to different stakeholders under such a system. In addition, government actors argued that using autonomous National REDD+ Fund based system option stands a better chance of addressing issues of leakages and sustainable development (Vatn, 2011) than the market based option. To this end, most government actors perceived that a market based structure does not respond to the needs of Tanzania since drivers for deforestation are different from one country to another. The main drivers

of deforestation and forest degradation in Tanzania are said to be energy needs and subsistence agriculture. These arguments were also supported and shared by parastatal organizations. Interestingly, only few NGOs supported the autonomous REDD+ Trust Fund. NGOs that favoured national REDD+ Fund option shared the same arguments as government actors arguing that the autonomous national REDD+ system will provide equal opportunities for stakeholders to access funds compared to market based option. Thus, proponents of the Fund based system from NGOs argued that such a system will assist non-profit organizations to receive funds. However, the proposal by NGOs seemed to be linked to the nested approach governance structure which was presumed to allow both payment and monitoring to be undertaken at a village or local levels.

4.2.1.2 Market based system

Table 2 shows further that, market based system was a second preferred national REDD+ governance system for REDD+ payments (i.e. 38%). The results revealed that most actors who preferred market based option were from NGOs, private sector, and development partners. Discussion with Key informants revealed that these actors preferred market based option because of the perception that such governance structure will allow direct payments to the villagers or local communities. Both NGOs and private sector further argued that market based governance structures are free from corruption and bureaucracy. This can be supported by the evidence by RNE that refused to channel funds through government entities because of corruption allegations in one of the ministries at the time of the introduction of REDD+ in the country.

Moreover, NGOs and private sector actors argue that market based system is more transparent than a fund based architecture which is likely to be marred with favouritism in its operations. Additionally, private sector actors argue that a market based structure

will allow different companies to sell carbon emission reduction units to generate money to support local REDD+ activities and other social services. The concerns raised by NGOs, development partners, and the private sector reflects the global concern of many stakeholders in many developing countries. These results suggest that issues of transparent and anti-corruption measures need to be considered in the design of emerging governance structures at all levels and every REDD+ country. Kanninen *et al.* (2007) reported on the prevalence of corruption and transparent in the national REDD+ process in Indonesia and Burkina Faso. Similarly, Bernard *et al.* (2014) found that key governance issues, particularly anti-corruption, carbon rights, and benefit-sharing arrangements were at the forefront of the national REDD+ governance process in Kenya.

On the other hand, the results also showed that there was only a small group of actors from the Government who backed the option of market based governance structure. Proponents of market based option from the Government aired similar views as those aired by NGOs, private sector, and parastatal organizations, in particular emphasizing on the issues of non interference and enhancement of transparency improvised in the market system. One of the respondents from the government actors pointed out that

“...we work in the government; we know and have witnessed most existing national funds suffering from political interference. There are some incidences where the funds were redirected to other government uses. Therefore, a support the market based system for governance”.

In addition, some government actors pointed out that market based system option will be able to leverage resources to supplement public sources and voluntary donations. Another argument in favour of the market based governance structure option was that it will ensure independence from governments and increase donor confidence.

Moreover, the results showed that a large number of actors from government sectors were afraid of market based governance structure arguing that it would lead to land grabbing and loss of land rights among local communities. The (government) actors were also concerned that market based governance structure can be associated with high transaction costs for local communities. In addition, government actors argued that the experience from Clean Development Mechanism (CDM) in Tanzania showed market-based option failed to operate. One of the responded from the Government had this to say

“.... market based governance system does not favour poor people, it is a kind of exploitation and neo- colonization that the government of Tanzania does not support...It is in this context that the national position of Tanzania supports development of a fund based governance structure at the international discussion.We should not make any mistake at national level to throw away a national REDD+ system which was defended at international level”.

This results reflect the concerns raised by Vatn and Velded (2011) and Vatn and Angelsen, 2009) who showed how market/project based governance system it is perceived as the weakest alternative in terms of political legitimacy, addressing leakage, permanence, coordination, transaction costs, and the expected delivery on co- benefits., Springate-Baginski and Wollenberg (2010) reported similar concern arguing that the poorest stakeholders are likely to lose their rights under carbon markets.

Furthermore, the market based governance option was supported by development partners who argued that such governed system could attract more financial flow to Tanzania given its present high deforestation rate. Additionally, development partners argued that since operationalization of the National REDD+ Fund was taking much money and that some actors who are ready to implement and receive REDD+ payments,

market based system could be the best option in Tanzania. Besides, development partners were also concerned over the weak financial management in the government. In view of this, it was argued that building a strong and separate system such as market based system may be the only viable option. This argument was also based on the concerns over corruption and fiduciary risk which was believed to exist in the central government at the onset of the national REDD+ governance process. The concerns of corruption and mismanagement allegations prompted RNE to channel funds through IRA and NGOs. However, channelling of REDD+ through IRA and NGOs was not well received by government actors, who consistently questioned this decision. This implies that the choice of governance structures can trigger conflict over which design and who has the right to benefit from REDD+. This finding showed that some conflict emerged with respect to who was the appropriate entity to receive fund for REDD+ activities. Kweka *et al.* (2015) and NORAD (2013) reported slow progress of the national REDD+ governance process which is attributed to lack of a sense of ownership by government actors.

4.2.1.3 Semi Autonomous National REDD+ Fund

On the other hand, Table 2 shows that Semi Autonomous National REDD+ Fund system was the third preferred option (i.e. 12%). Government actors who preferred a semi-autonomous National REDD+ Fund option argued that it can provide wide coverage throughout the country at low cost. This is due to the existing capacities and competences of the present state agencies which are widely spread throughout the country. On the other hand, all development partners, NGOs, and private sector actors were sceptical on the efficiency of the semi-autonomous fund option pointing out the possibility of interference by the central government. NGOs and other actors were already concerned that through a semi-autonomous REDD+ Fund, there is a risk of using it as a platform to recentralize

forest governance. Such concerns were also reported by Larson and Ribot (2009) in the case of Uganda, whereby lack of incentive in the REDD+ stalled decentralisation of forest management. This can jeopardize the achievements already gained through the ongoing decentralized forest governance through other initiatives in the country such as PFM.

4.2.1.4 Budget Support System

Besides, Table 2 reveals further that the budget support system was the least preferred option (i.e. 3%) and was proposed by government actors only. The proponents (government actors) argued that Budget support option had the least transaction costs since it can use the existing governance structures and state administration to manage the fund. However, actors from private sector, parastatal organizations and NGOs seemed not to prefer this option because of lack of independence from the central government and high risk of funds being redirected to other expenditures. Conversely, in Brazil, May *et al.* (2011) reported that argument for the national fund based system was based on the concern that developed countries should not be allowed to offset their emissions in exchange of REDD+ credit.

4.3 Selected National REDD+ Governance Structures in Tanzania

The design and choice of the emerging national REDD+ governance structures were based on the proposals and interests of various actors involved in the dialogue. Results in Table 2 show that an autonomous national REDD+ Fund was supported by majority of actors (i.e., except actors from private sector). Thus, the National REDD+ Fund based option was finally adopted and included in the national REDD+ strategy document. However, the National REDD+ Fund based option enjoyed majority support mainly from the Government and parastatal organization actors.

On the other hand, the market based option enjoyed a support of 38% from organizational actors. As a compromise, it was decided that a private facility would also be established as part of the National REDD+ Trust Fund which recognizes a nested approach national REDD+ strategy. The inclusion of the private facility in the National REDD+ Fund option can be considered as an official recognition of the market based governance structure in Tanzania. In addition, the inclusion of the Private sector facility in the national REDD+ fund based REDD+ governance structure can be considered as a win-win scenario by non-government actors (mostly NGOs, development and private sectors) who proposed it. However, despite agreeing on the National REDD+ Trust Fund as REDD+ governance option, there was no consensus on how funds will be disbursed to beneficiaries at different levels. Lack of consensus on this matter is an indication of either a conflict (and) or the evidence that there are still obvious disagreements on the design of governance payment structures in Tanzania. Similarly, Larson and Ribot (2009) showed that lack of clarity on the incentive mechanism affected REDD+ progress in Uganda.

Generally, the results simply that there was a diversity of views with respect to the preferred REDD+ governance options in the country. This implies that most actors are worried about independence or freedom of the emerging REDD+ governance structures. Most actors seem to prefer national governance structures that can guarantee freedom and minimal risks of corruption. However, a clear division existed between government and non-government actors with regard to the preferred national REDD+ governance structure. The results therefore suggest that the final adoption of the national REDD+ governance should be able to deliver to all beneficiaries without any interference and it should also be transparent enough to minimize risks of corruption. Similar results are reported by Pickett and Brock ahus (2014) and Vatn and Velled (2011) who revealed that

different countries have been presenting different positions on what can be appropriate governance structures.

4.4 Main Actors, Roles and Responsibilities in the National REDD+ Governance

Process

4.4.1 Main actors in the national REDD+ governance process

The main categories of actors identified in the national REDD+ governance process include: government, parastatal organizations, development partners, private sector, and non-governmental organizations (NGOs) who also formed the National REDD+ Task Force. Table 3 shows the main types of actors and operational levels in the national REDD+ governance process.

Table 3: Main types of actors and operational levels in the national REDD+ governance process (n=68)

	Main type of actors	Number of actors identified	Percent
1	Government	31	45.6
2	Parastatal organization	11	16.2
3	Development Partners	5	7.4
4	Private sectors	5	7.4
5	NGOs	16	23.5
	Total	68	100.0

The results indicate that many of the actors who were involved in the national REDD+ governance process came from the Government, followed by parastatal organizations and NGOs. Development partners and private sector were represented by small number of actors. Having a large number of government actors engaged in the national REDD+ governance process is related to the reality that the REDD+ initiative in Tanzania was

introduced mainly via the Government following various decision at the international level. A large number of government actors also related to the composition of the National REDD+ Task Force which was mainly dominated by government representatives. Fig.5: shows the composition of the national REDD+ Task Force.

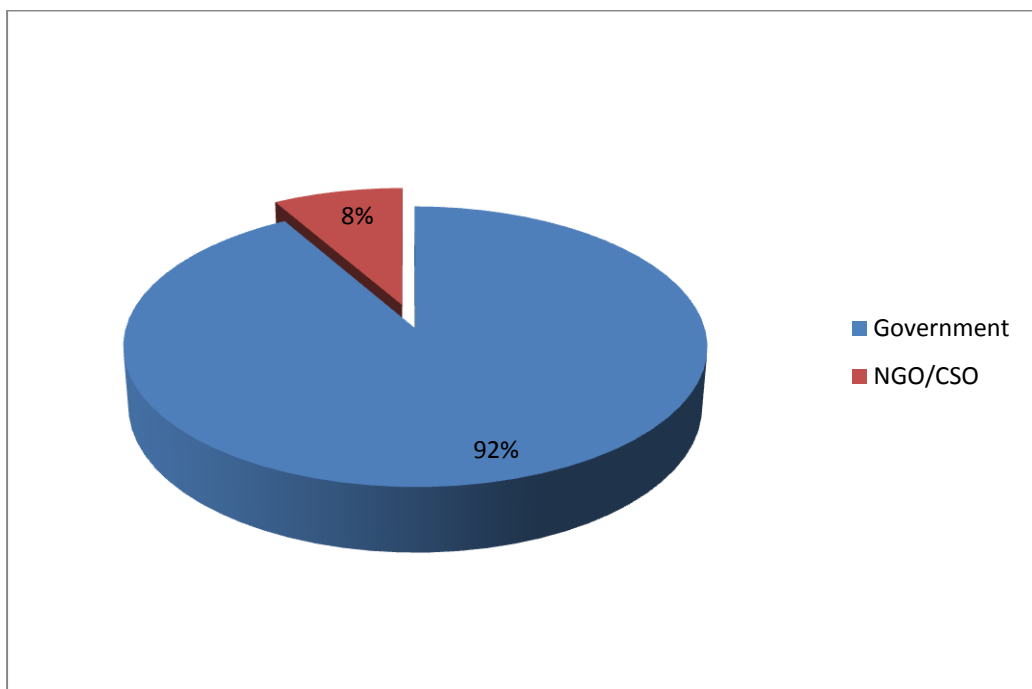


Figure 5: Composition of the national REDD+ Task Force

The results show that 92% of the members of the National REDD+ Task Force were from government organizations. These results suggest that the decision making platform in the course of national REDD+ governance process was within the hands of government actors. However, having a large number of government actors did not mean that there is a direct influence on the outcome of the national REDD+ governance process since other actors used different avenue to ensure that their interests are reflected in the outcome. The results are similar to those reported by Aguilar-Støen (2015) who also found that government actors had some influence in the REDD+ readiness process in Costa Rica, creating public spaces for participation. Conversely, Dkamela *et al.* (2014) found that

some actors who were not visible were also able to influence decisions in Cameroon's forest sector.

On the other hand, the results showed that the number of actors from NGOs was also relatively large compared to the number of other actors in the national REDD+ governance process. The plausible reasons for relatively large number of NGOs engagement in the national REDD+ governance process are the manner in which tasks and responsibilities were assigned to various actors. Most NGOs were tasked to pilot REDD+ activities which in turn motivated them to engage in the national REDD+ governance process. Most of the NGOs were involved in activities related to forest conservation and natural resource management. In addition, most NGOs were either involved in the payment for ecosystem services (PES) and participatory forestry management (PFM) which are considered as a vehicle for REDD+ governance. These results are similar to those reported by Aguilar-Støen (2015) who found that actors that led REDD+ processes in Costa Rica and Columbia had some experience on PES. In addition, May *et al.* (2011) and Dkamela *et al.* (2014) reported having a numbers of NGOs engaged in REDD+ in Brazil and Cameroon, because they had some experience of forest conservation activities.

Moreover, the results revealed a small number of actors from private sector and development partners who were involved in the national REDD+ governance process. According to the key informants, the small numbers of private sector involvement in the national REDD+ governance process is attributed to low level of awareness on REDD+ and climate change issues. Thus, engagement of few development partners and few private sectors suggest that more awareness activities on REDD+ need to be undertaken to address underlying challenges in the national REDD+ governance process. On the other hand, they may either have little interest in or they are suspicious of the benefits from

REDD+. Similarly, Brockhaus *et al.* (2013) report that private sector actors were not well represented in most countries due to their reluctance in supporting REDD+ initiative and inadequate awareness. Conversely, Bernard *et al.* (2014) in Kenya, and Babonet *al.* (2014) in Papua New Guinea (PNG), observed a large number of private sector actors who were actively involved in the national REDD+ governance process due to high level of awareness on the potential benefit of REDD+. These results also reflect a global trend reported by Brockhaus and McNeill (2012) who found that government and NGOs were leading the national REDD+ governance process because they seemed to have some experience on forest conservation and PES.

4.4.2 Roles and Responsibilities of actors in the national REDD+ governance process

The study found that actors that were involved in the national REDD+ governance process had different roles and responsibilities. The roles and responsibilities included (i) policy formulation, (ii) implementation of REDD+ pilot activities, (iii) awareness creation/raising and local community mobilization, (iv) carrying out research activities related to REDD+, (v) provision of financial support to the governance process and other activities. Fig. 6: shows the responses on the roles and responsibilities of various actors involved in the national REDD+ process.

The results show that most actors were engaged in the formulation of policies and implementation of activities related to REDD+. This is linked to the fact that the majority of the actors were from government ministries whose core roles and responsibilities relate to policy formulation that is regulating the activities. Further, the results show that government actors were involved in the coordination of REDD+ process, provision of

policy guidance, review of some legal frameworks and creation of awareness on REDD+ initiative.

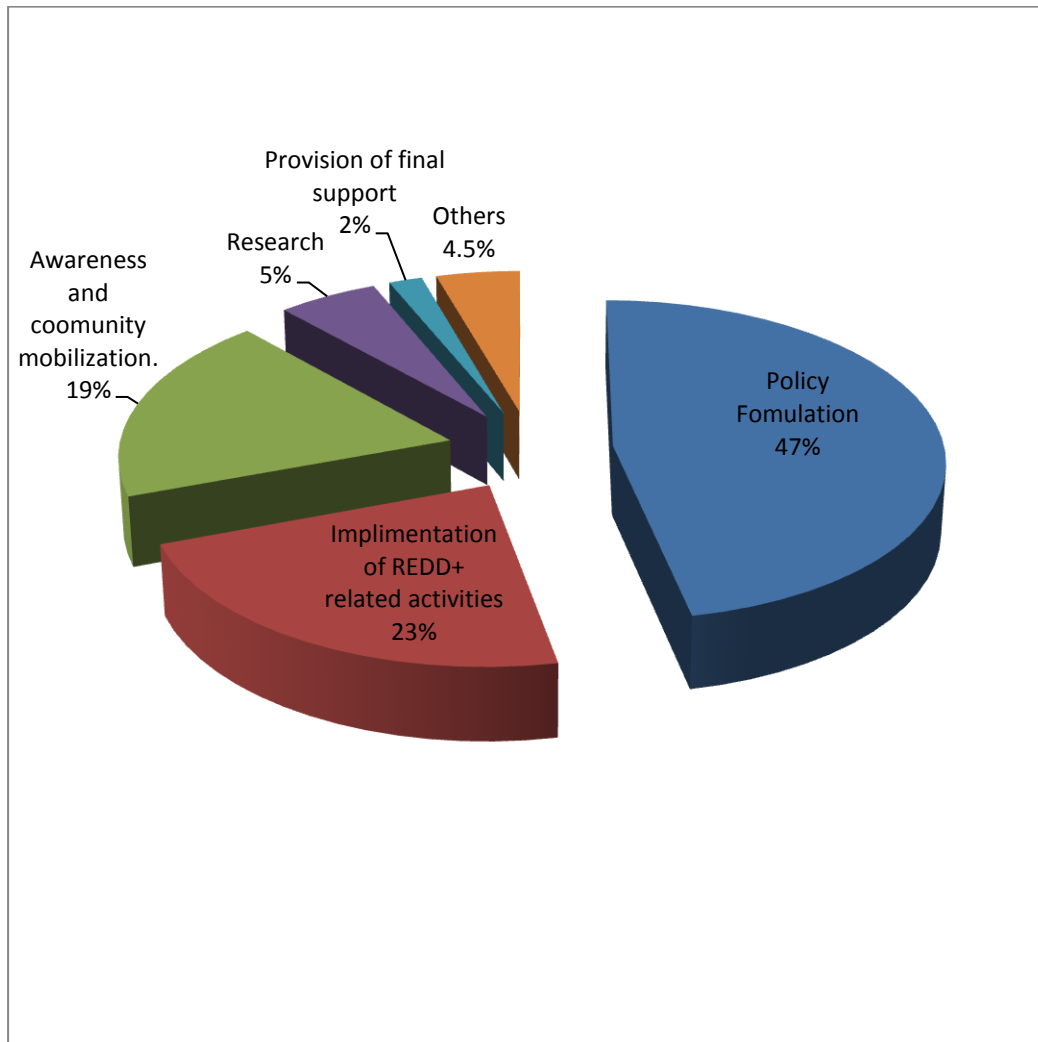


Figure 6: Responses on roles of various actors in the national REDD+ process.

Moreover, government actors were charged with making final decisions during the REDD+ governance processes (e.g. selection of types of governance structures and host organization for some emerging governance structures). This complemented the work of the national REDD+ Task Force. Moreover, the study revealed that actors from government organizations were also engaged in the negotiation of REDD+ at national and international levels. Negotiation at international and national levels was one of the sources of information on REDD+ initiative during the national REDD+ governance process.

The results revealed further that development partners were providing financial resources and technical support that were used to facilitate the REDD+ governance process. Development partners were also involved in awareness creation and facilitation of implementation of REDD+ pilot projects in collaboration with non-government actors, particularly NGOs and parastatal organizations. This means that development partners were the main source of financial resources for facilitating the national REDD+ governance process. Recipients of financial resources included government actors, research organizations and NGOs. This reflects Brockhaus *et al.* (2014) argument that given the high level of technical knowledge required to set up governance structures, it is necessary to mobilize expertise and resources from non-governmental actors and international organizations that have accumulated for years.

The results revealed further that NGOs were engaged in piloting of REDD+ activities, provision of technical advice and consultancy services to other stakeholders. They were also involved in the creation of awareness on REDD+ issues and establishment of locally based REDD+ governance structures. They (NGOs) organized showcasing activities at both national and international levels as part of awareness creation. In addition, NGOs were also involved in lobbying the government to develop national REDD+ governance structures which can benefit local communities. This is linked to historical activities and motives of NGOs who have been engaged in similar activities from the onset of the REDD+ initiative. Most studies (Brochaus *et al.*, 2012; Rantla, 2012; Bushley, 2014) reveal that public awareness and information have been at the core of the goals of NGOs involvement in the REDD+ process. Similarly, Wallbott (2014) found that globally, NGOs actively participated in awareness raising and education at different international

negotiations arenas. In Nepal, Bushely, and Khatri (2011) report that NGOs coordinated awareness campaigns on REDD+ initiative at both national and local levels.

On the other hand, the results revealed that IRA and SUA were involved in research and training on REDD+ related issues, provision of technical advice and services to various stakeholders. IRA and SUA were also involved in awareness creation and provision of consultancy services on REDD+ to different stakeholders (i.e., government and NGOs actors). In addition, IRA was assigned major and crucial responsibilities of serving as a REDD+ secretariat to the National REDD+ Task Force. The REDD+ Secretariat coordinated the day to day activities of national REDD+ governance process.

On the other hand, results indicate that private sector actors (i.e., Green resources Ltd) were involved in the technical discussion and expert meetings. It was observed that private sector actors were to some extent involved in the REDD+ dialogues only when they were invited by the government. Private sector actors were also involved in lobbying the development partners and government actors to support the adoption of the market based REDD+ governance structure. These results imply that private sector actors' participation in the national REDD+ governance process was, to a large extent, dependent on the discretion of the government actors even though they (private sector actors) were an interested party. Unlike other actors, the private sector actors were not assigned specific roles in the national REDD+ governance process. This implies that most of the private sector actors did not have direct influence on the national REDD+ governance process.

These results suggest that distribution of the roles and responsibilities of actors in the REDD+ process was also defined by technical and political motivation of various levels. However, since responsibilities of various actors during the national REDD+

governance process were not static as actors were able to switch from one responsibility to another or to have overlapping roles as they strived to acquire strategic positions. That is why some NGOs were able to operate as providers of consultancy services, to undertake awareness creation campaigns, to lobby and pressurize the government during the national REDD+ governance process. Moreover, the results revealed that some activities (e.g. awareness creation and participation in negotiations) were undertaken by almost all types of actors. This may be related to strategies of some actors who wanted to influence the process through awareness creation by using their information and knowledge on REDD+. That is why both government and NGOs actors were involved in awareness creation. Similarly, in Cameroon and DR Congo, Dkamela *et al.* (2014) found out that non-government actors led capacity building activities. A similar finding was also reported in Indonesia, where Korhonen-Kurki *et al.* (2014) found out that civil NGO actors formed coalition to raise awareness on REDD+ and challenging the government.

4.5 Legitimacy in the National REDD+ Governance Process

4.5.1 Dominant actors in the national REDD+ governance process

Fig.7 shows perceptions on dominant actors in the national REDD+ governance process.

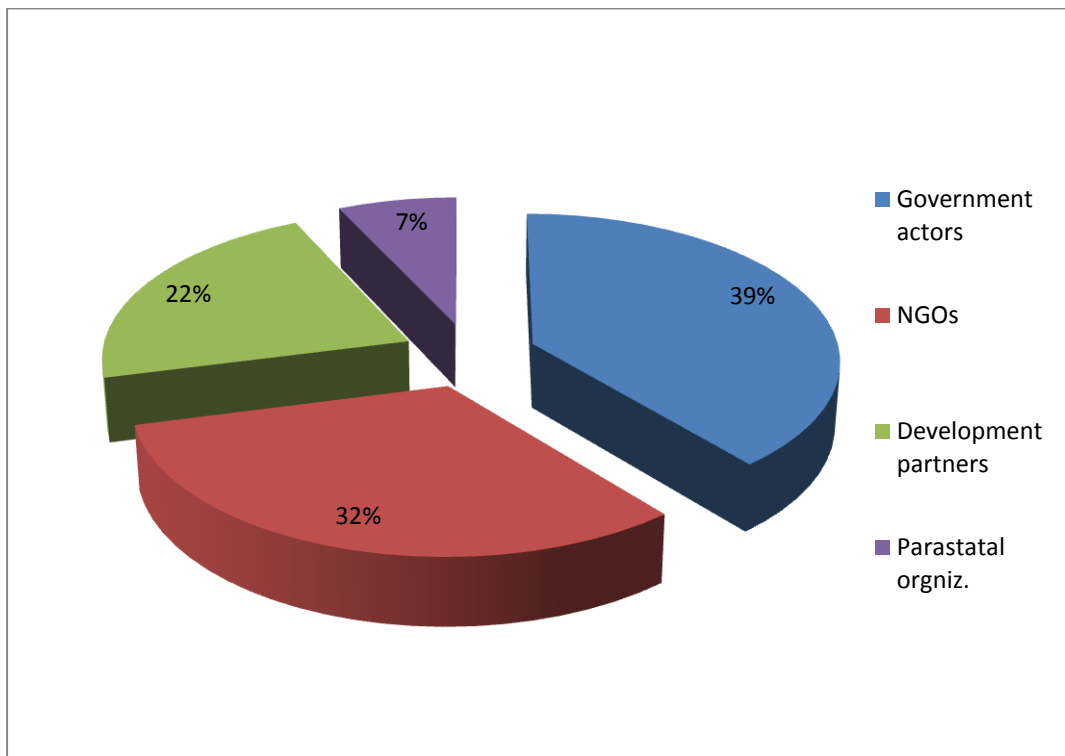


Figure7: Perception on dominant actors in the national REDD+ process

The results show that government actors (39%) were considered dominant actors in the process, followed by NGOs (32%), Development partners (22%), and Parastatal organizations (7%). The perceived domination by government actors is linked to their large number of representatives in both national REDD+ Task Force and other national REDD+ related events. NGOs ranked as second dominant actors due to their active engagement and visibility in the REDD+ related activities. The amount of financial resources which was provided to facilitate NGOs demonstration activities has increased both their visibility and on REDD+. This is because REDD+ piloting gave NGOs a platform to be visible to many stakeholders while increasing their knowledge based on piloting activities. Gebara *et al.* (2014) found that government actors and national NGOs were dominant actors in Brazil REDD+ governance process. Interestingly, Angelsen and McNeil (2012) also observed that NGOs were leading players in the global REDD+ pilot projects.

Moreover, Development partners were perceived as third dominant actors due to their influence on decisions particularly with respect to where REDD+ funds can be directed. It was observed that even though most projects were approved by the national REDD+ Task Force, the final decision on funding was done by the Royal Norwegian Embassy (RNE). After signing of Letter of Intent, RNE decided that all REDD+ funds should go through NGOs in the absence of independent REDD+ governance structures. In this context, most government actors seemed to be sidelined on decisions regarding financial issues. RNE was in this context responsible for direct disbursement of the funds to local projects implemented by NGOs. The approval and direct disbursement of funds to local projects by RNE suggest that some international actors transformed themselves into national and local actors. In this regard, the national government lacked accountability in the resource provision. Similarly, Angelsen and McNeil (2012) reported that both multinational agencies and donor countries had transformed themselves into political actors at the local scene. However, such transformation triggered concerns on ownership of the national REDD+ governance process. Thus, the transformation of actors can lead to input legitimacy concerns for some actors at the national level. Dkamela *et al.* (2014) found that international actors and NGOs were the main donors of the REDD+ governance process in Cameroon. However, NORAD (2014) also found that achievement of readiness outcomes in Tanzania was limited by lack of national government ownership and decision making.

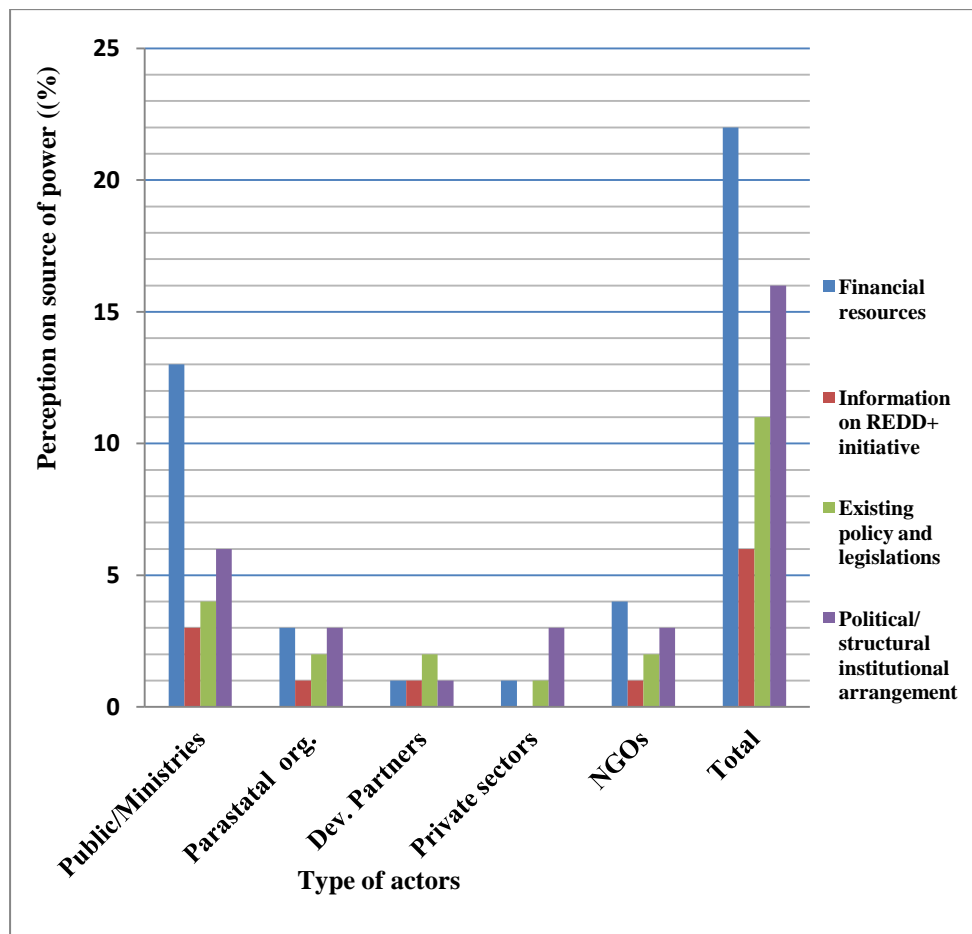
4.5.2 Sources of power in the national REDD+ process

The study identified various sources of power during the national REDD+ governance process. Table 4 shows the sources and types of power that influence legitimacy of the national REDD+ governance process.

Table 4: Sources of power and types of power relations underlying legitimacy

S/N	Sources of power	Type of power relations
1	Financial resources	Strategic power
2	Ownership of forest resources	Strategic power
3	Possession of information on REDD+ initiative	Strategic power
4	Existing policies and legislation	Institutional power
5	High ranking government offices	Institutional and structural power

The results show different perceptions among actors with respect to sources of power and influence on the national REDD+ governance process. Fig. 8 shows the responses of actors on the perceived sources of power in the national REDD+ governance process.

**Figure 8: Sources of power in the national REDD+ governance process**

The results showed that financial resources and possession of information on REDD+ initiatives were considered as the main sources of strategic power in the national REDD+ governance process. These results imply that actors who provided financial resources in the national REDD+ process were considered as powerful actors. This perception is linked to high expectations on financial flows amongst most actors. In this context, the results imply that most actors were attracted to participate in the REDD+ governance process for the purpose of benefiting from financial incentive. However, higher dependence of financial incentive from development partners can trigger concerns on the legitimacy of the process. Barbieri and Tesfu (2012) warned that new sources of financing were the source of power in REDD+ that could reverse some earlier achievement in the forests. Besides, Mulder (2011) found that international donors favouring support of the central government was a source of concern for legitimacy.

Furthermore, possession of knowledge and information on REDD+ was perceived as a source of power. In this regard, piloting NGOs were seen as pioneers of REDD+. Thus, they were believed to possess knowledge and experience on REDD+ initiative. Thus, information and knowledge accrued from implementation of pilot REDD+ projects were seen as a source of power. This is because REDD+ was a new concept, thus the possession of technical information was one way of influencing other actors who had no information and knowledge on REDD+. These results conform to those by Aguilar-Støen (2015) who observed that strategic control of information on REDD+ facilitated NGOs and Government actors to influence the national REDD+ governance process in Columbia and Cost Rica.

On the other hand, the existing legislations and policies were seen as sources of power of some actors in the national REDD+ governance process. Since REDD+ is linked to the

environment and forestry sectors, Environmental policies (1997); Environment Management Act (2004); National Forest Policy (1998) and Forest Act (2002) were considered to bolster powers of the two Government organizations (i.e., VPO and MNRT/TFS). VPO and MNRT are overseers of policies and legislations related to the environment and forest sectors in the country. Based on the existing legislations, VPO and MNRT mutually agreed to establish the first National REDD+ Task Force in 2009. However, complaints from other stakeholders including (government and non-government actors) led to the expansion of the National Task Force in 2012. The complaints were based on the arguments that REDD+ was a crosscutting issue that needed the engagement of a broader range of actors across the board.

Moreover, high ranking offices were considered as a source of organizational powerful of actors. Thus, VPO and MNRT were considered powerful due to both institutional and structural powers. The perceived sources of powers of high ranking offices were attributed to the existing policies and legislation. Given the inherent power of these two government actors, the chair of the National REDD+ Task Force was chosen from VPO. Bofin *et al.* (2011) found the existence of the tension between the Ministry of Environment and the Ministry of Planning as coordination bodies and recommended that high skills are required to mitigate tensions between the Ministry responsible for environment and the Ministry of Planning in DRC. The study by Brockhaus and de Gregorio (2014) also found that concentration of power to NGOs in Nepal and Cameroon was based on the type of organizations and expertise of actors on REDD+ issues.

These results suggest that sources of power of different actors were determinant factors in influencing the national REDD+ governance process. However, since REDD+ is a result

based payment scheme, the sources of power are likely to change as the national REDD+ governance process evolve leading to new sources of power and influence.

4.5.3 Influential actors in the national REDD+ process

Based on the sources of power and power relations, actors in the national REDD+ process exerted various influences in the national REDD+ governance process. Table 5 shows in-degree and out-degrees of various actors with respect to perceived influence of various actors in the national REDD+ governance process.

Table 5: Perceived in-degree and out-degree on influence of actors

	Types of actor	Actor	Perceived influence/Dominance	
			Out degree scores	In-degree score
	N= 30			
1	Government	VPO	79	247
2	Government	MNRT-TFS	99	247
3	Government	PMO-RALG	64	220
4	Government	MOF	42	46
5	Development Partner	RNE	59	241
6	Parastatal Organization	IRA-REDDSEC	87	260
7	Government	PO-CSM	26	20
8	Government	MOAFS	46	65
9	Government	MLHS	47	59
10	Government	MEM	47	31
11	NGO	WWF	53	68
12	NGO	TCFG/MJUMITA	64	250
13	NGO	MDCI	60	180
14	NGO	AWF	51	46
15	NGO	JGI	45	28
16	NGO	CARE-T	51	79
17	Development Partner	UNDP	48	108
18	Government	DC1/LC - Killosa	40	42
19	NGO	TATEDO	51	45
20	Government	NEMC	39	32
21	Government	SUA	53	89
22	NGO	TNRF	42	73
23	Private sector	GR	34	17
24	NGO	WCST	47	9
25	Parastatal Organization	PARL.	35	5
25	Government	OLMO - TFI	35	2
27	NGO	FARM - AF	35	2
28	Parastatal Organization	TAFORI	24	1
29	Government	MJCA	27	6
30	Government	MLFD	35	7
		Average	49	69

NB: The higher in-degree scores indicate the higher perceived influence of the actors

The results show that IRA was perceived as the most influential actor with 260 in-degree scores. The highest in-degree scores of IRA indicate its prominence and influence since it was connected to many stakeholders in the national REDD+ governance process. On the other hand, results indicate that TFCG/MJUMITA was an NGO that had the second highest scores of perceived in-degree (250) of influence. The perceived influence of TFCG/MJUMITA was due to its role as the representative of civil societies in the national REDD+ governance process. TFCG/MJUMITA also had pilot projects that were being implemented in two sites (Kilosa and Kilwa). This helped TFCG/MJUMITA to exercise influence on other actors based on the experience and knowledge from the pilot projects. Similarly, Aguilar-Støen (2015) found that alliances formed between NGOs and civil societies enabled them to create standards that shaped the direction of REDD+ in Columbia.

Furthermore, VPO and MNRT had scores of 247 perceived in-degree. These two actors (i.e., VPO and MNRT) were considered influential in the governance process due to their organizational mandates which gave them powers related to environmental and forest management issues. VPO is responsible for coordinating environmental issues, while MNRT/TFS is responsible for coordinating forestry issues.

The Royal Norwegian Embassy (RNE) was also among the actors perceived to have higher influence actors 242 in-degree scores, followed by the Prime Minister's Office Regional Administration and Local Government (PMO –RALG) what had 220 scores of in-degree centrality. While the Institute of Resource Assessment (IRA) was the parastatal organization with the highest in-degree centrality, Tanzania Forestry Research Institute (TAFORI) had the lowest in-degree centrality score among the parastatal organization actors. In addition, Olmotonyi Forest Training institute (OLMO –FTI) and Farm Africa

(FARM AF) were actors with the lowest in-degree score of perceived influence. The perceived low influence of these actors is attributed to low collaboration with other actors at the national level. This indicates that the two actors were not collaborating with most actors. OLMO – FTI was collaborating with MNRT, TFCG/MJUMITA (national actors) and ECOFT (an international actor that was providing technical backstopping to OLMO - TFI). This implies that OLMO – FTI and FARM AF had weak ties with other actors. Easley and Kleinberg (2010) argue that actors with weak ties do not frequently communicate and exchange information.

On other hand, influence of RNE is attributed to the financial resources it provided to support the government and NGOs in the national REDD+ governance process. The in-degree centrality in resource provision shows that RNE had the highest score of influence compared to other actors. This implies that RNE was the major donor in the national REDD+ governance process. Similar results were also reported by Angelsen and McNeil (2012) in Indonesia, and Papua New Guinea and Dkamela *et al.* (2014) in Cameroon National REDD+ governance process.

4.5.4 Legitimacy of the National REDD+ Process

Table 6 shows the response of actors with respect to the legitimacy of the national REDD+ governance process. The results reveal that at least all actors in the governance process agreed that the national REDD+ governance is legitimate.

Table 6: Perceptions of actors on the legitimacy of the National REDD+ governance

Type of actors	Strongly disagree (%)	Disagree (%)	Agree (%)	Strongly agree (%)	Reliability	
Government	1.47(1)	0	30.9(21)	13.2(9)	Cronbach's Alpha (α)	N of Items
Parastatal organizations	1.47(1)	1.4 (1)	7 (5)	5.9(4)		
Development partners	0	0	5.9 (4)	1.47(1)		
Private sectors	1.47(1)	1.4(1)	4.4 (3)	1.5(1)		
NGOs	0	0	17.6 (12)	5.9(4)		
Total	4.4(3)	2.94(2)	70.9(46)	27.9 (19)		

(NB: Numbers in parenthesis indicate respondents)

NB: Number outside brackets reflects percentages.

The results show that the majority of the actors agreed or strongly agreed that the national REDD+ governance process was legitimate. The wider acceptance of the REDD+ governance process is attributed to the broader stakeholders' consultation that was undertaken. This implies that legitimacy was granted by all actors including the Government, development partners, parastatal organizations and NGOs. Another plausible reason for acceptability of national REDD+ process by most actors could be related to the broader engagement of a wide range of stakeholders during the formulation of a national REDD+ Strategy. Such wide consultations increased acceptance of the national REDD+ governance process. This transparent and consultative national REDD+ governance process helped to garner support from various actors, including the development partners.

Moreover, signing of Letter of Intent between the Governments of Tanzania and the Kingdom of Norway in 2008 helped to galvanize political legitimacy of the national REDD+ governance process. These results imply that the national REDD+ governance process seems to have attained both technical and political acceptability. However,

despite wide acceptance of the process, the outcome legitimacy of the governance process will need time to be realized. Based on Vatn (2015) criteria of evaluation of legitimacy, this means that the national REDD+ governance process met the criteria of procedural justices, participation of actors at different stages of the process, transparency of the process and accountability to the wider group. However, the national REDD+ process will need to fulfil the criteria for output legitimacy which are linked to distributive justices, effectiveness and efficiency that will indeed depend on the performance of selected governance structure. Kashwan and Holahan (2014) argue that accountability and acceptability are important aspects in addressing political dimensions of the REDD+. Similarly, Bushley and Khatri (2011) showed that participation of the Government, NGOs, CSOs and Development partners in Nepal helped to achieve political legitimacy of REDD+ governance process. In Cameroon, Dkamela *et al.* (2014) reported that lack of adequate consultation with stakeholders risked political legitimacy of the REDD+ in that country.

4.6 Actors' Interests, Brokerage Strategies and Conflicts in the National REDD+ Governance Process

4.6.1 Actors' interests in the national REDD+ governance process

The study identified five broader interests of actors in the national REDD+ governance process. Fig.9 shows types of interests identified in the process.

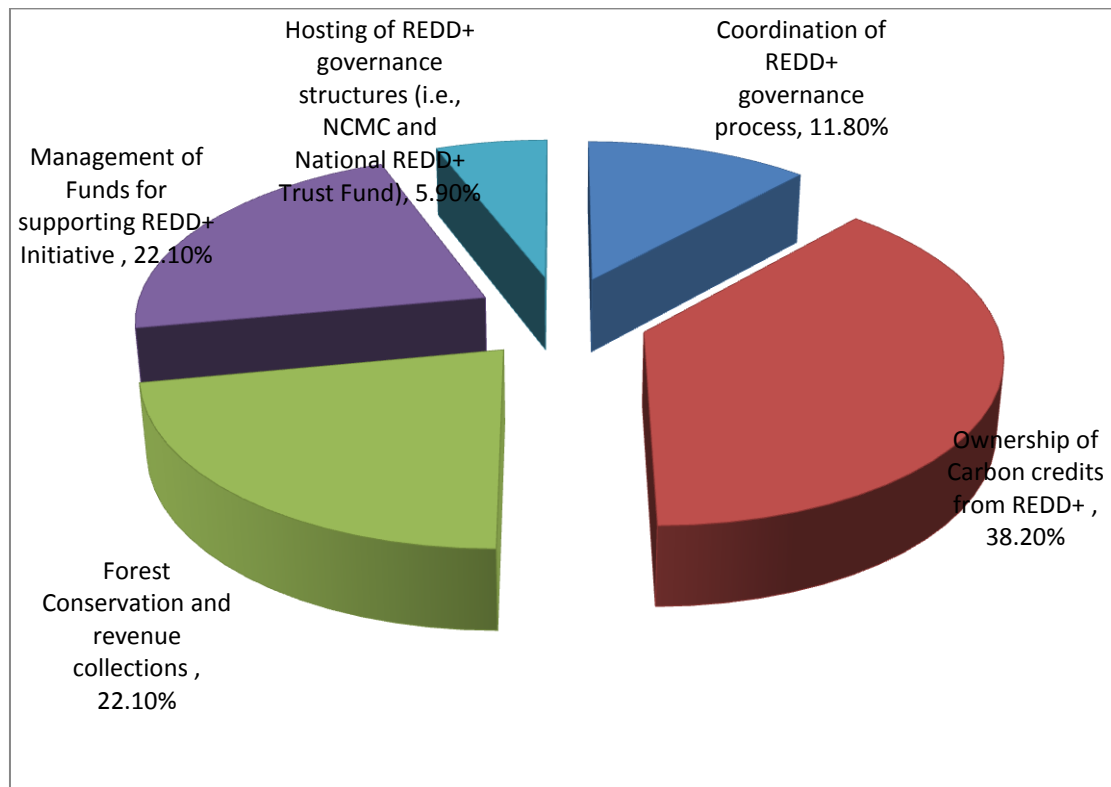


Figure 9: Types of interests of by actors identified in the national REDD+ governance process.

The results show that the majority (38.2%) of actors in the National REDD+ governance process were more interested in ownership of carbon credits, management of funds for REDD+ initiatives (22.1%), and Forest Conservation and revenue collection (22.1%). The high interest of actors on ownership of carbon credits, forest conservation and management of REDD+ funds is attributed to high expectations on financial flows envisioned in the REDD+ initiative. These interests are linked to inadequate funding currently facing the forest sector. As a result, most actors seemed to focus on REDD+ activities that had high potential of generating cash flow. However, results reveal further that there were also few actors (11.8%) who were interested in coordinating the REDD+ governance process and those (5.9%) who were interested in hosting of the national REDD+ governance structures. The interests on coordination and hosting of the national REDD+ governance structures was relatively low and limited to few actors only. Low

interests of actors on coordination of the national REDD+ governance process and hosting of REDD+ governance structures is attributed to low awareness and expertise on REDD+ initiative. This was attributed to the fact that REDD+ initiative was a new concept in the country, most actors lack experience and knowledge on how it should be managed and coordinated. In addition, the responsibility of coordination was not within the mandates of most actors. Owing to inadequate experience and knowledge, most actors seemed not to be interested in the process that they were not familiar with.

The results show further that government actors were the ones who were more interested in the coordination of the REDD+ governance process and management of funds. Government actors that were interested in the coordination included the Ministry of Natural Resources and Tourism/Tanzania Forest Service (MNRT/TFS), the Vice President's Office (VPO), the Prime Minister's Office, the Regional Administration and Local Government (PMO –RALG) and the Ministry of Finance -MoF. The interests of these actors may be attributed to their organizational mandates. These actors are characterized by common attributes such as being National Focal point and Coordinators of climate change issues, REDD+ projects and environment (i.e., VPO), custodians of forests (i.e., MNRT) and financial matters (i.e., MoF) in the country. While MNRT/TFS is responsible for all issues related to forests at the national level, the PMO-RALG is responsible for the management of forests at regional and district levels. On the other hand, VPO coordinates all issues related to environment, while MoF has the overall mandate to oversee finance matters in the country.

Moreover, the results also show that some NGOs were more interested in the conservation and ownership of carbon credits. These organisations include TFCG/MJUMITA, MCDI, TaTEDO, JGI, WWF and WCS. Their interests can be linked to the engagement of these

actors in similar types of activities prior to REDD+ initiative. While TFCG, MCDI and WWF and JDI are well known NGOs for their involvement in conservation activities, TaTEDO previously tried to formulate CleanDevelopment Mechanism (CDM) projects. These results imply that some actors such as NGOs (i.e., TFCG, MCDI and WWF and JDI) does not only perceive REDD+ as a means to improve forest governance under their existing responsibilities, but also as a platform where various actors can discuss carbon trading initiatives such CDM and forest conservation. The results suggest that REDD+ has promoted the efforts of some NGOs to engage in the conservation activities in the country.

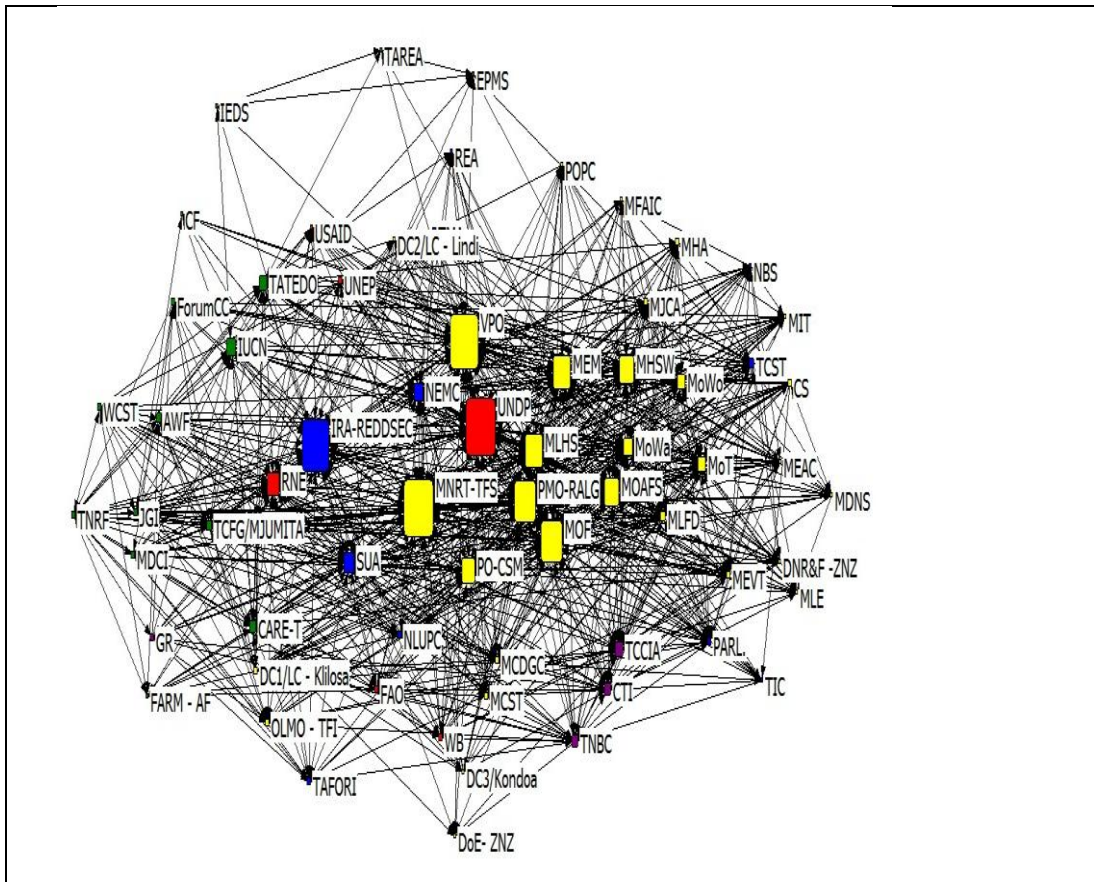
Additionally, the results show that development partners and the private sector actors were also interested in the ownership of potential carbon credits and conservation of forests. Development partners that were interested in carbon credits and conservation of forests include Royal Norwegian Embassy (RNE), World Bank (WB), and Food and Agriculture Organizations (FAO). Private sector actors which were interested in carbon credits and conservation of forests include Green Resources (GR), Confederation of Trade and Industries (CTI), Tanzania Chamber of Commerce Industries and Agriculture (TCCIA), and Tanzania National Business Council (TNBC). The interests of Development partners reflect their long history in supporting conservation activities in the country. Some development partners including RNE have a long history of supporting both environment and forest sectors for several decades in Tanzania.

Nonetheless, while the interests of development partners in conservation may not be surprising, the interests of private sector actors in conservation may suggest a paradigm shift in forest governance that is attributable to REDD+ initiative in the country. This is because, despite that, some private sector actors such as GR have been actively in the

conservation activities in CDM afforestation and reforestation programmes, others (i.e., CTI, TCCIA and TNBC) seemed that they were rarely engaged in conservation activities in the past. This implies that REDD+ initiative might have triggered new interests of private sector actors' engagement in conservation activities in the country. These new interests of private sector actors are linked to market-based approach embedded in the REDD+ initiative. These results imply that REDD+ governance process has resulted into positive incentives for private sector's engagement in conservation activities in the country. However, given the evolvement nature of the REDD+ governance and the dynamics of the private sector actors interests, sustainability of the early results will depend on the effectiveness of the selected REDD+ governance structures in delivering the expectations of the actors. Babon *et al.* (2014) and Atela and Quinn (2014) found that despite their low participation, the private sector actors in Papua New Guinea and Kenya were more interested in and supported REDD+ activities that could generate financial flows.

4.6.2 Characteristics of Interactions and Relationship of Actors in the National REDD+ Governance Process

The results reveal that national REDD+ governance process was characterized by different interactions and relationships of actors. Fig.10 shows a network of actors in the national REDD+ governance process.



	Development partner
	NGO
	Parastatal Organization
	Private Sector
	Government

Figure10: A network of actors in the national REDD+ governance process.

NB: Closeness means that actors were working together and shared and exchanged information

Key to abbreviation of actors

Development Partners:-; FAO = Food and Agriculture Organizations; RNE = Royal Norwegian Embassy; UNDP= United Nations Development Programme; UNEP = United Nations Environment Programme; WB = The World Bank.

Government actors: DL/LC = District Level or Local community; MEM = Ministry of Energy and Minerals (MEM); MoAFC = Ministry of Agriculture Food and Cooperatives, MLHSD = Ministry of Lands, Housing and Human Settlement Development; MoF = Ministry of Finance; MNRT/TFS = Ministry of Natural Resources and Tourism/ Tanzania Forest Service; PO –CSM = President’s Office Civil Service Management; PMO – RALG = Prime Minister’s Office – Regional; OLMO = Olmotonyi Forest Training Institute, VPO= Vice President’s Office.

NGOs:

IEDS = Institute of Environment and Development Studies, Dar es Salaam; CF = Clinton Foundation
 TaTEDO = Tanzania Traditional Energy Development Organization; WWF = World Wildlife Fund; AWF= African Wildlife Foundation; JGI = Jane Goodal Institute; TNRF = Tanzania Natural Resource Forum; WCST = Wildlife Conservation Society of Tanzania; TFCG = Tanzania Forest Conservation Group/ Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania (MJUMITA); CARE T= Care Tanzania; WCS = Wildlife Conservation Society; MCDI= Mpingo Development Initiative; EPMS = Environment Protection Services.

Parastatal Organizations

PARL = Parliament of Tanzania; FARM –AF = Farm Africa; UNEP = United Nations Environment Programme; TAFORI = Tanzania Forestry Research Institute; SUA = Sokoine University of Agriculture; NLUPC = National Land Use Planning Commission; NEMC = National Environment Council; IRA = Institute of Resource Assessment, REA = Rural Energy Agency.

Private sector actors

CTI= Confederation of Tanzania Industries, GR = Green Resources (T) Ltd; TCCIA = Tanzania Chamber of Commerce, Industries and Agriculture; TIC = Tanzania Investment Center; TNBC = Tanzania National Business Council.

NB: The size of the node indicates betweenness centrality of the actors and the name of ministries is according to the government structures 2010 -2015

The results show interactions between, within, and across different types of actors (i.e., development partners; NGOs, government; parastatal organizations and private sector) have led to the formation of various networks. The results reveal that RNE, IRA, SUA, NLUPC (parastatal organizations) and WB (development partner) collaborated closely with WWF, TaTEDO, TFCG/MJUMITA, IUCN, MCDI; JGI; Care TZ; TNRF; and FARM Africa (i.e., NGOs).

On the other hand, RNE was seemingly more close to piloting NGOs because it was the major donor that financed most of the activities during national REDD+ governance process. In addition, RNE financed a forum of NGOs that acted as a pressure group during the formulation of the national REDD+ strategy. On other hand, IRA was also closer to the NGOs because it was the secretariat of the national REDD+ Task Force. In this regard, IRA received information from multiple sources and also interacted with a range of other actors (i.e., government, development partners, NGOs and private sector actors). While the results suggest that there were active collaboration and cooperation within groups of actors (e.g. government, NGOs, parastatal organizations and development partners), collaboration and cooperation within the private sector actors was rather low. This is attributed to inadequate engagement and lack of awareness of the private sector actors on the National governance process. This means that the private sector actors had little or no information to share amongst themselves during the process. These results suggest that more awareness and capacity building campaigns are needed before a large number of private sector actors could be fully engaged in REDD+ initiative.

Moreover, the results show that SUA and the National Land Use Planning Commission (NLUPC) (i.e., parastatal organizations) worked closely with government actors and NGOs. The two parastatal organizations were hired by both government and NGOs to

assist in conducting studies related to the project. SUA was hired by the National REDD+ Task Force to assess different Fund options to be adopted in the country. On the other hand, NLUPC was used by local governments and NGOs to assist in developing land use plans in some pilot villages. These results imply that REDD+ governance process enhanced collaboration among actors that have similar technical competence and power. Prell *et al.* (2009), Schneider *et al.* (2003) and Bodin and Crona (2006) argue that frequent communications and trust leads to a strong relationship among actors in the governance process.

Furthermore, the results show that some District/local governments were close to NGOs. Close proximity between NGOs and local governments in the national REDD+ governance process can be explained in two folds. First, proximity was a precondition set before the approval of REDD+ pilot projects by the National Task Force. The national REDD+ Task Force required all NGOs' applications to be supported by a letter from the respective district/local government authority where the project is intended to be implemented. This pre-condition prompted most NGOs to forge a close working relationship with district authorities during the implementation of REDD+ pilot projects. Secondly, the closeness was linked to long time working history and relationship between NGOs and local governments/communities in the conservation activities in different areas. Most NGOs in the country work in collaboration with district and local governments in the implementation of different conservation activities. On the other hand, closeness between piloting NGOs and local government was considered as a strategy of the former to legitimize their activities in front of local government authorities. This strategy helped NGOs to enhance their influence on local governments.

Besides, the results suggest that collaborative relationships and, presumably, coordination in the network was not skewed but rather spread among actors. In addition, the analysis showed that the private sector actors were only minimally involved engaged in information and collaboration networks. Gebara *et al.* (2014) reported that collaboration between NGOs and local authorities helped to achieve a successful REDD process in Brazil. Similarly, Bushley and Khatri (2011) in Nepal as well as Dkamela *et al.* (2014) found that NGOs and government actors in Nepal and Cameroon, were also working closely. However, Bushley (2014) reported a weak working relationship between government and non-government actors due to lack of exchange of information. The strong working relationship between NGOs and government actors in Tanzania is due to the strategy used by NGOs to involve most government representatives in their project activities.

4.6.3 Betweenness centrality and position of actors in the national governance process

Fig. 11 shows betweenness centrality in information exchange during the national REDD+ governance process.

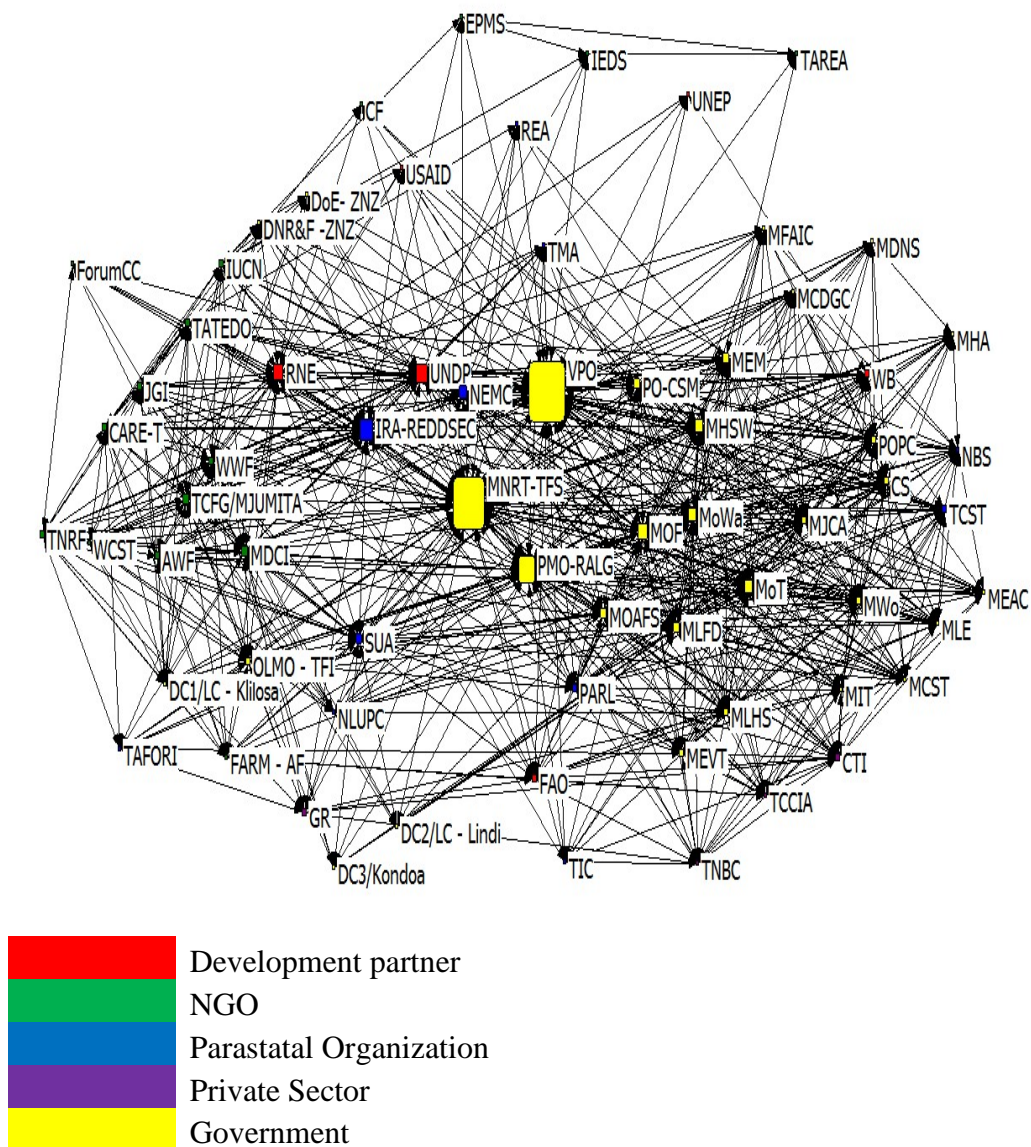


Figure 11: Betweenness centrality in information exchange during the national REDD+ governance process.

(NB: Key to abbreviation of actors as in Figure 10)

The results show key actors such as PO –CSM, MEM, MOAFS, MLHSD, GR, TAFORI, DL/LC, FARM Africa, MoF and TaTEDO were located at the periphery in the REDD+ network process.

Some peripheral actors such as DC/ LC and PO-CSM were considered as key actors in the national REDD+ governance process. In addition, PO-CSM, MLHSD, and MOF, PARL.

even though seemingly werenot very central in the REDD+ governance process, they were instrumental in the ways in which REDD+ policies were formulated and operate in the country. For instance, NCMC has been operationatolizedbut needsapproval bythe PO-CSM andMoF. Therefore, despite their peripheral positions in the national REDD+ process both PO-CSM and MoFhad some influence on key decisions on the national REDD+ process.

Relevant decisions that required approval by PO-CSM included financial and human recourses needs. Lack of early engagement of PO-CSM in the governance process created an impasse in the approval of the NCMC. These results suggest that similar incidentscan be expectedin the operationalization of the proposed national REDD+ Trust Fund. This structural advantage of some peripheral actors can be translated into structural power in relation to other actors. May *et al.* (2011) found that both government and non-governmentwere centrally located in the REDD+ debate in Brazil. These results suggest that centrality or peripheral position does not necessarily indicate the level of power in the national REDD+ governance process. The resultsalso suggest that despite of peripheral positions in the national REDD+ governance process, early engagements of all relevant actors was more likely to facilitate smooth national REDD+ governance process.

4.6.4 Strength of the relationship of stakeholders in the national REDD+ governance process

A varying degree of strength of relationship among actors was observed through SNA. Fig.12depicts varying strengths of relationships. The thicker lines represent strong relationships among stakeholders in the process.

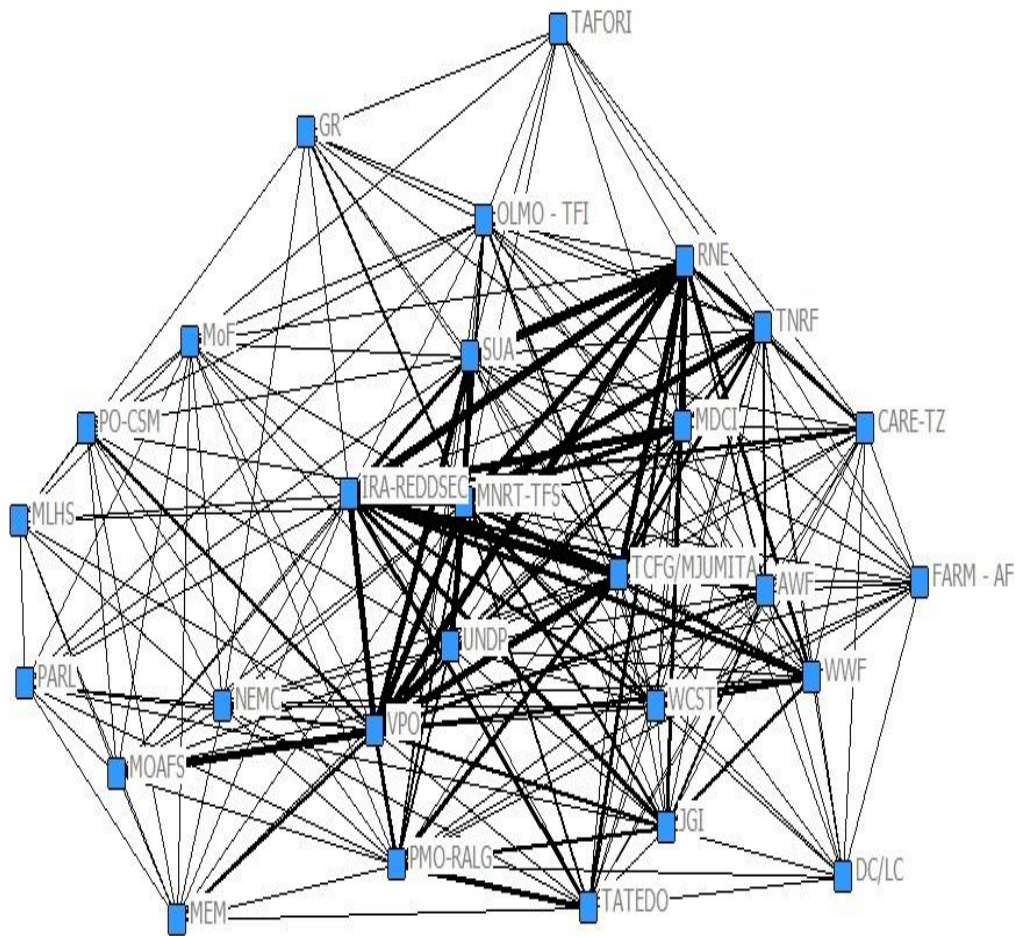


Figure 12: Strength of relationship between actors in the national REDD+ process

NB: Bold line lines indicate close and strong relationship.

Key to abbreviation of actors reflected in the Fig.12

RNE = Royal Norwegian Embassy; UNDP= United Nations Development Programme; UNEP = United Nations Environment Programme; DL/LC = District Level or Local community; MEM = Ministry of Energy and Minerals (MEM); MoAFC = Ministry of Agriculture Food and Cooperatives, MLHSD = Ministry of Lands, Housing and Human Settlement Development; MoF = Ministry of Finance; MNRT/TFS = Ministry of Natural Resources and Tourism/ Tanzania Forest Service; PO – CSM = President’s Office Civil Service Management; PMO – RALG = Prime Minister’s Office – Regional; OLMO = Olmotonyi Forest Training Institute, VPO= Vice President’s Office; TaTEDO = Tanzania Traditional Energy Development Organization; WWF = World Wildlife Fund; AWF= African Wildlife Foundation; JGI = Jane Goodal Institute; TNRF = Tanzania Natural Resource Forum; WCST = Wildlife Conservation Society of Tanzania; TFCG = Tanzania Forest Conservation Group/ Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania (MJUMITA); CARE T= Care Tanzania; MDCI= Mpingo Development Initiative; EPMS = Environment Protection Services; FARM –AF = Farm Africa; UNEP = United Nations Environment Programme; TAFORI = Tanzania Forestry Research Institute; SUA = Sokoine University of Agriculture; NLUPC = National Land Use Planning Commission; NEMC = National Environment Council; IRA - REDDSEC = Institute of Resource Assessment, REDD+ Secretariat; and GR = Green Resources (T) Ltd

The results reveal a strong relationship existed between development partners (i.e., RNE, UNDP, some NGOs (i.e., TFCG/MJUMITA, MDCI, TNRF, JGI, and WWF) and some Government actors (i.e., VPO, PMO- RALG) in the national REDD+ governance process. RNE supported NGOs umbrella forum under TNRF in their bid to pressurize the national REDD+ task force to disclose the national REDD+ strategy document. This means that development partners frequently collaborated and exchanged information with some NGOs.

The information included progress reports on project activities. In addition, the results reveal a strong relationship between some NGOs (i.e., TFCG /MJUMITA and MDCI) and some government actors (such as VPO and MNRT) which had central roles in the REDD+ governance process.

Furthermore, the results show that some NGOs (TFCG, MDCI, JGI, TaTEDO, WWF, Farm Africa, Care Tanzania -CARE- T; TNRF) had a strong relationship with both government actors and development partners who were working on REDD+ governance process. This strong relationship between government actors and NGOs was due to the active role played by NGOs in piloting REDD+ activities and institutional power of government actors (e.g. MNRT, VPO). The strong relation implies that there were some formal working relationship between those actors (government, piloting and development partners) on specific issues such as provision of funds, exchange of information and technical advice. In this regard, RNE and UNDP had signed a formal agreement with some government actors (i.e. VPO and MRNRT) and piloting NGOs to facilitate exchange of information. Amanzi (2011) found that collaboration between government actors and NGOs in Uluguru Mountains ended up forming a strong relationship with those actors. Prell *et al.* (2009) argued that the strength of the relationship may also suggest power of the actors in the network.

The existence of few actors at the centre of the REDD+ governance network process implies an opportunity for those actors to broker the national REDD+ governance process. The following section presents and discusses the brokerage strategies used by various actors.

4.6.5.1 Provision and Control of Financial Resources

Provision and control of financial resources were among the key issues in the national REDD+ governance process. Fig14 shows betweenness centrality in resource provision. The results show that the Royal Norwegian Embassy - RNE, UNDP (i.e., development partners) and MoF (i.e., government actor) were centrally located in the provision and control of financial resources.

The higher centrality positions of RNE, UNDP and MoF indicate that these actors were considered as main providers of financial resources during the national REDD+ governance process. However, these actors seem to provide financial resources at varying degrees. The high centrality of actors in the financial resource provision corresponds to the higher in-degree centrality scores of these actors.

Table 7 shows the perceived in-degree centrality of various organizations with respect to three information exchange, financial resource provision and collaboration among the actors.

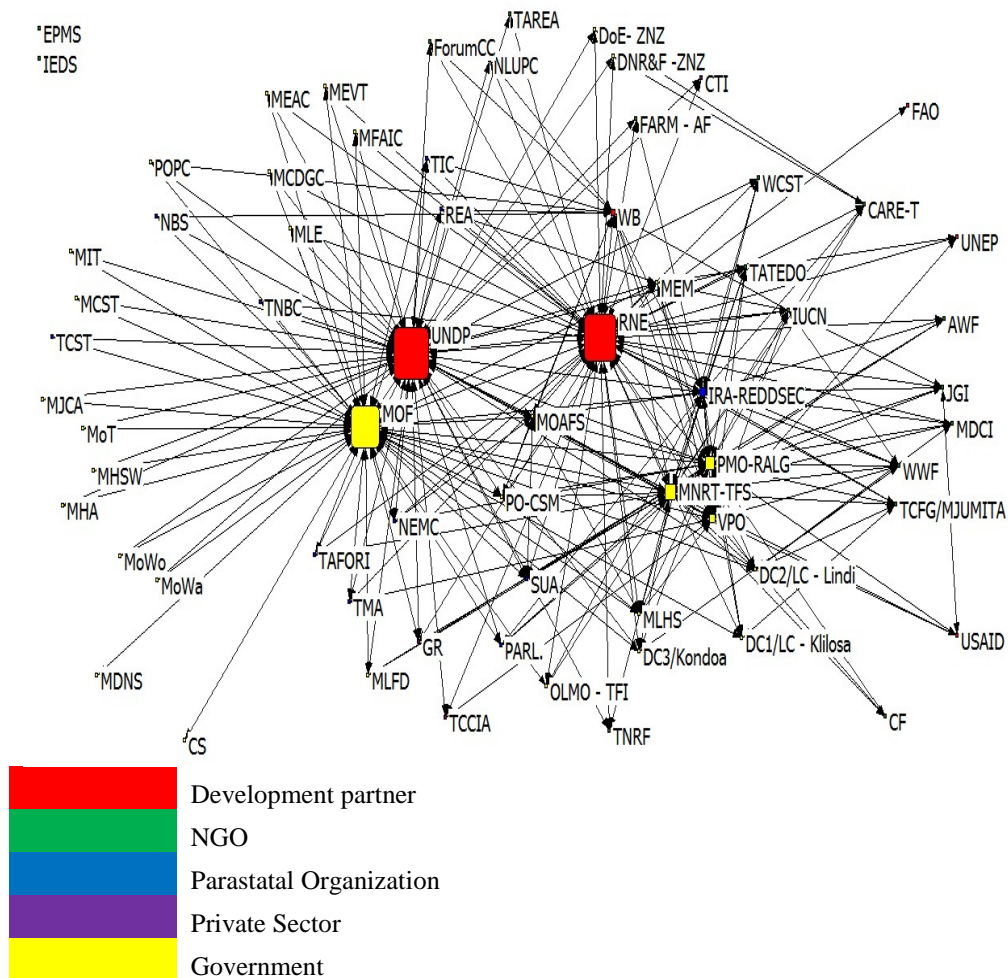


Figure 14: Betweenness centrality in financial resource provision in the national REDD+ process

(NB:Key and legend as in Figure 10. The size of node indicates high centrality in provision of financial resources).

The results indicate that the majority of actors were below average score (i.e., 28) in financial resource provision implying that only few actors were providing financial resources in the national REDD+ governance process. These results reveal that the overall average centrality scores of various actors with respect to financial resource provision were very low meaning that there were few providers of financial resources.

On the other hand, the average centrality scores on collaboration among actors were above 53 (see Table 7) implying that more than half of the actors were collaborating or

exchanging information. The results revealed high scores, 156 for RNE; 151 for UNDP and 127 for MoF with respect to in-degree on financial resource provision. Even though UNDP and RNE seem to score almost similar in-degree centrality, the later was the main provider of financial resources in the national REDD+ governance. Seemingly, UNDP high scores were due to their contribution to the UNREDD programme and other existing projects/programmes that were leveraged to support REDD+ initiative.

Apart from UNREDD programme that was implemented through MNRT, many other actors reported to have revised some of the existing projects/programmes to support REDD+ related activities. Activities that were supported included stakeholders' workshops, participation in the meetings at both national and international levels, as well as awareness creation. This suggests that high expectation on REDD+ was also useful in helping to leverage resources from other existing projects and programmes.

Similarly, MoF was found to occupy a central position in the resource provision network which corresponds with the high in-degree centrality because of its responsibilities as an entry point for financial support from international sources. RNE supported the formulation of the National REDD+ strategy, financed the piloting of nine (9) pilot projects and several studies related to REDD+. In addition, both UNDP and RNE supported the implementation of UNREDD+ programme. The results simply that financial support for the national REDD+ governance process was mainly dominated by a few actors that seem to have high influence on financial resource provision and control of resources that turned them into brokers.

Table 7: Perceived in-degree centrality on information exchange, financial resource provision and collaboration of actors

		Information exchange	Financial resource provided	REDD+ Collaboration
Type of actor		In degree centralization	In-degree	In-degree
Government	VPO	117.00	44	114
Do	MNRT/TFS	120.00	71	171
Do	PMO-RALG	80.00	48	131
Do	MOF	74.00	127	147
Development Partners	RNE	75.000	156	113
Parastatal Organizations	IRA	96.00	40	128
Government	PO-CSM	50.00	13	65
Government	MOAFS	60.00	23	109
Government	MLHS	40.00	12	117
Government	MEM	45.00	24	89
NGOs	WWF	49.000	19	67
NGOs	TCFG/MJU			
	MITA	62.00	25	67
NGOs	MDCI	55.00	15	32
NGOs	AWF	31.00	9	46
NGOs	JGI	35.00	18	41
NGOs	CARE-T	32.00	16	28
Development Partners	UNDP	51.00	151	107
	DC1/LC -			
Government	Kililosa	19.00	13	38
NGOs	TATEDO	30.00	16	53
Parastatal Organizations	NEMC	40.00	14	91
Parastatal Organizations	SUA	52.00	13	75
NGOs	TNRF	30.00	9	33
Private sector actors	GR	15.00	6	23
NGO	WCST	27.00	7	27
Parastatal Organizations	PARL.	37.00	10	51
Government	OLMO - TFI	21.00	12	25
NGOs	FARM - AF	17.00	6	21
Parastatal Organizations	TAFORI	10.00	8	27
Government	MJCA	78.00	9	41
Government	MLFD	78.00	11	47
	Average	43*	28*	63*

NB: Numbers in bold indicate above average scores

While RNE supported the entire national REDD+ strategy development process, it was also considered as a broker due to its control over how funds should be channelled and which types of activities should be supported. Therefore, being the main resource provider in the national REDD+ process, RNE was well positioned to influence the REDD+ governance process. However, as a broker in the national REDD+ governance, RNE was blamed for unilaterally deciding to channel funds through NGOs instead of government entities. RNE decided to channel funds through NGOs because of corruption allegations in the MNRT/TFS at the time of initiation of the national REDD+ governance process in Tanzania.

Furthermore, the results showed further that UNDP which also had higher in-degree centrality score in the provision of financial resources was also considered as a broker. UNDP was perceived to be a broker through the UNREDD programme. The UNREDD Programme was the United Nations Collaborative Initiative on Reducing Emissions from Deforestation and forest Degradation in developing countries. The UN-REDD Programme was launched in 2008 by FAO, UNDP and UNEP to support nationally-led REDD+ processes. The UN-REDD project in Tanzania was housed at the MNRT and supervised by a Technical Adviser who was hired by the UNDP country office. However, the Project Technical Adviser had a final decision on approval of funds for the project activities. In this regard, UNDP was able to broker the REDD+ governance process. In view of this, the government actors allegedly complained that the Project Technical Adviser sometimes ignored project activities that were proposed by the government actors. This trend led to a conflict between the UNDP and the MNRT. On the other hand, this implies that UNDP was a broker of information and financial resources under UNREDD+ programme through the provision of technical assistance to the government. The Technical Adviser was able to approve or disapprove some project

activities, thus occupying a strategic position to broker or divert resources to project activities that were of interest to the organization (i.e., UNDP).

Moreover, the Ministry of Finance (MoF) seemed to occupy a central position in financial resource provision network which corresponds with the high in-degree centrality score. This centrality position in resource provision coupled with high in-degree collaboration on REDD+ information was attributed to the responsibilities of MoF. However, records from National REDD+ secretariat and the national UNFCCC Focal Point showed that MoF did not provide its own financial resources to support the national REDD+ governance process. Instead, MoF was used as an intermediary to channel financial resources from the RNE to some actors such as universities or research organizations that were implementing some capacity building projects. Financial resources which were channelled through the MoF were transferred to Sokoine University of Agriculture (SUA) through an ex-chequer system to support implementation of a research programme on Climate Change Impacts, Adaptation and Mitigation – CCIAM. CCIAM was a research and capacity building programme that was implemented through collaboration between Tanzania and Norwegian Universities. SUA was the main CCIAM project coordinator in Tanzania while University of Dar es Salaam, Ardhi University and Tanzania Meteorological Agency were collaborating partners. Thus, being the intermediary, the MoF was able to influence financial resources provision during the national REDD+ governance process.

Moreover, even though results showed that the majority of the actors were located at the peripheral of the network with respect to resource provision, some government actors, such as MNRT/TFS (71), VPO (44) and parastatal organizations, for example IRA with 40 scores, had above average in-degree score in resource provision network making them

important brokers in the national REDD+ governance process. This is related to the ability of MNRT/TFS and VPO to control flow of information on availability of potential sources of financial resources to support national REDD+ governance process. VPO and MNRT were the entry points to most of the development partners who wanted to support the national REDD+ process. This opportunity is reflected by high in-degree centrality scores on information exchange and collaboration as indicated in Table 7. Since some programmes (e.g. UNREDD programme) required endorsement before they were supported, the two government actors (i.e., MNRT/TFS and VPO) were able to approve those project activities which were of interest to them.

On the other hand, IRA was able to broker financial resources since it was acting as a bridge between the main donor (i.e., RNE) and the recipient NGOs. Under the supervision of the National REDD+ Task Force, IRA was responsible for forwarding project proposals and comments as well as feedback to RNE. Therefore, IRA took advantage of this position to broker the process. In Mozambique, Moore *et al.* (2003) found that NGOs were able to strategically place themselves to capture international support before it reached the final recipient/beneficiaries. Thorelli (1986) argues that some actors can use their roles and responsibilities to brokerage policy processes.

4.6.5.2 Information Exchange and Collaboration

SNA results in Table 7 revealed further that MNRT/TFS had the highest in-degree centralization of 120 scores in information exchange followed by VPO (117), IRA (96), and PMO-RALG (80). The high betweenness centrality scores of these actors (i.e., MNRT/TFS, IRA, VPO, UNDP, PMO-RALG, and TFCG/MJUMITA) with respect to information exchange which corresponds with high in-degree scores on REDD+ collaboration implies that these actors were strategically positioned to broker

and influence the flow of information among actors during the national REDD+ governance process. The plausible explanation could be that MNRT/TFS, VPO, IRA and SUA, were the entry points for most of the new information related to national REDD+ governance process.

Apart from coordination role during the governance process, these organizations also housed key individual actors that had authority to approve different programmes related to REDD+ activities in the country. In this regard, VPO was the National Focal Point that was responsible for constituting national delegations and national position with respect to United Nations Framework Convention on Climate Change (UNFCCC) debates. In this respect, as the UNFCCC national Point, VPO was able to receive information on REDD+ from both international and local actors.

On the other hand, UNDP, UNEP and FAO collaborated with MNRT/TFS to coordinate the UN-REDD+ programme in the country. However, these actors in the latter (i.e., MNRT/TFS, IRA, VPO, UNDP, PMO- RALG, and TFCG/MJUMITA) also performed brokers' role by bridging together disconnected actors. Most communications to local government authorities were supposed to go through PMO-RALG. Even though PMO-RALG was represented in the national REDD+ Task Force, there were concerns that not all relevant information on REDD+ reached the local government. Control and manipulation of information flow is one of the brokerage strategies. On the same token, Gebara *et al.* (2014) argue that a structural role on connecting actors from different levels can be used to broker both power and information. Dkamela *et al.* (2014) found that the committee that was responsible for channelling REDD+ information to other stakeholders was accused of brokering information in Cameroon.

4.6.5.3 Other brokering strategies

The study found that all REDD+ piloting NGOs formed a coalition during the development of the national REDD+ strategy. The NGOs' coalition, which was led by TFCG/MJUMITA, was used as a strategy to pressurize the government to release the draft national REDD+ strategy. Through the civil society's forum, non-government actors blamed the national REDD+ Task force (which is working on behalf of the government) for not disclosing to the general public the draft national REDD+ strategy. Following such complaints and conflict, the government eventually released the draft national strategy for public comments in the same year, in 2011.

In addition, some NGOs (e.g. TFCG/MJUMITA, MCDI, WWF, Care Tanzania, and AWF) hired international technical advisers to provide technical backups on REDD+ project activities. In this regard, NGOs were able to develop strong arguments to convince the government to accept their proposals. In so doing, NGOs acquired power and knowledge to advance and protect their interests. Through such strategies, NGOs were able to influence the design of the national REDD+ governance structures that inclined towards project level governance payment systems that were imbedded in their project proposals.

Moreover, the results reveal that some NGOs were considered as "brokers" because they were connected to the local communities who were not directly connected to other key actors at national level. The results from SNA reveal that TFCG/MJUMITA was connected to most actors in the REDD+ governance network, and was in a position to broker many connections. The participant's observation in the workshops and other meetings revealed that some NGOs (e.g. TFCG/MJUMITA and MCDI) also worked as consultants to local communities in those villages where they were operating. As brokers,

TFCG/MJUMITA and MCDI were engaged in awareness creation and capacity building activities which were key areas in the national REDD+ governance process.

It was found that through awareness creation, NGOs promoted their own local/project based REDD+ governance system. Both TFCG/MUNITA and MDCI were piloting project level payment governance structures that were in contrast with the national REDD+ trust fund that was being advocated for by the central government. In this context, TFCG/MJUMITA and MCDI seemed to have turned into economic actors as they pushed for their own interests. The study found that both TFCG/MJUMITA and MCDI have already signed contracts with local communities as well as regional and international organizations in order to facilitate sale of their carbon credits.

Besides, the study revealed that some NGOs (e.g. TFCG/MJUMITA, MCDI, WCS, and TaTEDO) were also providing technical assistance and material resources to the local communities and other actors. For example, TFCG and TaTEDO assisted villages in the developing land use plans and by-laws, processing village land titles, and in the establishment of village forest reserves. Similarly, MCDI assisted local communities to develop carbon contracts. However, given the consulting roles of some NGOs, they were able to control and manipulate information flow to local communities. Some actors such as SUA, IRA and NGOs (TFCG/MUMITA, MCDI, JGI, WWF, AWF, and CARE Tanzania) worked closely with the local communities and, therefore, they deployed the so called “*consulting brokerage*” strategies to the district and national level actors. For instance, even though IRA acted as the national REDD+ Secretariat, it also conducted some researches related to the national REDD+ governance process. In addition, both IRA and SUA were commissioned by some NGOs and the government to help assess options for the establishment of payment systems at local and national levels. Through

such studies, IRA and SUA were able to manipulate information flow to other actors and influence the national REDD+ governance process. Burt (1992) observes that brokers can act as consultants, representatives or liaisons to other stakeholders.

Nonetheless, both government and NGOs actors were involved in awareness creation related to REDD+ initiative. NGOs were involved in awareness creation and implementation of REDD+ projects working with the local communities. By so doing, they were able to establish a national advocacy network that provided the necessary knowledge and political passion on REDD+. In this respect, they were able to generate and disseminate information from REDD+ pilot areas and also provided detailed information about the proposed REDD+ governance structures. According to Burt (2004) and Sozen and Sagzann (2010), brokering also involves collecting information from one side and transferring it to other sides. Additionally, MNRT/TFS was frequently requested by NGOs to provide technical guidance with respect to development of village forest management plans in the pilot projects. This enabled MNRT/TFS to strategically develop village land use plans that do not infringe the government interests.

Furthermore, it was also found that some NGOs deployed the so-called non-government diplomacy or insider-outsider relations by directly engaging with the government, including acting as observers and advisers in several events. In this context, TFCG/MJUMITA persuaded the government to include NGOs in the national delegation to the UN Climate Change talks in 2009. Since then, TFCG/MJUMITA was consistently included in the national delegation to attend UN climate change Talks in the 15th to 18th Sessions of the Conferences of the Parties of the UNFCCC which were held in Copenhagen, Denmark in 2009; Cancun, Mexico in 2010; Durban, South Africa in 2011; Doha, Qatar in 2012. During these meetings, TFCG/MJUMITA and ForumCC were

entrusted as part of the Tanzania delegation but also continued to link and interact with fellow NGOs and other partners at international levels. TFCG/MJUMITA persuaded the government to include NGOs in the delegation based on its experience in pilot REDD+ projects (i.e., piloting benefit sharing mechanism and community based monitoring) that were considered as important issues during the REDD+ governance process. Therefore, close working relationship with VPO and MNRT/TFS enabled TFCG/MJUMITA and Tanzania ForumCC to strengthen their lobbying strategies augmented by experience, and knowledge and technical advice obtained from the international technical advisers. Participant observation revealed that the Project Advisory Committees (PACs) for TFCG/MJUMITA and MCDI projects were also chaired by officers from the Government (i.e., MNRT/TFS). Lundberg (2013) argues that the establishment of insiders and outsiders relations help to influence policy making through both informal and formal channels as the insiders can gain access in the decision-making process. Lundberg (2013) found that insider relations increase the privilege of actor's access in the decision-making process. Thus according to Lundberg (2013), actors can use their insiders' relations to influence policy making through both informal and formal channels. Bernard *et al.* (2014) revealed that non-government actors are involved in the national delegation at different fora in Kenya. Wallbot (2014) reported that non-state diplomacy was used to change the dynamics of global REDD+ discourse since NGOs were directly engaged in discussions with representatives of governments at international fora. Wegerich (2001) found that when outsiders or insiders relations are used, non-government actors are able to convince decision makers and they become relevant to the ruling group, in this case the decision making group of REDD+ process.

Moreover, during the national REDD+ Strategy development process, NGOs pressurized the government to include representatives of civil societies in the national REDD+ Task

Force. Eventually, TFCG/MJUMITA was chosen to represent the network of civil societies in the National REDD+ Task Force. After being included in the Task Force in 2011, TFCG/MJUMITA was able to establish insider- relations with the government while continued to defend its interest and those of other NGOs during REDD+ dialogues. In summing up, the results imply that both government and non-state actors (NGOs, development partners, parastatal organizations) were involved in brokering the national governance process using different strategies. However, the results suggest that there was minimal engagement of the private sector actors in brokering the national REDD+ governance process as compared to other actors. This is plausibly due to the fact that they (the private sector actors) did not have any assignment or tasks linked to other stakeholders in the REDD+ governance process. Additionally, despite their invisibility, Dkamela *et al.* (2014) found that private sector actors were able to influence the government led process in Cameroon. On the other hand, the analysis showed that most actors used their responsibilities and cordial relations as brokerage strategies. The finding suggest further that actors deployed different brokerage strategies focusing on accumulating financial resources, power and knowledge and information related to REDD+. Additionally, the private sector actors suggest that government actors, parastatal organizations, and NGOs were altogether the main brokers during national REDD+ governance process. The motives behind brokerage include political, economic and technical incentives that were needed to be explored as the national REDD+ governance evolves.

In contrast, Gebara *et al.* (2014) revealed that government actors in Brazil appeared to have more control over information exchange during the national REDD+ governance process due to their strategic position in information generation and financial resource flow. Similarly, Atela and Quinn (2014) reveal that technical experts and donor supported

programme were used to broker the national REDD+ governance process in Africa and Latin American countries. Aguilar-Støen (2015) reported that actors who controlled key resources and information creation and dissemination related to REDD+ pilot initiatives were able to successfully influence the REDD+ process due to brokerage advantage. Rietig (2011) and Wallbott (2014) found that NGOs who collaborated with other actors and provided different services through workshops and a range of policy documents, were able to convince national governments to incorporate their issues into national statements at international REDD+ discourse. Similarly, Dkamela *et al.* (2014) Rantala and Di Gregorio (2014) and Manyika *et al.* (2013) reported that collaboration and consultant are being deployed to broker the national REDD+ governance process in Cameroon and Tanzania.

4.7 Power and power struggles in the national REDD+ governance process

4.7.1 Types of power relations and dominant power

The study identified different types of power relations in the national REDD+ governance process. These include: strategic; institutional and structural power. Table 8 shows types and ranking of power relations in the national REDD+ process for key actors.

Table 8: Types and ranking of powers in the national REDD+ governance process

Key Actors in the process	Types of powers			Score points
	Strategic power	Structural power	Institutional power	
VPO	0	X	X	2
MNRT/TFS	X	X	X	3
MoF	0	0	X	1
PO- CSM	0	X	x	2
PMO-RALG	0	X	X	2
RNE	X	0	0	1
TFCG/MJUMITA	X	0	0	1
IRA/REDD+ secretariat	X	X	0	2
SUA	X	0	0	1
UNDP	X	0	0	1
TOTAL score points	6	5	5	

Key: **X** = Presence of respective power in the actors

0 = Absence of respective power in the actors

The results revealed that strategic power was dominant with 6 scores, followed by institutional and structural powers with 5 scores. The results show further that both government actors and non-government actors possessed strategic and structural powers over the national REDD+ governance process as it evolved. The results show that the MNRT was the only government actor that possessed strategic power in the national REDD+ governance process. MNRT strategic power stemmed from ownership of forests that enable frequent interaction and collaboration with most of the actors in the forestry sector at both national and international levels. MNRT owns both protective and productive forests which are key determinant factors on how REDD+ and the emerging governance structures should depend upon. Under REDD+ initiative, ownership of forests was equivalent to potential carbon credits that can generate cash flows (Aguilar-Støen, 2015). Mbeyale (2009) found that farmers who owned cattle had strategic power in the Common Pool Resources.

Moreover, IRA, TFCG/MJUMITA and SUA had strategic powers which stemmed out from their roles/tasks and responsibilities in the national REDD+ process. While IRA was coordinating day to day activities during the national REDD+ governance process, TFCG/MJUMITA was representing REDD+ piloting NGOs and other non-government actors in the national REDD+ Task Force. Therefore, TFCG/MJUMITA has frequent communication with fellow NGOs and other members of the National REDD+ Task Force as well as local communities/village leaders in the pilot areas. Those responsibilities granted TFCG/MJUMITA strategic powers over other actors during the REDD+ governance process. Through such responsibilities TFCG/MJUMITA were able to manipulate and lobby other actors to support their interests. TFCG/MJUMITA was trusted to become the sole spokesperson of other actors in the National REDD+ Task Force meetings. In addition, TFCG/MJUMITA was found to have strategic powers over the national REDD+ governance process that was attributed to their piloting roles.

In addition, some piloting NGOs had garnered strategic powers over the governance process emanating from knowledge and experience gained in the course of implementing various local level projects. In Suledo, Magessa (2011) found that members of the environment committee ended up gaining strategic power over the village forest as they were able to collect revenue and portray themselves as representative of the entire village.

Furthermore, the study observed that some NGOs used their strategic power to mobilize local communities and local governments in the course of implementing pilot projects in the areas of their jurisdiction. To strengthen their strategic power, it was noted for example that TFCG/MJUMITA disbursed a total cash of Tsh. 28000000 to ten villages to assist them to construct village government offices. Such support seemed to elevate strategic power of TFCG/MJUMITA in the areas where they were working in

collaboration with local communities, local/district governments and development partners. Similarly, Mpingo Community Development Initiative (MCDI) was found to have gained strategic power and had signed contracts with local farmers and Carbon Tanzania (an NGO) to assist them to sell their Carbon credits. This implies that TFCG/MJUMITA and MCDI were able to build trust and good relationship with some local communities which provided with the opportunity of influencing other actors in the course of their interaction. Barnett and Duval (2005) and Kriesi *et al.* (2006) showed that power relations can be created through interaction of actors and social relations. Lukes (2007) argues that actors are able to influence each other through different interactions.

On the other hand, the results show that IRA gained strategic and institutional power in the national REDD+ governance process by being a National REDD+ Secretariat. The results imply that both formal and informal interactions of actors helped them to develop strategic power that was ascribed to knowledge of the actors on REDD+ issues. Keltner *et al.* (2000) argue that powers can be elevated or reduced depending on social circumstances. In this respect, strategic and institutional powers of the government actors on the management of REDD+ seemed to have been reduced because of lack of financial resources and technical experience on REDD+. Conversely, the strategic power of NGOs seemed to be elevated because of the financial and technical support they received from some development partners and the technical advisers that were employed in their projects. Cronkleton *et al.* (2011) and Wallbot (2014) found that financial resources of some international NGOs enable them gain access to decision making processes that were led by government actors.

Moreover, the results show that RNE and UNDP had Strategic power over how the funds should be used to support REDD+ initiative in Tanzania. In this context, RNE interacted

frequently and had signed contracts with 9 piloting NGOs and IRA on the management of REDD+ project funds. IRA was also granted strategic power to liaise with piloting NGOs over the management of REDD+ funds. This implies that financial resources and information flow were sources of power that helped some actors to strategically position themselves in the national REDD+ governance process. Dkamela *et al.* (2014) reported that donor communities in Cameroon and DRC possessed strategic power derived from the national REDD+ governance process. Likewise, Brockhaus and De Gregorio (2014) found that through the provision of financial resources and interactions, powerful actors strived to influence policy making process. In addition, Aguilar-Støen, (2015) reported that the control of key resources such as forests and carbon rights, information and data, and networks in the REDD+ process provided strategic power to some actors in Columbia and Costa Rica.

Besides, the results show that research organizations such as IRA and SUA had strategic power over knowledge generation during the national REDD+ governance process. SUA and IRA implemented a number of researches that enabled them to accumulate strategic power to manipulate which information was to be shared with other actors because of their interests in the national REDD+ governance process. As a National REDD+ secretariat, IRA possessed strategic and structural power over which issues could be tabled for discussion at the National REDD+ Task Force meeting. This is due to the fact that IRA was responsible for keeping daily records that were an important source of information for decision making. In some instances, the national REDD+ Task Force complained against IRA for not bringing at the discussion table issues related to availing funds to government agencies to pilot REDD+ activities. However, this structural position of IRA served as a constraint for the national REDD+ governance process because information was not timely delivered to various actors hence delaying decisions.

The results also suggest that some actors can use their roles, capabilities and resources to acquire strategic power that facilitate or frustrate governance process. The results also imply that the control of information on REDD+, financial resources, and knowledge related to REDD+ served as the source of strategic power to influence the national REDD+ governance process.

Moreover, the results reveal that institutional and structural power ranked second in the process, with scores of 5 each in the power ranking. The results revealed that VPO, MNRT and MoF, PO-CSM had both institutional and structural powers during the national REDD+ governance process. The results revealed that VPO had institutional power which stemmed from the organizational mandates given by the Environment Act (i.e., EMA 2004) and the National Environment Policy (1997). Additionally, the results showed that despite being ranked low in power rating, PO-CSM and MoF had institutional and structural powers over the approval of all proposed national REDD+ governance structures. Both PO-CSM and MoF are key organizations that are responsible for approving of new National REDD+ governance structures. Therefore, PO-CSM and MoF had complementary power relations in the approval of new REDD+ governance structures. The two actors could potentially exert control over other actors in the network because of their privileged structural position in exchanging information related to the approval of some REDD+ process. In Brazil, Gebara *et al.* (2014) found that the federal government, states, municipalities, and federal districts shared authority to legislate on several issues related to natural resources, including forest conservation as they had both institutional and structural powers in the national REDD+ initiative.

Similarly, Gebara *et al.* (2014) also found that the Chief Secretary Office in Brazil which has formal institutional power on the Inter-ministerial Committee on Climate

Change was one of perceived influential actors. Likewise, Bushley and Khatri (2011), Brockhaus *et al.* (2012) found that government agencies, consultants and donor agencies used their strategic power to influence the REDD+ processes in Brazil, Cameroon, Indonesia, Nepal, Papua New Guinea (PNG) and Vietnam). The results support the argument by Rietig (2011) that influence on the national REDD+ governance process depends on the roles, capabilities, and policy entrepreneurial strategies of various actors.

4.7.2 Power struggles in the National REDD+ process

Power struggles were evident in the national REDD+ governance process. The results reveal that while 29% of the respondents agreed, 53% of the respondent's strongly agreed with the existence of power struggles in the national REDD+ process, Table 9 shows the perception of actors with respect to power struggles in the National REDD+ governance process.

Table 9: Actors' perception on existence of power struggles

Actor Type	Do not know %	Strongly disagree %	Disagree %	Agree %	Strongly agree %	Reliability	
Government	2 (2.9)	1 (1.5)	3 (4.4)	10 (14.7)	15 (22.1)	Cronbach's Alpha (α) 0.72	N of items 68
Parastatal organizations	0	1 (1.5)	1 (1.5)	2 (2.94)	7 (10.29)		
Dev. Partners	1 (1.5)	0	1 (1.5)	0	3 (4.4)		
Private Sector	1 (1.5)	0	0	2 (2.94)	2 (2.94)		
NGOs	0	0	1 (1.5)	6 (8.8)	9 (13.24)		
Total	4 (5.9)	2 (2.94)	6 (8.8)	20 (29.4)	36 (53)		

NB: Number in bracket indicate percentages

The results reveal that perceptions on the existence of power struggles were across all groups of actors in the national REDD+ governance process. There was a strong perception of the existence of power struggles among both government and non-government actors with reliability coefficient of 0.72. The study showed that while a large number (over half i.e., 53%) of these actors strongly believed that there was power struggle. Having a large numbers of actors acknowledging the existence of power struggles is linked to competition on coordination of REDD+ process between government actors (i.e., VPO and MNRT) at the time of initiation. The competition was attributed to the organizational mandates of the two Government actors. On the other hand, only a small number of actors (2.94%) strongly disagreed that there was power struggles in the national REDD+ governance process. The actors (i.e., PO-CSM and PARL.) who strongly disagreed on the existence of power struggles were the ones that were located at the peripheral of the national REDD+ governance network. This is because the two government actors were not directly involved in REDD+ related activities and neither did they participate in all discussions at the beginning of REDD+ governance process. In this regard, they were not frequently involved in the national REDD+ governance process. In this context, they were not well informed of the politics and dynamics of the national REDD+ governance process.

The results showed that the level of perception by private sector and NGOs on power struggles was relatively low as compared to the perception by government actors. This tendency can be attributed to small numbers and inadequate awareness of those actors in the national REDD+ process. Since only few private sectors were engaged in the process, they were not interested in gaining power in the national REDD+ process. Besides, as most NGOs were satisfied with how the national REDD+ governance process was being conducted, there was little interest in getting involved in power struggles. In

addition, the coalition and network that was formed by piloting REDD+ helped to bring trust among NGOs. Indeed, the non-government actors also shared common ideological beliefs on their interests.

The perceived power struggles were between government actors (i.e., Vice President's Office -VPO, Prime Minister's Office - PMO- RALG and the Ministry of Natural Resources and Tourism/ Tanzania Forest Service-MNRT/TFS) especially with regards to coordination of national REDD+ governance process. The decision about which organizations were responsible for coordinating REDD+ was highly contested between VPO and MNRT. MNRT/TFS argues that it has already established REDD+ unit within its structure as one way of showing readiness and preparedness to coordinate the REDD+ initiative.

On the other hand, actors from VPO felt that EMA (2004) gives them structural and institutional powers to handle and coordinate all mitigation activities, including REDD+. The Environment Management Act (EMA) Cap 191 [R.E.2002] gives legal and power to the Ministry responsible for Environment (VPO-DoE) to coordinate climate change mitigation activities, including REDD+ (URT, 2004). Conversely, the Forest Act Cap 323 [R.E.2002] gives institutional power to the Director of Forestry and Beekeeping to manage all forests in Tanzania (URT, 2002). The Forest Act provides for joint forest management agreements to be signed between local communities and other partners as they strive to conserve forest resources. Forest management falls within two main management authorities, namely the Ministry of Natural Resources and Tourism (MNRT) through the Division of Forestry and Beekeeping/or the current semi-autonomous agency- Tanzania Forest Service (TFS) as well as the Local Government and Regional Administration under the Prime Minister's Office (PMORALG). Both Ministries are key

actors and have both economic and political interests that are attributed to their organizational mandates. Therefore, power struggles arose on who can manage and coordinate the proposed emerging governance structures such as national REDD+ Trust Fund and MRV system.

Furthermore, the study found that the establishment of the National Climate Change Financing Framework (NCCCF) process was another centre for power struggles from two key government actors, namely, the VPO and the MoF. NCCCF initiative process was led by the Ministry of Finance (MoF) which was supported financially by United Nations Development Programme (UNDP), the World Bank (WB), and Department of International Development (DfID) of UK. The study revealed that while the MoF from the onset of the initiative, positioned itself to manage and coordinate the NCCCF, a joint committee on this initiative finally decided that the VPO should be the chair of the NCCCF process. The decision was reached at the joint committee which involved the VPO, the MoF and the development partners (i.e. UNDP, WB, and DfID) who were supporting the NCCCF process financially. The decision to allow the VPO to coordinate the NCCCF process was based on organizational mandates of VPO on climate change issues. Similar finding was reported by Bofin *et al.* (2011) on a conflict with regard to coordination involving the Ministries responsible for Environment versus the Ministry responsible for forestry in the national REDD+ governance process planning in the DR Congo. May *et al.* (2011) also reported that power struggles existed between Federal and state actors, with States authorities struggling for more power during the national REDD+ governance in Brazil.

Furthermore, the results show that power struggles were perceived between some NGOs (particularly TFCG/MJUMITA and MCDI) and some government actors (i.e., VPO and

MNRT). Power struggles between these actors focused mainly on the design of new national REDD+ governance structures. Through their pilot projects, TFCG/MJUMITA and MCDI aimed at developing a Carbon cooperative and Group Carbon certification as a governance structure for their own assessment and reporting system at the local level. This initiative led to power struggles between the piloting NGOs and the government actors.

Moreover, the emerging REDD+ governance structures at both national and local/project level suggest that there is a contradiction between the local level REDD+ governance structures. While the pilot projects envisage selling Carbon credits directly to the international markets, they (i.e., NGOs) proposed the establishment of their own local/project level Carbon credit, which is a market based governance structure system. On the other hand, the national REDD+ Task Force was pushing for National REDD+ Trust Fund and MRV system that were eventually adopted in the national REDD+ Strategy. The National REDD+ Task Force adopted a nested centralized REDD+ governance structures at the national level. By proposing their own local/project level Carbon credit marketing systems which aimed at capturing Carbon benefits/profits through retention in their respective cooperatives and group certification scheme, NGOs (i.e., TFCG/MJUMITA in Kilosa and MCDI/Carbon Tanzania in Kilwa) seemed to have strategically transformed themselves into 'economic actors' and 'power brokers'. These two NGOs had already signed contracts with either local people, Regional and International Organizations. Power struggles in the national REDD+ governance process were also reported by Wollenberg and Springate-Baginski (2010). Angelsen and McNeil (2012) revealed that domestic power struggles contributed to slow overall progress in most REDD+ countries.

4.7.3 Factors underlying power struggles in the national REDD+ governance process

Table 10 shows factors underlying power struggles in the national REDD+ process. The results show that the Coefficient of determination (R^2) of 0.827 (1.477 Std. Error of the estimate) implies that independent variables explained 88.7% variation in the dependent variable.

Table 10: Factors underlying power struggles in the national REDD+ governance process

Factors X_i	Coefficient		0.827	
	β	S. E	t	Sig.
Number of Roles and Responsibilities of the actors	0.567	0.023	8.15 *	0.002*
Level of awareness and knowledge of actors on REDD+	0.198	0.191	3.554	0.152
Ownership of forests	0.064	0.693	0.945	0.368NS
Economic expectations from REDD+ initiative	0.146	0.154	2.034	0.046*
Organizational mandates of participating actors	0.219	0.123	-3.417	0.001*
Level of Designation or position of actors in the organization	0.046	0.358	0.935	0.354NS.
Membership in the National REDD+ Task Force	0.039	0.117	0.640	0.525NS
(Constant)		1.091	8.077	.000*

A Dependent Variable: Performance level index of Power struggles in the National REDD+ process (Y i)
 SE =Standard error of the estimate. *Statistically significant at 0.05 and 0.01 level of significance, NS = not statistically significant at 0.05 level of significance, β = Beta weight

The results show that there was a positive correlation between dependent variable (power struggles) and independent variables (factors underlying power struggles). The underlying factors included:- number of tasks/ roles and responsibilities of the actors in the process; level of awareness and knowledge of actors on REDD+; ownership of forests; economic expectations of actors organizational mandates of actors and membership in the national REDD+ Task Force. Table 10 shows further that a positive correlation was depicted between power struggles and factors underlying power struggles in the national REDD+ process implying the contribution and influence of the independent variables with respect to power struggles. The proceeding section shows the contribution of each factor in the power struggles:-

4.7.3.1 Number of Roles and responsibilities of actors in the national REDD+ process

Table 10 shows that the number of tasks and responsibilities were highly significantly correlated ($p=0.002$) with the power struggles over the process and had positive Beta value (Beta=0.567). This implies that actors who were assigned some tasks and responsibilities had a high chance of being engaged in the power struggles. Results from FGD and discussions with Key informants revealed that tasks and responsibilities assigned to actors helped to generate and improve information flow, enhance social interaction, attain strategic positions and knowledge related to REDD+. Thus, tasks and responsibilities of actors resulted into galvanized strategic powers of some actors. Table 11 shows the types of actors who were engaged in the power struggles and their roles and responsibilities related to the National REDD+ governance process.

Table 11: Types of actors engaged in the power struggles and their responsibilities

Types of actors	Actor	Roles and responsibilities	Engagement in power struggles
Government	VPO	UNFCCC National Focal point Coordination of climate change Member of the task force	YES
Government	PMO-RALG	Member of the task force	YES
Government	MoF	Coordination of Financial Matters Spearheading of national Climate Change Financing Framework Proposed member of the task force	YES
Government	MNRT/TFS	Leading the UREDD programme and Forest Carbon Partnership Facility (FCPF) initiatives Custodian of forest Member of the National REDD+ task force.	YES
NGOs	TFCG/MJUMI TA, MCDI	Piloting of REDD+ project activities Promotion and implementation of PFM Member of the National REDD+ task force	YES
Development Partners	RNE, UNDP	Provision of financial support	YES
Parastatal organizations	IRA,	REDD+ Secretariat Research on REDD+ activities Candidate for hosting of NCMC Member of the Thematic working Group for REDD+	YES
Parastatal organizations	SUA,	Research on REDD+ activities Hosting of NCMC Member of the Thematic Working Group for REDD+	YES
Parastatal organizations	TAFORI)	Research on REDD+ activities Candidate for hosting of NCMC	No

Theseresultsimply that most of the actors,that is, government actors (i.e., MRNRT/TFS, VPO) and non-government actors (such as TFCG/MJUMITA, MCDI, IRA, and SUA)who wereassigned severalroles and responsibilities or had organizationalmandates related to the national REDD+ governance process were, to a greater extent, engaged in power struggles. For instance,VPO, MNRT/TFS, MOF, IRA, TFCG/MJUMITA and MCDIthat were found to be engaged in power struggles werealso charged with several responsibilities related tocoordination, research, piloting and advocacy of REDD+ activities.For instance, VPO coordinates climate change negotiationsin the country andwas the signatoryof the Letter of Intent with the Royal Government of Norway which led to the adoption of REDD+ initiative in Tanzania. On the other hand, MNRT/TFS coordinatedimplementation of UNREDD programme and Forest Carbon Partnership

Facility (FCPF) initiative. Despite having institutional organizational mandates related to the national REDD+ governance process, the two Government actors accumulated strategic power and resources during the national REDD+ governance process. In addition, MoF coordinated a National Climate Change Financing (NCCF) process which advocates for streamlining coordination of climate change finances in the country. In this respect, it was found that power struggles between MoF and VPO was centred on coordination of REDD+ funds under the proposed streamlined National climate change financing mechanism.

Furthermore, discussions with key informants and FGDs revealed that overlapping mandates with regards to REDD+ initiative has led to the perceived power struggles among actors. These overlapping mandates coupled with the varied interests of stakeholders posed challenges to the national REDD+ governance process and may be the center of current conflicts and power struggles for several actors. Bushley and Khatri (2011) found that both government and non-government actors who were given some responsibilities were striving to advance their interests.

4.7.3.2 Level of Awareness and Knowledge of Actors

The results reveal that awareness and knowledge were being developed as the national REDD+ process evolved. Table 10 shows further that awareness and knowledge of actors were positively correlated ($p=0.152$) to the power struggles over the national REDD+ governance process and had a positive Beta weight (Beta= 0.198). However, the relationship was not significant with ($R = 0.191$) and ($P=0.152$) which is more than the critical value ($\alpha=0.01$ or 0.05). This means that an increase in knowledge and awareness on REDD+ increased the chances of aggravated power struggles since more stakeholders

become aware and interested to the benefits from REDD+ initiative. Table 12 shows attributes on the level of awareness and knowledge on REDD+.

Table 12: Attributes of Actors on the Level of Awareness and Knowledge on REDD+

Actors Level of Awareness and Knowledge on REDD+									
SN	Actor Name	Awareness on REDD			Total	High	Knowledge on REDD+		Total
		High	Medium	Low			Medium	Low	
1	SUA IRA- REDDSE	X				x			
2	C	x				x			
3	VPO	x				x			
4	UNDP OLMO -	x				x			
5	TFI PMO-	x				x			
6	RALG	x					x		
7	NEMC TCFG/MJ			x					x
8	UMITA	x				x			
9	TATEDO	x				x			
10	TNRF		x				x		
11	CARE-T	x					x		
12	MOF		x						x
13	JGI	x				x			
14	RNE	x				x			
15	MDCI	x				x			
16	AWF	x				x			
17	WCST	x					x		
17	MOAFS			x					x
19	WWF	x				x			
20	GR FARM –		x						x
21	AF		x				x		
22	PARL.			x					x
23	MEM			x					x
25	MLHS			x					x
26	PO-CSM			x					x
27	TAFORI		x						
28	DC/LC			x					x
Total		15	5	8	28	12	6	10	28
Percent		53.6	17.9	28.6	100	42.9	21.4	35.7	100

The results show that 15 (53.6 %) and 12 (42.9 %) of the respondents indicated to have had high awareness and adequate knowledge on REDD+ initiative. The study reveals that almost all the respondents (i.e. TFCG/MJUMITA), VPO, MNRT/TFS, IRA, PMO – RALG and MoF) who were engaged in power struggles had medium to high levels of awareness and knowledge on REDD+ initiative. This means that chances of actors being engaged in power struggles increased with an increase in the level of knowledge and awareness on REDD+. This implies that awareness and knowledge on REDD+ contributed positively to power struggles over the REDD+ governance process. A plausible reason could be that actors with high level of awareness and knowledge on REDD+ were more informed on the expected benefits of REDD+ as compared to those actors with low level of awareness or without the relevant knowledge. Manyika *et al.* (2013) reported that perceptions of local communities' rights changed as the level of awareness and understanding of the national REDD+ process continued to increase. Wallbot (2014) found that awareness of indigenous people on the implication of REDD+ initiative on their livelihood increased their participation and influence to national negotiators and UNFCCC decision. Malimbwi and Zahabu (2010) emphasized on the need to create awareness in order to increase participation on the national REDD+ governance process.

4.7.3.3 Actors' Ownership of Forests

Table 10 shows further that actors' ownership of forests had a positive contribution on power struggles (Beta=0.064) in the national REDD+ process. However, the results were not statistically significant at 5% ($p=0.368$). The positive value indicates that there were positive correlations between actor's ownership of forests and engagement in power struggles. Ownership of forests increased chances of actors' involvement in power

struggles. Table 13 shows the status of forest ownership with regards to actors who were engaged in national REDD+ powers struggles.

Table 13: Status of forest ownership with regard to actors engaged in powers struggles

S/N	Actors	Perceived engagement in powers struggles	Ownership of forests
1	VPO	YES	NO
2	PMO - RALG	YES	YES
3	MoF	YES	NO
4	MNRT	YES	YES
5	SUA	YES	YES
6	IRA	YES	NO
7	TFCG	YES	NO
8	MCDI	YES	NO
9	TAFORI	NO	YES
10	GR	NO	YES
Total		YES = 8 No = 2	YES = 5 NO = 5

The results revealed that 5 out of 10 actors who were engaged in power struggles own forests. The plausible reasons for non-significance could be that not all forest owners were fully aware of the existence of the REDD+ and its implication on forest resources. The non-significance was also attributed to the fact that some actors from organizations such as MoF, VPO and TFCG/MJUMITA who do not own forests were also engaged in power struggles. In addition, the non-significant results can be explained by the fact that other actors such as private sector actors (e.g. Green resources) and local communities who own forests did not seem to engage in the power struggles. The plausible reasons are: firstly, most NGOs who were involved in the national REDD+ process were portraying themselves as representatives of forest owners. Therefore, local communities who owned forests might have thought that their interests were taken care of by NGOs who were engaged in power struggles. Secondly, the private sector actors do not have great interests. In addition, low level of awareness on REDD+ and prior

engagement in CDM project may have caused most forest owners to have little interest in the national REDD+ process. Aguilar-Støen (2015) found that the control of key resources such as forests and carbon rights granted participation in the REDD+ initiative. Dkamela *et al.* (2014) found that despite their invisibility in the decision making forum, private sector actors were able to influence decisions in Cameroon forest sector.

Moreover, these results concur with those of Springate-Baginski and Wollenberg (2010) who argue that countries contemplating REDD+ initiatives are likely to confront conflicting policy objectives over forest access, control, and use. Kajembe *et al.* (2013) reported on power struggles between local communities and the central government on ownership of parts of forest reserve in the local level REDD+ governance project in Rungwe district. Other authors such as Cronkleton *et al.* (2011) (in Mexico, Brazil and Bolivia) and Bernard *et al.* (2014) (in Kenya) report conflicts between private owners of forest and government actors in the national REDD+ governance process.

4.7.3.4 Organizational Mandates of Participating Actors

Organizational mandates of participating actors contributed power struggles in the national REDD+ process. Table 10 shows further that organizational mandates were positively correlated (Beta=0.219) with power struggles, and were statistically significant (p=0.001). This implies that increased engagement of actors who had organizational mandates related to REDD+ led to increased competition in the national REDD+ process. The results showed that legal organizational mandates significantly correlated with power struggles (Beta= 0.219) and (P=0.001). Table 14 shows responses of actors on organizational mandates related to REDD+ initiatives. The results showed that 8 out of 10 actors who were involved in power struggles had legal organizational mandates related to REDD+ implementation. Only 2 out of 10 actors who were engaged in

power struggles seemed to have no legal organizational mandates related REDD+ process. This implies that organizational mandates of organizations had significant influence on actors' engagement in power struggles during the national REDD+ process. Implicitly, actors with organizational legal mandates had strong power base and were compelled to defend their authority and power during the national REDD+ governance process. Table 14 shows organizational mandates related to REDD+ often get actors engaged in power struggles.

Table 14: Organizational mandates for actors engaged in power struggles

S/N	Actors	Perceived engagement in powers struggles	Any organizational mandates	Organizational mandates on REDD+ initiative
1	VPO	YES	YES	Coordination of Environment and Climate change issues
2	PMO - RALG	YES	YES	Forest management
3	MOF	YES	YES	Financial management and approval
4	MNRT	YES	YES	Forest governance, management and production
5	SUA	YES	YES	Research, consultancies
6	IRA	YES	YES	Research consultancies
7	TFCG	YES	YES	Project implementers, service providers
8	MCDI	YES	YES	Project implementers, service providers
9	TAFORI	NO	YES	Research consultancies
10	GR	NO	YES	Forest management
Total		YES = 8 No = 2		

The MoF was an overall custodian of financial matters in the country while PMO- PALG was engaged in the management of forests at the district level. SUA and IRA were involved in research and training related to forest and REDD+ activities. Similarly, NGOs were working with local communities in the conservation of forests. Cronkleton *et al.* (2011) and Bond *et al.* (2009) pointed out the importance of considering Organizational mandates of actors at both local and national levels in designing of REDD+ institutional mechanisms in order to avoid conflicts.

4.7.3.5 Level of Designation/Position of Actors in the Organizations

Table 10 shows the effects of the level of position of the actors in the organizations participating in the National REDD+ governance process. Designation or position of actors participating in the national REDD+ process was positively correlated (Beta= 0.046) to power struggles. However, these results were not statistically significant (p=0.354), implying that level of designation or position of actors in the organization did not have any significant motivation for engagement in power struggles. Table 15 shows designations/positions of actors in the national REDD+ process.

Table 15: Level of Designations/positions of actors engaged in the national REDD+ process

Actors	Designation / Positions of the actors participating in the National REDD+ governance process			
	Junior officers	Seniors Officers	Assistant/Director or Executive Directors	Number of respondents
Government	2.94(2)	39.7(27)	2.94(2)	31
Parastatal organizations	0(0)	14.7(10)	1.47(1)	11
Developing partner	0(0)	2.94(2)	4.4(3)	5
Private sector	4.4 (3)	1.47 (1)	1.47(1)	5
NGO/CBO	1.47 (1)	7.4(5)	14.7(10)	16
Total	8.8(6)	66.2(49)	25(17)	68

NB: Number in brackets indicate frequencies of respondents

The results showed that most of the actors who were participating in the national REDD+ process held senior positions in their organizations. The results indicate that 66.2% (49) of the actors held senior positions, while 25% (17) of the actors held positions of Assistant/Directors or Executive Directors. The results also show that 8.8 % (6) of the actors were junior officers. These results indicate that very few Assistant/Director or Executive Directors—who are normally considered as decision makers in their organizations—were engaged in the national REDD+ governance process. On the other hand, these results imply that most policy makers in the government did not engage directly but delegated the responsibilities on REDD+ to Senior Technical Officers. This means that decision makers (i.e., Assistant Directors or Executive Directors) relied on the feedback provided and advices from their subordinates in making decisions. The results may also imply that Executive officers from government sectors were not interested in or motivated to participate directly in the national REDD+ process. Conversely, the results show that most NGOs were represented by their top Executive Officers (i.e., Director,

Executive Directors or managers) in the national REDD+ process. This indicates that most NGOs had great interests in the REDD+governance process.

Moreover, the results indicate that most of the representatives from private sector actors were junior officers implying that executive officers were not interested in the national REDD+ process. These results also indicate that the positions of the actors in the participating organizations have an impact in the national REDD+ process. Table 16 shows the perceived effects of the level of designation or position of the actors in the National REDD+ governance process.

Table 16: Perceived effects of the level position of the actors in power struggles

Types of	The level of designation/position of the actors in the organizations influence on power struggles					Reliability Cronbach 's Alpha (α) %	No. items %
	Do not know %	Disagree %	Agree %	Moderate ly agree %	Strongly agree %		
Government Parastatal organizations	4(5.9)	3(4.4)	3(4.4)	11(16.2)	10(14.7)	0.81	68
Developing partner	1 (1.5)	1 (1.5)	1(1.5)	2(2.94)	6(8.8)		
Private sector actors	1(1.5)	0	1(1.5)	1(1.5)	3(4.4)		
NGO/CBO	1(1.5)	0	0	2(2.94)	2(2.94)		
Total	2(2.94)	2(2.94)	1(1.5)	6(8.8)	5(7.4)		
	8(12%)	6(9)	6(9)	22(32)	26(38)		

NB: number outside parenthesis indicated respondents

The results show that there is a mixed feeling on the contribution of position/designation of the actors in the power struggles. The results show that further that a large number of actors agreed that designation/position of participating actors in the national REDD+ process contributed to power struggles. About 38% of the actors strongly agreed that level of designation of the actor affected the national REDD+ governance process. While 12% of the actors indicated not to have known, and 9% of the actors disagreed that the

designation of actors influenced power struggles in the national REDD+ governance process.

The results show that Senior or Executive Officers were actively engaged in the discussions which addressed the interests of their organizations as opposed to the discussions of junior officers. These results imply that even though power struggles was affiliated to organizations, some personal interests were also demonstrated by some Senior Officers or Executive Directors who were involved in the national REDD+ governance process. Greer (2014) argues that people in top management positions normally consider their interests in the organizations and they neglect those of others. In Cameroon, Dkamela *et al.* (2014) found that most senior officials in the Ministry of Environment and Forestry strongly opposed the reform by the World Bank in the forest sectors because it was considered to threaten their interests. In addition, Brockhaus *et al.* (2015) argue that individual and collective behaviours and beliefs pose a threat to the REDD+ governance process due to vested interests.

4.7.3.6 Membership to the National REDD+ Task Force

Table 10 shows that membership of actors in the REDD+ task force was positively correlated (Beta= 0.039) with power struggles. However, these results were not statistically significant (P=0.525). Most of the organizations represented in the national REDD+ Task Force were also involved in the power struggles. During the national REDD+ process, members of the National REDD+ Task Force constituted a decision platform and provided technical guidance to the government and other players.

Table 17 shows the distribution of actor/organizations engaged in power struggles in relation to the membership in national REDD+ task force.

Table 17: Representation of actors engaged in power struggles in the national REDD+ Task Force

S/N	Actors	Perceived engagement in powers struggles	Membership or serving in the National REDD+ Task Force
1	VPO	YES	Yes
2	PMO – RALG	YES	YES
3	MOF	YES	YES
4	MNRT	YES	YES
5	SUA	YES	YES
6	IRA	YES	YES
7	TFCG	YES	YES
8	MCDI	YES	NO
9	TAFORI	NO	NO
10	GR	NO	NO
11	MLHSD	NO	YES
12	MCJ	NO	NO
13	MEM	NO	NO
Total		YES = 8 No = 2	YES =7 NO =5

The results show that 58% of the actors who represented organizations which constituted the National REDD+ Task Force were involved in the power struggles, while 42% of those actors were not. These results indicate that the more the members of the national REDD+ Task Force the more the competition for powers in the national REDD+ process. Therefore, this means that increasing the number of members of the task force from six representative organizations to twelve increased the intensity of power struggles.

Participation in the national REDD+ Task Force also increased the chances to influence decision making in the national REDD+ process. This can be attributed to the fact that stakeholders who had access to decision making forum were able to influence the decision and agenda setting through the secretariat and the national REDD+ task force. TNRF (2012) revealed that after inclusion in the task force, NGOs successfully pushed for the establishment of a private facility in the National REDD+ strategy. For example,

most of the Government actors initially rejected the establishment of a Private Facility in the National REDD+ Strategy but it was included after NGOs representative became a member of the task force. Cronkleton *et al.* (2011), Rietig (2011) and Wallbott (2014) found that access of NGOs/CSOs to negotiations of REDD+ increased their level of influence to defend their interests.

4.7.3.7 Economic Expectations from REDD+ Initiative

Table 10 shows further that economic expectations for REDD+ initiative were positively correlated ($p=0.154$) with the strategic power struggles over the national REDD+ process having a positive Beta weight (Beta= 0.146). The results show a positive correlation between economic expectations from REDD+ initiative; and the relationship was significant with ($r = 0.154$) and ($p=0.046^*$) which is more than the critical value ($\alpha=0.01$ or 0.05).

These results imply that most actors in the national REDD+ governance process, to some extent, expected economic benefits from the REDD+ initiative. For instance, it was revealed during discussions with key informants that advocating for compensation of the foregone or avoided deforestation activities increased the economic expectations of actors.

These results suggest that the national REDD+ governance process need careful consideration on how established governance structures will meet the high economic expectations from stakeholders at local, national and international levels. Emerging REDD+ governance structures need to deliver to the expectations of the stakeholders. Brockhaus and Angelsen (2012) and Bernard *et al.* (2014) warned that the potential material advantage was the interest of many actors in the REDD+

initiative. In Kenya, Bernard *et al.* (2014) found that economic benefits were the main incentive for the engagement of private sector in the Readiness process. Likewise, Sunderlin (2010) found the linkage of REDD+ initiative and expectations of stakeholders on compensation for keeping forests standing. Martin *et al.* (2010) showed that some governments have already created forest reserves as economic mechanisms to generate financial compensation in the context of REDD+ activities.

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

This chapter presents salient conclusion and recommendations arising from the study. In addition, areas that needed further study are highlighted.

5.1 Conclusions

The study has shown that Fund and Market based systems are emerging as National REDD+ governance structures in Tanzania. These emerging governance structures are complementary to the existing forest governance structures that facilitated introduction of the former. In addition, the co-existence or complementarity between new and the existing governance structures seem to bridge the coordination gap in the national REDD+ governance process. A number of actors, including government, parastatal organizations, private sector and non-governmental organizations (NGOs), were involved in the development of the emerging national REDD+ governance structures. However, the study has shown that the Government and NGOs were privileged by their track record engagement in similar activities and their new tasks and responsibilities in the national REDD+ governance process. In this regard, visibility and influence of private sector actors were affected by the low level of awareness and inadequate representation in the governance process. Despite the diversity of views on the design of the emerging REDD+ structures, most actors preferred REDD+ governance structures that are free from government interference, free of corruption and fiduciary risks. On the other hand, the study has revealed that the National REDD+ Trust Fund is still uncertain on how to disburse funds to the beneficiaries. Lack of clarity on how funds will trickle down to the beneficiaries is more likely to cause a slow pace of operationalization of the emerging REDD+ governance structures and presents a potential conflict on the final design of governance structures in the country.

Furthermore, uneven distribution of sources of financial resources and knowledge on REDD+ issues observed during the national REDD+ governance process rendered some actors more powerful while neglecting some equally important actors. As a result, the perceived influence of various actors is more likely to lead to legitimacy test from other actors. Both political and economic factors are likely to raise the question of inadequate participation, accountability, effectiveness, equity and transparency as actors continue to gain more experience and knowledge on REDD+.

The study has further revealed that vested interests at both local and national levels have compelled both the government and non-government actors to position themselves as brokers of power, information, as well as financial resources and knowledge. In this context, majority of actors have capitalized on their assigned roles and responsibilities to brokerage the national REDD+ governance process. Consequently, some actors strategically deployed various brokerage strategies to find and solidify their respective brokering positions. Such strategies include provision of consultancy services (consulting brokerage), financial resources and technical services. In addition, some actors deployed non-state diplomacy or insider-outsider relations by directly engaging with governments through acting as observers and technical advisers at different fora.

Moreover, the study has shown that power struggles occurred not only between different types of actors (e.g. government against NGOs) but also within the same groups of actors (government Vs government organizations). The power struggles are attributed to various factors such as the number of assigned roles and responsibilities of actors, the level of awareness and knowledge of actors on REDD+, economic expectations of carbon credits, organizational mandates of actors, the level of designation/position of actors and ownership of forests. Other underlying factors that contributed to power struggles are

membership in the national REDD+ Task Force and organization mandates of actors. This confirms the hypothesis that power struggles in the national REDD+ governance process are contributed and influenced by socio-economic factors underlying the REDD+ governance process. The study also showed that both brokerage strategies and power struggles may spark political legitimacy and subsequently affect performance of the emerging governance structures.

In sum, the study has shown that it is important to consider actors' brokerage strategies and power struggles and how they may play out in the specific designs of emerging REDD+ governance structures. On the other hand, the study has shown that governance structures are shaped by strategic brokerage strategies, power relations and power struggles deployed by various actors at different stages. The study draws attention to the perverseness of power struggles and brokerage strategies of actors in twinned and hidden attempts at shaping both the governance process and emerging governance structures. This will serve as awareness and wake up call for both national government and local governments to devise robust mechanism for mapping up and shaping different actors interests that influence governance processes.

5.2 Recommendations

In order to address brokerage and power struggles of actors and ensure legitimacy in the national REDD+ governance process, the following are some pertinent recommendations:-

5.2.1 Assessment of the emerging governance structures

Since REDD+ governance structures have just been established, there is need to continuously assess their effectiveness, performance and provide the required remedy

whenever necessary. Likewise, studies need to be undertaken to assess the performance of REDD+ governance structures with reference to their output legitimacy.

5.2.2 Establishment of REDD+ governance stakeholders' platform for conflict mitigation

Given the evolving nature of REDD+ governance at local, national, and international levels, there is need to establish national REDD+ dialogue platform whereby all issues on REDD+ could continuously be debated and deliberated. This is due to the fact that REDD+ initiative is still evolving and most countries and projects are still at the early stages of implementation. Thus, the national dialogue could ensure that all emerging issues on REDD+ are taken on board and that all stakeholders including local communities and private sectors are actively engaged in the national REDD+ governance process. The platform could also be used to discuss REDD+ related issues that still lack clarity such as benefit sharing governance structures, REDD+ credits ownership and potential land conflicts as they relate to REDD+ governance. Stakeholders' consultative meetings can be arranged regularly on zonal basis to discuss issues related to the effectiveness of the emerging REDD+ governance structures and feed into the national governance process. This will enable stakeholders to address emerging issues at local, national, and international levels.

5.2.3 Improving institutional arrangements on issues related to REDD+ governance

The government and other stakeholders should review and improve institutional arrangements regarding coordination and implementation of REDD+ issues so as to address potential areas of conflicts and power struggles among stakeholders. The improvement of institutional arrangement for REDD+ can be done by devolving more

power to local communities who are managers and users of forest resources. This will help the national REDD+ governance structures to further garner political legitimacy for effective delivery of the expected benefits to all stakeholders.

5.2.4 Establishing a national mechanism for checks and balances in the national governance process

There is need to develop a mechanism for checks and balance for the established governance structures (e.g. NCMC and REDD+ Trust Fund) at national level so as to ensure that such processes do not allow the elite to reap the benefits from REDD+. This will help to minimize proliferation of governance structures, and emerging of power brokers in the national REDD+ process. In addition, clear roles and responsibilities should be provided to the participating actors in order to avoid self-motivated interests of local, national, and international actors. Initiating a national governance process without clarity on some critical issues such as ownership of carbon credits and financial management is likely to endanger both the design and success of the emerging governance structures.

5.2.5 Revision of policies and legislations to enhance performance of the emerging REDD+ governance structures

REDD+ initiative provides for no regret policy initiatives that can support forest governance in the country. In order to ensure sustainability and output of established national REDD+ governance structures, efforts should be made to review the existing relevant policies and legislations such as the National Land Policy (1995), Land Use Policy (1999), National Livestock Policy (2006), the National Agriculture Policy (2013); Environmental Management Act (2004), Village Land Act (1999) Cap 114, Land Act (1999), and Land (Amendment) Act (2004) that has a direct bearing on REDD+ issues.

Review of legislation in the context of REDD+ will provide legal powers to the established governance structures at both national and local levels. In addition, policies and legislations which are currently under review should provide a clear statement on how issues related to REDD+ can be implemented taking into account broader spectral objectives. This will help to enhance effectiveness, performance and legitimacy of the established REDD+ governance structures.

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APPENDICES

Appendix 1: Summary of the study specific objectives, data collection methods and corresponding analysis

Specific Objective	Data to be collected	Data collection Methods	Technique of data analysis
To examine emerging governance structures in the national REDD+ readiness process in Tanzania.	Different Actors in national REDD+ governance process, their interests, roles and responsibilities and their preferred options for establishing governance structures	Social network analysis, pair wise ranking, questionnaire interview, key information's interview, PRA, Focus Group discussion, and participant observation	Content analysis Descriptive analysis
To examine the legitimacy of the national REDD+ governance process.	Sources of power in the national REDD+ process, most influential/powerful in the national REDD+ process Acceptability Of the governance process and emerging governance structures	Power relations	Content analysis Descriptive analysis Social network analysis
To assess brokerage strategies of actors in the national REDD+ governance process.	Interaction and relations of actors, networks of actors Closeness and strengths of relationships Positions of actors, degree centrality, betweenness centrality and closeness of actors	Power relations Brokerage strategies and prestige of actors	Content analysis Descriptive analysis Inferential statistical analysis
To identify and analyze power relations and struggles between actors in the National REDD+ governance process	Ranking and scoring different roles, responsibilities, perceptions, power, power bases and power relations which influence the process, and factors underlying power struggles	Power relations Brokerage strategies social network analysis, ranking, questionnaire survey, key information's interview, PRA, Focus Group discussion, and participant observation	Content analysis and Descriptive analysis

Appendix 2: Guiding questions for FGD and key informants

- 1) Do you agree that there have been there have been some conflicting interest in the national REDD+ process
- 2) Which are key areas for conflicting interests?
- 3) What is your perception in interests in the national REDD+ process?
- 4) Do you perceive existence of power struggles in the national REDD+ governance
- 5) Whoactors are involved in power struggles?
- 6) What are the levels of awareness of actors involved in the power struggles?
- 7) What are the positions of actors who seem to be involved in power struggles?
- 8) Does membership in the national task force influence power struggles?
- 9) Does ownership of forest influence power struggles and brokerage in the national REDD+ governance process
- 10) Do you agree that there have been some compromise the national REDD+ process in Tanzania
- 11) What are these compromises
- 12) Do you agree that there is brokerage in the national REDD+ governance process.
- 13) What are sources of powers for various actors
- 14) Which type of national REDD+ governance structure do you prefer
- 15) who are influential actors in the national REDD+ governance process
- 16) Which governance structures do you prefer?
- 17) Who are the dominant actors?

Appendix 3: Matrix for pair wise ranking of power relations dominant in national
REDD+ governance process.

	Strategic power relations	Institutional relations (1)	Institutional power relations	Score
Strategic power relations				
Institutional power relations				
Structural power relations				

	S1	I	S3	Score
S1				
I2				
S3				

Appendix 4: Questionnaire for Structured interview with Key informants in the national REDD+ governance process

A: Basic identification of respondents

1. Questionnaire No.
2. Date of interview.....
3. Name of respondent(s).....
4. Designation/Position in the organization.....
5. Number of years with the position/title.....
6. Department /Organization.....
7. Category i. Public/ Ministry (ii) para-statal/semi autonomous (iii) High Learning/ Research Institution (iv) Development Partner (v) Private Sector (vi) NGOs/CBO

B: Key issues under consideration

I. National REDD+ Governance structure setting up process

1. Are you aware of REDD+ initiatives in Tanzania?
Yes/No.....
2. If yes, what are the roles of your organization in relation to REDD+ implementation in Tanzania?
 - a. Policy and legislation reformulation.....
 - b. Implementation of REDD+ activities.....
 - c. Research
 - d. Donor/ financing.....
 - e. Awareness and local community mobilization.....
 - f. Others (specify).....
3. Do you think REDD+ initiatives could be implemented successful in Tanzania?
Yes/No...? (if yes go to Q.8)
4. If No, why do you think the REDD+ initiatives cannot be successful implemented?
 - a. Not clear and known by stakeholders.....
 - b. Inadequate financial resources.....
 - c. Inadequate political commitment.....
 - d. Politics involved in the matter.....
 - e. Others (specify)

II: Engagement in the national REDD+ governance process

5. Is your organization directly involved in management of forest resources? Yes/No.....
6. Are/were you involved in the process of establishing the National REDD+ Governance structure in Tanzania? Yes/No.....
7. If NO, were you consulted during setting up/selecting the organization to host National REDD+ fund/NCMC? Yes/No.....?
If, YES, how?
 - a. Stakeholder's workshop
 - b. Research
 - c. Provided online/web comments
 - d. Online/web comments
8. Do/did you have any specific interests in the process of setting up the national REDD+ Fund and/or NCMC? (Yes/No)
 - a. If yes, what are they?.....
9. If you were involved in the national REDD+ governance process, are your interests or arguments/opinions taken into account in the selection of the national REDD Fund or NCMC? Yes/No
 - a. If YES, how?.....
 - b. If NO, go QN. to13
10. Are you aware of any rules which were used in the selection of the National REDD+ Fund and/or NCMC? Yes/No
 - a. If YES, what are those rules and are/were these rules followed during the process? Yes/No.....
11. How were these rules/guidelines developed/formulated?
 - a. Workshop.....
 - b. Seminar.....
 - c. Consultant.....
 - d. Issued by one organization.....
12. Do you think those rule or guidelines facilitated/hindered your participation in the process? Yes/No-----
13. If you were NOT involved in the process, what are the interests that you would like to be considered in setting up the national REDD+ Trust Fund and NCMC?
 - a) Interests for national REDD Trust fund.....
 - b) Interests in the NCMC.....
 - c) Interested in the carbon credits and cash there-fro
14. Are you satisfied with the choice of the national governance structures?

- a. REDD+ fund (The fund is yet to be operationalised and there is still no any organization which has been selected to manage REDD Trust fund) – Yes/No?
 - b. NCMC (Sokoine University has been selected as an interim entity for implementing the project) – YES/NO?
 - c. Others (specify)
15. How do you classify your (organization) participation in the national REDD+ governance process?
- a. active -----
 - b. neutral -----
 - c. marginalized-----
 - d. sideline-----
 - e. do not know-----

III: Legitimacy of the National REDD+ process and source of power

16. Do you know who is/was responsible for convening meeting for actors in the national REDD+ governance structures Yes/No
If yes, mention
17. Did you have access to the decision making process during the setting up of the National REDD+ governance structure Yes/No..... (If No skip to 27)
18. If YES, how? I) participation in the task force ii) consulted by the decision makers; ii) participated in the workshop (iii) others (specify)
.....
19. What are/ were your tasks and responsibilities in setting up the national governance structures for REDD+?.....
- a. Convener
 - b. Task force member
 - c. Consultant
 - d. Secretariat
 - e. Service provider
 - f. teaching and research
 - g. Others (specify)
20. How do you perceive the process for setting up national REDD+ governance structure in Tanzania? (i) Transparent, (ii) not transparent,(iii) legitimate, iv) illegitimate

21. Do you agree that the national REDD+ governance process was a legitimate process?

Neutral	Strongly disagree	Agree	Strongly agree	I don't know
1.	2.	3.	4.	5.

IV: Power relations and brokerage strategies in the national REDD+ governance process

22. How do you assess the participation and representation of following actors in the process of setting up the national REDD+ governance structure in Tanzania?

Actors	Remarks			
	1.Poor	2.Satisfactory	3.Good	4Excellent
President's Office – Cabinet secretariat				
President's Office – Public service management				
Vice President's Office – Division of Environment				
Ministry of Natural Resource and Tourism - Forestry and Beekeeping Division				
Ministry of Natural Resources and Tourism – Wildlife Division				
Ministry of Finance and Economy				
Ministry of Agriculture and Food Security				
Ministry of Energy and Minerals				
Ministry of Livestock Development				
Ministry of Lands, Housing and Settlement Development				
Ministry of Industries and Trade				
National Environment Council				
Tanzania Forest Services				
Sokoine University of Agriculture				
Institute of Resource Assessment, University of Dar es Salaam				
Ardhi University				
Development Partner				
Norwegian Embassy				
United Nations Development Programme (UNDP)				
Kilosa District Council, Morogoro				
Kondoa District Council, Dodoma				
Rungwe District Council, Mbeya				
Tanzania Forest Conservation Group				
Tanzania Climate Change Forum (Forum CC)				
Tanzania Natural Resource Forum (TNRF)				
Green Resources Ltd				
National REDD+ Task Force members				
National REDD+ Task Force Secretariat				
Parliamentary Standing Committee on Lands, Natural Resources and Environment				

23. How do you perceive the authority/entity (ies) that leads/lead the national process for REDD+ governance?
- Have technical competence.....
 - Have legal mandates/power.....
 - Does not have legal mandate/power
 - Have financial power
24. Do you think there is equity and transparency in the national REDD+ governance setting up process in Tanzania? Yes/ No.....
25. If, No, what organizations/entities were having more access and influence other?
- Government actors
 - Economic actors
 - Political actors
 - Donor communities
 - Research organizations
 - NGOs
 - Private entities
26. Did/do you advance your interests during the national REDD+ governance setting up process? Yes/No..... (if you were not involved go 29)
27. Where do you prefer the national REDD+ Fund or NCMC to be housed? (i)VPO, (ii) FBD, (iii) TFS, (iv) PMO –RALG, (v) autonomous (vi) others.....
28. How would you like the funds from the national REDD+ Trust fund to be accessed if established in Tanzania?
- Direct
 - Through intermediately organizations/entities such as NGOs.....
 - Through village village/district committees at local level.....
 - Through responsible ministries such as MNRT, TFS, VPO-DOE, and NEMC.....
 - Others (specify).....
29. How do you like monitoring, reporting and verification of REDD+ activities to be undertaken in Tanzania?
- Directly through implementing entities/organization which can hire/buy the service from international organization
 - Through intermediately organizations/entities such as NGOs.....

- c. Through village village/district committees at local level.....
- d. Through responsible ministries such as MNRT, TFS, VPO-DOE, NEMC.....
Others (specify).....

V: Power struggles and awareness of actors in the national REDD+ governance process

30. Have your organization established any initiative related to REDD+?

- a. Yes
- b. No

31. If Yes, mention the initiative

- a.....
- b.....
- c.....

32. Have you attended any workshop/meeting on REDD+?

- a. Yes
- b. No

33. If yes, mention the type of the workshop/meeting

- a.....
- b.....
- c.....

Thank you very much for your time

THE END

Appendix 5: Questionnaire on power struggles and Legitimacy of the National REDD+ process

(Key: 1=don't know 2= Neither agree nor disagree; 3 =Strongly disagree. 4=.disagree... 5= Agree, 6 =. Strongly agree)

Statement	1	2	3	4	5	6
1.1 Access to the decision making process has influenced the National REDD+ governance process						
1.2 Economic interests of actors has affected the national REDD+ governance process						
1.3 Political interests of actors has affected the national REDD+ governance process						
1.4 Conservation interests of actors has affected the national REDD+ governance process						
1.5 Power relations among actors affects the national REDD+ governance process						
1.6 There is adequate transparency in the National REDD+ governance process						
1.7 Distribution of roles and responsibilities in the National REDD+ governance process have led to the power struggles						
1.8 Position or designation of the actors participating in the National REDD+ governance process have affected the governance process						
1.9 Unclear legal frameworks regarding REDD+ has affected the National REDD+ governance process						

Part I: Questionnaires on power struggles in the National REDD + governance process in Tanzania

Name and organization.....

1. Are you a member of the National REDD+ Task Force YES/NO.....
2. What is your organizational roles and responsibilities in relation to forest management?
3. Do you perceive any power struggles in the National REDD+ governance process in Tanzania
 - (i) Do Not know.....(ii) Neither agree nor disagree, (iii) Strongly disagree.....(iv) disagree.....(v) Agree..... (vi) Strongly agree.....
4. What is your perception on existence of power struggles in the National REDD+ governance process?

(i) Low..... (ii) Medium..... (iii) Very high.....

Who are involved in the power struggles?

(i)..... (ii)..... (iii).....

5. What are the effects of power struggles in the national REDD+ governance process

(i)..... (iii)..... (iv).....

6. Does your organization own forest? Yes/NO.

7. Do you have any economic expectation on REDD+ initiatives? Yes/No.....

8. If Yes, mention the expectations of your organization...a.....b.....c.....

Part II: Questionnaires on the Legitimacy of the National REDD+ governance

Name and organization.....

1. Do you perceive the National REDD+ governance process as an legitimate process

(i) Do not agree..... (ii) Agree..... (iii) Strongly agree..... (iv) Do not Know.....

2. What are the factors which affects the legitimacy of the national REDD+ governance process

(i).Accountability..... (iii).Transparency..... (iv)...Dependent to donor fund.....

3. Show whether you 1=Do not know, 2 Neither agree or disagree, 3= Strongly disagree =4 disagree = 5= Agree = 6; Strongly agree on the following statements:-

Statement	1	2	3	4	5	6
a. The national REDD+ governance process in Tanzania has taken into considerations all legitimacy requirements						
b. There is adequate transparency in the National REDD+ governance process						
c. There is sufficient access to the decision making process in the National REDD+ governance process						
d. The procedure adopted for decision making in the national REDD+ governance process were adequate						
e. Distribution of roles and responsibilities in the National REDD+ governance process have led to the legitimacy of the process						
f. Position of the actors participating in the National REDD+ governance process have affected the legitimacy of governance process						
g. Participation of all actors of some actors have influenced positively the national REDD+ governance process						
h. The existing power relations have positively influenced the national REDD+ governance process						
i. There was adequate representation of actors in the national REDD+ governance process, the outcome of national REDD+ governance process will be acceptable by all actors at both national and local level						
j. Unclear legal frameworks regarding REDD+ has affected the legitimacy of the National REDD+ governance process						
k. REDD+ financial flows should go direct to the beneficiaries						