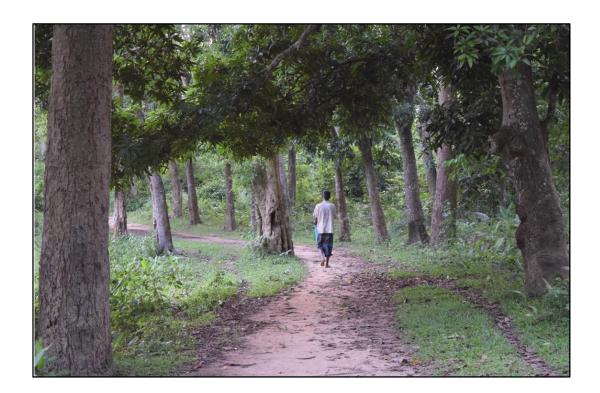


Faculty of Natural Resources and Agricultural Sciences

Forest resource governance and the devolution of power through co-management approach: policy vs practice

- A case study in Rema-Kalenga Wildlife Sanctuary, Bangladesh

Sujoy Subroto



Department of Urban and Rural Development

Master's Thesis • 30 HEC

Rural Development and Natural Resource Management - Master's Programme

Uppsala 2016

Forest resource governance and the devolution of power through co-management approach: policy vs practice

- A case study in Rema-Kalenga Wildlife Sanctuary, Bangladesh

Sujoy Subroto

Supervisor: Dr. Margarita Cuadra, Researcher and Lecturer, Swedish

University of Agricultural Sciences, Department of Urban and

Rural Development

Co-supervisor: Professor Dr. A.Z.M Manzoor Rashid, Shahjalal University of

Science and Technology, Bangladesh, Department of Forestry

and Environmental Sciences

Examiner: Dr. Örjan Bartholdson, Senior Lecturer, Swedish University of

Agricultural Sciences, Department of Urban and Rural

Development

Credits: 30 ECTS

Level: Second cycle, A2E

Course title: Master's thesis in Rural Development and Natural Resource Management

Course code: EX0777

Programme/education: Rural Development and Natural Resource Management - Master's

Programme

Place of publication: Uppsala Year of publication: 2017

Cover Pictures: A local villager is walking through the forest

Photo Credit: Krishna Kumar Gupta

Copyright: Sujoy Subroto

Online publication: http://stud.epsilon.slu.se

Keywords: Co-management, Power devolution, Partnerships, Accountability, Actors Capability

Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and Agricultural Sciences Department of Urban and Rural Development

Dedication

To My Beloved Daughter

"Arunima Aarushi"

Her innocence and heart melting smile inspire me to work hard and give me the strength to chase my dreams

Acknowledgements:

First of all, I would like to pay my heartfelt gratitude to my supervisor **Dr. Margarita Cuadra** for her all out support, guidance and cooperation throughout the research period. She has been a constant source of help and inspiration during my research work and her valuable input was instrumental in moving the research work forward. Secondly, I would like to extend my heartiest gratitude to my co-supervisor professor **Dr. A. Z. M. Manzoor Rashid** for providing logistical support during my fieldwork. Without his active support it wouldn't be so easy to get permission for conducting fieldwork in Rema-Kalenga Wildlife Sanctuary, Sylhet, Bangladesh. He also provided an important contribution at early stages of developing my research proposal and his scholarly input has enhanced the quality of the final draft of my thesis. I am also grateful to my program coordinator **Örjan Bartholdson** who has agreed to extend my study period and provided all kind of administrative and legal support for conducting my fieldwork in Bangladesh.

Moreover, I would like to convey my heartfelt gratitude to the people who took part in my study especially the forest department officials, CMC president M. Akbar Hossain Jitu, key community respondents and FGD participants who generously gave their time to participate in this study in spite of having their busy schedule. This research wouldn't have been possible without their valuable insights and support. I also wish to thanks my friend and field trip host Krishna Kumar Gupta for his active support during field data collection. His constructive comments, suggestions and reflection on my case has contributed to the improvement of the research. My special thanks also goes to Partha, Faiasl, Foteh, Swarna, Nishat, Dipu Vai, Rony, Livash, Sourav, Fahim, Bulet, Camila, Jalla and Sara for their support and encouragements.

Furthermore, I am thankful to my wife Mouri Moumita for her continuous encouragements, taking care of my little angle alone and making sure that my daughter is not feeling the absence of her father so that I could completely concentrate on my studies. She has been the constant sources of inspiration and strength and this journey would have been impossible without her support, sacrifice and love. Additionally, I am wholeheartedly grateful to my parents and father in-law for their blessings, sacrifice and continued support and made me feel that I am not alone in this journey.

Finally, my biggest debts of gratitude goes to Swedish Institute for providing me the opportunity to pursue my higher studies in Sweden and making my long cherished dream come true.

Table of Contents

Dedication	
Acknowledgement	I
Table of Contents	II
List of Tables and List of Figures	IV
List of Abbreviations	V
Abstract	VI
I. Introduction	1
1.1: Background	1
1.2: Context of Co-management in Bangladesh.	4
1.3: Rationale of the Study.	5
1.4: Objectives.	6
1.5: Research Questions.	6
II. Literature Review, Conceptual and Theoretical Context of the Study	8
2.1: Concept of governance in Natural Resource Management (NRM)	8
2.2: Governance reform in natural resource management: The case of	10
Decentralisation.	
2.3 : Emergence of co-management as a governance strategy under decentralisation	12
reforms	
2.4: Agrawal and Ribot's decentralisation (1999) framework for analysing the process	15
of devolution of governance through co-management approach	
2.4.1: Principle Elements of decentralized forest governance	18
2.5: Evolution of Co-management governance in RKWS	22
2.5.1: Administrative Framework of forest department in Bangladesh	22
2.5.2: History of co-management interventions in RKWS	23
2.5.3: Legal and Policy framework for governing protected area through co-	
management	23
2.5.4: Formation of the Co-management Organisations in RKWS	24
2.6: Research Design.	25
III. Materials and Methods	27
3.1: Brief description of study area	27
3.2: Data collection Procedures.	28
3.2.1: Focus Group Discussion and Observation	28

3.2.2: Semi-structured Interview.	28
3.2.3 : Secondary Data Collection.	29
3.3: Data Processing and Analysis.	29
3.4: Ethical Consideration.	30
3.5: Limitation and Challenges.	30
IV. Empirical Materials	32
4.1: General Perception about CM process, Key Actors, Participation and	
Inclusiveness	32
4.2: Power Sharing Mechanism in Co-management Process	36
4.2.1: Legislative Power: Formulation of Rules, Regulations or Bylaws	37
4.2.2: Executive Power: Decision Making, Enforcement and Compliance	39
4.2.3: Resolution of Conflicts: The Judicial Approach.	40
4.2.4: Is Co-management restructuring the Power Relation?	41
4.3: Accountability and Transparency.	44
4.4: Inter-dependency towards a meaningful partnerships	47
4.5: Capability of Actors, Livelihood benefits and Financial Resources	49
V. Result and Discussion	51
5.1: Power devolution in CM Governance.	51
5.1.1: Power to create rules and make decisions.	51
5.1.2 : Power to implement decisions and ensure compliance	53
5.1.3: Power to resolve dispute or conflicts	55
5.2: Accountability.	56
5.3 : Partnership Arrangements and Interdependency.	57
5.4: Capability of Actors.	58
5.5: Factors affecting the process of co-management governance at RKWS	60
VI. Conclusion and Recommendation	61
VII. References	65
Appendix A	74

List of Tables

Table 1: Types of decentralisation according to (Smith, 2001, p.17)	11
Table 2: Key Stakeholder Groups in RKWS	24
Table 2: Summary of FGD Participants	28
Table 4: Major roles of key Stakeholder Groups/ CBO's in Co-management	
arrangements identified by Key Respondents and FGD participants	33
Table 4: List of Key Actors/CBO's and their powers in Co-management	
arrangements at RKWS	42
Table 5: Conflicting Interests between FD and Local Community	47
List of Figures	
Figure 1: Co-management continuum (Sen and Nielsen 1996, p. 407))	13
Figure 2: Key stakeholders and Organizational Structure of Co-management	25
Committee (CMC)	
Figure 3: Map of the Study Area.	27
Figure 4: Perceived Understanding and Experience about Co-management (CM)	
Process by respondents.	35
Figure 5: The Structure of PA governance through Co-Management (CM) system in	
RKWS	45
Figure 6: Factors affecting the successful implementation of Co-management	
Project	60

List of Acronyms and Abbreviation

ADB = Annual Development Plan

BO = Beat Officer

CBO= Community Based Organizations

CM = Co-management

CMC = Co-management Committee

CM Council= Co-management Council

CMOs = Co-management Organizations

CNRS = Centre for Natural Resource Studies

CPG = Community Patrolling Group (CPG)

CREL = Climate Resilience Ecosystems and Livelihoods

DFO = Divisional Forest Officer

FAO = Food and Agriculture Organization

FD = Forest Department

FGD = Focus Group Discussion

FR = Forest Ranger

FUGs = Forest User Groups

GS = General Secretary

IPAC = Integrated Protected Area Co-management

IUCN: International Union for Conservation of Nature

NSP = Nishorgo Support Project

PA= Protected Area

PF = Peoples Forum

RKWS = Rema-Kalenga Wildlife Sanctuary

UNESCAP = United Nations Economic and Social Commission for Asia and the Pacific

USAID = United State Agency for International Development

VCF=Village Conservation Forum

VP = Vice President

YC = Youth Club

Abstract:

In recent years co-management has been widely used as a strategy to address the challenges related to protected area governance, and devolution of power, management responsibility and empowerment of actors are recognized as central to this approach. This study examines the extent to which present co-management arrangements in Rema-Kalenga Wildlife Sanctuary (RKWS), Bangladesh has achieved devolution of power, responsibility and resource use rights and what are the prevailing gaps between policy and practice. Lockwood's good governance principles and Agrawal and Ribot's power decentralization framework were adopted to analyse the governance reform process and present mechanism of power sharing at study site. Our findings reveals that, co-management program has been helpful in advancing forest conservation goals, reducing corruptions, creating social networks, changing the attitude of stakeholders and minimizing resource related conflicts. But unlike many cases around the world, outcomes of this decentralization process have not been systematically positive with regard to devolution of power and management responsibility from state to local comanagement organizations. Additionally, this process is struggling to offer a meaningful reciprocal partnership between state and local community due to unequal power relations and top-down accountability mechanisms. Legislative and executive powers are still withheld by the state and important controls over decision making process were retained by government agencies. There is no proper arrangement regarding the sharing of benefits arising from comanagement and this governance reform has failed to have a significant impact on the socioeconomic development of the local communities. This paper concludes by pointing out that though co-management has showed its potential for solving some of the pressing contemporary forest governance challenges of Bangladesh, it is still operating as like a foster child of government without any legal policy backup and state's support which has limited the devolution process and its outcomes. It is recommended that, policy interventions, capacity building of local actors, identifying context specific enabling conditions, enhancing downward accountability, and a shift from centralized regulatory frameworks are required for ensuring equitable and democratic power sharing process.

Keywords: Co-management, Power devolution, Partnerships, Accountability, Actors Capability.

Chapter One: Introduction

1.1: Background: Rapid loss of biodiversity and the continuous destruction and degradation of natural resources have become an issue of global concern in recent times (Masozera and Ralavalapati, 2004). This problem has been further intensified due to the lack of understanding about the complex nature of social-ecological systems and states' inherited intention to manage the natural resources with centralized governance approach. Thus, the last two decades have witnessed a wave of decentralization reforms in the arena of natural resource governance (Shackleton et al., 2002). Consequently, a wide range of institutional arrangements have been developed and several attempts have been made so far to address the issue of conservation dilemmas and conflicting relationships between state and local community. Amongst these, comanagement has emerged as an internationally acclaimed way to deal with the challenges of governing natural resources (Matose, 2006). The key assumption behind co-management is that, this governance system will provide a sense of shared ownership and responsibility for managing natural resources (Brown et al., 2007) by incorporating conservation goals with the livelihood interests of multiple local stakeholders (De Pourcq, 2015).

Consequently, different types of co-management arrangement has been developed by different scholars based on the levels of participation and extent of power and management responsibility transferred from state or central government to community based organization or local actors (Be'ne' et al, 2006; Berkes, 2010). Actually, there is no universally accepted single fit definition of co-management applicable to diverse social-ecological systems and literature on co-management provides a wide range of definitions (Carlsson and Berkes, 2005). For instance according to World Bank (1999), co-management is a decentralized approach to decision making which provide equal ground for sharing rights, responsibilities and duties between local communities and nation state. On the other hand Sen and Nielsen (1996), described co-management as a process of integrating local knowledge with centralized management system and this joint decision making process covers various partnership arrangements based on the level of power sharing and degree of participation. Most widely accepted definition of co-management is shared by Borrini-Feyerabend et al., (2000), who define co-management as a situation in which two or more social actors negotiate, define, and agree amongst themselves to equitably share the management functions, entitlements, and responsibilities for a given territory or set of natural resources. In summary, comanagement is considered as a pluralistic governance system (Nielsen et el, 2004) which sought to create a meaningful partnership arrangements through sharing power (Berkes, 2007; Borrini-Feyerabend et el 2000); management responsibilities and authorities (Berkes, 2010) between local people and government. Devolution of power from central authority to local community institutions, improving the capability of actors (Shackleton et el, 2002) and ensuring downward accountability of state agency and co-management organisations (Agrawal & Ribot, 1999) are thus central to co-management process (Rashid et al, 2015).

This decentralization process, initially started in developed countries and then it showed a rapid spread and was widely adopted in developing countries at the end of late 90's (Bene et al, 2009). Then, co-management has become progressively prevalent in the national and international policy discourse but various recent studies have shown that it has not lived up to expectation and the reality rarely reflects the rhetoric (Shackleton et el, 2002). Though this governance reform aimed to restructure the unequal power relation between state and communities through the transfer of management power and responsibilities and increasing downward accountability, empirical evidence suggests mixed results about its success (Bene et el, 2009). Some studies have shown that co-management projects have been successful at integrating both forest conservations and livelihoods goals of the rural community (Gautam et al., 2004; Yaday et al., 2003) and reducing conflict at grassroots level (De Pourcq et el, 2015). Whereas, a large body of research argue that outcomes of the reform have not been systematically positive (Bene et el, 2009) since elite capture, unequal power relations, partial improvement of rural livelihood and welfare etc were in the lime light (Njaya et el, 2012). Thus in many cases co-management has resulted in limited participation and an inability to exercise authoritative power (Ho et el, 2015), failed to offer meaningful partnership arrangements (Matose, 2006), yielded limited benefits for local people and weakened local institutions (Shackleton et al. 2002).

Similarly, Ribot et el., (2006) concluded that, in many cases decentralization reforms resulted in state recentralization because central governments tend to create obstacles for the local institutions by limiting the kinds of decision making powers that are transferred. Recent experiences in India and some African countries also found that, there is a lack of supportive legislation, guidelines and regulatory framework that is required for successful decentralization process (Meynen and Doornbos, 2002). Moreover, lack of necessary institutional arrangements and downwardly accountable representative authorities have also created barrier for the desired outcomes (Ribot et el, 2006) and in many cases co-management approaches have failed to improve governance (Bene et el, 2009). Furthermore, the discussion on governance reform process also highlights that, decentralization in natural resource management is not likely to

succeed and bring positive outcomes until a set of organizational and social conditions are met (Meynen and Doornbos, 2004; Bene and Neiland, 2006). Various study emphasize that, in order to improve the governance through co-management arrangements, lower level bureaucracies such as local actors and co-management organizations should be empowered with legitimate authority and adequate capacity to execute or implement the decision they have been entitled to do, as well as they must get sufficient financial support from revenue sharing process (Meynen and Doornbos, 2004). Thus, the advocates of decentralized NRM emphasized that, for analysing governance reform process it is critical to understand policy framework (how forest policy is formulated), the power issues especially the exercise of power, practices on the ground, and implementation process of the co-management project (Springate-Baginski and Blaikie, 2007).

Moreover, co-management is a form of multi-level governance because multiple actors engage and share management power and responsibility at different territorial levels under comanagement regime (Nayak and Berkes, 2008). Thus, the notion of co-management needs to understand from the embedded power relations amongst different actors in a governance system by taking into consideration the complex socio-political dynamics of state –community relations (Matose, 2006). Various recent studies have also stressed out the importance of evaluating natural resource governance reform processes based on the key principles of good governance such as Participation, Transparency, Accountability (Davis et el, 2006) as well as from the standpoint of power relationships (Njaya et al, 2012 and Ho et el, 2015). Actually, in the early analysis, degree of participation and level of power sharing was considered as key explanatory variable for evaluating the success or failure of decentralization process (Bene et al., 2008). But in recent times, various researchers concluded that, types of actor, mechanism of downward accountability, kinds of participation as well as supportive legislation and benefit sharing mechanism are equally important for evaluating the governance reform process. Because, alike degree of participation, the transfer of power to accountable and representative local institutions is a necessary element of effective decentralization (Bene and Neiland, 2006). So, analysing the dynamics of power relation especially the types and distribution of power among various actors as well as accountability mechanisms are therefore critical for understanding the devolution process.

Under the context of the emergence of new modes of governance, this study aims to examine the present power dynamics of co-management governance reform in a protected area of Bangladesh in order to understand whether decentralized management has resulted in better governance outcomes or not, what are the challenges for its implementation and what can be done to improve the effectiveness.

1.2: Context of Co-management in Bangladesh.

Like other developing countries in the tropics (where majority of the rural community depends on forest), Bangladesh has also been experienced a historic conflict between state and community regarding forest governance (Mukul et el, 2012) and reconciling conservation goals with local livelihoods interests was really a challenging task for Bangladesh. Because, current forest management policy has failed to improve the governance (Mukul et al., 2012) and in many cases unsuitable to secure active participation of local people. Moreover, state controlled traditional top-down governance approach and ineffective management practices have resulted in the further degradation and destruction of protected area resources of Bangladesh (Aziz, 2008). Therefore, after several decades of strong centralized management practices comanagement system was initiated in Bangladesh's protected areas in 2004 (Rashid et al, 2014; Chowdhury et al., 2011) with the help of development partners with a view to improve conservation outcomes by giving local communities a central role in the management of natural resources (IPAC, 2013). As Nielsen et al., (2004) stated that co-management approaches are designed to devolve power, authority and aims at empowering local communities to make forest management and utilization decisions jointly. Thus, Mukul and Quazi (2009), suggested that, shared governance through co-management system can be used as a crucial strategy to conserve degrading forests and biodiversity of Bangladesh by providing support for local livelihoods. Study conducted in few protected areas of Bangladesh have reported some positive outcomes initially in terms of the improvement of socio-economic condition of the forest user groups (FUG) members (Mukul et al., 2012) and perceived increase of skills, decision-making power and social respect of the participants (IPAC, 2013). On the contrary, several studies concludes that despite of its high expectation and promises, co-management in Bangladesh has been struggling to deliver expected outcomes. Though the central government of Bangladesh has, in recent years realized the importance of people's participation in forest management and initiated decentralization of NRM through co-management projects, but there is no notable progress has been made to restructure the institutional arrangements and policy framework in favour of decentralization. For example, Haque (2012), claims that with few exceptions to date protected areas and reserved forests reside largely on paper, not in practice. Study conducted by IPAC (2013) also concluded that in Bangladesh, co-management model remains highly protectionist and Rashid et al., (2014) stated that good governance is often found missing and a top-down dominant approach still persists.

1.3: Rationale of the Study

Natural resource governance focuses on the relationship among structures, processes, traditions and institutions which determine how participation occurs, who makes key decisions, how authoritative power is transferred and exercised, how the responsibilities and how benefits are distributed among stakeholders (Graham et al., 2003). According to UNESCAP (2007), governance is the process by which decisions are made, norms or regulations are produced and actions are carried out. Various studies have shown that, conventional governance system of natural resources has been largely unsuccessful due to non-participatory development approaches (Dupar and Barenoch 2002), centralized and top-down governance system, inadequacy of government agencies, exclusion of local people in decision making process and has often led to increased degradation of natural resources. These factors have resulted in governance failure and urged for greater involvement of the local communities and other stakeholders in the management of natural resources (Ostrom 1990; Mearns 1996; Campbell et al. 2002).

Actually, co-management governance is expected to improve the management efficiency through creating partnership arrangements by involving wide range of actors in decision making process as well as altering unequal power relations by directing more power to local communities from state. But, forest governance reform through co-management system has faced many challenges in various part of the world. Because in practice devolution of power from state agencies to local authority is a complex multi-dimensional process (Bene et al., 2008; Cronkleton et al, 2012). As a consequence, the potential for co-management approach to empowering the actors through restructuring the power relations, ensuring downward accountability and the effective involvement of actors in decision making process has recently come under widespread criticism (Bene et al. 2009).

Though there is no universally agreed criteria or assessment tool to analyse the performance of co-management process but, Participation, Transparency, accountability, empowerment lie at the centre of contemporary discourses on NRM governance and these elements have in recent years been considered as the fundamental guiding principles for evaluating the success or failure of governance reform process (Bene and Neiland, 2006). Moreover, in order to understand the process of decentralized forest governance, analysing the role of power

relationship is important because where there is ecological problems there is almost always a power struggle involved (Koot, 2016). Therefore, examining the context, especially how the transfer of various types of power among several actors are happening in practice, whether proper institutional arrangements are put in place, what are the mechanisms of accountability and how government is facilitating the process by enabling proper legislation and providing support for capacity building are necessary for understanding the effectiveness of decentralized governance process. As various studies indicate that effective engagement of local actors in protected areas governance (Policy development, Planning and implementation) and ensuring the equal distribution of power, management responsibility and benefits among various actors still remains a challenging task in Bangladesh (Rashid et al., 2014; Chowdhury, 2008; DeCosse et al., 2012). Thus, there is a pressing need for careful re-assessment of rhetorical claims of government regarding the success of decentralization through co-management (CM) approach in the protected area management in Bangladesh.

In Bangladesh, most of the research has been primarily focused on evaluating the effectiveness of co-management approach in relation to livelihood outcomes, conservation goals and community participation. Nonetheless, sharing of different types of power, multi-stakeholder engagement, empowerment of wide range of actors and increasing downward accountability are recognized as crucial dimensions and central aspect of co-management governance process (Ho et el. 2015, Davis et al, 2006, Agrawal and Ribot, 1999). Thus understanding the socialecological context and embedded power relations among various actors, the administrative framework through which CM plan or project is implemented, accountability mechanism (downward or upward), and the processes by which decision-making power and responsibilities are allocated amongst the different actors are considered as key factors which determine the potential advantages that could be gained from co-management system (Matose, 2006, Bene et al, 2006, Agrawal and Ribot, 1999). But, it is indeed surprising that, very few empirical studies have been undertaken to systematically examine the power dynamics of comanagement (CM) process in the PA management of Bangladesh. So, there is a need to explore how co-management systems operate in practice especially from the perspective of power devolution and institutional transformation and what are the social-ecological factors affecting or contributing to the devolution process and its outcome. Thus, a qualitative research design was adopted to analyse the extent to which co-management approach has transferred decision making power and management responsibility to local actors, ensured accountability and transparency, created a meaningful partnership between Forest Department (FD) and other stakeholders and what are the existing gaps between power in theory and power in practice.

1.4: Objectives:

The aim of my study is to critically examine the present mechanism of power sharing and institutional arrangement in collaborative management processes, especially, whether comanagement program has managed to achieve power devolution to some extent and how well is collaborative governance functioning in practice at Rema-Kalenga Wildlife Sanctuary.

1.5: Research Questions:

- **A.** To what extent has co-management (CM) system transferred management and legal power to local level organizations and ensured the active participation of relevant stakeholders in decision making process?
- **B.** To what extent present institutional arrangements have increased accountability and transparency and created a meaningful partnership between forest department and local stakeholders?
- **C.** Do co-management organizations (CMOs)¹ have the capacity to effectively deliver the expected outcome of the devolved governance process?
- **D.** What are the factors contributing to or affecting the successful devolution of comanagement governance?

-

¹ **CMOs** (**Co-management Organisations**): These are stakeholder groups or organisation elected by local people, particularly located in local area and covers a series of activities at community level. In the context of protected area governance in Bangladesh, CMOs are the main actors operating at the field level and working with forest department with the aim to improving forest governance through creating a partnership arrangements by sharing management responsibility and power.

Chapter Two: Literature Review, Conceptual and Theoretical Context of the Study

This chapter reviews the literature on the issues of governance, decentralization process in Natural Resource Management, emergence of co-management approach as well as their relevance to Bangladesh. More explicitly this chapter highlights the contemporary theoretical and policy debates that have arisen in connection with the recent paradigm shifts of natural resource governance through decentralisation process and provides a concrete rational on how the analytical framework for this study is developed. This chapter is organised in six sections. The next section will provide a brief discussion regarding the debate associated with the concept "governance", its importance in natural resource management and the principles and characteristics of good governance. Section, 2.2 will briefly present the process of governance reforms in the arena of natural resource management and types of decentralisation. The emergence of co-management approach as a as a way to promote good governance under decentralization regime and various types of co-management arrangements are explained in section 2.3. The theoretical framework of the study is shaped by the good governance principles and rooted in the framework provided by Agrawall and Ribot. Thus, section, 2.4 explains, Agrawal and Ribot's (1999) framework for analyzing the process of governance reform through co-management approach in Rema-Kalenga Wildlife Sanctuary (RKWS) in Bangladesh. Section, 2.5, discuss the legal, policy and administrative framework of protected area management through co-management approach in Bangladesh. Section 2.7 ends with describing the research design of the study.

2.1: Concept of governance in Natural Resource Management (NRM):

The term governance is now being increasingly used across many disciplines (Davis et al., 2013) including in the arena of development studies and Natural Resource Management (NRM). Researchers and development practitioners tend to analyse the success or failure of NRM related projects through the lens of this concept. Thus, a clear theoretical understanding regarding the concept of governance is necessary to analyse the forest governance process under decentralised regime. Despite its growing importance as an analytical tool, still there is a debate on how to define governance and asses its effectivity. Though various attempt has been made by wide range of scholars to clarify the term "Governance" but still it is an evolving concept and there is no simply or broadly accepted definition of governance (Davis et al., 2013). Different authors have contextualised governance in different ways and according to

UNDP (1997, p2), "Governance comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences". On the other hand, European commission (1995) defined governance as a continuous process of accommodating conflicting or diverse interests by taking collective action and enforcing compliance through formal institution while managing public affairs. Early definition of governance was mostly focused on the conventional process of creating norms, rules and institutions in order to manage public affairs but most recently focus has been shifted and governance has been highlighted with respect to power sharing, accountability, inclusiveness etc. For example, Be ne and Neiland (2006), defined governance as a democratic process of sharing responsibility and authoritative power among various stakeholders, formulations of rules or policy and implementing management actions.

Like other sectors, fostering better governance is now considered as central to achieving sustainable forest management goals. With respect to natural resources, governance refers to the process of formulating formal rules, policy or laws that determines ownership and land use rights especially right to use, access and manage natural resources as well as how these rules are monitored and enforced; how the benefits are shared and how the systems of authority is legitimized (Mearns, 1996). The notion of governance has been changing significantly and governance is now categorised as good or bad depending on the outcomes, effectiveness and perception of people (Davis et al., 2013). Thus a new term good governance has emerged and being increasingly used by practitioners and policy makers in the domain of NRM and international development. Good governance is commonly perceived as a process of overcoming the shortcomings of weak governance and has the inherent ability to provide economic, social and environmental outcomes effectively (Davis et el, 2013). Conversely, weak or bad governance is defined as the process which has failed to achieve its objectives due to ineffective institutional framework, corruption, improper accountability mechanism, unequal distribution of power and authority etc (Owoye and Bissessar, 2012). In the context of natural resources, the issues of bad governance is often associated with the lack of open and inclusive decision-making process, transparency and accountability as well as implies states inability to manage the resource effectively. Thus, bad governance is often regarded as the root cause for poor development outcomes and management failure such as natural resource depletion, illegal logging and corruption, marginalization and impoverishment of forestdependent communities etc. (Davis et el, 2013).

Many authors have criticised the concept good governance since it implies many different things in many different contexts (UNESCAP, 2009) and in reality it is difficult to achieve in its totality. On the contrary, some authors have argued that, though good governance has different contents and meaning depending on the socio-ecological and political context but the fundamentals principles that characterise "good governance" are mostly similar worldwide (Kaufmann et al., 2010; Cashore, 2009). Good governance is associated with several widely accepted principles such as Transparency, accountability, public participation, legitimacy, empowerment, coordination, social justice, equity etc. Most recent definition of governance by Borrini-Feyerabend et al (2006) stated that "Governance is about power, transparency, accountability and legitimacy and the voice of actor's in the decision-making process. Additionally, good governance is claimed to deliver intended project outcomes and improve the management effectiveness if the above mentioned set of principles are adopted and used as a guiding strategy in governance reform process. Thus, in recent years, focus has been shifted from conventional top-down authoritative governance system to more participatory, inclusive and pluralistic governance approach. Therefore, good governance is now considered as essential element for achieving development and conservation goals and being increasingly used in the arena of natural resource management (NRM) in order to improve the management effectiveness (Bene, 2006, Rashid et al., 2016).

2.2: Governance reform in natural resource management: The case of Decentralisation

In recent years a new wave of governance reform has been promoted by international NGOs, donor organisations, national governments, civil society etc in the arena of NRM (Bene et al., 2006) with the aim of producing positive social, economic and ecological outcomes (Carter & Grownow, 2005). Thus a considerable restructuring of the institutional arrangements and policy frameworks have been done in order to promote more sustainable NRM practices through improved governance mechanisms Despite of several theoretical and policy debates on the issue of decentralized institutional arrangements, decentralization is now widely accepted as a new management paradigm (Bene et al., 2006) for promoting good governance in natural resource management (Davis et al., 2013).

Consequently, during 1980s, a large number of programs and policy reforms were being carried out by donor agencies and NGOS in many developing countries, with the explicit objective to achieve sustainable use of natural resources through the ongoing process of decentralization

(Manor, 1999). Various types of institutional arrangements have been developed by various scholars and policy makers in order to improve effective and efficient management of NRM. Under the umbrella term decentralization, three types of governance reforms are being widely practiced in the domain of natural resource management such as: de-concentration, delegation and devolution (Table, 1). Thus, recognizing the clear distinction between these three different forms of decentralisation is therefore critical for understanding the issues related to governance reform process in forestry.

Under the spectrum of decentralisation, de-concentration refers to the process where power and management responsibility is transferred to the regional offices or lower-level units of bureaucracy or government body (for example: provincial or district level of the Department of Forestry) (Bene et al., 2006). Though deconcentration shifts the management responsibility to the regional offices of the same department but it is considered as the weakest form of governance reform because control over NRM and decision making power is still maintained by the central government (Smith 2001, UNDP 1999). On the other hand, delegation is considered as a higher form of decentralization because more decision making authority and responsibilities are shifted from central government or state (such as forest department) to autonomous or semi-independent local level organizations (e.g : local NGOS or community organisation) but overall accountability mechanism remains upward to central government (Smith 2001, UNDP 1999).

Accountability	Autonomy			
	Low	High		
Central	Deconcentration	Delegation		
Local	Inadequate devolution	Effective devolution		

Table 1: Types of decentralisation according to (Smith, 2001, p.17)

Devolution refers to the transfer of authoritative power, rights and responsibilities from the central government to local government or other designated independent organization such as representatives of user groups at the local level (fishers organizations, co-management organization etc) (Bene et al., 2006). Devolution is considered to be the highest form of

decentralization (Smith, 2001) since it provides high level of autonomy regarding decision making process and high level of accountability to local people (Table 1).

Governance reforms in NRM sectors covers these three different types of decentralization (deconcentration, delegation and devolution) and each of these types of arrangements provides different outcomes in relation to empowerment of actors and control over natural resources (Bene et al., 2008). Therefore, various participatory governance reform projects have been initiated and implemented in the developing countries under the above mentioned spectrum of decentralization in order to facilitate people's participation and improve the responsiveness of government practices in natural resource management.

2.3: Emergence of co-management as a governance strategy under decentralisation reforms:

Under this wave of decentralisation reforms many countries have moved away from centralised command and control system to a more participatory approach which requires the involvement of multiple stakeholders in forest management (Turyahabwe et al., 2012). This widespread promotion of participatory governance was sparked by the direct support of international donor agencies which has resulted in the changes to national legislation, policies, and institutional arrangements in support of decentralisation. Though participatory approaches encompasses a wide range of governance arrangements but the key concept of participatory forest management lies in the processes and mechanisms that empower local people to take part in the all aspects of decision-making process regarding forest resource management. The most important types of participatory forest management approaches are Joint Forest Management (JFM), Community Based Forest Management (CBFM) and Collaborative Forest Management (CFM). For example, under JFM approach communities are allowed to sign formal agreements with resource owners such as government or state agency regarding the management of forests through sharing the operational costs and benefits (Wily, 1998). On the contrary "communitybased natural resource management" exclusively based on the initiatives of user groups, where local communities have full control over management of the resources and the allocation of costs and benefits (Wily, 2002) as well as ownership and user rights over the forest resource also belong to the community. Collaborative Forest Management (CFM) is the most widely used and adopted form of participatory forest management approach worldwide. There are several varieties of CFM and under this spectrum, co-management, in particular, has evolved as a more recognized approach of natural resource governance and widely promoted by

scholars and donors in developing countries (Ming'ate, 2012). Within the spectrum of decentralisation, several authors have tried to contextualise co-management based on the typology of participation and degree of power sharing. Among these, one of the very first and most widely accepted typology co-management was proposed by Sen and Nilesen (1996).

According to 'Sen and Nilesen' framework, co-management arrangements are categorised into five types such as: Intrusive, Consultative, Cooperative, Advisory, and Informative based on the level of participation of the actors in the decision making process and degrees of power sharing. Under this continuum of collaborative arrangements, instructive management refers to the process of one way information flow or sharing from the government to natural resources users (e.g. fishers, forest users, etc.). In this process, local stakeholders are merely consulted by the government before regulations are introduced or formulated (Ming'ate, 2012).

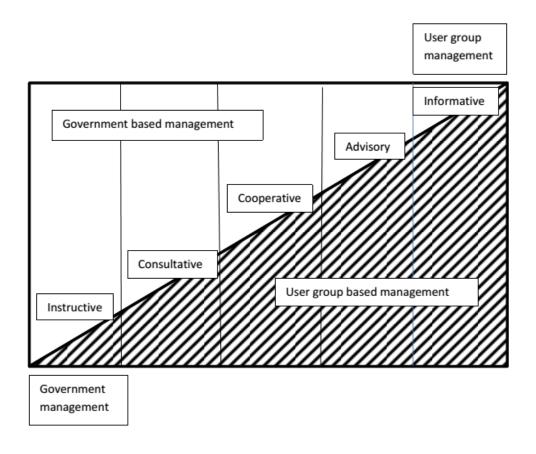


Figure 1: Co-management continuum (Sen and Nielsen 1996, p. 407))

However, consultative management, involves a two way information sharing process both from government or state to resource users or local community. Here government consults with resource user before forming any policy or law but the final decisions are taken by the state. Under this continuum, co-management is situated in the middle ground course (Pomeroy,

1997), where genuine partnerships are arranged between government and local community through sharing of decision making power, benefits and management tasks at all stages in the management process (Sen and Nielsen, 1996). Thus, the third type of management on the spectrum (cooperative approach under this spectrum) is referred as the ideal form of comanagement and fits with the notion of power devolution under the decentralization framework (Figure 1).

The fourth and fifth types of management are totally opposite from instructive and consultative arrangements. For example, under the advisory arrangement, resource users act as a dominant decision making authority and can take decisions in prior consultation with government. State or government agency mainly act as an advisor and merely approves or endorses the decisions. Under informative management, resource users have authoritative and decision making power to design, construct and implement regulations or laws (Pomeroy & Berkes, 1997). Government devolves the full management responsibility to the resource users and mainly provide necessary assistance or support when necessary. This is also called as community based natural resource management where social actors are in full charge of natural resource governance and according to Arnstein (1969), this stage is called citizen control which is the highest level of public participation. Community forestry in Nepal is the example of this type of management where local communities receive the ownership and use rights, formulate laws or policies regarding and exclusively manage the forest resource (Lawrence, 2007) with limited assistance or advice from government.

Co-management is a form of participatory management which integrates both the state and the community management and offers a wide range of partnership arrangements depending on the degrees of power sharing among multiple actors (Alpizar, 2006). Actually, institutional reforms through co-management process is aimed to improve forest governance as it involves bringing the central authority (for example: forest department or state) closer to the local community, in both the spatial and institutional senses by enabling actors' empowerment and participation and promoting accountability and transparency (Baumann, 2000). However, key to all the definitions is that, in co-management, devolution of power, equitable sharing of management function, responsibility and benefits, active involvement of various actors in decision making process, creating meaningful partnership arrangements etc are considered as the salient dimension of co-management system.

As a consequence, co-management approach has been promoted by international donor organisation and widely practiced in India, Nepal, Philippines and Latin America (Ghate, 2003) as well as in many African countries like Tanzania, Sudan, Ethiopia, Kenya, Uganda, Zimbabwe, Malawi, Cameroon, Niger, Nigeria, Gambia, Ghana, Mali and South Africa (Wily, 2002) with the aim to improve natural resource governance. As we already discussed that forest governance reform under the wider trend of decentralisation process was aimed to ensure sustainable forest management through the implementation of good governance principles. Comanagement is believed to have the inherent potential to provide effective management solutions through embodying the key principles of good governance such as Participation, Transparency, Empowerment, and Accountability etc. in natural resource management (Bornifeeyarabad et al., 2006).

Though co-management has received widespread recognition as a way to promote good governance but study on the decentralisation reform process have highlighted serious limitations of CM arrangements. Amongst the wide range of collaborative projects implemented worldwide, Community based forest management in Nepal, Joint Forest management program in India, CFM in Uganda and some other African countries, comanagement program in Fisheries and forestry sector in Latin American and some Asian countries have been reported as the successful example of decentralization. In spite of having various positive aspects, literature on co-management also found a great number of cases where decentralization reforms have failed to meet its explicit objectives and led to negative or devastating outcomes (Campbell and Shackleton 2002; Ribot, 2002; Dupar and Badenoch 2002; Wily 2002). Some authors also argue that decentralisation is actually a distraction from the real power play on the forest land and in many cases it lead to a tightening of central control and hasn't resulted in a real devolution of power (Springate-Baginski and Blaikie, 2007).

2.4: Agrawal and Ribot's (1999) decentralisation framework for analysing the process of devolution of governance through co-management approach:

Ongoing global trends towards using devolution as a management strategy is a positive transitions from centralistic governance approach to a more collaborative arrangement of NRM. Thus, a wide range of analytical framework has been developed by various scholars with the aim to explaining forest governance reform process and assess the effectivity of forest comanagement program. Among the wide range of theories, Design principles and theory for common pool resources by Elinor Ostorm, Tragedy of the common by Hardin, Lockwood's

good governance principles for protected area management, Agrawal and Ribot's decentralization framework are considered as the most influential set of theories for analyzing decentralization process of natural resource governance.

Active participation of various social actors in co-management program is believed to enhance the efficiency and equity in resource management (Castro & Nielsen, 2001). However, Béné and Neiland (2006), conducted a review of 50 case-studies of fisheries across 39 countries and conclude that degree of participation rarely explain the performance of the co-management system and the issue of how much power is shared may be the incorrect question. Instead, issues of how this power is shared among various actors and who receives this power (eg: local level elected organization or elite) is more crucial in governance reform process. They emphasized that alike participation, accountability, transparency, empowerment and capability of actors are equally important for evaluating the process of co-management governance. Agrawal and Ribot (1999) support this argument and evidence from the decentralization process of South Asia (e.g.: India and Nepal) and West Africa (Senegal and Mali), also demonstrated that downward accountability and empowerment of actors through devolution of power and responsibility are fundamental element in decentralization processes.

However, a number of recent studies have indicated that, central governments are not willing to share authoritative and managerial power with social actors which creates ambiguity regarding the implementation of the reform process (Davis et al., 2013). Moreover, lack of compatible objectives and contrasted and opposed policy goals from state level agencies and community is recognized as another major obstacle which can accelerate existing resource related conflicts and power struggles among different state agency as well as within and between community groups at various levels (Be ne and Neiland, 2006). This strategy of state agencies to retain control over natural resources is also observed in many countries and Ribot et al., (2006) mentioned that, central governments intentionally limit the ability of local authorities to exercise power by either creating ambiguity in their reforms, or by exploiting ambiguities inherent in all policy measures. For example, in respect of Malawi, Chinangwa, (2005) concludes that despite the official devolution discourse widely publicized, the paradigm of centralized management remains deeply embedded in the state agencies' mentality. Actually, devolution requires transferring some of the power to local actors and state always feared a loss of control over planning and practice and try to recapture managerial power by controlling local governance (Pulhin and Dressler, 2009).

Thus, good governance is now considered as fundamental to achieving development and conservation goals in the arena of natural resource management (NRM) (Be ne and Neiland, 2006). As we discussed in previous section good forest governance is characterised by several principles and governance reform processes is aimed to increase the efficiency of resource management and provide equitable distribution of benefits. Therefore, improving forest governance and legislative framework has been the key central issue of international debate in recent years. UNESCAP (2007), has identified eight crucial elements of good governance and Lockwood (2010) identified seven principles and performance outcomes for good protected area governance. The principles that both UNESCAP (2007) and Lockwood (2010) have in common are Participation, Accountability, Transparency and Capability. These four key principles have in recent years emerged as universal criteria for successful decentralisation and are now being widely adopted and practiced for protected area (PA) governance and management (Institute on Governance, 2002). On the other hand, Agrawal and Ribot (1999) identify three principal elements of decentralization in forest management; these are: (1) Actors or Stakeholders (to whom the powers or responsibilities are transferred) (2) **Empowerment** (mostly focused on what types of power is being transferred: decision making or authoritative) and (3) Accountability (to whom the new institutions and actors are accountable).

According to World Bank (2012), improving forest governance through decentralisation process must involves of all stakeholders in decision making, provide supportive forest policies and legislative framework, strengthen actors with adequate capacity and financial resources, create mechanisms for downward accountability, and ensure transparency in revenue sharing and allocation of management responsibility. The analytical framework for this study builds upon the key principles of good governance and Agrawal and Ribot's (1999) three principle elements of decentralization framework was mainly used to assess whether decentralized management through co-management has resulted in better forest governance and produce meaningful outcomes. In order to analyse all the research questions of our study, along with Agrawal and Ribot's (1999) principles we also pay attention to two other important dimension of good governance such "Participation" and "Transparency". So, in our study we mainly focus on the following principles and characteristics such as: **Participation, Actors, Empowerment** (It includes power sharing and Capability) and **Accountability** and **Transparency** for analysing the process of power devolution and governance reform through co-management (CM) at Rema-Kalenga Wildlife Sanctuary.

2.4.1: Principle Elements of decentralised forest governance:

2.4.1.1 : Actors: Co-management involves diverse range of actors from various stakeholders group in decision making and power sharing process. These actors holds different social position, ideology, wealth, interests and expectations. In the co-management governance, these actors include forest department personnel, local government agencies, resource users group, local elite, civil society members etc. Actors are positioned at different levels of social action, and decentralization is about bringing changes in how actors at different levels of political authority exercise their power. In decentralisation process, a wide range of stakeholders and institutions shape decisions about how forests are managed and governed (Davis et el, 2013). Thus, the same types of power devolved to different actors will lead to variations in outcomes (Agrawal and Ribot, 1999). For example, Meynen and Doornbos (2004), concluded that in various states of India, decentralization of NRM initiatives has failed to fulfil the expectation due to transfer of power to non-representative bodies such as local politician and traditional leaders. Thus, the type of local actors who gains power and the kind of power local actors gain determines the outcome of governance reforms (Ribot, 2003). Because devolving powers to elite or influential actors rather than elected user groups may increase the risk of strengthening their autocracy (Fisher 1997; Shackleton and Campbell, 2001) and limits the scope of community representation in decision making process (Ribot, 2003). So, identifying the relevant actors and what kind of power they should be endowed with is necessary to analyse the dynamics of complex power relation in environmental governance.

2.4.1.2: Participation: The meaning of participation varies with context and situation but the key to all definition is the active involvement of relevant stakeholders in planning, design, and implementation of management decision. Participation is actually a process through which marginalised community is empowered to have a voice in the overall decision making process and ability to influence the outcome. It is now a potential element for most environmental decisions as it brings greater understanding and coordination between government and nongovernment actors (Rashid et el, 2014). Participation by both men and women is a key cornerstone of good governance. Participation could be either direct or through legitimate intermediate institutions or representatives (UNESCAP, 2007). In our case participation in comanagement process implies involvement of stakeholders in forest management activities, decision-making and benefit sharing process.

2..4.1.3: Empowerment: Synthesizing the literature on governance reform process reveals that, co-management approaches aim to developing partnership arrangements between state and communities through empowering local communities (Bene et al., 2009; Nielsen et al., 2004), involving of wider group of actors in all stages of decision making, and facilitating equity in benefit sharing process (Coulabaly-Lingani et al., 2011). Thus, within comanagement governance system local actors are expected to gain decision making power and play a greater role in managing forest resources. In the context of natural resource governance, empowerment is referred as the ability of actors or institutions to positively influence the decision making process, course of actions, benefits sharing mechanism and outcomes of comanagement arrangements (Ming'ate, 2012). Thus, decentralisation through co-management approach is aim to empower local actors by having more control over resource utilisation and benefit sharing mechanism, policy formations and overall resource management decisions (Bene et al., 2009).

According to (Mahonge 2010, p.33), "Empowerment and Co-management are interdependent and reinforce each other". Hence, for effective devolution, communities or local actors need to attain decision making power and state or central agency should devolve power on management and utilization to local actors that are accountable to local communities (Bergh, 2004). As Agrawal and Ribot (1999) concluded devolution as the highest form of decentralisation because it can provide the greatest benefits to communities and empower them to actively participation in decision making process. Forest co-management approaches is therefore assumed to have the potential to achieve devolution as it involves the transfer of decision making powers and management responsibilities to co-management organisations or local institutions which are downwardly accountable to local citizens through electoral processes (Agrawal and Ribot 1999; Larson, 2005; Pomeroy et al., 2001). Moreover, comanagement reconcile the conservation goals set by government with the social needs of local community through creating partnership and providing actors with the legal and political authority needed to enforce rules, manage forests and utilize benefits (Nielsen et al., 2004). Thus, empowerment of actors is considered as a key element of community-based management approaches and sharing management responsibility and authority is central to the decentralisation process (Bene et al., 2009).

Empowerment through transferring of power and management responsibility under rapidly changing complex social-ecological systems is really a challenging task (Mahonge, 2010) and limited by various factors. For example, Brett (2000), concluded that, in various countries

control over decision making process and empowerment of actors through transfer of power is severely constrained by government. Because right to participation doesn't always imply a right to determine outcomes (Brett, 2000) unless the local communities, decision making power and control over the use of natural resources and management rights are legally secured by supportive legislation or policies. Thus effective empowerment depends on whether or not local actors or institution are being able to execute their responsibilities, rights and power independently. A great number of studies have shown that for co-management initiatives to be successful enabling legislation must provide authoritative, legislative and financial power for the creation and enforcement of institutional arrangements at the local level (Pomeroy and Berkes 1997, Carlsson and Berkes 2005 and Ostrom 2009). Actually governance determines the allocation and use of decision-making powers and Agrawal and Ribot (1999, p.476) concluded that "an in-depth understanding of the powers of various actors, the realms in which they exercise their powers, and to whom and how they are held accountable is necessary to analyze the extent to which meaningful decentralization has taken place".

It is frequently argued that, power sharing mechanism determines the outcomes of governance reform process and Agrawall and Ribot (1999), identified four broad types of decision making powers (discussed in section 2.7) crucial in the management of natural resources. Thus determining how responsibilities are distributed among different actors, how do they participate in the resource management; what kind of powers and right do they exercise; and how benefits are shared and rules or regulations are formed etc are crucial for analyzing the the effectiveness or outcome of the co-management governance process.

Empowerment can be done either devolving power or responsibilities and by enhancing political, social and financial capital or building capacity of the actors through training, acquiring new skills and sharing knowledge. Agrawal and Ribot mostly emphasize on the power sharing dimensions of empowerment. But, improving the actor's capability to participate effectively in decision making, ability to self-organize and carry out the management task independently etc. are some other important dimensions need to be considered for better understanding the empowerment process in the co-management of natural resources. Thus, our study also address the issue of capability in order to analyze whether co-management organizations and local actors can effectively deliver the expected outcome of governance reform process.

2.4.1.4: Capability: Empowerment is expected to improve the capacity of resource users or actors both economically and politically (Pomeroy et al., 2011) through providing training, financial resources and sharing knowledge. Moreover, empowerment enhance the political capacity of local community which is important for balancing unequal power relations in comanagement governance system (Mahonge, 2010). Capability refers to the systems, plans, resources, skills, leadership, knowledge, and experiences that enable organizations, and the individuals who direct, manage, and work for them, to effectively deliver on their responsibilities (Lockwood, 2010). Effective implementation of co-management projects and success of decentralization processes depend on what types of skills and resources (financial, social and political) the involved actors possess. Technical skills, organizational skills, financial resources, communications skills and political mobilization are crucial to address complex social-political problems and in dealing with social inequalities and breaking the asymmetrical power relation. Co-management is aimed at enhancing the skills, competencies and capabilities of people and institutions at various levels.

2.4.1.5: Accountability: In general, accountability concerns the allocation and acceptance of responsibility for decisions and actions and the extent to which a governing body is answerable to its constituency. It ensures that, the governing body and personnel have clearly defined roles and responsibilities and the governing body has demonstrated acceptance of its responsibilities (Lockwood, 2010). Accountability is thus the measure of responsibility and all modes of accountability are relational (Agrawall and Ribot, 1999). Accountability may be vertical or downward and downward accountability broadens the participation of local actors which is primary dimension of decentralization and it also enhances the responsiveness of the empowered actors to their constituencies (Agrawal and Ribot, 1999). In the context of natural resource governance, however, experience suggests that success of decentralization depends on the devolution of adequate resources, powers and authority to elected representative bodies or user groups that are accountable to local community (Meynen and Doornbos, 2004). Downward accountability can be defined as the institutional mechanisms or processes through which executing agents or decision-makers are liable to their beneficiaries or end users. The transfer of power to accountable and representative local institutions is a necessary element of effective decentralization. (Davis et al., 2013). A number of study indicates that, either government or state only transfer limited power to co-management organisations and retain control over decision making process through excessive monitoring and the enforcement of laws. Or powers are often transferred to non-representative local institutions or organisation

that are fully accountable to central government not to local population ((Béné and Neiland, 2006). Various researchers also highlighted that, elite capture is the most severe shortcomings of decentralisation process and it is the result of improper accountability mechanisms and devolution of power (Béné and Neiland, 2006) to customary authority or no-representative local actors.. Therefore the Agrawal and Ribot's (1999), framework suggests that, in the comanagement program actors should be both downwardly accountable to constituents (local community) and upwardly to government or state agency. Thus, identifying the mechanisms of how the actors are appointed especially the electoral process, whether the authority or actors have clearly defined duties or not, and how their actions are monitored more specifically the institutional mechanism to provide justifications for their actions and decisions and how sanctions are enforced those who don't comply with rules are important to analyse the governance reform process (Béné and Neiland, 2006).

- **2.4.1.6:** Transparency: Transparency means that decisions taken and their enforcement are done in a manner that follows rules and regulations. It also means that information is freely available and directly accessible to those who will be affected by such decisions and their enforcement (UNESCAP, 2007). According to Lockwood (2010, p.759), "Transparency refers to the visibility of decision-making processes; the clarity with which the reasoning behind decisions is communicated; and the ready availability of relevant information about a governance authority's performance". In our study we mainly focused on the flows of information regarding CM related activities to various stakeholders, accessibility or availability of information, how feedback is used in decision making process and what are the present ways of communication among relevant actors?
- **2.5:** Evolution of Co-management governance in RKWS: Co-management system was initiated in Bangladesh with the explicit objectives to sustainable management of forest resources. This section briefly discuss the administrative, legal and policy framework for co-management governance, history of co-management interventions and the process of formation of co-management organisation in RKWS.
- **2.5.1:** Administrative Framework of forest department in Bangladesh: The Ministry of Environment and Forests (MoEF) of the central Government is the high administrative body responsible for the planning, co-ordination and monitoring the implementation of forestry and environment related programmes or matters in the country. Bangladesh Forest Department is placed under the ministry of MoEF and is the primary government agency responsible for

enforcing different laws and regulations, managing forest resources, and implementing conservation activities (BFD, 2017). Forest department is administrated by a chief conservator of forest who is responsible for overseeing the overall operational activity of the FD. The organisational structure of the forest department includes different circles based on the geographical location and types of the forest lead by a CF (conservator of Forest). Each circle contains several forest divisions headed by Divisional forest officers who looks after the administrative matter and operational activities of the divisions (BFD, 2017). Under each division there are several independent sub-divisions consists of range and beat offices (the lowest administrative body of FD). Each range is managed by a Forest range Officer who is directly accountable to Divisional Forest Officer. Range officer is in executive charge of his range who is responsible for carrying out day to day management activities, patrolling in the forest, investigation of forest offences, resolving resource related disputes etc. with the help of beat officers and forest guard.

2.5.2: History of co-management interventions in RKWS: Following global trend of decentralisation in the forestry sector in developing countries, Bangladesh Forest Department also launched a co-management program named Nishorgo Support Project (NSP) in one of the country's protected areas in 2004 with the financial assistance of USAID (Sharma et al. 2008). Initially the project was implemented in five pilot sites and RKWS was one of them. During that period major stakeholder groups were identified and co-management organizations (CMOs) and institutions were formed. After the successful implementation of NSP, government was initiated another project (Five years phase: 2008-2013) with the direct support from USAID in 2008, named "Integrated Protected Area Management Program (IPAC)" for strengthening the legislative and financial foundations of the Co-management process (IPAC, 2013). Then, in 2013, Climate Resilient Ecosystems and Livelihoods (CREL) project was launched (funded by USAID) with the aim to ensure improved governance of protected areas and increase resilience to climate change through adapting successful co management models and livelihood diversification. In, RKWS, a national NGO named Center for Natural Resource Studies (CNRS) is implementing this project and helping co-management organizations (CMOs) in arranging regular meetings, creating activity plans or management plans, arranging training for building capacity of key stakeholders (individuals, communities and government).

2.5.3: Legal and Policy framework for governing protected area through comanagement: The forests of Bangladesh is managed and administered by the several laws, policies and regulations of which, Forest Act 1927 (Amendment in 2000), Forest Policy 1994, Wildlife (Conservation and Security) Act 2012 and Bangladesh Biological Diversity Act 2012 are mainly act as the foundation for overall forest management in Bangladesh.

Table 2: Key Stakeholder Groups in RKWS (Source: Official document of RKWS CMC)

Name of local	No	Members		Total
Organizations		Male	Female	Members
Co-management Council	1	53	11	64
Co-management Committee	1	26	03	29
(CMC)				
Peoples Forum (PF)	1	59	33	92
Youth Club (YC)	4	-	-	-
Community Patrolling	8	141	0	141
Group				
Village Conservation Forum	46	1941	1269	3210
(VCF)				

Under the Wildlife (Conservation and Security) Act 2012, government can declare any area as protected area and initiate co-management system for proper utilization, conservation and management of natural resources. According to section 16 (1) and 16 (2) of Wildlife Preservation and Security Act, 2012, "The Government may, for each sanctuary, prepare a management plan in accordance with the manner prescribed by rules and The Chief Warden of forest department, shall bear all responsibilities of implementation and management of management plan." Currently this act is working as a guideline and legal policy document for PA management in Bangladesh. Co-management system was introduced in the protected area under forestry co-management official gazette notification in 2006. This gazette notification was issued by the Ministry of Environment and Forests through bureaucratic orders, not based in parliamentary process and legal. As a result, it doesn't have any strong legal ground and can be changed or cancelled simply through government administrative orders. However, this government gazette provided the provisions and instructions on formation of co-management institutions such as co-management council and co-management committee (CMC) by including representatives from various stakeholder groups. This gazette notification was acted as a foundation for initiating the co-management activities in protected areas (PA) which was later revised and amended in 2010. The main actor groups and co-management organizations (CMOs) in RKWS are described in Table 2.

2.5.4: Formation of the Co-management Organisations in RKWS: According to the gazette, co-management council forms the first tier of the institution which should consist of 65 members through selecting representatives from the different stakeholder groups such as Local Government, Local Elite, Civil Society, and Resource owning Groups, Forest User Groups or Peoples Forum, Youth Club, Community Patrolling Groups, Forest Department, Local NGOs and other Government departments. This council will be elected for four years and responsible for the monitoring and approving the activities of PA landscape. Then, the council will create a co-management committee (CMC) consisting of 29 members by selecting or electing people from the same stakeholder groups. The two key actors of co-management committee (CMC) are Forest Department (28% member) and Peoples Forum (21 % member) (Figure: 2).

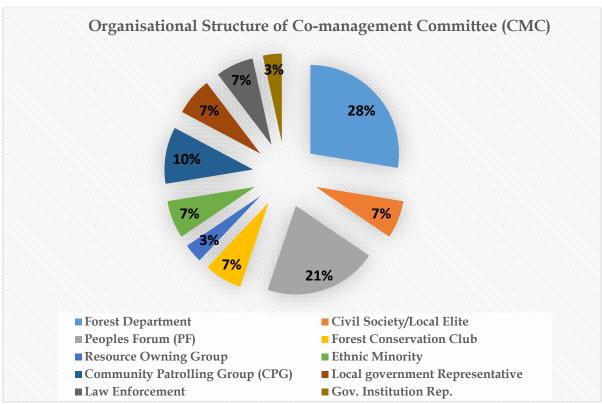


Figure 2: Key stakeholders and Organizational Structure of co-management committee (CMC)

This co-management committee (CMC) acts as an executive body responsible for taking regular activities in the PA such as preparing the management plan, creating project proposals, implementing plan, distributing benefits and responsibilities, resolving conflicts, serving as liaison between FD officials and local people, maintaining income and expenditure, undertaking necessary measures for the protection of forest according to the instruction of

Divisional Forest Officer (DFO) etc. This committee is elected for two years and accountable to co-management council and People Forum (PF) (Government Gazette Notification, 2010).

2.6: Research Design:

In our study, firstly we identified the key actors and analyzed whether co-management (CM) regime has created opportunity for the various actors to actively participate in the decision making process. Then, we focused on the empowerment of actors, especially what types of power they are entitled to exercise in practice and how their authority is legitimized. Agrawal and Ribot (1999) recognized four broad powers of decision-making crucial in natural resource governance and categorized powers into three types (A) Legislative (Power to create and modify rules and regulations); (B) Executive (Power to make decisions on management and utilization; implement management activities and ensuring compliance of the formulated rules and regulations) and (C) Judicial: (Power to resolve conflict or disputes). Power in this context is defined as the ability of actors or organisations to create rules, make decisions, enforce law and resolve disputes and Agrawal and Ribots' (1999) power typology was chosen to analyze actor's power in this study. This power analysis framework suits the existing nature of the power relationship between government and the community because in Bangladesh governments formally hold all three types of power and co-management system was initiated to share legal, managerial and authoritative power with local actors and co-management organisations. Then, we used the principle of transparency to understand the visibility of decision making process and how these decisions are communicated with concerned actors or stakeholders. Then, we used the principle of Accountability to identify the flow of accountability (Downward or Upward or both) and to whom the Actors are accountable to for their actions and decisions. Finally, we analyzed the capability of actors whether they have the technical skills, knowledge and financial resources to maintain the day to day management activities and deliver the promised outcomes of CM governance process.

Chapter Three: Materials and Methods

This chapter comprises of six sections which includes brief description of the study area, details explanation about research methods employed for the study, process of data analysis, ethical aspects of the research and finally this chapter concludes with describing the challenges and limitations of the study.

3.1. Brief description of Study Area: The Rema-Kalenga Wildlife Sanctuary (RKWS) falls under the administrative jurisdiction of Sylhet Forest Division. Geographically the wildlife sanctuary is located in between 24°05′-24°13′ N latitude and 9134-91-40 E longitude. It is the second largest forest and wildlife sanctuary in Bangladesh which comprises an area of 1995 hectare (Chowdhury et al., 2011). This forest is remnant for its diverse flora, fauna and high conservation value. It is one of the reaming patches of tropical natural hill forest in Bangladesh

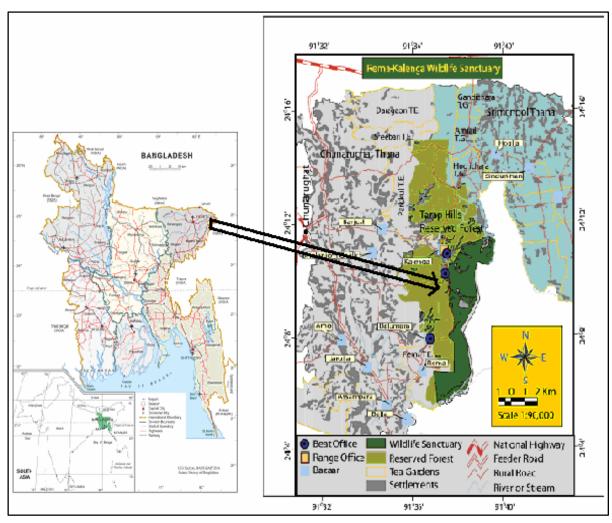


Figure 3: Map of the study area (Sources: Chowdhury et al., (2011).

which is under extreme threat due climate change driven natural calamities and anthropogenic pressure. This forest was declared as a Wildlife Sanctuary in 1996 under the IUCN category of

Protected Area (IV) It is also home to various indigenous communities including Tripura, Marma, Cakma, Orang and people living in the almost 50 villages inside and adjacent to the sanctuary and who depend heavily on forest resources for their livelihoods (Morshed, 2013). This protected area (PA) is unique from the perspectives of biodiversity richness as well as for the high level of exploitation and human interference.

3.2: Data collection Procedures: Our research design was based on the philosophical underpinnings of qualitative methodology as our aim was to explore the perceived understanding of relevant actors about the ongoing process of power devolution through comanagement system at study site. Thus qualitative methods were used to collect empirical data and details procedure of field data collection are described below.

3.2.1: Focus Group Discussion and Observation: With the aim of understanding the current process of co-management governance, qualitative techniques such as Focus Group Discussion (FGD) through open ended questionnaire was used as a methodological tool for collecting data. Peoples Forum (PF), Community Patrolling Group (CPG) and Youth Club (YC) are the key community stakeholder's group in RKWS. So, two interactive FGDs (each consisting of 8-10 members) were carried out at study site of which one at the beginning of fieldwork with Community Patrolling Group (CPG) and Youth Club (YC) members.

Table 3: Summary of FGD Participants

No	Participants Category	Participants	Total Participants	Place of Discussion	Date
FGD 1	Community Patrolling Group (CPG)	5	9	Youth Club Office,	17-05-2016
	Youth Club (YC) members	4		Kalenga	
FGD 2	Peoples Forum (PF) General members	8	8	Alinagor	15-06-2016

The interview questions for key respondents was also shared during the first FGD and revised to reflect the feedback or suggestion from FGD participants and then correction was done accordingly. The second FGD was conducted at the end of field visit and only members from Peoples Forum (PF) were invited to participate in that FGD (Table 3). The questionnaire for FGD was focused on the knowledge of various stakeholders group regarding the structure and process of co-management in RKWS. Besides this, I also participated in various co-managements organizations' (CMOs) regular meetings (such as three village conservation

forums' (VCFs) monthly meeting, one peoples forums' (PF) executive committee meeting, one youth club and one Community Patrolling Groups'(CPG) monthly meeting) in order to understand the current mechanism of interaction among various stakeholders and how the decisions are taken in real ground. I have spent six weeks (two visits) in the field for collecting data and observations of management practices were also made during my stay at study site.

- **3.2.2: Semi-structured Interview:** Semi-structured interviews were conducted with key actors to explore in depth of their perception and experience regarding the current process of power devolution through CM governance. Interview questions are more details and different from FGD questions as it sought to gather information from key actors regarding their experience and involvement in co-management activities. Potential respondents for in-depth interviewees were selected through prior consultation with Forest Department (FD), Co-management committee and project (NGO) staffs by considering their engagement and relevance to the comanagement program as well as based on documentary evidence. The process of FGD also helped in determining the key respondents. In total, eleven co-management committee (CMC) members were selected across the study sites from various stakeholders groups and full details of key respondents are summarized in Appendix A. Forest officials provided useful insights about legal aspects of PA management and their views on existing co-management program. Other informants from community groups also provided important information about the ongoing devolution process. Out of eleven, 9 interviews were conducted in person (face to face) mostly at the local setting and two interviews were conducted over phone due to the absent of informants during my field visit.
- **3.2.3 : Secondary Data Collection:** Secondary information such as project evaluation reports, NGOs reports, co-management plan, Forest Department's reports and annual plan, Newspaper reports, meeting resolutions, policy documents were collected from CREL project site office and Forest Department range office as well as from using relevant websites and internet. The collected documents were reviewed and used as a starting point to understand the objectives, activities, and reported progress of the ongoing co-management project at my study site.
- **3.3: Data Processing and Analysis**: Qualitative data analysis software "MAXQDA 12" was used to process, analyse and interpret the complex phenomena of qualitative data with the aim to find the result of the study. As Silverman, (2014) stated that qualitative research mostly focus on exploring the "phenomena" in depth. So in order to avoid early assumption or hypothesis all the interviews raw data were transcribed and translated through detailed reading.

Firstly, code was assigned on text segments of transcripts in order to organize the huge volume of qualitative data in a systematic manner. Identifying the key, essential, striking, odd and interesting things in the text is necessary for qualitative data analysis (Silverman, 2014). So, all the data were sorted, labelled and structured to find similar phrases, commonalities and differences. Thereafter, the codes with the same labels were organized to form a group, i.e. a theme and themes were categorized in relation to their significance and relevance to research questions. Some codes also emerged while the interview transcripts were reviewed inductively. Then, the collected empirical data was analyzed in light of the theory and principles with the purpose of answering the research questions. Multiple methods of data collection is used as a common strategy of triangulation in qualitative research (Silverman, 2014). So, qualitative information collected through FGDs and secondary materials were used and cross checked with interview data in order to avoid the misleading information, wrong interpretation, minimize the effect of bias and ensure validity and reliability.

3.4: Ethical Consideration: Formal approval was obtained from co-management committee (CMC) and Forest department (FD) before initiating field work where detailed working method was described. Informed consent and maintaining confidentiality are central to the most ethical guidelines of qualitative research (Silverman, 2014). Thus, before moving ahead with the interview, the goals and limitations of the research and procedures of data collection was explained thoroughly. The questions were purposefully asked to explore their individual experience and perception regarding the co-management governance and no attempt was undertaken to obtain access to traditional knowledge. All conversations were recorded in writing during interview sessions and audio recording was used but respondent's permission was sought before recording the interview. All the interviews were conducted mostly in the local settlements (e.g. in respondents' houses, local markets or public places). During and after the fieldwork, participants' rights and privacy was protected. Collected data was organized through coding and all data was treated anonymously and confidentially. Special arrangement was done for conducting female interview by discussing the matter with the family head and community leaders well ahead of time when necessary. Findings of the research will be shared with the CMC, FD and community upon completion of the study through arranging a workshop or meeting if time and budget permits.

3.5: Challenges and Limitations: Conducting FGD and in-depth interview of diverse actors in a rural setting was really a challenging task. Because, the perceptions and views regarding co-management approach was varied across different stakeholders. Another major limitation

was to make sure all participants are freely participating in the interview process and expressing their views and perception. Time and resource constraint were some other potential challenges encountered during the study. Since I had only six weeks for gathering data in the field and it was really hard to finish the whole data collection procedure within that time period. Because, at that time local government election was going on and people were extremely busy with the election. I was really struggling to get adequate opportunity to meet all the selected key actors in person because of their business during daytime. As a result, I had to change the list of interview participants and had to conduct two interviews over phone. Access to government data and project reports and interviewing the forestry officials also represented major practical challenges. I admit that the governance dimensions and power dynamics of CM approach is really vast and complex. Thus, it's nearly impossible to address all the social, institutional, political and economic aspects of NRM governance in a single research which might leave some inaccuracies.

Chapter Four: Empirical Materials

This chapter presents the key findings based on qualitative data collected in the field as well as secondary materials in relation to the present governance reform in the RKWS. This section is organised under five major themes and these themes were selected based on the research questions and objectives of the study. The main heading of thematic areas are as follows: Perception of various actors about the ongoing paradigm shift through CM process, Institutional arrangements of CM system for joint management, Mechanism of power and benefit sharing, Degree of collaboration between FD and CMOs' and Capability of actors to provide long term sustainability of CM process.

4.1: General Perception about co-management process, Key Actors and Participation

Co-management (CM) engages multiple stakeholders from different social categories linked with the power sharing and decision making process. Therefore, understanding how local communities or different actors perceive the context and multiple dimensions of CM is necessary for analyzing the present governance reform in the case study area. As a result, respondents were asked some basic questions regarding their understanding about CM, roles and responsibilities of various CMO members/stakeholders, present mechanism of communication among various actors, how CM is improving the forest conditions and human well-being and the scope of participation of local people in decision making process.

Since various actors are from heterogeneous social groups, I expected to get a diverse opinion regarding the definition of co-management (CM). But surprisingly almost all of the actors (both FD and Local community) had a homogeneous perception regarding the definition of CM and according to them "Co-management is simply a way of creating various committees by including representatives or members from local community, Forest Department, Civil society, etc for protecting the forest and helping forest department". The only exception was the president of CMC who stated "Co-management means, the management of a forest or protected area through engaging various community groups in decision making and power sharing process which will ensure forest protection and provide socio-economic benefit". On the other hand FD personnel defined co-management as "Any organization (for example NGOs, CREL or CMC/CPG) that provides services or help Forest department to protect the forest from further degradation is called co-management"

According to official gazette notification 2010, co-management committee (CMC) is the main executive and administrative body of a protected area (PA) which is formed by selecting representatives from each of the lower tier namely PF, CPG, VCF, YC (Table 4).

Table 4: Major roles of key Stakeholder Groups/ CMO's in co-management arrangements

Key Stakeholder Groups	Roles and Responsibilities	Legal framework
Co-management Council	Supervision and GuidanceMonitoring the activities of CMC (in Theory)	Official Gazette 2010
Co-management Committee (CMC)	 Help Forest Department in forest protection Organize monthly CMC meeting Prepare ADB with the help of NGO/CREL Monitor the activities of CPG, PF, Youth Club, VCF Beneficiary Selection for Social Forestry Conflict Resolution Implementation of activities taken with the help of CREL Project/Grant Providing some income generation activities through CMC fund for reducing dependency on forests Building awareness 	Gazette Notification of the government 2010
Peoples Forum (PF)	 Organizing monthly Executive Committee (EC) meeting, Creating awareness among people about the importance of forest Discuss the issues, demands or suggestion of VCF meetings in CMC meeting. Help FD in Forest Conservation 	No formal legal framework
Community Patrolling Group (CPG)	 Key duty is to protect forest and helping the Forest department. Patrolling in the Forest, Capture illicit feller, Seize Logs Organize monthly meeting Motivating people, building awareness among community members about the importance of forest 	No legal Base
Youth Club	 Help FD in Fire Control and forest protection Aware People about the importance of wildlife conservation Capture illegal hunter or poacher; Monitor and patrol in the forest areas. 	No legal Base

Village Conservation Forum (VCF)	 Awareness Building among villagers Attend in Monthly VCF meeting Engage VCF members in Livelihood related activities 	No legal base
	• Help in forest conservation and protection	

Data Sources: (Gazette Notification 2010, Resolution of the Monthly Meeting of CMC, Project Report, Key informant Interviews and FGDs). (In Table 4, bold italic sentence denotes the common responsibility shared by various actors group).

Representatives from various stakeholder groups reported that, building awareness among people, motivate the resource users about the importance of forest, protecting forest and wildlife, helping forest department and attending monthly meeting are the key roles and responsibilities of CMO members. In theory, various stakeholder groups are supposed to have specific roles to play in co-management (CM) arrangements but in practice these were found to overlap to a great extent among various actors (Table 4).

Co-management committee (CMC) is the main decision making body regarding the activities taken at PA and they are in the legal position of monitoring the activities of other lower tier CMO's (PF, CPG, VCF, YC). CPG is mainly working in forest patrolling and Youth Club (YC) is helping FD in controlling forest fire and illegal hunting. Peoples Forum (PF) and Village Conservation Forum (VCF) members don't seem to have regular specified tasks to do and mainly work for building awareness among local villagers.

In the study site, the majority of respondent stakeholders (82%) stated that they don't have any proper idea about their actual tasks, and roles and responsibilities of CMO members are not clearly defined in the co-management gazette (Figure 4). Moreover, both FD and CMC members highlighted that the present CMC president is playing a vital role in CM process and his leadership skills and political power has helped to achieve some positive outcomes.

In the government gazette, there is a lack of information and specificity about the roles and responsibilities of general CMC members, office bearers post and other stakeholder groups. One of the CMC member and representatives of Youth Club was sharing his frustration "I am the president of a youth club but it doesn't have any legal basis, we don't even have any formal structure about our working scope, roles, rights etc. So responsibility of Youth club, CPG, PF, CMC should be defined very clearly otherwise it creates vagueness and problems. It seems like everybody is doing the same thing because nobody knows what his main responsibility is?"

In the government gazette, there is a lack of information and specificity about the roles and responsibilities of general CMC members, office bearers post and other stakeholder groups. One of the CMC member and representatives of Youth Club was sharing his frustration "I am the president of a youth club but it doesn't have any legal basis, we don't even have any formal structure about our working scope, roles, rights etc. So responsibility of Youth club, CPG, PF, CMC should be defined very clearly otherwise it creates vagueness and problems. It seems like everybody is doing the same thing because nobody knows what his main responsibility is?"

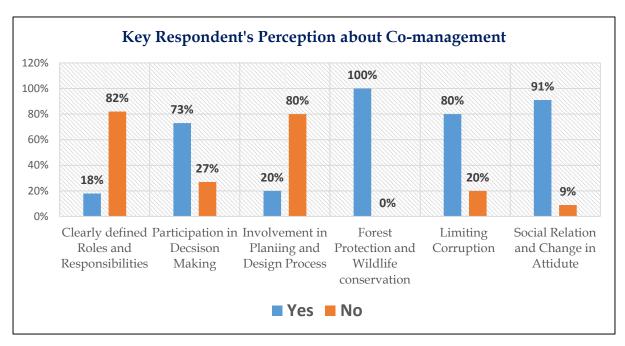


Figure 4: Perceived understanding and experience about co-management (CM) process by key respondents

However, majority of the key respondents reported that they are happy with the present mechanism of taking decision because all the activities taken by CMC with the assistance of CREL project are always discussed in the monthly CMC meeting and members can share their concern and suggestions (Figure 4). But, they also had negative feelings about the involvement of local actors in planning and design process of CM. Both the main parties (Forest Department and Communities) have agreed (100%) that co-management has made a remarkable progress in the protection of forest and conservation of wildlife in RKWS (Figure 4). Majority of the respondent (80%) pointed that joint patrolling and social network among various actors have created a barrier for doing illegal activities both by FD staffs and illicit feller which has resulted in limiting corruption (Figure, 4).

Findings from FGD's and key respondents interview also revealed that there is a huge positive change in the attitude and perception of Forest Department staffs towards the local community

and now there is a good social relation between these two parties (Figure, 4). One of the CMC members and representative from Ethnic Community was sharing his perception as follows:

"In the past, local people didn't get the chance to meet forest Officers, they couldn't even have the rights to enter into the premise of forest office; if they wanted to meet any forest officer they had to seek appointment with the help of headman of the villagers but now we can visit them whenever we need and share our concern/problems; at least they don't treat us like an animal at all and I perceive it as a positive change".

Respondents from forest department also appreciated this change and stated that "Historically there was a rivalry relationship between FD and local community. They didn't trust us, we didn't tolerate them. So there was a huge conflict. But, co-management has made a good progress in establishing social relationship and building trust between these two parties".

Almost all of the key informants and FGD participants stated that their social status has been raised and they feel more respected than before. They also shared their fear that the attitude of forestry officials is not static and mostly depends on their personal intention and interests. If forest department (FD) staff is honest he would support CMC but if he is dishonest and corrupt he wouldn't help them and create lots of barrier so that CMC wouldn't carry out their operational activities properly. Several respondents reported that, they had a struggling period before and some FD officials didn't even allow them to enter into the PA for carrying out the activities of CMC. One of the FD staffs was also supporting their claim and fear of local community and he also replied: "Now, the relation between co-management committee (CMC) and forest department (FD) is really much better if you compare it with past. But, if FD staff is corrupted he won't help CMC or community members and he will treat community members differently. So, attitude towards CMC or community sometimes depends on the personal interest of FD staffs but overall the relationship is good". This fragile and unstable condition of communication indicates the weakness of institutional arrangements of CM process.

4.2: Power Sharing Mechanism in Co-management Process

One of the key objectives of CM system is to transfer rights, responsibility and decision making power from government to local community. Thus, examining the existing mechanism of power sharing is necessary to understand the ongoing devolution process. Each and every CM arrangement is designed to share some degree of power and expected to improve the unequal power relations. So, in this section we will mainly focus on the types of power co-management organizations (CMOs) have in theory and how they are exercising these power in practice.

4.2.1: Legislative Power: Formulation of Rules, Regulations or Bylaws

Focus group discussions and key informants interview revealed that CMC has no legal power to make new rules, guidelines or bylaws; even they can't change or modify the existing rules or CM guidelines. Almost all the CMC members (Except Forestry Officials) perceived an inability to influence the rule creation and decision making process. In Bangladesh, reserve forests and protected areas (PA) are declared under the Forest Act 1927 and Wildlife Sanctuary is declared under the Bangladesh Wildlife preservation Order 1973 (Rahman, 2005).

As we discussed in chapter 2 (section 2.5), that government gazette notification, 2010 is the only approved piece of formal documents for initiating co-management program in PA of Bangladesh. This gazette notification is just an administrative order not a legal policy document. It mostly emphasizes on the guidelines for creating co-management council and Co-management committee by selecting representatives from designated stakeholders groups in the PA. Our result finds that, according to the Gazette notification 2010, CMC has no legal power to make any new rules and change or modify the government guidelines. It's really surprising that in the gazette they didn't even define what co-management is? Though this gazette has specified the responsibilities of CM committees and council but these guidelines are very abstract, descriptive, and subjective to interpretation and there is no clear instruction on how CMC will manage or organize its activities.

Even, people's forum (PF) doesn't have any legal base, they just mentioned it in the gazette but they didn't specify its working scope, organizational structure, roles and responsibilities etc. Majority of the respondents feel that this gazette is not compatible with their interests and needs. For example, according to gazette a person can't be elected as a CMC member or president for more than two times (each term two years) consecutively but all the respondents (both from community and Forest Department) have said that the present CMC president is a very good and honest person who possess dynamic leadership skills and they want him as a president again. But he was the CMC president for the last two terms and now according to guidelines he won't be elected as a president anymore.

"There is nothing in this gazette about the authorities and administrative role of CMC; it just provided some instructions on how to form a CM committee. If FD has given the authority or power to us for creating our own rules and management plan by taking into consideration the social-ecological and political context, then there should be a real sense of collaboration in practice." (CMC vice-president was sharing his perception about government gazette)

The majority of the respondents reported that there is no clear mechanism for sharing of benefits arising from co-management project. Co-management committee (CMC) and Community Patrolling Groups (CPGs) were demanding some incentives from the revenue collected through public auction of illicit timber seized by them during patrolling in the protected area (PA). But FD has denied to provide them any share or percentage since there is no provision for that and co-management committee (CMC) doesn't have any legal rights to create new rules or guidelines for benefit sharing.

Another major critical issue was identified during the discussion with key respondents and FGD participants regarding the criteria of selecting members for the co-management committee (CMC). The majority of respondents complained that the members selected from the category of civil society especially (Journalist and Freedom fighter), government officials and resource owner groups are not interested in co-management. They are very infrequent in the monthly meeting and CMC hardly received any support from them. Reviewing the meeting resolution and attendance list of monthly CMC meeting for last one year it was also revealed the same. The average rate of participants in every CMC meeting is 19-21 (out of 29) and members from Civil society, Government officials and Resource Owning Group remained absent for the monthly CMC meetings. So, the membership selection criteria need to be revised but CMC couldn't make any decision about this issue because in the gazette there is nothing about whether CMC can adjust or modify the criteria for member selection.

In addition, in the gazette there is nothing about the legal framework of CPG, PF, YC etc. and exclusion and inclusion criteria of members for these CMOs. According to the Wildlife (Conservation and security) Act, 2012 "The Government may, by notification in the official Gazette, make rules, constitution, powers, functions and tenure of co-management committee'. So, in practice CMC or local community has no legislative power and this one way of making regulation made them feel powerless and being out of the rules of the game. The way CMC has taken roots in RKWS revealed that FD is still holding all the legislative power and one of the forest department (FD) officials stated "All legal power should be in the hands of FD and CMC only can perform some activities outside of core zone in prior consultation and permission with FD". Thus, in practice local stakeholders have very limited scope to influence the design and implementation of devolution policies.

4.2.2: Executive Power: Decision Making, Enforcement and Compliance

According to the CM Gazette (2010), CMC is allowed to develop short term and long term management plans or annual development plans (ADB) for the PA but they can only operate their activities in the buffer zone² and landscape area³. Moreover, this plan needs to be approved by Divisional Forest Officer (DFO) and there is no financial and technical support available for CMC from forest department (FD) or government. In RKWS, CMC is doing some development activities and arranging livelihood related training with the direct help of donor supported projects. The majority of the key respondents and FGD participants of community patrolling groups (CPG) and youth club (YC) stated that, a couple of months ago CMC made a plan about giving some fallow Lunga (low valley between two hills) to CPG groups so that they can manage these Lunga for fish farming and create an alternative income source for the members who are involved in forest patrolling and conservation activities. But Forest Department rejected their demand and said that CMC is not allowed to do any activities inside the PA. So, in theory CMC can prepare a project plan but in practice they don't have any executive power to implement the decision until it is approved by the District Forest Officer. Thus, CMC is only allowed to carry out activities which are mainly compatible with the needs and laws of the Forest Department. In practice, still FD is playing the main authoritative role in decision making regarding PA management because they have the legal policy and administrative support from the government.

Since, CPGs are doing regular patrolling in the PA, so they can arrest or capture the illicit feller and seize the logs. But CMC or CPG don't have any power to arrest a corrupted forest official or take legal action against them. All the key respondents from local community have stated that CMC can take legal action against CPG or CMC members and general public but CMC has no power to sanction against any FD staffs. In the gazette, there is nothing about how to ensure compliance with rules, how to enforce decisions and rules and how to sanction offenders with penalties especially how the violators are going to be sanctioned.

_

² "Buffer zone" means any forest lying in the margin of protected area or degraded forest area adjoining human habitation, except core zone, where local community people are inclined to harvest forest product. (Bangladesh Wildlife Preservation and Conservation Act, 2012. p.3)

³ "Landscape zone" means a public or private area outside the boundaries of designated sanctuary, national park and ecopark that regulates the biodiversity of the protected area and which is managed to maintain similar landscape of the protected area for deterring degradation of the protected area and where safe movement of wild animals is ensured and which is declared as landscape zone under section 20 (Bangladesh Wildlife Preservation and Conservation Act, 2012. p.3)

This vagueness in CM gazette has created frustration among CMC members. CMC president was sharing his frustration regarding this issue "We need to specify the roles and responsibilities of various stakeholders in CMC especially if someone disobeys the rules and don't perform his duty properly what will be the punishment, who will take the authoritative and management decision; who will implement the decision; what will be the role of FD and CMC, whom they are accountable to; if the CMC or FD don't follow or comply with the rules or disagree to cooperate who will solve the problems and how; all these issues need to be clarified and solved".

4.2.3: Resolution of Conflicts- the judicial approach

CMC has no legal judicial power and there is no clear guidelines in the gazette on what types of mechanism CMC can deploy for resolving conflicts over benefit sharing and forest access or tenure rights. But in practice, all the key respondents have stated that CMC has been playing a key role in conflict resolution and they have an informal way of minimizing the conflict. Actually, in the study area three types of conflicts are found: Conflicts between CPG/CMC with FD, conflicts regarding sharing of benefit from social forestry plantation among various actors and conflict among CMOs or member within a co-management organizations.

The conflicts between FD and CPG regarding the routine patrol are mostly dependent on the intention of FD staffs and activities of CPG members. If the FD staff is dishonest he normally doesn't allow CPG to perform their roster duty inside the PA. On the other hand if CPG members are involved in illegal activities, FD staff don't allow them for patrolling. In, both cases this allegation or issues are normally shared in the monthly CMC meeting and then CMC creates a small committee consisting of representatives from FD and CMC members for investigating the case. The committee arranges meetings with both parties and if they find that any CMC, Forest Guard or CPG members are guilty they submit the inquiry report to CMC. Then CMC take the final decision with the presence of FD staffs and other parties. CMC has been resolving this kind of issues successfully and they have already taken action against various CPG members and excluded them from the groups. One of the respondents shared "We have taken action against several CPG members who were involved in illicit felling. We have discussed this issue in CMC meeting and canceled their membership and if the crime is really very extreme then we ask the FD to take legal action against them according to law. CMC also solve the conflicts among various member within a group in the same way."

Another major arena of disagreement is the selection of beneficiary for the social forestry projects. Though majority of the key respondents were saying that there was no elite pressure and the way beneficiary is selected is quite fine. But the FGD participants had a totally opposite opinion about this issue and they claimed that in most of the cases politically influential person, local elite and outsiders are included in the social forestry scheme with the help of corrupted FD staffs and influential CMC members. This issue has created frustration among poor villagers who are involved in conservation and forest protection activities because this is the only way they can at least get some incentives for their work. One of the FGD respondents from Youth Club "It has created lots of problems and distrust among various groups. So in the last month CMC and FD have agreed that from now on all the beneficiary of social forestry project will be selected through CMC meeting. We wholeheartedly appreciate the decision and hope now at least real poor people will get some opportunity (FGD CPG YC 001)".

In order to resolve this issue, CMC and FD have made a decision that all the beneficiaries will be selected jointly by FD and local community with prior consultation in CMC meeting. Respondents also identified some other types of conflict especially conflicts between land encroacher and FD, conflict between Forest Villagers and FD, conflict between FD with other government organizations etc. But FD never involves CMC in those issues and they resolve it thorough using their legal judicial power and constitutional authority assigned on FD.

4.2.4: Is Co-management restructuring Power Relations?

Though co-management was introduced to facilitate the governance process through altering unequal power relations but our result suggest that there has been very limited transfer of legislative and executive power from state to local co-management organizations (CMOs) and still FD controls all management decisions and determines the degree of participation. As a consequence, CMC is functioning without legal backing and state support and in practice CMOs have no power to take management or administrative decision, change rules and implement plan independently.

Table 5, summarizes the findings from this section and demonstrates the existing power relation in RKWS, most specifically what types of power have been transferred or devolved from central authority to local community through this CM process.

Table 5: List of Key Actors/CMO's and their powers in Co-management arrangements at RKWS

	Major Actors						
Types of Power	Forest Departm ent (FD)	CM Council	Co-Management Committee (CMC)	Village Conservation Forum (VCF)	Community Patrolling Group	Youth Club	Peoples Forum
Create and modify rules, bylaws and regulations	Yes	No	No	No	No	No	No
Enforcing rules, Apply sanction for violation of operational rules	Yes	Partially Yes*a	Partially Yes*a	No	Limited Scale	Limited Scale	No
Make decision on management of PA	Yes	Partially Yes*b	Partially Yes*b	No	No	No	No
Make administrative decision	Yes	No	No	No	No	No	No
Make decision on benefit sharing and resource utilization	Yes	No	Partially Yes*c	No	No	No	No
Implement management activities	Yes	No	Partially Yes*d	No	No	No	Partially Yes*d
Resolving conflict	Yes	Partially Yes*e	Partially Yes*e	No	No	No	Partially Yes*e

Source : (Gazette Notification 2010, Resolution of the Monthly Meeting of CMC, Project Report, Key informant Interviews and FGDs)

^{*}a= only capture illicit logger, poacher and seize logs and take legal action against CMC, CPG or community members not against FD staffs.

^{*}**b**= need prior approval from the Forest Department; ***c**=only take decision regarding social forestry beneficiary selection; ***d**=only implement project taken by CMC through CREL/NGO grants; ***e**= Only solve disputes within various actor groups, among the members of CPG or CMC but don't have the power to solve land use related conflict, conflict between FD and Land encroacher etc.

The main decision and policy making power about PA is still formally vested with the Forest department and still Forest officials largely retaining their view of following control and command approach and not giving any authoritative or managerial power to CMC. In practice, the power relation context of the RKWS hasn't changed much to embrace meaningful joint management. As we can see from the Table 4, none of the stakeholder groups (CMC, PF, CPG, VCF or YC) has power to make modification to state rules though some of the rules have already proven to be impossible to implement and some are not suited to the socio-political and geographical context of the study site.

Though CM Council, CM committee, CPG or Youth Club members can capture illicit feller, poacher, seize logs but these stakeholders group are not entitled with legitimate authority to sanction those power against FD, Local Police and local government officers if they are found guilty and refused to comply with their rules. Only FD has the legal authoritative and administrative power to make decision about the management of PA (Table 5). Among the CMOs, only CMC has the partial power to make decision about sharing benefit from PA but it entirely focus on only social forestry scheme. CMC and PF have some power to implement the activities taken by CMC through CREL grants but they can only operate their activities in the landscape area especially the adjacent villages not inside the PA (Table 5).

CM Council, CMC and PF have the power to resolve conflict which is mainly oriented to community members but CBO's are not legally able to apply penalties against FD staffs or other Government officials who are included in the CM process. So, all these powers (Legislative, Executive and Judicial) are retained in the governments' realm and there has been no meaningful transfer of decision making power and responsibility towards local level Comanagement organizations (CMOs). In addition, CMOs' power to implement and ensure compliance with rules, make management related decision has been limited due to poor institutional arrangements and legal policy support. So, still there is an unequal power relation and one of the respondent stated "If CMC doesn't have any management, authoritative and legal power then how would you say it is collaborative management".

4.3: Accountability and Transparency:

In practice, there is a dual governance system in the RKWS: one is by run by FD inside the PA and another one is by CMC outside of PA, mainly in the landscape area. FD is following their traditional top down approach and they have their own departmental routine activities for managing PA which is totally outside of the jurisdiction of CMC. To date, FD retains the main authoritative, managerial and decision making power regarding PA and CMC has been taking some activities in the landscape area with the help of donor agencies and NGOs. The issues of accountability mostly remained upwards especially FD staff feel that they are accountable to their upward hierarchy and there is no legal framework or mechanism that have been put into place to ensure the downward accountability of FD staff and other government officers to CMC or CMOs.

Bangladesh Forest Department (BFD) is acting as the central authority for preparing master plan or policy and responsible for transforming the policy into action with the prior approval from Ministry of Environment and Forests (Figure 5). Divisional Forest officer is mainly responsible for making administrative and managerial decisions over a specific territory or forests under his jurisdiction. Forest rangers (FR) and beat officers (BO) are the legal field level administrative authority who is mainly engaged in the implementation of activity plan in protected areas (PAs) according to the instructions given by the Divisional Forest Officer (DFO) (Figure 5). Field level FD offices have their own rules and mechanism for reporting their activities to the DFO. In the real ground, local level FD staffs (FR and BO) are working in the field level and CMC are mainly operating at the community level (Figure 5).

Forest Ranger (FR) is the member secretary of CMC and other beat officers (BO) are the member of CMC. All the CMC members including FD staffs are supposed to be answerable to the Co-management Council and Peoples Forum (PF) which will ensure downward accountability (Official Gazette Notification, 2010). There should be a balance between both upward accountability to higher authority and downward accountability to local people the ultimate constituencies. But in practice, the flow of accountability remains highly upwards and there is a vagueness regarding which actor is obliged to whom for their decisions and actions. According to official gazette 2010, CMC is accountable to CM council and Peoples Forum (PF) and they have to meet at least twice a year. But surprisingly Peoples Forum (PF) doesn't have any legal base yet, it doesn't have any formal constitutions; there is nothing in the Gazette

about its working scope, legal power especially how it can make CMC and other stakeholders including Forest Department staffs accountable to their own constituency

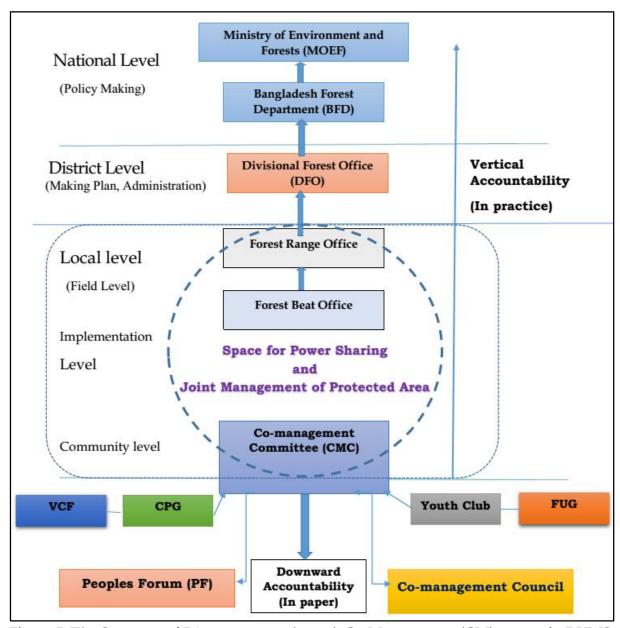


Figure 5: The Structure of PA governance through Co-Management (CM) system in RKWS

As a consequence, PF and CM council failed to maintain downward accountability and CMC also did not bother about this issue. PF is still considered as a passive stakeholder and in practice they don't have the ability, capacity and legal basis to get involved in PA management process and make other stakeholders groups accountable to them. The lack of coordination among various stakeholder groups as well as upward accountability of FD to higher authority challenges the present structure of institutional arrangements. CMC doesn't have any right to

question, challenge and express approval or disapproval of a Forest departments' decision and actions. Even, CMC needs to take approval or permission from Forest Department for implementing their activities in the landscape area of PA.

Figure (5), demonstrates that, instead of making CMC accountable to local CMOs, lack of authoritative power, policy support and inability of enforcing laws made them accountable to the higher authority of Forest Department. On the other hand, FD staffs never shows or never tends to show any accountability to local people or Co-management organizations (CMOs) because according to Forest act 1927, they are appointed by the government and they are the legal custodian of the PA. As a result, they mainly demonstrate compliance with legitimate governing laws, policies and legislation and follow their departmental bureaucracy not with CMC or local community. This was reflected in a statement given by a forestry official: "Actually FD is not accountable to CMC according to law. We normally don't share our internal work and we are not legally bound to share these plans or budgetary information with CMC. We have our own criteria and mechanism for monitoring and evaluating the activities taken by range offices and we are mainly accountable to Divisional Forest Officer (DFO)".

There is a need to develop appropriate mechanism and institutional settings for upward, downward and horizontal accountability. There is no proper and clear communication channel for the VCF or PF members to maintain regular contact with CMC. The Focus Group Discussion with people's forum (PF) members showed that the majority of the PF members don't have any clear idea about the work of CMC. In few cases PF-VCF members were consulted, but FD or CMC are not obliged to take into account PF or VCF members' opinions and perceptions in decision making process. So there is no downward shift of authority and this colonial mentality has put devolution at risk.

For example, according to CMC president "CMC is simply a powerless puppet? For example, Forest Ranger (FR) is the member secretary of CMC but he is accountable to DFO; he never thinks that he is answerable to me or CMC? FD staffs always thinks that they are wholly answerable to their higher authority, who the hell is CMC? CMC president.

The lack of proper mechanism of accountability has created the risk of abusing power both from the side of FD and elite CMC members. So, the present framework of CM governance has failed to allocate more control to higher level of local organizations and the lack of administrative and legislative mechanisms and fragile conditions of institutional arrangements of CMOs have resulted in a weak governance reform.

4.4: Inter-dependency towards a Meaningful Partnership

The key respondents interviews and FGD revealed that FD staff and local people have conflicting interests, different expectation and perception about devolution process (Table 5). The government hasn't placed special attention on promoting meaningful and effective partnerships between FD and local community. Still majority of the FD staff consider CM as a donor driven management system because it was initiated and developed under the strong influence of a donor funded project. They also perceive this governance reform as a threat to their autonomy. All the CMC members and FGD participants were united in their views that Forest Department is not dependent on CMC for making and implementing decisions about protected area (PA).

On the other hand, CMC had to inform everything and don't have the power to take any projects or activities without the prior approval or permission from FD. They also emphasized that FD don't perceive CMC/Community as a partner in forest management, but rather as an associate organization for helping them in forest conservation. There is a clear lack of interdependency and unequal power relations which has placed a barrier for creating meaningful partnerships between FD and local community. One of the CMC members sharing his feelings "CMC or CREL can't take any projects without discussing with FD but they don't share and don't want to share any information about their ongoing work in PA. They are totally independent and still hold the legal power for managing PA." On the other hand, one of the FD staff stated "CMC has no legal rights to ask about our departmental and administrative activities and we are not accountable to them. We normally don't share our internal work and we are not legally bound to share these plans or budgetary information with CMC'.

Table 6: Conflicting Interests between FD and Local Community

Forest Department	Community			
Mostly Concerned about Forest protection	Mostly concerned about Livelihoods and			
and Biodiversity Conservation	power sharing			
Don't intend to share Authoritative and	CMC wants more authority and decision			
Managerial Power	making power			
Not accountable to CMO, Follow Acts and	FD should also be accountable to CMC			
legal procedure				
Take decision independently, enjoy more	Need more equal interdependency and			
autonomy	coordination, joint decision making			

No fund or logistic support for CMC or CPG	Need permanent financial support from FD				
Not interested or bound to share their	FD should include CMC in their				
activities with CMO	departmental activities regarding PA				
CMC should stay outside of PA	CMC needs power to work inside PA				
Not interested in sharing Management	All the PA management responsibilities				
responsibilities	should be shared equally				
Not interested in giving resource sharing or	FD should allocate some lands or water				
using rights	bodies to CMO for creating alternative				
	income				
Not interested in sharing ownership and	CMC should have legislate power and legal				
legislative power	support backed up by national policies				

Another key respondents and CMC members stated: "It seems that FD staffs are in a dilemma; they can neither accept us as their partner nor deny us. The power that was resides with the Forest Department still resides with them but in a different form. As a CMC member I can't say it directly but it's like an open secret that FD staffs rarely wants that CMC should sustain and become an independent organization".

Still NGO's or CREL project played an important facilitating and capacity building role in RKWS. The project staffs are trying to bring local people and FD together under a common platform in order to ensure joint management and equitable power sharing. One of the key goals of co-management governance is to create meaningful lost lasting partnership among different stakeholders. Since devolution itself is challenging for the bureaucracy as it entails giving up power so there should be a genuine commitment from both parties to develop a meaningful partnership. Unfortunately, FD staff is focusing on retaining their command and control approach and exercising various types of power independently. Moreover, the ownership of CMC by government agency is still remains a critical question that is rightly reflected in the following statement of a FD personal:

"If we include community members in our administrative and managerial activities it will totally destroy the forest. They should stay outside of our internal affairs. They can help us according to the regulation but there is no pint of sharing regulatory and authoritative power with CMC. All legal power should be in the hands of FD, and CMC only can perform some activities outside of core zone in prior consultation and permission with FD" (Interview Transcript FD_BO_002, See Appendix A).

FD needs to deal with issues related to co-management partnerships in a more meaningful way and there should be a clear legal framework on how CMC and FD will jointly manage and monitor all the activities of PA. In addition to this, there is also a lack of co-ordination exist among CMO organizations. FGD results showed that, members of Peoples Forum (PF) and Village conservation Forum (VCF) don't know that much about the activities of CMC and there is a lack of proper communication channel among various stakeholders groups. The decisions and information's about CM activities need to be distributed in the lower tier institutions of governance structure in order to ensure transparency.

4.5: Capability of Actors and Livelihood benefits: The majority of the Key respondents and FGD participants reported that local community members have very limited capacity to organize and manage the CM activities. They also described that without the active support from donor supported CREL project they won't be able to carry out the managerial and operational activities of CMC. Because most of the CMO members are illiterate and they are clearly lacking in leadership, communication and organizational skills. Now, CREL project is assisting CMC to prepare the management plan, organize monthly meetings and capacity building training, providing funds, negotiating with the government for formulating policies in favor of the CMC. Though, co-management regime has been operating in RKWS since 2004 (almost more than 10 years) but still, the majority of the community actors are confused about the co-management governance process, and are not yet capable enough to carry out their activities independently. Even forest department staffs are not properly oriented about government gazette and other legal aspects of co-management process.

Moreover, there is also a lack of interest among community members regarding CM process and most of them don't own it as their responsibilities. Some of them feel like if they engage with CM activities they might get some power, social status or benefits in future. Moreover, funding from donor agencies still remains critical in facilitation of devolution process. There is no proper logistical support available for field level FD staffs and they don't have arms, proper budget, skills and manpower to carry out their routine activities properly. Actually forest department (FD) hasn't got any financial policies for CMOs, and CMC is mainly taking their activities and managing its operational cost with the financial support from donor agency. Thus, CMC has no permanent source of income and there is no regular inflow of money. Key respondents and FGD participants identified this issue as one of the main key challenges. Since there is no benefit sharing arrangements between FD and CMC, so CMC is wholly dependent on donor funded projects.

Co-management is supposed to provide some incentives and livelihoods benefits for the engaged stakeholders. But unfortunately no notable progress has been made so far to improve the socio-economic condition of local community. CMC has initiated some projects, provided support to some families and arranged capacity building and livelihood related training with the direct help of CREL project, but this is still very negligible. There is no fund from the government, and Forest department has no plan or project for reducing the dependency of resource users on forest. Both key respondents and FGD participants identified this aspect as a crucial component for the sustainability of CMC. One of the key respondents from community patrolling group was sharing his frustration as follows:

Forest department has thousands hectares of fallow land and unused water bodies which can be used or given to the CMC, CPG or community for creating alternative income sources but they didn't take any steps.

Another FGD participant was sharing his feelings about livelihood crisis: "We are really tired of doing the same things and making the same false promises to our local members again and again over the years (FGD_PF_002)". Forest department officials also agreed that they didn't have the scope to provide any livelihoods support and Forest department should come forward to create livelihood opportunities for the CMO members mainly CPG. One of the Forest officer stated "Personally I think FD should create some fund or project for CPG, because they are helping in forest conservation almost voluntarily."

Chapter Five: Result and Discussion

The co-management program at the study site has established new local institutions and theoretically engaged various stakeholders group in decision making process. But their participations are mostly limited in forest protection and awareness building activities. Though CM approach has made a good progress in improving the rivalry relationship and created a platform for mutual communication but the active involvement of local community in planning, design and decision making process is still far beyond the expectation. Majority of the actors still don't have any clear idea about their actual roles and responsibilities and they perceive comanagement as a way of helping the forest department in forest protection. Our result indicates that CM process is not well understood by the actors. They perceive an imbalance of power and there is a lack of equitable and locally appropriated decision making process. Several reasons may be brought forward to explain this situation and in this chapter we will discuss our findings in details through using theoretical lens and link it to relevant literature.

5.1: Power devolution in CM Governance: Agrawal and Ribot's (1999) Actor-Power-Accountability framework and power typology (Legislative, Executive and Judicial) was used to analyze the present power dynamics of CM governance at study site. The findings of the study shows that there has been no fundamental shift in unequal power relations, and governance reform has been happening in RKWS without insufficient power transfer and inappropriate local institutional arrangements. The present paradigm shift in governance in RKWS shows that there is a large gap between the rhetorical claims for collaborative management and the devolution of power through institutional changes that actually take place in real ground. In Bangladesh, forest department is still not enthusiastically committed to adapt CM approach and still forest department has retained significant control over PA.

5.1.1: Power to create rules and make decisions: Institution defines rules and practices; the scope of the authority and their relationships to other state and non-state actors (Singleton, 2000). So, independent institutions are key to ensure transparency, accountability and equity in power sharing process. Our results reveal that co-management institutions in RKWS are actually being operated under the shadow of states centralized traditional governance structure and CMC or other CMOs have no legal power to make new rules, guidelines or bylaws even if they are not compatible with the interest of actors and social-political context of the PA. Though field level FD staff appreciate the support of CM organizations in forest protection but they are united in their views that all the legal power should be in the hand of forest department

(FD). The state agency in Bangladesh is still not eager to share their authoritative power with newly formed co-management organizations (CMOs). So, in practice CMC or local community has no legislative power and this one way of making regulation made them feel powerless and being out of the rules of the game. This sense of powerlessness could be related with the findings of Lachapelle et el (2004, p.4), who stated "a lack of power in one area (e.g., rule creation) often meant power couldn't be exercised in another (e.g., dispute adjudication).

Co-management projects in the protected area (PA) of Bangladesh are mainly operating under the official gazette notification 2010. But some aspects of Forest Act 1927 and Wildlife Act 2012 contradicts with the gazette and FD staffs feel more comfortable with following the act rather that CM gazette. For example, according to Wildlife Preservation and Conservation Act 2012, "no person is allowed to enter inside the PA and cultivate any land in wildlife sanctuary"; on the contrary according to CM gazette 2010, CMC can make plan and take initiatives inside the PA or landscape zone for creating alternative income sources by considering bio-physical condition of PA. These conflicting clause and guidelines pose serious threats for CMC and CMOs to create and implement any plan independently and limiting the exercise of their authoritative and managerial power over PA. As we stated in our result section that in RKWS, CMC has made few project plan with the help of donor agency (CREL Project) for creating some alternative income sources through fish culture inside the PA but FD has denied to give them permission as everything is prohibited inside the PA according to law. Similar incidents have been witnessed in Vietnam where local fisheries associations (FAs) are not allowed to create new rules that go beyond the rules of state and the power of Fisheries Associations (FAs) is limited by the provincial government's power (Ho et el, 2015).

Moreover, it's quite surprising that FD staff feel neither the pressure to include local actors in decision making process nor to incorporate their needs and preferences. Actually, our results found that, CMC and other CMOs are suffering from legitimacy deficits. According to Lockwood (2010) government agencies are legitimized through the democratic authority vested in governments to authorize decisions and actions and delegate responsibilities to agency officials. Therefore, FD staff think they are the only legitimized agency since they are legally entitled with authoritative power by law and they don't perceive CMC as a legitimized authority because it is not yet backed up by constitution, laws or policies. Lockwood (2010) also mentioned that an organization can also earn legitimacy for more specific responsibilities and actions by gaining approval directly from the people affected. On one hand, CMC doesn't have any legitimacy by legal law or policy and on the other hand they are also struggling to

deliver expected outcomes due to resource deficits, inadequate decision making power and improper communication with other local actors which collectively creates barrier for CMC to earn legitimacy from the local community.

Additionally, our findings suggest that membership criteria for CMC needs to be revised but CMC can't make any decision on this issue. Seid-Green, (2014) claimed that involvement of various actors is supposed to reflect better public values but maximum participation may not always bring positive outcomes because if the representatives or actors are not strongly downwardly accountable to the rest of the community it is likely to become a source of misuse and abuse (Ribot 2001; Campbell and Shackleton 2002). So, instead of including as many as actors in the CM arrangements it is much more important to identify the most relevant actors and put a mechanism in place to engage them actively in management activities and make them responsive and accountable to the local institutions such as CMC or people forum (PF).

Moreover, our result also find that, there is an absence of clear legal framework for local level co-management organizations (CMOs) such as PF, CPG, YC and VCFs. The government gazette notification didn't specify what types of power is decentralized and merely spelled out the roles that these different actors should play in the CM arrangements. In addition, there is no proper instruction about the inclusion and exclusion criteria for selecting member in various CMOs expect CMC or CM council. In In India, JFM programme was introduced through administrative orders rather than changes to the law which has been found a major constraint in securing resource users rights, creating legal partnership between government and local communities and often lead to confusion among stakeholders regarding their roles and responsibilities (Springate-Baginski and Blaikie, 2007). Similarly, Larson (2002) argues that legal ambiguities create obstacles for local organizations or stakeholder groups to act properly because it may be taken to task for having undertaken an illegal action. Thus, in our case ambiguity and vagueness regarding rights and responsibilities coupled with insufficient legal organizational support create complexities and confusion among actors which undermines the degree of devolution sought through CM.

5.1.2: Power to implement decisions and ensure compliance: According to Agrawal and Ribot (1999), effective decentralization only takes place when local community or actors have the power to make and enforce decisions and rules independently. Our study finds that, in RKWS, CMC has been endowed with very limited authoritative power to make decision about developing long term management plan for PA and executing the plan accordingly. In

theory they can prepare a project plan but in practice they don't have any power to execute or implement the plan until it is approved by DFO and they can only operate their activities in landscape area and in some cases inside buffer zone. Our result shows that CMC literally have no activities inside the PA and in practice very limited management responsibilities have been transferred to local authority/CMOs. In RKWS, devolution has been taking place without giving sufficient authority to exercise decision-making powers and adequate controls over forest management and without any proper incentive structure or benefit sharing mechanism. Therefore, CM governance is struggling to yield desirable outcomes especially for local livelihoods and it has reproduced asymmetrical power relation.

KimDung et al, (2016) observe that, unequal division of political and fiscal control by the state limited the power of actors to contribute in day-to-day management activities of PA. Our result finds that in RKWS, government and state agency still determines the nature of responsibilities and powers to devolve and no considerable management responsibility has been transferred to local authority or CMOs so far. Overall decision making power is still concentrated within the FD, they are totally responsible for everyday management of the forest and the only input from CMOs is to support them in forest patrolling, controlling illegal hunting and creating awareness among local forest dwellers. Moreover, Shackeloton et al (2002) found that, in joint management income distribution shares are mostly decided at the central level, and Bazaara, (2003) and Fairhead & Leach (1996) also concluded that central governments rarely give up control over the allocation of profitable revenue sharing opportunities. Our study also finds the similar results and CMOs don't get any percentage from revenue collected by selling logs seized by community patrolling group (CPG) and there is no clear mechanism for sharing of benefit from joint management. So in practice CMC and CMOs don't have any ownerships and resource using rights as well as don't possess any power to create rules for benefit sharing.

However, we also found that some informal executive power has been transferred to CMC, especially to some extent, CMC can apply sanction to those who do not comply with guidelines or violate the CM rules. But CMC can only execute this power over community members and CMC or CMOs don't have any power to enforce compliance against FD or other government actors. Case studies from Niger, Zambia and Cameron show that co-management policies were either not accompanied with necessary legal frameworks or such legal supporting mechanisms were effectively blocked from being used (Bene et al, 2009). In our case, though CMC has got some executive power but their implementation has been impeded by creating many obstacles.

Especially the institutional structure of forest department and vagueness in the CM gazette about how to ensure compliance with rules and how to sanction offenders has limited the power of CMC to enforce executive power. This can be related with the findings of Chinangwa et el, (2015), who stated that "the introduction of new institutions may threaten those who are already in power". Still there is an invisible fear among the FD staff that the transfer of executive power may weaken the centralized governance structure and will create new windows of opportunity for other actors which will reshape the institutional arrangements and lessen the authoritative power they have been enjoying so far.

5.1.3: Power to resolve conflicts: Despite of having massive limitations in RKWS, CMC is playing a vital role in resolving resource related conflict at community level. Though there is no formal frameworks or conflict resolution mechanisms exist but engaging different actors in conflict resolution process have made a positive change and created considerable trust among local actors. But still CMOs have no formal judicial power and can't play any role in resolving land use, land tenure-ship and land encroachment related conflicts. Decentralization reforms also produce disputes over benefit sharing and Cinner et al (2012) stated that in some instances conflicts can lead to adaptations in legislation or guidelines. This is somehow true in our case, for example in our study site selection of beneficiary for social forestry scheme has proved a highly contentious issues and local actors also reported the issue of elite capture and they were demanding a change in the process. In order to resolve this conflict appropriately CMC has decided that FD has to select the beneficiary with prior consultation with CMC, which is perceived as a positive change by local community.

A wide range of studies conducted in Asia, Africa and Latina America revealed that almost all cases of devolution have been unsuccessful because state agencies have failed to transfer sufficient rights and responsibilities over natural resources to the community members or stakeholders (Chinangwa et el 2015, Pulhin and Dressler 2009; Shackleton et al. 2002; Ribot et el. 2006 and Matose, 2006). Even in the context of decentralization initiatives the outcomes of present governance reform in RKWS is not systematically positive in terms of sharing of decision making power and management responsibility. No significant rights or power have been entitled to CMOs and this co-management structure gives local actors or community member's very limited space and bargaining power for negotiation with the policy makers. It seems that the history of highly centralized state management of forest for more than a century in our country is still deeply rooted in the state's agency which created barriers for the CMOs. Therefore, CMC failed to play a fundamental role in shaping the distribution of benefit due to

inadequate legal support. Moreover, there is very limited scope for the local actors to engage in and influence policy level and this systematically organized forest bureaucracy is actually recentralizing the power of state in a modified way.

5.2: Accountability: Our result implies that the present institutional arrangements and governance structure are not fully favorable for the active participation of actors and influence the outcomes of the process. Agrawal and Ribot, (1999) concluded that the expected benefits of decentralization become available to local community only when empowered local actors are downwardly accountable. In RKWS, it is evident that accountability remains mostly vertical and there is no clear legal support and guidelines on how to ensure downward accountability. According to Ribot et el., (2006), if local governments or institutions always must seek approval from superiors before undertaking an action, their downward accountability and ability to respond are weakened. In practice, there is very limited transfer of managerial and authoritative power from Forest department to co-management organizations (CMOs) and CMC always need to seek permission before taking any projects in the buffer zone or landscape area of PA. As a result community inputs are severely diluted due to the lack of proper accountability mechanisms. Decision making process are mostly controlled by the Forest Department and there is a lack of visibility and transparency regarding the decision taken by them about protected area (PA) management. Besides this, local elite sometimes allies with corrupted FD personnel for their benefits which also shape the outcome of governance process.

Moreover, formation of CMC through electing or selecting representatives from various stakeholder groups is supposed to ensure downward accountability but irregular election and lack of clearly defined mechanisms to make them accountable to their constituents has created frustrations among community members. Additionally, Ribot et el., (2006) concluded that, a full sense of accountability will emerge only as elections become institutionalized. In my study site, the period of present co-management committee (CMC) has expired two years ago but no new election has been organized so far for the formulation of new committee. CMC is supposed to accountable to PF and CM council but majority of the PF and CM council members are mostly unaware about their rights and they are not properly informed about the regular activities of CMC. If local populations or stakeholders are unaware about their rights and don't get proper information, this can make a mockery of accountability even where local leaders are democratically elected (Ribot et el., 2006). Agrawal and Ribot (1999, p.478) mentioned that "if powers are decentralized to actors who are not accountable to their constituents, or who are accountable only to themselves or to superior authorities within the structure of the

government, then decentralization is not likely to accomplish its stated aims." Our results reveals that Forest Department and government officials who were mainly appointed by government according to gazette are totally ignorant about their role as a CMC members and are likely to be loyal to their government office instead of their constituents or local people. Thus, the existing accountability mechanism indicates that forest department limits the scope of reforms in order to ensure that outcomes of reforms will not threaten their existing autonomy.

5.3: Partnership Arrangements and Interdependency: As we know that co-management (CM) engages two separate but interrelated parties in resource management (KimDung et el, 2016) in order to overcome the shortcoming of centralized management and creating partnership arrangements between state and community. But our results indicates that there is a clear lack of interdependency between FD and CMC regarding taking decisions and managing PA. Central to collaborative interaction are issues of inclusion, power-sharing and joint decision-making (Davidson-Hunt & O'Flaherty 2007). In RKWS, FD is not dependent on CMC for taking or implementing any decision or plan in PA. Moreover, FD is actively involved in all activities taken by CMC with the assistance of donor projects but CMC or CMOs have no involvement in the departmental activities of FD. FD don't share their activities, budgetary information or audit report with CMC and our results show that local actors perceive it as a hindrance to ensure transparency. It seems like that one set of actors are likely to have a considerable influence on all the decision making process regarding PA management which makes cooperation difficult.

Co-management involves social actors at multiple levels and from different social groups and this cross-scale arrangements are expected to lead to network relationships and multilevel governance (Basurto, 2013; Berkes, 2007; Paavola, 2007). Though, social trust and change in attitudes of FD staffs towards community has created opportunity for collective action but inadequate formal scope for local actors to engage actively in all types of forest management activities is impeding the success of devolution process in RKWS. Possible consequences of this asymmetrical power relation could threaten the process of joint management and limits the opportunity for creating genuine multi-level partnership among various actors. In order to bring about successful collaboration, the state must cultivate social trust, and demonstrate the capacity and willingness to be tough, credible and reliable (Singleton, 2000). Social trust and interdependency and sense of ownership is a necessary condition for an institution to function effectively which is not really present in the study site. Mutual cooperation would allow each side to focus on the task for which it has a comparative advantage while enjoying the benefits

of collaboration (Singleton, 2000). The interdependency and collaboration among various actors could be fostered through creating scope for constructive dialogues, maintaining diverse social relationships network, building trust and competency through learning by doing and all these factors can lead to a more informed understanding of CM which will ensure the long term sustainability of CM institutions.

5.4: Capability of Actors: Successful co-management requires investing in institutions and building leadership capacity at local levels (Evans et al, 2011). Our results show that, local actors don't possess enough technical skills and knowledge about forest policies, CM gazette, rights and responsibilities to maintain the regular activities of CM process without the direct support of NGO staffs. Donor agencies still played an important role in strengthening the capacity of actors and state has literally no financial and technical support for CM system. Institutional and capacity building is necessary at both government and resource user levels for multi-level co-management to be effective (Mansuri and Rao, 2004). Even local level FD office don't have enough staff, proper budget, skills and manpower to carry out their routine activities and they also don't have proper knowledge about CM process. Larson, (2002) and Ribot et al, (2006), summarized that the devolution of management responsibilities without corresponding funds to carry them out is common a strategy of state. Though state has introduced CM in PA but they don't provide any direct fund or financial support for the CMC or CMOs. Ribot et al., (2006) also mentioned that unfunded mandates reduce the ability of local actors or organizations to undertake any management tasks and this is also common in RKWS. Therefore, there is a need for identifying possible funding mechanisms that will empower communities to participate in decision making independently and continue the co-management program without donor support.

Moreover, our results also summarize that limited participation of ordinary community members such as of general members of Peoples Forum, CM Council, VCF member and Youth Club in capacity building training program coupled with low literacy level, further limits their capacity to effectively engage in decision making process. CMC is not essentially providing enough financial and technical support to make other CMOs (PF, YC, VCF and CPG) independent. As a consequence, we found that ordinary members of PF and VCF members merely have any idea about the CM process, activities and outcomes and this drastically limits their capacity to engage in the CM process. Singleton (2000), suggests that actors must have the capability, the social and material resources to solve the variety of collective action problems associated with creating and maintaining resource management institutions. In our

case, still CMOs have to rely on donor agencies for financial and technical support and state agencies for enforcing rules which is creating barriers to the sustainability of CM process. Agrawal and Ribot (1999) stated that power in a co-management program should be devolved to coordinated and capable institutions and actors. On the other hand, Berkes (2010) argue that co-management is actually a learning by doing process and actors can be empowered and capable when they engage in management activities. So, if actors are given the scope to exercise their power in practice they will eventually become competent and skilled.

Awareness of their rights amongst stakeholders and knowledge of the constitution are critical factors influencing devolution outcomes (Shackleton et el, 2002). Our results show that despite of having various constrains the process of shared governance has provided some positive outcomes. These changes were possible due to the leadership capacity, commitment and substantial knowledge of CMC president in RKWS. Mutual cooperation and successful cooperation are obviously more likely to emerge and be sustained when both sides have the adequate resource to carry out their agreed responsibilities (Singleton 2000). So, improving actor's capacity is hence very essential and state agencies must demonstrate that it is committed to genuine co-management through providing legislative, technical and financial support for local capacity building.

Livelihood enhancement and welfare of the community is an important goal in resource management (Singeleton, 2000). Present decentralization process through CM activities hasn't significantly increased the tangible economic benefits for local people, except few CPG members that were included in the social forestry scheme and few VCF members got livelihood related training by CREL which is really negligible. But, still there is a lack of access for CMOs to sufficient financial resources and there is no livelihood support for the local resource dependent community from Forest Department. Singleton (2000) recommended that the state should provide subsidies that compensate locals for preserving biodiversity and Shackleton et al (2002) also concluded that failures to deliver promised share of income or incentives in CM severely affects local enthusiasm. Similar phenomena have been observed in our case as local actors are not getting any proper incentives, and unequal trade-off between FD and community is affecting the active participation of local actors. Therefore, co-management needs to focus on positive trade-offs between state and community through reconciling multiple values and goals of various actors in order to accelerate the success of devolution process.

5.5: Factors affecting the process of co-management governance at RKWS

Our study implies that different actors placed different values on forest resources and

sometimes they have competing interests. Thus there are divergence and contrasts regarding perception of various actors about co-management and process outcomes. Findings from the key respondents' interview, FGD. secondary materials and subsequent discussion have found several major factors that are creating hindrance for successful implementation of co-management program which are described in the Figure 6. Our study finds that local people don't

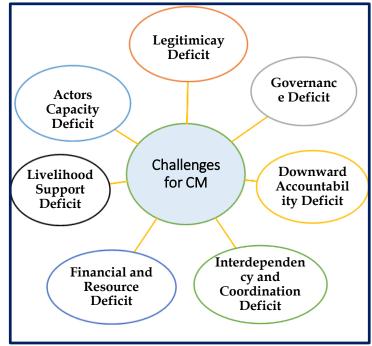


Figure 6: Factors affecting the successful implementation of Co-management Project

have that much scope to play active role in decision making process due to the imbalance of power and complex centralized nature of forest bureaucracy. Thus, the majority of respondents perceived this governance reform as a modified and more systematic way of retaining state control over forest protected areas (PA). In summary, the lack of legal policy support, improper institutional arrangements and governance structure, limited transfer of managerial power and authoritative power, vertical accountability mechanism, lack of access for CMOs to sufficient financial resources, insufficient livelihood support, lack of interdependency between FD and CMC regarding taking decision and managing protected area (PA) and insufficient skills and knowledge of actors are the key factors affecting the successful implementation of comanagement project in RKWS.

Chapter Six: Conclusion and Recommendations

The objective of the study was to assess whether co-management program has managed to achieve power devolution to some extent and how well is collaborative governance functioning in practice. Our results reveals that, present CM arrangements at study site has not been successful in restructuring the asymmetrical power relations. Moreover, the differences in perceived understanding among actors about CM system also reflects the complexities involved in devolution process and indicates the need for incorporating multiple interests and perspectives in the CM program in order to achieve desired outcomes. This study shows that the transfer of power actually determines the outcomes of CM governance reform and state agency deploys various strategy to reinforce the unequal power relation by creating legal barriers or blocking the power being used by local organizations. Moreover, this study also reveals the complexity associated with CM governance reform process and how one set of actors can manipulate or control the whole process if there is no uniform or equal distribution of decision making power and proper institutional arrangements and downward accountability mechanism. Thus, the findings of our research highlights the importance of critically examining the effectiveness of co-management system from the perspectives of power devolution and this study might also be useful to understand why the CM process is struggling to deliver the expected outcomes in other PA of Bangladesh as well.

Transferring or sharing of power is the vital factor that determines the effectiveness and sustainability of CM governance reform. Because, the nature of power relations ultimately determines the nature of co-operation among various actors and unequal distribution of power also affects negatively the capacity building process. Moreover, our study also conclude that, vagueness in policy documents and improper legal policy support may create a power vacuum and government agency can use this vacuum as a way of manipulating the process of CM governance and make powerless actors to be accountable to state rules or institution instead of their constituency. A genuine governance reform through CM process needs genuine commitment from both state and community and a stable and suitable power transition process. Thus, our findings argue that the rhetorical claim of success of CM process is not always represent the reality and asymmetrical power relation remains central to the CM process which hindering the success of CM governance process in a multidimensional way.

The governance reform in RKWS thorough co-management program has shown some positive changes particularly in the field of forest protection, reducing corruption, improving social relations and minimizing resource related conflicts. However, CM is still struggling to achieve true devolution due to insufficient power transfer, inappropriate legal policy support, lack of capability of actors and upward accountability mechanisms. Despite of various limitations this approach has played an important role in overcoming the stage of historic mistrust between state and community and established a common platform for joint management which was not previously present. Good leadership skill of the CMC president, commitment among CMC members, active support from CREL project and a change in attitude of FD staffs towards community were the key factors found to be facilitate comanagement process at study site.

Though, FD has recognized the importance of community involvement in forest protection but they are not willing to share authoritative and managerial power with co-management organisations (CMOs). As stated by Sandstorm and Rova (2010), collaboration among actors is mainly determined by the relative power and allocative authority of each actor, which regulates strategic interactions among actors. The situation in RKWS implies that, unequal power relation creates unequal degree of interdependency which in turn limiting the capacity of CMOs to establish meaningful collaboration with FD or state. Moreover, forest department merely share their operational plan or budget with CMC or CMOs regarding protected area which might compromise the transparency and visibility of decision making process.

Singleton (2000) propose that, in order to achieve successful co-management (CM), the state should facilitate cooperation between parties, supplying stable rules and acting as a third party enforcer of such rules. Unfortunately, these enabling conditions are found absent in our study site and it seems that CM is operating as a foster child of government. Findings of the KimDung et el, (2013) suggest that, in many cases, co-management remains mostly administrative rather than participative in nature. This is somewhat true in our case because our study also indicates that there is an inherent tendency of government to retain control over forests and there is a lack of commitment for developing genuine partnerships. Thus, there is a need to adopt cooperative regulatory strategies in order to achieve greater effectiveness of CM process and state shouldn't be simply act as a rule enforcer instead they should come forward to nurture meaningful partnerships through incorporating broader public interests in their policy.

Moreover, mechanisms of upward accountability have further weakened the success of CM process as FD and other government stakeholders tend to account to legislative government agencies rather than to local communities or CMOs. As Ribot (2002) stated that "establishing accountable representation without powers is empty.' Limited capacity and power of local actor and improper legal support and institutional arrangements in decentralized frameworks has failed to ensure downward accountability. Thus public hearing, public auditing, joint monitoring and evaluation as well as fair and regular electoral process for CMC or CMOs and increased local awareness could be used as a strategy to address this problem.

Furthermore, there is no proper mechanism for sharing revenue or benefit from joint management and the present CM arrangements have not been successful to meet the local livelihood needs. In addition to this, lack of education and skills, limited knowledge with regards to roles and responsibilities, and insufficient technical and financial support from state for local actors limits their capacity to effectively implement the management activities and make decisions autonomously. Shackleton et al., (2002) pointed that supporting local capacity building and livelihood enhancement should be the centre to devolution policies. Our results also support that capable local actors can influence the CM process positively and considerable effort should be given to empower relevant local actors. Moreover, Sessin-Dilascio et al, (2015) emphasize that a successful co-management process requires ongoing investment. Though our results shows that there is a positive change in forest protection, social relation and conflict resolution; this however may not guarantee that present CM arrangements will continue to display these outcomes and ensure long term sustainability of CM process. Especially, when there will be no donor support or technical input from NGOs and when there will be no dynamic and potential person like present CMC president.

As Sidaway (2005) stated "Politics of cooperation is only possible when politics of power have been exhausted". So, forest department needs to shift their position from the centralized regulatory behaviour towards more equitable democratic power sharing process in order to facilitate meaningful partnerships between state and community. Considering the present socioeconomic and political condition central government may continue to contribute to enforcement, monitoring and administrate protected area (PA). But at least they should transfer some degree of management rights and decision-making powers to CMC. In addition, FD should engage CMO members in day to day management activities and allocate some fallow forest land to CMOs for creating alternative income sources which in turn will increase

their capabilities, confidence and financial autonomy as well as inspire and make them feel as a partner rather than an implementer or passive actor.

Though present CM has shown the potential to provide positive outcomes but Chinangwa et al, (2015), concluded that, failure to abolish the power imbalance and to transfer decision making and management powers from state to local institutions, could in practice mean that co-management is just management in disguise. In terms of power devolution and transformation towards cooperative partnerships and multi-level governance present CM system is really far away from achieving these goals. Therefore, increasing trust and mutual interdependency, creating enabling policy and providing technical and financial support for both CMOs and local level FD staffs should be the priority for government as it could increase the likelihood towards arriving at more equitable and collaborative power sharing process.

Our study also finds that CM is not a universal panacea and doesn't offer in built simplistic solutions for all governance related problems. Because, every social-ecological system is unique in terms of the actor, power relation, history, culture and geography that influence the perceived understanding of actors. Thus, outcomes of the governance reform process through CM depend on how different actors interact and collaborate within this complex social-ecological system. So, a more intensive further research is also needed to understand the political, ecological and social context within which the co-management system is currently being operated. In addition to this, identifying the context specific enabling conditions is also necessary for creating a unified understanding and vision of shared governance. In order to ensure the effectiveness of devolved governance system, the present power sharing dynamics needs to be restructured in a meaningful way. As well as, necessary changes in institutional arrangements and legislative framework should be made to overcome the limitation of ongoing CM process and address the existing gaps between policy and practice.

7. References:

- Agrawal, A. and Ribot, J. (1999). Accountability in decentralization a framework with South Asian and West African cases. Journal of Developing Areas 33(4), pp.473-502.
- Alpizar, M.A.Q. (2006), "Participation and fisheries management in Costa Rica: From theory to practice." Marine Policy 30: 641-650
- Arnstein, S.R. (1969), "A ladder of citizen participation." Journal of the American Institute of Planners 35(4): 216-224.
- Aziz, M.A. (2008). Co-management of protected areas without local knowledge and participation: A case study of Lawachara National Park. United States Agency for International Development (USAID), pp. 27-56. Retrieved on 10/03/2016.
- Basurto, X. (2013). Linking multi-level governance to local common-pool resource theory using fuzzy-set qualitative comparative analysis: Insights from twenty years of biodiversity conservation in Costa Rica. Global Environmental Change, 2, 573–587.
- Baumann, P. (2000). Sustainable livelihoods and political capital: Arguments and evidence from decentralization and natural resource management in India. (Working Paper No.136). London: Overseas Development Institute.
- Bazaara, N. (2003). Decentralization, politics and environment in Uganda. WRI Environmental Governance in Africa Working Papers, Washington, DC. http://www.wri.org/sites/default/files/eaa_wp7.pdf. Retrieved on 22/10/2016.
- Be'ne', C., and Neiland, A.E. (2006). From Participation to Governance. WorldFish Center, Penang, and CGIAR Challenge Program on Water and Food, Colombo.
- Bene, C., Belal, E., Ousman, B, M., Ovie, S., Raji, A., Malasha, I., Njaya, F., Naandi, M., Russel, A. and Neiland, A. (2009). Struggle, dispute and alliance over the new power: analyzing democratic' decentralization of natural resources through the lenses of Africa inland fisheries. *World Development*, 37(12):1935-1950
- Béné, C., Emma, B., Baba, M. O., Ovie, S., Raji, A., Malasha, I., Andi, N.M., & Russell, A. (2008). Governance, Decentralization and Co-Management: Lessons From Africa. 14th IIFET Conference Proceedings, Vietnam.

- Bergh, S. (2004). Democratic decentralization and local participation: A review of recent research. *Development in Practice* 14(6):780-790
- Berkes, F. (2010). Devolution of environment and resources governance: trends and future. *Environmental Conservation* 37(4):489-500.
- Berkes, F. (2007). Adaptive co-management and complexity: Exploring the many faces of co-management. In D. Armitage, F. Berkes, & N. Doubleday (Eds.), Adaptive co-management: collaboration, learning, and multi-level governance (pp. 19–37). Vancouver: UBC Press.
- BFD (Bangladesh Forest Department). 2017. Forest Department, Government of the Peoples Republic of Bangladesh. http://www.bforest.gov.bd/. Retrieved on 20/05/2017.
- Borrini-Feyerabend, G., Farvar, M. T., Nguinguiri, J. C. and Ndangang, V. A. (2000). Comanagement of natural resources: Organizing, negotiating and learning-by-doing. GTZ and IUCN, Heidelberg: Kasparek Verlag, 2000. Retrieved on 17/09/2016.
- Borrini-Feyerabend, G., Johnson, J. and Pansky, D. (2006). *Governance of protected areas. In:*Lockwood, M., Worboys, G.L., Kothari, A. (Eds.), Managing Protected Areas: A Global Guide. Earthscan, London, pp. 116–145.'
- Brown, P. C., Lassoie, J. P., & Wolf, S. A. (2007). An analytic approach to structuring comanagement of community forests in Cameroon. Progress in Development Studies, 7(2), 135-154.
- Campbell, B. and Shackleton, S. (2002). The organizational structures for community-based natural resources management in Southern Africa. *African Studies Quarterly* 5(3).
- Carlsson, L. and Berkes, F. (2005). Co-management: concepts and methodological implications. *Journal of Environmental Management* 75:65–76.
- Carter, J., Gronow, J. (2005). Recent experience in collaborative forest management: a review paper. CIFOR Occasional paper No.43, CIFOR, Bogar, Indonesia. 48 pp
- Cashore, B. (2009). Key Components of Good Forest Governance in ASEAN Part I: Overarching Principles and Criteria. *Exlibris*, no. 6, 1-8.
- Castrol, A. P., Nielsen, E. (2001). Indigenous People and co-management: Implications for Conflict Management. *Environmental Science and Policy*, 4:229–239.

- Chinangwa, L., Sinclair, F., Pullin, S.A., and Hockley, N. (2015). Can co-management of government forest reserves achieve devolution? Evidence from Malawi. *Forests, Trees and Livelihoods*, 25(1): 41-58.
- Chinsinga, B. 2005. District Assemblies in a fix: the perils of the politics of capacity in the political and administrative reforms in Malawi. *Development Southern Africa* 22(4): 529-548.
- Chowdhury, M.S.H., Koike, M., Akther, S. and Miah, M.D. (2011). Biomass fuel use, burning technique and reasons for the denial of improved cooking stoves by Forest User Groups of Rema-Kalenga Wildlife Sanctuary, Bangladesh. *International Journal of Sustainable Development & World Ecology 18*: 88-97.
- Chowdhury, R. M. (2008). Governance through Protected Area Conservation Co-Management Committees: A Case Study at Lawachara National Park. Protected Areas in Bangladesh (pp. 49-72). East West Centre. Retrieved on 10/03/2016.
- Cinner, J.E., Daw, T.M., McClanahan, T.R. *et al.* (2012). Transitions toward co-management: the process of marine resource management devolution in three east African countries. *Global Environmental Change* 22, 651–658.
- Coulibaly-Lingani, P., Savadogo, P., Tigabu, M., Oden, P. C. (2011). Decentralization and community forest management in Burkina Faso: Constraints and challenges. *International Forestry Review*, 13(4):476-486.
- Cronkleton, P., Pulhin, J.M., Saigal, S. (2012). Co-management in community forestry: how the partial devolution of management rights creates challenges for forest communities. *Conservation and Society.* 10(2): 91–102.
- Davidson-Hunt, I.J. & O'Flaherty, R.M. (2007) Researchers, indigenous peoples and place-based learning communities. *Society and Natural Resources* 20: 291–305.
- Davis, C., Williams, L., Lupberger, S., and Daviet, F. (2013). Assessing Forest Governance: The Governance of Forests Initiative Indicator Framework. World Resource Institute, Washington, DC 20002, USA. Retrieved from: http://www.wri.org/publication/assessing-forest-governance#sthash.qf0531tz.dpuf

- De Pourcq, K., Thomas, E., Arts, B., Vranckx, A., Léon-Sicard, T. & Van Damme, P. (2015). Conflict in protected areas: who says co-management does not work? *PloS One*, *10*(*12*), *e0144943*. Retrived on 17/09/2016.
- DeCosse, J.P., Thompson M.P., Ahmad, U.I; Sharma, A.R., and Mazumder, H.A. (2012). Protected Area Co-Management Where People and Poverty Intersect: Lessons from Nishorgo in Bangladesh. United State Agency for International Developments; Government of Bangladesh, Dhaka. Retrieved on 12/09/2016.
- Dupar, M. and N. Badenoch. (2002). Environment, Livelihoods, and Local Institutions -Decentralisation in Mainland Southeast Asia. World Resources Institute, Washington DC. 77 pp.
- European Commission (EC). (1995). Report of the Commission on Global Governance:

 Our Global Neighbourhood. Oxford University Press, Oxford
- Evans, L., Cherrett, N., and Pemsl, D. (2011). Assessing the impact of fisheries co-management interventions in developing countries: a meta-analysis. *Journal of Environmental Management* 92: 1938–1949.
- Fairhead, J., & Leach, M. (1996). Misreading the African landscape: Society and ecology in a forest-savannamosaic. Cambridge: Cambridge University Press.
- Fisher, W. 1997. Doing good? The politics and anti-politics of NGO practices. *Annual Review of Anthropology* 26:439-464
- Gautam, A., Shivakoti, G., Webb, E. (2004). Forest cover change, physiography, local economy, and institutions in a mountain watershed in Nepal. Environmental Management, 33(1):48–61.
- Ghate, R. (2003). Ensuring collective action in participatory forest management. Working Paper No.3-03, South Asian Network for Development and Environmental Economics, Kathmandu, Nepal.
- Government Gazette Notification. (2010). Peoples Republic of Bangladesh, Dhaka, Bangladesh.
- Graham, J., Amos, B. and Plumptre, T. (2003). *Governance Principles for Protected Areas in the 21st Century*. Institute on Governance, Ottawa, Canada.

- Haque, O. (2012). *Collaborative management of the 'protected' forests of Bangladesh Space for participation of the people*. Swedish University of Agricultural Sciences. Retrieved from: http://stud.epsilon.slu.se/5107/. Retrieved on 17-02-2016.
- Ho, N.T.T., Ross, H and Coutts, J. (2015). Power sharing in fisheries co-management in Tam Giang Lagoon, Vietnam. *Marine Policy* 53:171-179.
- IPAC. (2013). Performance Evaluation of the Integrated Protected Areas Co-management (IPAC) Project: Democracy and Governance components. United States Agency for International Development (USAID).
- Kaufmann, D., Kraay, A and Mastruzzi, M. (2010), "The Worldwide Governance Indicators: Methodology and Analytical Issues," *World Bank Policy Research Working Paper*, 5430.
- KimDung, N., Bush, R.S and Mol, J.P.A. (2016). The Vietnamese State and Administrative Co-Management of Nature Reserves. *Sustainability* 2016, 8, 292.
- KimDung, N.; Bush, S.; Mol, A.P.J. (2013). Administrative co-management: The case of special-use forest conservation in Vietnam. *Journal of Environ. Manag.* 51, 616–630.
- Koot, S.P. (2016). Contradictions of capitalism in the South African Kalahari: Indigenous Bushmen, their brand and baas-skap in tourism. *Journal of Sustainable Tourism*, 24 (8-9). doi:10.1080/09669582.2016.1158825
- Lachapelle, P.R., P.D. Smith & S.F. McCool. (2004). Access to power or genuine empowerment? An analysis of three community forest groups in Nepal. *Human Ecology Review*, 11(1):1-12.
- Larson, A. (2002). Natural resources and decentralization in Nicaragua: are local governments up to the job? *World Development*, 30(1), 17–31.
- Lawrence, A. (2007). Beyond the second generation: Towards adaptiveness in participatory forest management. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resource, 2(28):1-15.
- Lockwood, M. (2010). Good governance for terrestrial protected areas: a framework, principles and performance outcomes. *Journal of Environmental Management*, 91:754-766.

- Mahonge, C. (2010). Co-managing complex social-ecological systems in Tanzania. The case of Lake Jipe wetland (e-book). Wageningen, The Netherlands: Wageningen Academic Publishers.
- Manor, J. (1999). Concept paper on civil society and governance. Paper presented at the 1st International Conference, Institute of Development Studies, 22-25 June 1998, Brighton. (www.ids.ac.uk/ids/civsoc/home.html).
- Mansuri, G and Rao V. (2004). Community-based and-driven development: a critical review. World Bank Res Obs 19:1–39. http://dx.doi.org/10.1093/wbro/lkh012. Retrieved on 19-10-2016.
- Masozera, K.M., and Ralavalapati, R.J. (2004). Forest Dependency and Its Implications for Protected Areas Management: A Case Study from the Nyungwe Forest Reserve. Scandinavian Journal of Forest Research 85: 19(4).
- F. "Co-Management Matose, (2006).**Options** for Reserved Forests in Zimbabwe and Beyond: Policy **Implications** of Forest Management Strategies." Forest Policy and Economics 8: 363–374.
- Mearns, R. (1996). Community, collective action and common grazing: The case of post-socialist Mongolia. *Journal of Development Studies*, 32 (3):297-339.
- Meynen, W., & Doornbos, M. (2004). Decentralizing natural resource management: A recipe for sustainability and equity. *European Journal of Development Research*, 16(1), 1–25.
- Morshed, M.H. (2013). Benefits and Weaknesses of Collaborative Management: A Case Study in the Rema-Kalenga Wildlife Sanctuary. East West Center. Retrieved from http://ewcbookstore.org/fox/2013connectingcommunities08remakalenga.pdf
- Mukul S.A and Quazi S.A. (2009). Communities in Conservation: Changing protected area management and enhanced conservation in Bangladesh. In: Leslie RN (ed.). Proceedings of the international conference; 'The Future of Forests in Asia and the Pacific: Outlook for 2020' held in October 16-18, 2007 at Chiang Mai, Thailand. pp. 143–159.
- Mukul S.A., Rashid A.Z.M.M., Quazi S.A., Uddin, M.B and Fox, J. (2012). Local peoples' responses to co-management regime in protected areas: A cases study from Satchari National Park, Bangladesh. *Forest, Trees and Livelihoods*, 21(1): 16–2

- Nayak, P., Berkes, F. (2008). Politics of co-optation: community forest management vs. joint forest management in Orissa, India. *Environmental Management*, 41,707–718.
- Nielsen, J.R., Degnbol, P., Kuperan Viswanathan, K. K., Ahmed, M., Hara M., Abdullah, N.M. R. (2004). Fisheries co-management—an institutional innovation. Lessons from South East Asia and Southern Africa. *Marine Policy*, 28:151-160.
- Njaya, F., Donda, S., and Béné, C. (2012). Analysis of power in fisheries co-management: experiences from Malawi. *Society and Natural Resources* 25:652–66.
- Ostrom E. (2009. Understanding institutional diversity. Princeton University Press; 2009.
- Ostrom, E. (1990). Governing the commons: the evolution of institutions for collective action, political economy of institutions and decisions. Cambridge University Press.
- Owoye, O., and Bissessar, N. (2012), Bad Governance and Corruption in Africa: Symptoms of Leadership and Institutional Failure, Association for Middle Eastern Public Policy and Administration.
- Paavola, J. (2007). Institutions and environmental governance: A reconceptualization. *Ecological Economics*, 63, 93–103.
- Pomeroy, R., Katon, B., & Harkes, I. (2001). Conditions affecting the success of fisheries comanagement: Lessons from Asia. *Marine Policy*, 24(3), 197-208.
- Pomeroy, R.S. and Berkes, F. (1997). Two to tango: the role of government in fisheries. *Marine Policy* 21:465–80.
- Pulhin, J.M. and W.H. Dressler. (2009). People, power and timber: the politics of community-based forest management. *Journal of Environmental Management 91* (1): 206–214
- Rashid, A.Z.M.M., Craig,D., Jeffery., M.I. and Khan, N.A. (2014). Forest protected area governance in Bangladesh: a focus on the legal and policy framework. *Chinese Journal of Population, Resources and Environment* 11(4): 345-351.
- Ribot, J. (2001). Local actors, powers and accountability in African decentralizations: a review of issues. United Nations Research Institute for Social Development (UNRISD) Final Draft, Washington DC, USA: World Resources Institute, Institutions and Governance Programme, 104.

- Ribot, J. C. (2002). Democratic Decentralization of Natural Resources: Institutionalizing popular participation. World Resources Institute, Washington, D.C., USA
- Ribot, J. C. (2003). Democratic decentralization of natural resources: institutional choice and discretionary power transfers in Sub-Saharan Africa. *Public Administration and Development*, 23(1), 53–65.
- Ribot, J.C., Agrawal, A and Larson, M.A. (2006) 'Recentralizing while Decentralizing: How National Governments Reappropriate Forest Resources', World Development 34(11): 1864–86.
- Sandstrom, A. and Rova, C. 2010. Adaptive co-management networks: A comparative analysis of two fishery "conservation areas in Sweden. Ecol. Soc. 2010, 15, 14.
- Seid-Green, Y. 2014. Defining Co-management: Levels of Collaboration in Fisheries Management. Master Thesis. University of Washington 2014. Retrieved on 20/10/2016.
- Sen, S. and Nielsen, J.R. (1996), "Fisheries co-management: a comparative analysis." Marine Policy 20(5): 405-418.
- Sen, S., & Nielsen, R., J. (1996). Fisheries co-management: A comparative analysis. Marine Policy, 20(5), 405-418. Policy, 20(5), 405-418.
- Sessin-Dilascio, K., Prager, K., Irvine, K.N., de Almeida Sinisgalli, P. (2015). The dynamics of co-management and social capital in protected area management- the cardoso island state park in Brazil. *World Development*. 67, 475–489.
- Shackleton, S. and B. Campbell. (2001). Devolution in Natural Resources Management:

 Institutional Arrangement and Power Shifts. A Synthesis of Case Studies from Southern Africa. Center for International Forestry Research (CIFOR), 79 pp
- Shackleton, S., Campbell, B., Wol-lenberg, E., and Edmunds, D. (2002). "Devolution and Community-based Natural Resource Management: Creating Space for Local People to participate and Benefit." *Natural Resource Perspectives* 76 (1): 1–6
- Sharma, R., DeCosse, P., and Roy, M. (2008), Co-Management of Protected Areas in South Asia with Special Reference to Bangladesh, Nisorgo Support Project, Bangladesh Forest Department (BFD), Dhaka. Retrieved on 11/06/2016.

- Sidaway, R. (2005), Resolving environmental disputes: From conflict to consensus. Earthscan: London, UK. (Retrieved from SLU Library, Ultuna)
- Silverman, D. (2014). *Interpreting Qualitative Data*. SAGE Publications Ltd. Fourth Edition, Olivers Yard, London.
- Singleton, S. (2000). Cooperation or capture? The paradox of co-management and community participation in natural resource management and environmental policymaking. *Environmental Politics*, 9(2), 1-21.
- Smith, Lawrence D., 2001, "Reform and Decentralization of Agricultural Services: A Policy Framework", FAO Agricultural Policy and Economic Development Series 7, Rome.
- Springate-Baginski, O., and Blaikie, P. (2007). Forests, People and Power: The Political Ecology of Reform in South Asia. Earthscan, London.
- The World Bank. (1999). Report from the international workshop on community-based natural resource management (CBNRM). Retrieved 20/08, 2012,
- Turyahabwe, N., Agea, J. G., Tweheyo, M., and Tumwebaze, S. B. (2012). Collaborative Forest Management in Uganda: Benefits, Implementation Challenges and Future Directions. INTECH Open Access Publisher
- UNDP (October 1999), "Decentralization: A sampling of definitions." Joint UNDP-Government of Germany Working Paper
- UNDP. (1997). Governance for sustainable human development. http://magnet.71 reFerenCes undp.org/policy/default.htm, United Nations Development Programme
- UNESCAP. (2007). What is Good Governance? United Nations Economic and Social Commission for Asia and the Pacific. *Retrieved at:* http://www.unescap.org/sites/default/files/good-governance.pdf
- Wily, L. A. (1998). Villagers as forest managers and governments "learning to let go". The case of Duru Haitemba and Mgori Forests in Tanzania. Forest Participation Series, No 9. International Institute for Environment and Development, London, UK.'
- Wily, L. A. (2002). "Participatory Forest Management in Africa: An Overview of Progress and Issues." Second International Workshop on Participatory Forestry in Africa, FAO, Rome, pp31-58.

- Ya'el Seid-Green (2014). Defining Co-management: Levels of Collaboration in Fisheries Management. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Marine Affairs, University of Washington.
- Yadav, N. P., Dev, O. P., Springate-Baginski, O and Susan, J. (2003). Forest management and utilization under community forestry. *Forest and Livelihood*, *3*(1):37-50.

Appendix A: Summary of Semi-structured Interview of Key Informants

No	Respondent ID	Membership Category/Represe ntatives	Position in Co- Management Committee (CMC)	Place of Interview	Date
1	Interview Transcript FD_FR_MS_001	Forest Department (FD)	Member Secretary	Range Office, RKWS	19-05-2016
2	Interview Transcript FD_BO_002	Forest Department (FD)	General Member	Beat Office, Rema, RKWS	23-05-2016
3	Interview Transcript FD_BO_GM_003	Forest Department (FD)	General Member	Over Phone	26-07-2016
	Interview Transcript CMC_CS_P_001	Civil Society (CS)	President	Over Phone	12-08-2016
4	Interview Transcript CMC_PF_VP_002	Peoples Forum (PF)	Vice- President (VP)	Kalanga Village	28-05-2016
6	Interview Transcript CMC_CPG_GM_00 3	Community Patrolling Group (CPG)	General Member	Nalmukh Bajar, Chunarughat	06-06-2016
7	Interview Transcript CMC_CPG_GM_00 4	Community Patrolling Group (CPG)	General Member	Rupospur Village	08-06-2016
8	Interview Transcript CMC_YC_GM_ 005	Youth Club (YC)	General Member	Nalmukh Bazar	09-06-2016
9	Interview Transcript CMC_EC_GM_006	Ethnic Community	General Member	Lalkeyar Village	11-06-2016
10	Interview Transcript CMC_FUG_GM_00 7	Forest User Group (FUGs)	General Member	Garamchari Village	07-06-2016
11	Interview Transcript PF_EC_VCF_008	VCF, EC member PF	NA	Chamoltoli Village	12-06-2106