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From participation to responsiveness: The changing priorities of community forestry governance in Nepal's Terai.

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Academic dissertation

To be presented, with the permission of the Faculty of Science and Forestry of the University of Eastern Finland, for public examination in the auditorium BOR 100, Borealis building of the University of Eastern Finland, Joensuu on 4th October 2019 at 12 noon.

Title of the dissertation: From participation to responsiveness: The changing priorities of community forestry governance in Nepal's Terai.

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Dissertationes Forestales 282

https://doi.org/10.14214/df.282 Use License CC BY-NC-ND 4.0

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ISSN 1795-7389 (Online) ISBN 978-951-651-654-0 (Pdf)

ISSN 2323-9220 (Print) ISBN 978-951-651-655-7 (Paperback)

Publishers: Finnish Society of Forest Science Faculty of Agriculture and Forestry of the University of Helsinki School of Forest Sciences of the University of Eastern Finland

Editorial Office: Finnish Society of Forest Science Viikinkaari 6, FI-00790 Helsinki, Finland http://www.dissertationesforestales.fi **Devkota, B. P.** (2019). From participation to responsiveness: The changing priorities of community forestry governance in Nepal's Terai. Dissertationes Forestales 282. 54 p. https://doi.org/10.14214/df.282

ABSTRACT

The involvement of local people in the governance process, reliable and transparent engagement of disadvantaged people in decision-making and justice in benefit sharing have been the emerging strategies for the acceptance of REDD+ (Reducing Emissions from Deforestation and Forest Degradation, forest conservation, sustainable management of forests and enhancement of carbon stocks). However, closer scrutiny of the values of forest governance is needed in order to evaluate its effectiveness, contribute to its legitimacy and understand the interactions of governance attributes. At the same time, both at the international and national level, there is lack of clarity around the kinds of governance arrangements that can be implemented at the ground when striving for REDD+.

This PhD thesis assesses the practicability and priorities of community forestry governance to articulate climate change mitigation initiatives by forest users. The focus includes factors associated with benefit sharing process, patterns of engagement of disadvantaged groups in community forestry and the impact of REDD+ implementation on social inclusivity of community forest user groups in Nepal's Terai region. The study is based on grounded theory of qualitative approaches that builds on case studies from three community forest user groups and REDD+ interventions. Through the lens of a theoretical framework of common resources governance, the study assesses the similarities and differences between policy goals and observations of forest governance values and their impacts. Second, the study explains the nature of factors affecting benefit sharing and their impacts under REDD+ and other benefit sharing process in community forestry. Third, the study explores how existing policies and practices engage Dalits in community forestry governance processes. Finally, the study investigates how social inclusivity under REDD+ enhances representation and deliberation of disadvantaged groups and requires responsiveness in community leaders within community forestry.

The study results are based on the focus group discussions, in-depth interviews and participant observation in three community forests of the Nepal's Terai. Similarities and differences between the factors of forest governance are apparent within the specific conditions of each community. Qualitative differences in the implementation of governance initiatives have increased the level of dissatisfaction among the community forest users. Though poor users of community forest were highly dependent on forest resources, rich users benefit comparatively more due to their control over decision-making structures. The formal structures for engagement of disadvantaged groups in community forestry do not provide enough space for genuine participation. The benefits of REDD+ implementation of REDD+ has also positively supported governance in community forestry. Proportional representation of disadvantaged groups has been achieved but the criteria need revisiting to prioritize the inclusion of highly dependent users in community forestry.

Keywords: Accountability, community forestry, decision-making, participation, REDD+, responsiveness

ACKNOWLEDGEMENTS

During the study, I was supported by several individuals and organizations in different phase of the work. I started the research work while being involved in the research project, Towards Responsive Governance in Climate Change Adaptation and Mitigation: A Comparative Study from Nepal and Tanzania and funded by Academy of Finland. The research project was led by Prof. Irmeli Mustalahti. Later, with the initial financial support of Center for International Mobility (CIMO) Fellowship Finland in 2015, I started my PhD study. The University of Eastern Finland, School of Forest Sciences supported me in writing the thesis summary. Thank you all for the support.

I would like to thank my supervisors, Prof. Irmeli Mustalahti (University of Eastern Finland) for her comments, suggestions and support during my thesis and whole PhD study period; Prof. Jouni Pykäläinen (University of Eastern Finland) for his guidance and support; and Prof. Santosh Rayamajhi (Tribhuvan University, Institute of Forestry, Nepal) for the support and guidance during the field work in Nepal. Next to my supervisors, I would like to thank Dr. Celeste Lacuna-Richman for her advice on conducting social research and data analysis. I acknowledge Mark Richman for his support. Thanks to Nick Quist Nathaniels for editing the language of the papers and the thesis.

During the field work, I take an opportunity to thank the respondents of Kankali community forest user group, Sundari community forest user group and Janapragati community forest user group in Nepal. I greatly acknowledge the support of the executive committee members and staffs of the respective community forest as well. In the field, I was accompanied my Mamata Sharma, Suman Bhattarai, Dol Raj Thanet, Bandana Poudel and Rajan Subedi, I would like to acknowledge them all.

I would like to thank my family members in Nepal; thank you all for the constant support and love during the entire course of study. I profoundly recall my father (Late Jay Krishna Devkota) with whom I could not share my happiness of the academic achievement that I have possessed. I owe my dear mother (Mana Devi Devkota) with no words to express. My eldest brother (Nava Raj Devkota) had a dream for me to earn this academic degree, I was inspired with his thoughts. I also thank my elder brother (Moti Ram Devkota) and sisters (Jethi didi, Maili didi and Kanchi didi) for their love and affection. No words are enough to express my debt to my mother-in-law (Junu Devi Sharma) and father-in-law (Ram Chandra Sharma) for their support and encouragement during the study period. My most sincere thanks go to my beloved wife (Mamata Sharma) for all the love, understanding and support. I am also thankful to my beloved wife for tireless care of our daughter (Riyansi Devkota) during my absence. My special thanks to my daughter who patiently waited for me during my absence.

Bishnu Prasad Devkota Joensuu, Finland October 2019

LIST OF ORIGINAL ARTICLES

This thesis is a summary of the following articles, which are referred to in the text by their Roman numerals I-IV. The articles are reprinted with the kind permission of the publishers.

- I Lacuna-Richman, C., Devkota, B. P., and Richman, M. A. 2016. Users' priorities for good governance in community forestry: Two cases from Nepal's Terai region. *Forest Policy and Economics* 65: 69-78. https://doi.org/10.1016/j.forpol.2015.11.005
- II Devkota, B. P. and Mustalahti, I. 2018. Complexities in accessing REDD+ benefits in community forestry: evidence from Nepal's Terai region. *The International Forestry Review* 20(3) 332-345. https://doi.org/10.1505/146554818824063041
- III Hyle, M. A., Devkota, B. P. and Mustalahti, I. 2019. From blueprints to empowerment of disadvantaged groups in natural resource governance: Lessons from Nepal and Tanzania. *International Journal of the Commons*. In Press.
- IV **Devkota, B. P.** Social inclusion and deliberation in response to REDD+ in Nepal's community forestry. Manuscript submitted.

The author's contribution:

In study I, Lacuna-Richman and Devkota designed the study, conducted the field work together and wrote the first draft. Lacuna-Richman, Devkota and Richman finalized the paper. In study II, Devkota and Mustalahti designed the study, Devkota conducted the field work, analyzed the data and wrote the first draft. Devkota and Mustalahti finalized the paper. In study III, Hyle, Devkota and Mustalahti designed the study, Hyle conducted field work in Tanzania whereas Devkota conducted field work in Nepal. Hyle and Devkota analyzed the data, wrote the first draft. Hyle, Devkota and Mustalahti finalized the paper. For study IV, Devkota designed the study, conducted field work, analyzed data and finalized the paper.

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ABBREVIATIONS AND ACRONYMS

CBS	Central Bureau of Statistics
CFUG	Community Forest User Group
CIFOR	Center for International Forestry Research
COP	Conference of the Parties
DAGs	Disadvantaged Groups
DFRS	Department of Forest Research and Survey
DOFSC	Department of Forests and Soil Conservation
EDD	Empowered Deliberative Democracy
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
GON	Government of Nepal
LRMP	Land Resource Mapping Project
MPFS	Master Plan for Forestry Sector
NDC	National Dalit Commission
NGO	Non-Governmental Organization
PES	Payment for Environmental Services
RECOFTC	The Center for People and Forests
RED	Reducing Emission from Deforestation
REDD	Reducing Emission from Deforestation and Forest Degradation
SDGs	Sustainable Development Goals
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

1. INTRODUCTION

1.1 Forest governance in the context of UN processes for mitigating climate change

The rising concern around the world about the effect of greenhouse gas emissions on global climate change led to negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) that took place in 1994 (UN-REDD Program Secretariat 2016). The Conference of the Parties (COP) is the main forum under UNFCCC to negotiate agreements to reduce human contributions to climate change. COP comprised countries as parties. In 1997, parties to the UNFCCC adopted the Kyoto Protocol that was an internationally binding agreement setting targets to reduce greenhouse gas emissions (UN-REDD Program Secretariat 2016). The Kyoto Protocol also focused on the enhancement of carbon sinks through sustainable forest management practices, afforestation and reforestation. But only afforestation and reforestation under clean development mechanism that allowed eligible credits for carbon trading were considered. Reducing emissions from deforestation was not part of the clean development mechanism. Later, at the 11th conference of parties to UNFCCC held in Montreal 2005, two party members of UNFCCC, Papua New Guinea and Costa Rica, forwarded the agenda of reducing emissions from deforestation in developing countries to ensure that the objectives of Kyoto protocol would be achieved. After two years, at the 13th conference of parties to UNFCCC held in Bali 2007, it was recognized that reducing emissions from deforestation and forest degradation can promote co-benefits and complement the aims and objectives of international conventions and agreements to combat climate change (Holloway and Giandomenico 2009). Reducing Emissions from Deforestation and Forest Degradation, Conservation and Enhancement of Carbon and Sustainable Management of Forest (REDD+) is a set of approaches and actions as well as a performance-based incentive, agreed under the UNFCC, which is supposed to mitigate forest-based contributions to climate change by reducing emissions from deforestation and forest degradation (Angelsen and Wertz-Kanounnikoff 2008). REDD+ in developing countries is now emerging as a policy instrument to reduce greenhouse gas emissions, increase sustainable use of forest resources, enhance livelihoods and improve forest governance (Fujisaki et al. 2016, Mustalahti et al. 2017).

Forest governance "comprises all formal and informal, public and private regulatory structures, the interaction between public and private actors therein, and the effects on either on forests" (Giessen and Buttoud 2014). Hence, forest cover improvement and enhancement of socio-economic status of forest dependent people largely depends on effective forest governance (Agrawal *et al.* 2008). REDD+ has been framed to improve governance in community forestry as a supportive policy tool (Leventon *et al.* 2014) that enhances the adaptive capacity of communities by diversifying income streams, creating economic opportunity and strengthening local institutions (West 2012). Equity in benefit sharing under REDD+ is a high priority in the international discourse (Pham *et al.* 2013). Many countries have now accepted that avoiding deforestation is a cheap mitigation option for greenhouse gas emissions, and many countries have been convinced to adopt the REDD+ mechanism that has contributed to the 2015 Paris agreement to combat climate change (Corbera and Schroeder 2017). Climate change impacts will strengthen governance trends towards market-based approaches such as REDD+, particularly in developing

countries, because governments are willing to take advantage of emerging carbon funds (Agarwal *et al.* 2008).

The centralized regime of governance is not efficient and does not fulfill the needs of local people dependent on forest resources (Faguet 2012). Therefore decentralization has been widely accepted as a governance reform for the effective management of forest resources (Wright et al. 2015). Decentralization in the context of forest management can be defined as "an act by which a central government cedes rights of decision-making over resources to actors and institutions at lower levels in a politico-administrative and territorial hierarchy" (Smith 1985 and Mawhood 1993 as cited in Agrawal and Ostrom 2001). Decentralization in forestry is now accepted as a policy tool for increasing participation of local users in decision-making and benefit sharing from forest resources (Agrawal and Gupta 2005, Agrawal et al. 2008), as a strategy to improve public sector performance (Andersson 2004, Faguet 2012) and to enhance responsiveness of the authorities to the needs of local people (Ribot et al. 2006). Effective decentralization requires that both the power and authority for decision-making devolves from the higher hierarchy to lower levels (Fisher 2000); local users of the forest should have control over collective and constitutional choices over forest management (Agarwal and Ostrom 2001), decisions should be made by inclusive, representative and accountable local authorities (Ribot 1995) selected through democratic process, and representatives should be empowered and responsible to the local needs (Ribot 2001).

1.2 Community-based forestry as a forest governance approach

In the 1970s, community demand for greater say in forest governance, failure of centralized management to control deforestation and recognition of the community's capability to sustainably manage natural resources led to the emphasis on decentralized forest management in the form of *community-based forestry* (Agrawal and Ostrom 2001, Acharya 2002, Gautam *et al.* 2004, FAO 2016). Community-based forestry includes "initiatives, sciences, policies, institutions and process that are intended to increase the role of local people in governing and managing forest resources" (RECOFTC 2013). The original idea of community-based forestry was to keep land forested while simultaneously contributing to the livelihoods of local people. During the 1970s, community-based forestry became part of international development cooperation and received support from the international donor community for the development of legal and institutional frameworks of decentralized forest governance (Nurse and Malla 2005, Mustalahti 2009). Community-based forestry is now widely practiced in different forms and with varying degrees of people's participation, particularly in developing countries (FAO 2010, FAO 2018).

During the initiation of community-based forestry in the 1970s, reversing deforestation was the primary objective but, over time, improving livelihoods of forest dependent people has become the primary objective in most developing countries (FAO 2016). With time the priorities have also changed; in recent years the fundamental rights of forest dependent people, including the poor, indigenous and marginalized people, over the forest resources have become a more convincing justification of community-based forestry worldwide (FAO 2016). Larson (2002), on the basis of studies of decentralization of natural resource governance in Nicaragua, reported that the new interventions in natural resource governance are economically motivated, and the capacity of local forest institutions and incentives are important factors for proper management of forest resources. The emergence

of Reducing Emissions from Deforestation and Forest Degradation (REDD+) has evoked community-based forestry as a better opportunity for improved forest governance in some countries (Corbera and Schroeder 2017) because collective actions for community-based forestry support the storage of more carbon in forests than occurs without collective actions (Bluffstone *et al.* 2018).

Community forestry is a special form of community-based forestry where the decisionmaking rights remain with the local people for the protection, management and utilization of forest resources. More generally, community forestry is "any situation that intimately involves local people in forestry activity" (FAO 1978). There are different models of community forestry programs practiced around the world, which may basically vary based on how the users are organized, the resource sharing mechanisms, and the management and the land tenure rights (FAO 2001). Two accepted approaches to community forest management have been distinguished: anticipating local participation through sharing management responsibilities with local government; and providing responsibilities for management and use rights of forests legally to the local people (Ayana 2014). Whatever the approach, community forestry originally evolved to halt and reverse forest degradation, but now community forestry is expected to achieve diverse sets of conservation, economic, political and social objectives (FAO 2016). Scholars have analyzed the success or failure of the approach viewed from different perspectives. Pagdee et al. (2006) conducted a metastudy of community forests throughout the world and concluded that property rights, institutional arrangements, and community incentives and interests have transcendent effects of the success of community forestry. Piabuo et al. (2018) in a review of 36 studies in Cameron, found that community forest governance improved community participation for the sustainable management of forests and improved awareness of environmental protection. In Nepal, Agrawal and Gupta (2005) concluded that community forestry has succeeded in decentralizing forest governance.

1.3 Forest governance in Nepal

Nepal can be argued to be a forerunner of community forestry. There is a well-established community forestry program implemented since 1978, the community forest user groups are well institutionalized, and there is supportive policy for participatory forest management. Moreover, Nepal has been involved in the REDD+ program since 2008 through support from the FCPF/World Bank, and is one of the first countries to receive such support to develop its capacity to be involved in international negotiations. Nepal has also been a member of the UN-REDD program since 2009 and is one of only a handful of countries in Asia belonging to both global initiatives (Bushley and Khatri 2011). In addition to this, the first REDD+ piloting was implemented in community forestry in Nepal.

Nepal practiced a top-down centralized forest governance model until 1978. Decentralization of forest governance was initiated with the enactment of the Panchayat Forest Rules and the Panchayat Protected Forest Rules in 1978 (Gilmour *et al.* 1989, Fisher 2000). The panchayat was the territorially based politico-administrative lowest unit of the Government of Nepal during that time (Acharya 2002). After 1978, the forestry sector in Nepal has undergone several legislative changes that aimed to transfer the management responsibility of forest resources to forest dependent local people (Acharya 2002). The Master Plan for Forestry Sector 1989 was one of the early forest policy documents. This plan emphasized community forestry as the priority program of Nepal for the next 21 years

(MPFS 1989) to ensure local people's rights to access and control of forest resources (Satyal 2017) in the form of community forests. The Forest Act (1993) and Forest Regulation (1995) were the most progressive legislative measures that guided forest management in Nepal after the political changes of 1990. The Forest Act (1993) categorized forests in Nepal into different management regimes based on the involvement of local people and government authorities. These categories include community forest, collaborative forest, leasehold forest, religious forest, private forest, protected forest, buffer zone community forest and government managed forest. Among these categories, the community forestry program is the most extensive and decentralized forest governance model and involves a larger proportion of the country's population (Agarwal and Ostrom 2001, Ribot et al. 2006). Nepal has 44.74% of the total land area under forests and other wooded land cover (DFRS 2015). Of the total forest area, 68% is under government management and 32% is under community-based management (Brandt et al. 2017). In Nepal, the community forestry program covers 28% corresponding to 1.6 million hectares of the total forest area and involves 2.46 million households. There are 19,361 existing parcels of community forest in Nepal (DOFSC 2018).

Community forestry was introduced in Nepal in response to widespread deforestation (Gilmour and Fisher 1992) to restore the degraded hill-forests and meet peoples' subsistence needs for forest products (Adhikari et al. 2007). In 1957, the government had centralized the forest resources through the Private Forest Nationalization Act. This act had perverse effects that resulted in massive deforestation because local people perceived forests as state property (Maskey et al. 2006; Ribot et al. 2006). In 1978, the government of Nepal introduced the Panchayat Forest Rules through which the management authority of the forests was transferred to the local government from the central government. Further, in 1989 the Master Plan of the Forestry Sector was developed, which prioritized community forestry as the major program. The Forest Act 1993 and the Forest Regulation 1995 legally shifted the *de-facto* authority of management, utilization and protection of forests to local people through handing over the part of the national forest to local people as community forests under *de-jure* government ownership. The initial focus of community forestry was reforestation of degraded lands in the mid hills. Later, the focus shifted to participatory management and rural development and was also extended to the Terai region. Still later, the focus also included climate change mitigation through the REDD+ implementation. The Master Plan for the Forestry Sector (MPFS 1989) identified 61% of the total forest of Nepal as suitable for community forest and prioritized the handing over of this forest to the local community for management and utilization (Acharya 2002). After the initiation of community forestry in Nepal, the discourse of its role has grown to include decentralization (Agrawal and Ribot 1999, Agrawal and Ostrom 2001, Adhikari et al. 2004, Adhikari 2005, Agarwal and Gupta 2005, Thoms 2008, Chhetri et al. 2013, Adhikari et al. 2014) and the suitability of REDD+ implementation as an effective and efficient climate change mitigation measures (Sharma et al. 2017, Bluffstone et al. 2018).

Nepal has been participating in world bank's Forest Carbon Partnership Facility (FCPF) since 2008 and in the UN-REDD program since 2009 as an observer country (Bushley and Khatri 2011, GON 2018). Through implementing REDD+, Nepal aims at advancing sustainable forest management and improving forest governance with the inclusion of all concerned stakeholders (GON 2018). One of the major objectives of the national REDD+ strategy of Nepal 2018 is to increase the livelihood assets of forest dependent people, including the disadvantaged groups. The success of this national REDD' strategy 2018 will depend on successful community-based approaches and practices in Nepal and obviously

community forestry. In Nepal, REDD+ piloting was first implemented from 2009 to 2013 in 105 community forests in three districts with one site per district in Charnawati, Ludikhola and Kayarkhola catchments in, respectively, Dolkha, Gorkha and Chitwan districts (Shrestha et al. 2014, Khatri et al. 2018). The sites in Dolkha and Gorkha districts are in the mountains whereas the site in Chitwan district is in the Terai region of Nepal. The aim of the REDD+ pilot project was to demonstrate benefit sharing mechanisms and a socially inclusive approach of forest governance in community forestry (Shrestha et al. 2014). However, studies suggest that implementing REDD+ may shift priorities and rules regarding management and use of forest resources in community forestry, and even restrict traditional use rights of forest users (Khatri et al. 2018). Another study recommends that if Nepal aims to benefit from REDD+, explicit policies and programs should be implemented in community forestry (Lintel et al. 2018). Global experience shows that the REDD+ initiatives should focus on existing commitments for the conservation and management of forest resources, which are consistent with the principles of good forest governance (Kanowski et al. 2011). After the recent political change, the constitution of Nepal 2015 follows the principles of proportional inclusion and social justice in every unit of the government institutions (Constituent Assembly Secretariat 2015). Therefore the forest policy 2015 and the community forestry development guidelines 2014 ensure the inclusion of disadvantaged groups in the executive committee of community forests (GON 2014, GON 2015). After the implementation of such policies, there was a need to investigate how such policies can be translated in the field and to evaluate their outcomes. Although there is extensive literature that relates forest governance to the successful implementation of REDD+ in forestry projects (Angelsen and Wertz-Kanounnikoff 2008, Mustalahti and Rakotonarivo 2014, Atela et al. 2015, Chomba et al. 2015, Cadman et al. 2016, Fujisaki et al. 2016, Ochieng et al. 2016, Cadman et al. 2017, Sharma et al. 2017, Bluffstone et al. 2018), studies of the consequences of REDD+ at local forest governance are limited. The motivation of this study is to fill this existing gap.

Studies have further revealed that with the initiation of community forestry in Nepal, significant decentralization in forest governance from the central government to local people has been achieved (Arnold 1998, Agarwal and Ribot 1999, Agrawal and Ostrom 2001, Ribot et al. 2006, Adhikari et al. 2014). Research has also exposed the situations and lessons of decentralization and participation in community forestry (Varughese and Ostrom 2001, Agrawal and Gupta 2005, Agarwal 2010, Chhetri et al. 2013), local people's dependency and benefits through managing community forest as a communal resource (Adhikari et al. 2004, Adhikari 2005, Thoms 2008, Birch et al. 2014), the sustainability of community forests (Pokharel et al. 2015) and their production efficiency (Chand et al. 2015, Rai et al. 2016). After the promulgation of the new constitution of Nepal, the political consequences have also given rise to new discourse in forest governance. The constitution of Nepal 2015 has adopted the principles of proportional inclusion to develop an egalitarian and inclusive society for sustainable development. Based on these principles, the Forest Policy 2015 emphasizes social justice for effective forest governance. Though community forestry is one of the most popular programs implemented that has been able to meet some diverse needs of the local people, we still need to advance our understanding on how social inclusion and REDD+ are to be integrated in community forestry. Social inclusion is "the process of improving the terms of participation in society for people who are disadvantaged on the basis of age, sex, disability, race, ethnicity, origin, religion, economic or other status, through enhanced opportunities, access to resources, voice and respect for rights" (UN 2016). Through the principle of social inclusion, the government of Nepal aims to eliminate

all forms of discrimination in the country. In line with the constitution of the country, the Forest Policy 2015 emphasizes that inclusion and social justice should be ensured for disadvantaged communities for effective forest governance (GON 2015).

The community forestry policy has been revised to stimulate changes in social relations within the users of community forests and reduce gender and caste-based discrimination (Timsina 2003). Previous studies had concluded that the rich and elite people were taking disproportional benefit from the community forestry program as compared to the poor and the marginalized communities for various reasons (Ojha *et al.* 2009, Chhetri *et al.* 2012, Adhikari *et al.* 2014), and therefore social justice is assuming prominent importance in forest governance (Satyal 2017). Furthermore, the large numbers of users and their diverse socio-economic conditions add complexities in benefit sharing among the users in the community forests of the Terai region of Nepal (Agarwal and Gupta 2005). In managing communal resources like forests, the benefits of decentralized forest governance cannot be obtained without ensuring social justice for marginalized communities (Timsina 2003). The Sustainable Development Goals (SDGs) have clearly pointed out that participation of disadvantaged groups should be empowered through social inclusion (UN 2016).

The existing community forest development guidelines (2014) clearly mention that there should be proportional representation of members of the poor, indigenous people, women and Dalits during the formation of executive committees of community forest user groups. Dalits are defined as a "caste from whom water is not acceptable, and by virtue of caste-based discrimination and so-called untouchability, are most backward in the social, economic, political, educational and religious spheres, and are deprived of human dignity and social justice" (NDC 2017). Such provisions ensure the inclusion of the representatives of disadvantaged groups in the executive committee of community forests. However, such representation of disadvantaged groups tends to be more symbolic rather than being genuine due to lack of enough knowledge of the rules and provisions of community forestry. Yet on the other hand, even in the rural areas of Nepal, the changing agrarian economy has resulted in decreasing pressure on forest resources (Fox 2016) for fuelwood and fodder. The trend of male people of age between 20-44 years to go abroad for labor work is increasing. This situation creates lack of enough manpower to work in the forestry sector as well as in other agricultural and developmental activities. For these reasons, the local people want their community forest user committee to take care of the community forest on their behalf and want them to be more responsible for management of forest resources without seeking user's participation in every aspect of community forestry. Therefore the issue of responsiveness in the community forest user committee has become prominent. Such situations in community forestry demand the shifting of governance priorities away from compulsory participation of all its users towards a greater responsiveness of the user committee for effective management of forest resources. Under the new administrative structure of the country, it is still to be seen how the existing policy will be implemented in the future, and how the principle of proportional inclusion will be implemented in the forestry sector of Nepal.

1.4 Aim of the thesis

From the perspective both of forest decentralization and REDD+ implementation, community-based forest management is gaining momentum. This has brought about a new discourse of how the implementation of the REDD+ program has influenced forest governance in *community forestry*. Studies conclude that strong ownership and leadership in forest governance are institutional conditions supporting the REDD+ progress (Korhonen-Kurki *et al* 2018). Has community forestry become firmly institutionalized to sustain the benefits of REDD+ implementation in developing countries? Are the issues of participation, representation and benefit sharing still the most prominent issues of community forestry as was the case during its initiation? Has community forest governance become more responsive towards mitigating climate change effects together with better benefit sharing for the poor and disadvantaged groups? Against this background, more understanding is required to see how forest governance priorities have changed over time to incorporate the climate change mitigation agenda, such as REDD+, in community forestry.

The main aim of the study was to understand how contextual priorities of forest governance factors in community forestry are shifting with REDD+ implementation and enhanced responsiveness in community forestry in Nepal's Terai region. This thesis draws on how actors perceive and are involved in community forestry governance at the ground level. The thesis provides a complete overview to understand how local actors decide, are involved in, value and benefit from community forestry governance. Article I provide a complete overview of how communities value governance factors and has implications for institutionalizing community forest user groups in appropriate ways. Article II discusses the factors of the benefit sharing process and has implications for designing new interventions in community forestry. Article III has implications for planning possible ways of involving Dalits in community forestry governance. Article IV provides details of the potential of REDD+ to include all stakeholders in the process and has implications for revisiting the criteria of social inclusion in community forestry. Together, papers I-IV contribute to a broader understanding of factors for good governance (accountability, participation, benefit sharing, decision-making, responsiveness, representation), interactions of good governance factors, and the impact of REDD+ implementation in community forestry governance. Theories and methods from forestry and social sciences were used to develop the research and answer the research questions.

The specific objectives and the corresponding research questions were as follows:

I. Exploring the similarities and differences between theoretical frameworks of common pool resource governance with the community forest users' actual understanding of their livelihood assessment (Article I).

The corresponding research questions were:

How do local contexts impact forest user's choice for the selection of forest governance priorities in community forestry? The specific research questions were: What are the qualitative differences in the implementation of governance initiatives in community forestry? How do local forest users prioritize governance factors in forest governance?

II. Exploring how different factors within community forests affect REDD+ benefit sharing in Terai region of Nepal (Article II).

The corresponding research questions were:

How are local people motivated for the implementation of REDD+ in community forestry? This question was further elaborated into the following sub-questions: What are the factors affecting REDD+ implementation in community forestry? How do socio-

economic attributes influence forest users' participation in decision-making process? How accountable are local leaders to the needs of forest users?

III. Explaining the patterns of citizen's engagement in forest resource governance in Terai community forestry of Nepal (Article III).

The corresponding research questions were:

How does the process of community forestry engage disadvantaged groups in forest governance? The specific research questions included: Does participation of disadvantaged groups in decision-making mechanisms support their effective deliberation? How effective is existing community forestry governance for the empowerment of disadvantaged groups?

IV. Exploring how social inclusivity enhances representation and deliberation of disadvantaged groups and stimulates responsiveness of local leaders under REDD+ implementation in community forestry (Article IV).

The corresponding research questions were:

How are REDD+ projects considering social inclusion of disadvantaged groups in community forestry? This question was further addressed with the following subquestions: Does REDD+ enhance social inclusion in community forestry governance? Does REDD+ contribute to enhanced responsiveness in local leaders of community forestry?

2. CONCEPTUAL FRAMEWORK

2.1 Shifts in forest governance

According to Stoker (2004), "Governance refers to the rules and forms that guide collective decision-making. That the focus is on decision-making in the collective implies that governance is not about one individual making a decision but rather about groups of individuals making a decision or organizations or systems of organizations making decisions". In some developing countries, there was a re-emergence of transfer of power from the central government to local government bodies (Agarwal and Ribot 1999), while other scholars advocated that local resource users create institutional arrangements for equitable benefit sharing, which are efficient and sustainable (Ostrom 1990, Agarwal 2001). There has been a remarkable shift in the discourses of natural resource governance. Many developing countries that nationalized natural resources during the 1950s and 1960s were unsuccessful in designing effective and uniform sets of rules (Ostrom 1990). After nationalization, those resources which were claimed to be *de jure* properties of government actually reverted to de facto open access resources (Arnold 1998). Therefore, the scholars of common pool resources questioned the generalization of conventional theory of resource governance (Vargughese and Ostrom 2001). A common pool resource is a natural or manmade resource from which excluding or limiting its beneficiaries is difficult, and one person's consumption of the resource subtracts benefits which others might enjoy (Ostrom et al. 1994). The governance of forest resources moved from central administration by governments to community people for multiple use in developing countries; logging by private companies in tropical forests; and market-oriented certification system in the developed countries (Agarwal et al. 2008). Thus, decentralization became the prominent feature of forest governance in the mid-1990s (Ribot et al. 2006, Andersson and Gibson 2007, Agrawal et al. 2008). One of the major arguments under the decentralization approach was that the local government is more accountable to local people than the national government (Ribot 2008). However, the decentralization approaches are not homogenous around the world (Treisman 2007) and have given mixed results (Andersson and Laerhoven 2007).

This thesis employs the concepts of change in governance values to analyze and explain the shift in governance priorities in Nepal's community forestry and the rationales behind these changes. In forest governance, there are multiple actors, both public and private, that govern multiple public issues at multiple scales (Arts and Visseren-Hamakers 2012). These actors work within different approaches, trends, scales and modes of governance (Ayana 2014). Based on current discourses, three broad categories of changes can be interrelated in forest governance: horizontal change, vertical change and temporal change (Avana 2014). The horizontal changes recognize the collective roles of actors through negotiation and coordination (Van Kersbergen and Van Waarden 2004, Newell et al. 2012). Participatory forest governance and forest certification are examples of horizontal changes in forest governance (Arts and Visseren-Hamakers 2012). In vertical change, the decision-making is dispersed from below to above and vice-versa (Newell et al. 2012). The concept of decentralization in forest governance is an example of vertical change in governance. The third perspective in governance change deals with the chronological sequences of change at different points in time (Anrouts 2010). Such chronological changes are the result of new interventions in forest governance, for example REDD+. Therefore, to assess the changes in

forest governance, the array of forest governance values should be considered because governance values are interlinked with each other. The comprehensive array of governance values can identify institutional weakness and respond to stakeholders' concerns (Cadman *et al.* 2016). Two-way communication at all stages of engagement is vital to improve local participation in forest governance (Dyer et al. 2014). Moreover, the interactions between the local forest users and the local politicians can be particularly important to strengthen the incentives and take effective action (Wright *et al.* 2015).

2.2 Participatory approaches in forest governance

Since early 1990s, academicians and donor agencies have stressed the participation of citizens in public policy processes (Gaventa 2004). This promotion of citizen participation in developing countries has led to the adoption of various participatory governance mechanisms, primarily to strengthen accountability, overcome the problems of centrally provided government services and make governance structures effective and efficient (Goetz and Gaventa 2001, Brautigam 2004, Speer 2012). Participatory approaches in natural resource governance emerged because of the failure of the central government to manage these resources to benefit the local population. Taking the normative perspective of participatory governance, Speer (2012) has explained four strands of participatory governance based on previous scholarly studies. The scholars of the democratic decentralization strand view participatory governance as an approach to improve the institutional setup in developing countries, decrease elite capture and increase local participation in decision-making, and prevent social exclusion. The second strand of scholars perceive participatory governance as a means to realize a deliberative democracy; the view is that the system as a result becomes more democratic through strengthening of the deliberative form of decision-making and increasing transparency and equitability in decision-making. The third strand of scholars perceive empowerment as the ultimate goal of participatory governance; these approaches advocate for increasing the capabilities of the poor and empowering them to overcome the inequalities. The fourth strand of scholars view the participatory approach as a flexible decision-making mode that allows citizens to influence the design and implementation of public services; this provides flexibility to service providers and users to develop governance solutions according to local circumstances, and thus enable resilience to change.

To tackle the growing environmental problems, initiatives have been undertaken to make consumers responsible by shifting environmental responsibilities to the individual in the new form of environmental governance (Soneryd and Uggla 2015). Since the conceptualization of people's participation in the research methods by Chambers (1994), participatory approaches have been widely tested in developing countries. The effect of decentralization on common pool resource governance has been widely studied, and researchers have illuminated different aspects of resource governance. Rights of access and use at the operational level are not enough for the effective participation and benefit of forest users in the absence of property rights (Agrawal and Ostrom 2001). The other factors that may have impact on local users' participation in forest governance are heterogeneity and group size (Poteete and Ostrom 2004), benefit sharing (Adhikari 2005, Adhikari *et al.* 2014), the economic and social status of forest users (Agrawal and Gupta 2005), and the influence of external organizations (Andersson 2013). A locally initiated intervention has

higher chances of being successful compared to those interventions that have been initiated by outsider agents (Measham and Lumbasi 2013).

Participatory forest governance should ensure sustainable forest conservation along with fair and equitable distribution of benefits and the decision-making rights of forest dependent people (Larson and Petkova 2011). The outcomes of community forestry are sustainable if local actors engage in and integrate technical, social and environmental elements of forest management (Bahagel *et al.* 2017, Fleischman and Solorzano 2018). For sustainable outcomes, local communities should have opportunities to participate, there should be demand from the communities to participate, and the communities should have capability to participate (Fleischman and Solorzano 2018).

2.3 Decentralized forest governance

Decentralization of natural resources has gained momentum, mostly in the developing countries. Decentralization has often been chosen when actors at the central level compete for power among themselves and find that decentralization is a better option for accessing their power and resources rather than competing with other actors at central level (Agrawal and Ostrom 2001). Decentralization is an evolutionary process that took place as a result of constant pressure from the stakeholders and revision of the existing policies, and was often revolutionary under the pressure of public demand (CIFOR 2005). Decentralization is an easy and cheap strategy of resources management compared to central management, and is often believed to obtain efficient development outcomes through local institutions (Adjei et al. 2018). According to Manor (1999), decentralization can be of several types: geographical decentralization, fiscal decentralization, administrative decentralization, and democratic decentralization. Democratic decentralization is a process through which powers and resources are transferred to local actors who represent the population and are accountable to the local population (Ribot 2001). In democratic decentralization, power is transferred to the actors or institutions that are downwardly accountable to the population. and the population can sanction or reward their representatives and thus make the leaders more responsible (Ribot et al. 2006).

Decentralization reforms depend on the rights and power of the actors to make decision regarding the disposition of the resources (Agrawal and Ostrom 2001). Habermas (1984) argued that people come together for common action based on argument and consensus rather than strictly in pursuit of their own goals, a process which he coined as communicative rationality. The possession of the power of deliberation and rationality of disadvantaged or marginalized members determines their consensus in decision-making (Martin 2011). Achieving such deliberative power of disadvantaged groups is difficult without their empowerment. Rights are enforceable claims that provide access to the use of resources (Macpherson 1978 as cited by Ribot 2011). Property rights form an important component of access, which provides social claims for the use and management of and benefits from resources (Ribot and Peluso 2003). The benefits of democratic decentralization can be available to local populations if there is greater efficiency and equity in public decision-making, and if the local actors are empowered and downwardly accountable to the local population (Agrawal and Ribot 1999). Ribot (2009) argues that if the decision-making roles of local people are enhanced, justice and efficiency in forest management increases, which results in better outcomes. But decision-making structures are not always inclusive, equitable and empowered. Even the well-established and widely

implemented forest policies are not sufficient to ensure equitable and efficient engagement of the poor and marginalized people in forest governance (McDougall *et al.* 2013). As the involvement of forest users in decision-making is the main factor influencing forest governance outcomes (Coulibaly-Lingani *et al.* 2011), questions of involving poor and marginalized communities in forest governance becomes an important consideration.

Accountability implies that a population has a right to hold their representatives accountable for their duties, monitor whether the representatives perform their responsibilities and sanction the representatives if the responsibilities are not met (Grant and Kehone 2005). Likewise, accountable local actors have the ability to motivate local populations in resource governance (Ribot *et al.* 2006). According to Oakerson (1989), "to be accountable means to have to answer for one's action or inaction, and depending on the answer, to be exposed to potential sanctions, both positive and negative" (as cited in Oyono 2004). The developmentalist logic of decentralization is that local authorities are more likely to respond to local needs and aspirations because local authorities have better access to information and are easily held accountable to local populations (Ribot 2001). A responsive representative can translate local citizens demands into responsive public policy (Cook *et al.* 2017), which may not be possible only with the external interventions like REDD+.

2.4 Responsiveness in community forestry

According to the conventional definition, empowerment is bringing people outside the decision-making process into it (Rowlands 1995). The emphasis on empowerment is the access of disadvantaged groups to the decision-making process and subsequently the interpretation of their power (Rowlands 1995). Therefore Fung and Wright (2001) call for empowered deliberation as a progressive reform in democratic practice. Reservation of quotas for disadvantaged groups in decision-making structures in community forestry has provided access to them, but genuine deliberation can take place only with their empowerment. Such empowerment for deliberation can be supported by the responsiveness of the community leaders.

The participatory governance approach emphasizes the two-way interaction between the decision makers and the public (Abelson et al. 2003). In participatory governance, institutional arrangements are made to facilitate participation of citizens in public policy process (Andersson and van Laerhoven 2007). People come to a common conclusion based on the reason-based discussion for and against an action, after careful and serious weighing of the reasons (Fearon 1998). Ability and motivation of participating actors are the key factors for successful participatory governance (Speer 2012). The other issue of participatory governance is the responsiveness of the local institutions to align with the needs of the local people (Fugue 2012). Therefore the effective deliberation of the forest dependent users and the responsiveness of the community leaders are important considerations in community forestry. Fung and Wright (2001) argue that with Empowered Deliberative Democracy (EDD), local people can participate and influence the policies that effect their lives. Deliberation without empowered individuals becomes ineffective, and thus EDD encompasses the value of participation, deliberation, responsiveness and empowerment. The constitution of Nepal (2015) expresses its determination for social justice through provisioning proportional allocation of disadvantaged groups in the development process. Agarwal (2015) considers that if the number of members of disadvantaged groups can be increased in decision-making structures, the deliberation of such disadvantaged groups can be enhanced. In the absence of imposed rules and norms of deliberation, there is also the risk of participants of deliberative discourse being excluded (Martin 2011). Such situations may arise if there is power inequality between the participants and a high dependency of some members on others. To translate the needs and aspirations of people into policies, leaders should be responsible (Ribot et al. 2008). Responsiveness of leaders is "decisions that respond to and reflect the local needs and aspirations" (Ribot 2017). Andersson and Laerhoven (2007) conclude that participatory governance is more likely to occur when active local users demand actions from their leaders. Therefore it is important that responsive leaders inspire people for better deliberation and engagement in community forestry (Ribot and Larson 2005, Ribot et al. 2008). The key issue of decentralized forest governance is the extent to which decentralization enhances responsiveness of local leaders to align with the needs of local forest users (Faguet 2012, Cook et al. 2017); responding to the livelihood of local forest users is therefore an important aspect of participatory forest policy to make it more effective and equitable (Cook et al. 2017).

Interventions such as the REDD+ is an example that prioritizes economic incentives for disadvantaged people in the community forests of Nepal (Shrestha *et al.* 2014). The prioritization of governance values such as inclusiveness, resources, accountability and transparency by the people under REDD+ reflects the types of problems that exist even in REDD+ projects (Cadman *et al.* 2016).

3. MATERIALS AND METHODS

3.1 Study sites

The study was empirically based on the case of three Community Forest User Groups (CFUG) from the Terai region in Nepal. Nepal is located between 26⁰ 20' 53" to 30⁰ 26' 51" north and 80⁰ 03' 30" to 88⁰ 12' 05" east (DFRS 2015). Nepal is a landlocked country in South Asia, surrounded by India at the eastern, southern and western borders and China at the northern border. The Terai region is the flat land that lies in the southern part of Nepal. Among the three CFUGs, Janapragati CFUG and Kankali CFUG are situated in Chitwan district of central Terai and Sundari CFUG is situated in Nawalparasi district of central Terai. Study I includes the case study of Kankali CFUG and Sundari CFUG as embedded units of analysis. Study II and III have used the case of Kankali CFUG. Study III is a comparative study of the case of Nepal and Tanzania, which therefore also considers Angai forest in Southern Tanzania. Study IV includes both the case of Janapragati CFUG and of Kankali CFUG. Brief descriptions of the study sites follow.

The Terai is the flat low land in the southern part of Nepal bordering India. The case study sites are a fertile narrow strip of plains lying to the north of the Churia (Siwalik) range of low mountains and to the south of the Mahabharat range of mid-mountains. The area is characterized by a number of rivers and rivulets intersecting with major rivers flowing east to west. The land is plain and fertile for agriculture production. The Terai region of Nepal occupies 13.7% of the total land area of the country (LRMP 1986) that amounts to 147,181 km². The Terai is populated by 41.8% of the nation's total population and has a population density of 583.46 persons/km² (CBS 2012). The population of Nepal according to the national census of 2011 was 26.49 million.

The Kankali CFUG is located in Khairahani Municipality-4, Chitwan district of the Terai region. The area of Kankali community forest is 749.13 hectares. In 2017, there were 2105 households as the members of the Kankali CFUG, with a population of 10,525. The users are of diverse ethnicity and castes, including Brahmin/Chhetri, Tamang, Derai, Bote, Kumal, Chepang and Dalits. The Kankali community forest was handed over by the government to the community forest user groups for its protection, management and utilization of forest products in 1995. Sale of forest products such as timber, firewood and bamboo are the main source of income for Kankali CFUG.

The Sundari CFUG, located in Devchuli Municipality in Nawalparasi district, was formally handed over by the government to the local people in 1998. There were approximately 2153 households involved in the Sundari CFUG in 2013. The area of the Sundari community forest is 384.75 hectares. The main sources of income of the Sundari CFUG are sale of forest products, membership fees and research fees. Members are from diverse ethnicities and castes, including Brahmin/Chhetri, Gurung, Magar and Dalits.

The Janapragati CFUG is located in Kalika Municipality-9 in Chitwan district. Janapragati CFUG was formally handed over to the local people from the government in 2003. Janapragati community forest has an area of 154.22 hectares. In 2017, Janapragati CFUG had 284 member households and a population of 1704. The main ethnicities and castes of the CFUG are Brahmin/Chhetri, Chepang, Kumal and Dalit. A REDD+ pilot project was implemented in Janapragati and Kankali CFUG from 2009 to 2013.



Figure 1: The location of case study sites in Nepal.

3.2 Research design and methods

The selection of the research design depends on the complexity of the questions we seek to answer through the research we aim to attempt (Yin 2014). A case study is the preferred design when the main research questions are "how" and "why", when there is no control of the researcher over the events, and when the focus of the research is contemporary phenomena (Yin 2014). Based on the case study approach, individual cases were used to fulfill the research objectives specified for the study which investigates the phenomena of interactions within the larger context of forest governance and use rights in community forestry. The study uses previously established theoretical frameworks (for example, governance theory) to identify variables and propose research questions. Furthermore, using grounded theory approach (Corbin and Strauss 1990, Strauss and Corbin 1994), new observations were collected, and these observations were combined and contrasted with the initial theoretical propositions. Moreover, from the field observations, fragmented cases were tied together to draw new insights, explanations and reasoning. This thesis adopted grounded theory (Corbin and Strauss 1990) as the main approach for data collection

Field research was initiated in April 2013 to obtain contextual, institutional and community level information. Unstructured key informant interviews and group interviews were conducted with academicians, bureaucrats, community forest user committee members, ordinary people and community-based organizations. These interviews helped to identify the institutions and actors involved in community forestry governance, their interests and actions. The basics for considering selected community forest user groups as case study sites was the composition of heterogeneous users in their community forest user group, implementation of climate change mitigation and adaptation interventions as a priority program, involvement of local people in forest user group targeting disadvantaged group members. In the next phase, more detailed information was obtained with methods that included document analysis, focus group discussions, in-depth interviews and participant observation.

3.2.1 Document analysis

Document analysis is a systematic way of examining, extracting and interpreting the content of documents in qualitative research (Bowen 2009). Document analyses are applicable to intensive studies of a single phenomenon or event, and produce rich descriptions of the case of study (Yin 1994, Stake 1995 as cited in Bowen 2009). Document analysis can be used as a qualitative research method on its own, but also often as a complement to other research methods and for data triangulation (Bowen 2009). In this study the method was used for the purpose of data triangulation and as a complement to focus group discussions and in-depth interviews.

A review of grey literature, both published and unpublished documents, was conducted to draw upon the background information. The grey literature was useful in identifying the context in which forest governance interventions were introduced and implemented, how the interventions were approached, and how the actors involved interacted. The minutes of the CFUG meetings, lists of users of community forests, display boards, community forest operational plans, CFUG constitutions and other filed records were used as data. The recorded information in the grey literature was also used to cross check the information obtained by other methods – for example, the involvement of different stakeholders, major decisions and leadership positions in the CFUG. Document analysis was done before the onset of field work until the end of field work, from April 2013 to November 2017.

3.2.2 Focus group discussions

Focus group discussions are a widely accepted method of qualitative research, which explores aspects of participants' engagement with their social and spatial worlds (Hopkins 2007) and provides understanding of group dynamics (Michel 1999). In focus group discussions, mutual experiences and understandings of participants are identified through exploring various aspects of participants' involvement in different activities. For the study, through cluster random sampling, local level focus groups were identified based on well-being rank and other pre-identified criteria (gender, ethnicity) of the respective CFUGs to ensure variety of opinion but not statistical representation. Each household of the community forest under study was already classified by respective CFUG under certain

well-being ranks based on the local criteria such as employment status of family members, educational status, amount and types of land holding, annual income of each household, number and types of domestic animals owned, size and types of houses and other local criteria. Eight focus group discussions were organized in Kankali CFUG and in Sundari CFUG; four were based on well-being rank (the poor, medium class, rich and well-off) and the other four were based on other classifications of the users of the respective CFUGs, such as Dalit group, indigenous people group, women group and political leaders group so as to counter bias for under-representation that may have occurred during the criteria based on well-being rank only.

The focus group discussions were conducted from August to October 2013 and were facilitated by the researcher using an open-ended questionnaire to guide the discussions. The role of the researcher was as observer who did not intervene the interactions but facilitated when the discussion drifted off the subject matter. The focus group discussions lasted between one to three hours and 16 focus group discussions were held that included 189 representatives ranging from 4 to 22 individuals in a group. The discussions were conducted in the local language (Nepali) and effort was made to ensure that every individual in the group delivered his/her opinion on the subject matter. In the focus group discussions, participants were initially asked to discuss the impact of REDD+ in community forestry governance. The participants were more general in these discussions, and discussed every issue related to forest governance: benefit sharing, transparency and accountability within the CFUG. The discussions also focused on how the trend of forest governance was shifting from just participation to individual responsibilization in mitigating climate change impacts. With the prior permission of the participants, the discussions were audio recorded and were later transcribed and translated to English. The transcriptions were analyzed using NVivo 10 software.

3.2.3 In-depth key informant interviews

Key informant interviews provide more detailed access to participants' feelings, understanding and experiences of the case in question (Michel 1999). Following the focus group discussions, semi-structured face-to-face in-depth interviews were conducted with the users of community forests to gain deeper understanding of community forest governance, the benefit sharing process and the involvement of household level users. Semi-structured interviews provided the respondents with greater flexibility to explain the actual situation, and face-to-face interviews provided an opportunity even to interview illiterate users of community forests who were actively involved in forest conservation. The interviewees in this study were purposively selected, based on the users' role and experiences in community forest management and forest products utilization. These interviewees included different members of the society who were directly affected by community forestry policies and governance and also represented both the social and economic diversity of the society, including women, Dalits, indigenous people, poor class, medium class and rich class users. The well-being ranking was based on the local criteria and indicators adopted by the CFUGs. The indicators of well-being rank adopted by the CFUGs were total area and types of land holding, employment status of household members, education, livestock holding, types of houses owned, vehicles and other assets. Interviewees were also representatives of political parties, local leaders, governmental and NGO employees, and executive and ordinary members of CFUGs. A total of 103 interviews were conducted between 2014 to 2017 in two CFUGs - Kankali CFUG and Janapragati

Name of	Number of participants by different categories							
CFUG	Gender		Ethnicity			Well-being rank		
	Male	Female	Dalit	Indigenous	Others	Rich	Medium	Poor
				people		class	class	class
Kankali	42	33	17	25	33	18	34	23
Janaprajati	17	11	7	12	9	6	6	16

Table 1: Summary of the interviewees

CFUG (see Table 1 for a summary of the interviewees). Interviews were conducted in the local language (Nepali) by the author and were audio recorded with prior permission of the interviewees. The research assistant transcribed the recordings which were then translated into English for further analysis.

3.2.4 Participant observation

Participant observation is a way of collecting data through observing the participants while they are involved in different activities, talking with them and experiencing how they understand their world (Delamont 2004). In participatory observation, researchers spend a long time in the field studying the interactions of the people, thinking carefully of what is seen and interpreting it in the light of the question of study (Delamont 2004). Participant observation revels insights that are difficult to capture merely through interviews (Ayana 2014). Participant observation was partly used in this thesis. During different times from 2013 to 2017, the author stayed more than five months in the field interviewing community forest users, conducting focus group discussions and observing community members participating in community forestry activities. Based on these participant observations, field notes were prepared and later analyzed during the course of data analysis and thesis work.

During the field work, the author visited every sampled household to conduct key informant interviews. During the household visits, attention was paid to observe the types of support received by individual households from the CFUGs and the status of the household. The participation of representatives of different socio-economic groups in community meetings, in community forestry development activities and decision-making processes was observed. The informal interaction with the villagers, their concerns in community forestry governance and critiques of implementation of REDD+ pilot projects provided useful information for the study. The involvement of the author in all data collection processes provided additional opportunities for participant observation.

3.3 Data analysis

Data from focus group discussions and in-depth interviews were obtained as audio recordings. While obtaining the consent of respondents for audio recording, the respondents were informed that the recorded material would be used only for research purposes and identify would not be revealed. The audio records, which were in Nepali, were first transcribed and then the transcribed material was translated into English. Both the transcriptions and translation work were done by a research assistant. The research assistant was a forester who had similar experience from previous research projects. Details of the field notes from participation observations and informal interactions with the villagers, key

aspects of key informant interviews and focus group discussions captured in the author's field diary, and notes from document analysis were systematically organized, classified, interpreted and synthesized with the theoretical concepts of the study. These larger thematic areas were synthesized to reconstruct a smaller number of themes. These themes were analyzed as variables and considered for further interpretation in the light of the theoretical concepts and available literatures, and conclusion drawn.

QSR NVivo 10 software was used in the analysis of the results following the grounded theory approach (Bixler 2014). Every statement of the respondents from focus group discussions and in-depth interviews, segments of the field notes and unpublished documents were coded under individual themes in NVivo software. First, the statements that were frequently used by the respondents during the discussion and related to particular research question were placed under particular themes. Following a process of iteration, these themes were narrowed down to broader themes, and only the latter broader themes were used for analysis in the study. Direct quotes of the respondents were used emphasize the essentials of the study.

In study IV, QSR NVivo 10 software was not used. In this study, the statements of the respondents, information obtained from observations, field notes and unpublished documents were categorized under different clusters or themes. The clustering of the information was based on the similarities of the information carried out by the segments in a particular theme. Such segments of information were sometimes a few words, in some cases some sentences or sometimes a chunk of a paragraph. With iterations, these clusters of information segments were narrowed down based on the information they carried to answer the particular research question in focus. Finally, the condensed chunks of information were analyzed to draw conclusions (Miles and Huberman 1994).

4. RESULTS

4.1 User's priorities for good governance in community forestry

Similarities and difference in the priorities of users for the factors of governance in two community forests depended on the condition of each community and how each was governed. Based on document analysis, focus group discussions and participatory observation, 46 factors relating to good forest governance and climate change initiative were initially identified in both Kankali and Sundari community forest user groups (study I). In both these CFUGs, out of 46 factors, the factor 'benefit' was ranked first based on the importance given to it by the forest users. Such rankings were performed ordinally based on the frequency of total quantity of statements made by the community forest users referring to the factor of forest governance. In Kankali CFUG, the Dalits were used by the CFUG executive committee to elicit external funding but did not themselves benefit. The availability and use of resources by different groups, including the Dalits, seemed the major concern raised in the Kankali CFUG, whereas the concern of increasing revenue for the intended groups persisted in the Sundari CFUG. The women, poor and Dalits of Kankali CFUG were misrepresented by their leaders because of the lower level of education of women, poor and Dalits. The women were not able to assert their rights because of lack of sufficient information and education. The users from Sundari CFUG also considered education and information as an important prerequisite for effective deliberation, understanding the consequences of climate change, and mitigating its effects. Equality existed and increased with increased educational status of forest users.

In both Kankali and Sundari CFUGs, the Dalits showed dissatisfaction over their participation in the general assembly and other decision-making forums because of their limited capability for effective deliberation. Dalits feared public speaking. The Dalits participated strongly in their own small groups. The Dalits cannot attend all required meetings because laboring work is their main source of income. The woman and the poor users in Kankali CFUG claim that by caste all groups participated equally in the community forest, however, the level of participation was different based on well-being class. The middle-class users participate more than the rich or the poor. But the rich-class users utilize most of the timber whereas the poor utilize less forest products by value but the contribution of timber to the household economy is relatively high. The political parties stated that of users with higher income participate less in community forestry compared to users who have less income. The poor and women in Sundari CFUG could not allocate sufficient time to participate in community forestry activities due to their household duties. Both the women and the Dalits in Sundari CFUG participate in community meetings because doing so is compulsory. But the indigenous peoples were dissatisfied over their poor representation in the executive committee. The middle-class users claimed that for the poor, participating in community forestry activities was waste of time. The participation of women has increased compared to their male counterparts. However, the rich users think that there was no difference in participation based on well-being class.

Class and opportunities factors ranked fourth in Sundari and fifth in Kankali CFUG. For the poor, Dalits, women and indigenous peoples in Kankali CFUG, their low social and economic status hindered their opportunities to participate. Because of their poor deliberation capacities, women are underrepresented during the decision-making process. Women feel that the number of their representatives in the decision-making structure should be in proportion to their population, but this cannot be achieved without the support of their male counterparts. Women were not able to fill even the current quota of members provided for them in the executive meeting because they have to be busy in household activities. Indigenous people said that though every caste is represented in the executive committee, in reality only the educated individuals from the caste or those of higher economic status are represented, thus excluding the majority of the population who are uneducated. The poor say that the forest is accessible to everyone but only the rich people can afford to buy timber under the current system of organization of the forest. The middleclass users think that the poor and middle-class users contribute more but the rich class users consume more, and even in the decision-making process, the rich people make decisions for other classes of users.

The Dalit users in Sundari CFUG are aware of how class division can provide opportunities for users; they claim that instead of relying on class opportunities, it is better to be more active for the benefit of the organization. A complaint of the women users was that they had to pay fines even when lack of access within their own family to their user's identification cards meant that they could not show their user status when in the forest. This caused them to forego opportunities to collect forest products because of fear of being fined. The indigenous users were satisfied with the governance of the community forest with the exception of their underrepresentation in the executive committee. The middleclass users thought that classification of users based on socio-economic class was one of the best decisions for ensuring the provision of opportunities to each class and for better representation. The poor users have received opportunities and gained advantages from the community forest. They are allowed to collect firewood and given opportunities for income generating activities such as goat herding. They believed that there was no discrimination by the executive committee based on socio-economic classification. The rich users on the other hand believed that the community forestry was a pro-poor program, which was why the CFUG had classified their users according to socio-economic class.

The issues of accountability in the governance of the community forest were raised loudly in Kankali CFUG as compared to Sundari CFUG. The middle-class users wanted the executive committee to take more responsibility for managing the community forest and providing facilities to the users, whereas the rich users did not see accountability as a major issue in Kankali CFUG. On the other hand, all classes of users felt that the executive committee was accountable to its users. In places where there were issues, this was not because of lower accountability of the executive committee but was due to diversified interests of different users. Similarly, the issue of transparency was raised as an important issue in Kankali CFUG. The poor, women and Dalits accused the executive committee of not being transparent in sharing information of revenue distribution and fund raising in Kankali CFUG. The issue of transparency was hardly considered by the users of Sundari CFUG, where the users had faith in and trusted the executive committee.

4.2 Factors affecting REDD+ benefit sharing

Document analysis, in-depth key informant interviews and participatory observation were used for data collection to explore how different factors within community forests affect REDD+ benefit sharing (study II). According to the analysis results, in Kankali CFUG, users had access to firewood, grass and fodder collection. If available, timber was distributed to the users according to priority. Moreover, small groups of users were formed

to conduct incoming generating activities such as goat keeping, pig keeping, fish farming, bamboo production and fodder production within the community forest. 20% of the income obtained from such activities was returned to the CFUG as revenue while the other 80% was distributed among individuals involved. The poor and the middle-class users were involved in such income generating activities. It was mandatory to participate in the community forestry activities, and those who were absent had to pay fine for not participating. The middle-class users participated the most in the community forestry activities, whereas the poor and the rich-class users had to pay fines for not being able to participate. The poor users could not participate because they were involved in laboring work for their livelihood, while the rich preferred to pay their fines in cash for not participating. Women users were mostly busy in their household work, so their participation was less in the general assembly but higher in the forest development activities. Therefore men were dominant in the decision-making process of the CFUG.

Benefit sharing was the most considered factor by the users of Kankali CFUG. For the rich-class users, the benefit sharing mechanism was equitable. The poor and the mediumclass users claimed that the good quality timber was distributed to the rich people and to the executive committee members, whereas the poor and middle-class users got only the poorquality timber. Users in the decision-making structures benefited the most from the community forest. The rich users benefited from the consumption of timber because they do more construction work compared to the middle-class and poor-class users. The middleclass users participate more in the community forestry activities and are able to benefit to some extent. The poor users provide not only less time to the community forest but also benefit less. The poor and the indigenous users generally collect firewood and grass from the forest and engage in income generating activities. Without internal funding from the community forest, the external funding received from projects such as REDD+ are not sustainable. For this reason the income generating activities of subgroups had to be abandoned later after the phase out of the REDD+ pilot project in Kankali CFUG.

The poor and medium class users of Kankali CFUG believe that the decision-making process in the community forest is influenced by the rich and powerful people. Even decisions about the income generating activities under the REDD+ pilot project were made by the rich users without taking into account the consensus of the middle and poor-class users, though the latter had to implement the program. Income generating activity such as fish farming were not requested by the Dalit users who were to implement it, and later the program completely failed. Even the other members of the executive committee claimed that major decisions were made by the holders of major portfolios (chairperson, vice-chairperson, secretary, treasurer). There was a high influence of political parties in the decision-making process. Even the executive committee was formed based on political consensus rather than the election process. The poor and Dalit users think that they are called upon to participate in the decision-making to formalize the process, while decisions are not taken according to their wish. But the rich and members of the executive committee argue that decisions are participatory, and that the views of every user are considered.

In Kankali CFUG, specific subgroups have been formed to carry out income generating activities according to their interest. These included the grass production group, goat farming group, fish farming group and pig keeping group. Conflicts exist between these sub-groups and between the sub-groups and the executive committee of the CFUG. These conflicts reflect the conflicting issues between the groups; for example, the goat keeping group wants open grazing in the community forest area, but the grass production group want stall feeding of goats so that grass production in the community forest can continue

without damage from goats. The conflict between the executive committee and sub-groups is due to procedural accountability and transparency. For example, the sub-groups were allowed to produce bamboo but were not given permission to harvest bamboo in time by the executive committee. The executive committee think that conflicts between the executive committee and the users are due to the gap between the demand and supply of forest products in the community forest. The other reasons of conflict in the CFUG were because of difference in socio-economic class of users, and therefore reflect the varying priorities of the different classes. For the poor users, there is discrimination during the selling and distribution of timber. The rich people think that as they do not use firewood and grass from the forest, they should be given priority during timber distribution. Moreover, the rich users think that the poor and middle-class users also benefit from income generating activities. But the women, Dalits and poor think that as the CFUG is receiving support from the donor agencies on their behalf, they should be given priority in benefit sharing. The Dalits and poor are also heavily dependent in the forest resources for their livelihood.

The female user committee members of Kankali CFUG were unhappy with the working procedure of the executive committee. The female members accused the executive committee of not implementing the decisions made during the meetings. The incoming generating groups, such as the grass production group, had to undergo loss due to the wrong decision of the executive committee to set livestock (goats) loose to graze. The female-led bamboo production group blamed the executive committee for being unaccountable to their needs by not allowing the fully-grown bamboo to be harvested. Without any prior information about fish farming, the Dalits were asked to take responsibility for the fish pond, which led to a loss in production. The executive committee never informed the Dalits that the funding received for fish farming was a grant under the REDD+ pilot project. The poor, Dalits, women and medium-class users felt that the executive committee was not accountable to the users. For the rich users, the executive committee was accountable with respect to the conservation of forest and its users. However, the executive committee felt that its first priority should be first accountability with respect to conservation of the forest and only after that to the needs of users. The executive committee claims that dissatisfaction of the users was due to the large number of users with varying demands.

4.3 From participation to empowerment of Dalits in community forestry

Document analysis, in-depth key informant interviews and participant observation were used for data collection to explain the patterns of citizen's engagement in forest resource governance (study III). When analyzing the data, it was found that Dalits of Kankali CFUG do not feel that their engagement in community forestry has been able to have an effect on the governance of forest resources. The disadvantaged users of the community forest, including the poor, Dalits, women and indigenous people, feel that their views are not taken into account though they may enjoy formal representation within the decision-making structures. The participation of Dalits was called upon to formalize and complete processes in terms of legal procedure only, whereas they had little or almost no role in decisionmaking. During the piloting of the REDD+ project, a fish pond was constructed, and Dalits were asked to run it. The Dalit users had never asked for a fish pond because they did not have the required skill to run the fish pond. If they were asked for their views in advance, they would have suggested pig farming. The fish farming was not profitable, and the executive committee decided to manage the fish pond through a contract with a businessman. The Dalits were not informed that the fund for the fish farming was aid from the REDD+ pilot project meant for improving the livelihood of marginalized users. The participation of Dalits in the executive committee is mandatory according to policy, but due to their lower literacy level and capability, Dalits can hardly influence decisions.

Looking back, the participation of Dalits has increased in community forestry compared to earlier. The elderly Dalits encourage their successors to participate in community work. There has been legal provision for the mandatory inclusion of Dalits in decision-making forums. The executive committee feels that Dalits have started taking leadership in community forestry activities, such as tree seedlings plantation. The participation of Dalits in community forestry activities is increasing. Young generations of Dalits have started expressing their views in community discussions. Since the youth feel that Dalits have been left behind due to illiteracy, they have started sending their children to school. With the changing culture, women can now express their views in front of older people. Nevertheless, since the elites are still better informed and knowledgeable about the rules and regulations of community forestry, they remain influential in decision-making.

The Dalit respondents in Kankali CFUG feel that their awareness level has increased as a result of the implementation of community forestry activities. Though the initial decisions, for example the construction of fish ponds in Kankali community forest, were not made by Dalits, they have participated in the process and increased awareness of how the CFUG works. After the recent political change in Nepal, the mandatory policy provision of proportional representation of Dalits in community structures has empowered at least some of them. The Dalit users have established a non-governmental organization with an aim of advocating for their rights. The Dalit youth are aware of the provisions of national constitutions, the latest national forest policy, and the community forest operational plans and constitution of the CFUG. Though these changes among the Dalits may not be a result only of the community forestry program, yet such changes will obviously have an impact on community forestry governance.

4.4 REDD+ impact in social inclusion

Document analysis, in-depth key informant interviews and participant observation were used when exploring how social inclusivity enhances representation and deliberation of disadvantaged groups and stimulates responsiveness of local leaders under REDD+ implementation in community forestry (study IV). According to the analysis, the users of both Kankali and Sundari CFUG are involved in different forest development activities such as weeding, cleaning, thinning, forest fire controlling and fire line management. The day to day activities are conducted by the executive committee of the community forest user groups. These executive committees are formed democratically from among the users. During the start of the community forestry program, the representation of disadvantaged groups such as the Dalit, poor, indigenous people and women was either absent or was very low if present. Now, with the new policy provisions, half of the major positions among the executive committee members are held by women. Dalits and indigenous people are represented in the executive committee. With the implementation of REDD+ pilot project, special income generation and awareness programs were implemented targeting the poor, Dalit, women and indigenous people. Income generating activities such as fish farming, pig farming, goat farming, vegetable farming and grass farming were implemented in both

Kankali CFUG and Janapragati CFUG for the poor and medium-class users. Community forest users agree that the representation of disadvantaged groups (poor, Dalit, women and indigenous people) in the executive committee has increased. While the rich users claim that the representation of all users in forest development activities is equal, the mediumclass users feel that the poor do not influence the decisions of the CFUG, and the poor users claim that their representation is sought for labor and not considered sufficiently during benefit sharing. Women too consider that their representation is increasing in community forestry. The representation of Dalits and indigenous people is limited due to their poor capability and education.

The deliberation of disadvantaged groups in community forest was progressively changing depending on their need, capacity and willingness. Women are slowly coming out of the traditional culture of not speaking in front of their elderly male relatives and counterparts and are starting to speak out. Compared to the rich and medium-class women, the poor and Dalit women were more deliberative in community forestry program. However, the poor and women Dalits expressed greater dissatisfaction over CFUG activities. Even the male members from poor and Dalit communities had more complaints regarding community forestry. Examples of how women could influence the decision of the executive committee through effective deliberation could be observed in some situations, basically when women felt there was injustice within their community. The influence of inclusive development in Dalits was observed less when compared with other disadvantaged groups. Dalits were often criticized by economically high status groups for wanting rights without taking responsibilities in community forestry.

The leaders of Kankali CFUG and Janapragati CFUG believed that with REDD+ approach everyone can be included in forest conservation. REDD+ has been able to convince the local people on the importance of forest conservation. However, the poor users of both community forests were unaware of the implementation of REDD+ piloting projects in the community forests. The rich users were of the opinion that with the implementation of the REDD+ pilot project the traditional approach of forest governance has changed, and power has been decentralized at the user level. Community forests are now better managed, and leaders are responsive to their users. The implemented income generating activities have improved the livelihoods of the poor and Dalit members of CFUG. The executive committee of Janapragati CFUG implemented the income generating activities in a transparent and participatory manner. Due to such approaches, Janapragati CFUG had less complaints from its users than Kankali CFUG. Implementation of the REDD+ pilot project in the community forests has resulted in the executive committees becoming more responsive to the needs of its users and for forest conservation.

5. DISCUSSION

The studies included in this thesis analyzed how REDD+ interventions gave rise to changes in the values of forest governance at local level. They focused on factors of forest governance that included participation, deliberation, decision-making, accountability, and responsiveness in benefit sharing under REDD+ interventions in community forestry.

Participatory processes, with emphasis on the interaction between the decision makers and the public (Abelson et al. 2003), are constructed and facilitated to ensure opportunities for people to participate in forest governance (Martin 2011). In the discourse of forest governance, top-down (Jordhus-Lier et al. 2009), market-based (Cashore 2002) and community-controlled frameworks (Colfer 2011) frequently feature. Community forestry can be seen as a locally controlled framework which evolved in response to the failure of top-down approaches of forest conservation. This approach, which adopts participatory approach of decision-making and benefit sharing, is considered better than state management in providing benefits to local people and forest conservation (Agrawal et al. 2008, Agrawal and Chhatre 2006, Persha et al. 2011). What constitutes good forest governance is a matter of on-going discussion. Though there are agreed indicators of good forest governance, the priorities for such indicators may vary with local contexts (Article I). The choice of priorities of indicators for good governance in community forestry depended on the socio-economic status of forest dependent people, livelihood options and how the leaders governed the CFUG. Interventions like REDD+ brought hope for the community forestry users but also contributed new challenges in forest governance. The REDD+ interventions have shifted the priorities and rules of community forestry management and forest use away from subsistence towards monetary benefit (Khatri et al. 2018) and can limit local people's customary rights to access and use of forest resources (Poudel et al. 2014). The poor users still want their subsistence needs fulfilled from community forests, whereas the rich users go for monetary income and even to the indirect benefits of community forestry. Such differences could be observed in the focus group discussions of different socio-economic users of the study sites. Transparency was not a major issue of discussion if the executive committee consulted widely with its stakeholders before making major decisions. But in Kankali CFUG, users blamed the executive committee for not being transparent in its activities. One reason for such a situation in Kankali CFUG was that it received support from the REDD+ pilot project and the users did not understand the technicality of REDD+. An inclusive, transparent and accountable mechanism adopted in in the decision-making process increases the acceptability of REDD+ at ground level (Cadman et al. 2017). The educational status of users is linked with the institutionalization of good governance because educated and well-informed users can actively participate in decision-making without depending on the leaders of community forest user groups. Education increases access to forest resources (Agrawal and Gupta 2005).

The economic condition of forest users, representation and participation of users in decision-making processes, conflicts between different interest groups within the community and the accountability of leaders in fulfilling the needs of forest dependent people should be considered for successful implementation of REDD+ in community forestry (Article II). Transforming the rights of forest dependent communities based on social justice requires increasing accessibility of the poor, Dalits and indigenous people to the decision-making process. The dissatisfaction of poor and disadvantaged users over the benefit sharing process of community forestry could be because of the tightened rules

placed on the users due to intervention of REDD+ (Paudel *et al.* 2015) without taking the circumstances of needy people into account. The rich and elite members' satisfaction over the benefit sharing process was a reflection of their dominance over the decision-making structure and the privileges they enjoyed during the sale of timber and other forest products. The poor users are relatively more dependent on forest resources compared to rich users, while in absolute terms the rich benefit more from the timber (Rayamajhi *et al.* 2012). In addition, the education and information the rich users possess supported their easy access to forest resources. For REDD+ to be successfully implemented, the community forestry program needs to ensure that the people on the margins are prioritized, their rights translated into practice, and participation becomes equitable.

The implementation of the REDD+ project in community forestry has increased the participation of disadvantaged groups in the decision-making structure. This study supports the findings of Thoms (2008) and Poudel et al. (2014) with regard to the issues of inequity and exclusion of disadvantaged groups that the REDD+ project is intended to address. But such representation is not genuine because the representatives of poor users are not able to influence the benefit sharing process. Empowered and genuine participation of the users can influence the decision-making regarding benefit sharing (Fung and Wright 2001, Mathie and Cuningham 2003, Yadav et al. 2015). Injustice in benefit sharing due to unequal power sharing among the users of community forestry may undermine the implementation of REDD+. In the implementation of REDD+, addressing the economic concerns of forest users, and particularly of the poor, women and Dalit users, will remain the major challenge (Cadman et al. 2017). The powerful actors, including the local elites, government and donor agencies, still emphasize protection-oriented forest management with the result that the forests are underutilized and the poor users gain little benefit (Shrestha and McManus 2008). The community forests are governed by the rich and elite people but the severity of consequences of forestry activities is faced by the poor users, which raises the prospect of conflict in implementation of these activities. The accountability of community leaders profoundly influences the attraction of users to community forestry. The community leaders were not downwardly accountable to the users while upward accountability towards the donor and governmental agencies may undermine the principle of democratic decentralization.

The engagement of Dalits in community forest governance is seen as a blueprint approach in Nepal (Article III). The constitution of Nepal 2015 has adopted the principle of proportional representation which ensures that places are reserved for Dalits in the executive committee of community forest user groups. Through the allocation of quotas, the government has tried to change the social order, but such change is very slow and is not fully supported by society due to traditional and cultural beliefs. The community forestry program in Nepal aims at responsive environmental governance but fails to attain this because of the difference in socio-economic status of the forest users and their contrasting needs. The politicalized community forestry approach cannot deliver equity to Dalits as long as the power relations are not considered the central focus (Bushy and Subba 2003). Despite the contribution of Dalits to community forest development, Dalits are blamed for their illiteracy and heavy use of forest resources. The Dalits on the other hand are still not brave enough, owing to their social and cultural habituation, to go against the decisions of the elite. Thus, unless Dalits obtain the role of giver as opposed to their present status of taker, their participation is effectively only a rubber stamp of the decisions of the elite in community forestry. The embedded poverty of Dalits has limited their active leadership in community forestry (Poudel et al. 2014, Yadav et al. 2015)

The Forest Policy 2015 of Nepal (GON 2015) and the community forestry development program guideline 2014 (GON 2014) adopts the representation of disadvantaged groups (DAGs – women, the poor, Dalit and indigenous people) as a prerequisite in community forestry. The purpose of representing DAGs in community forestry is to ensure their stake in governance, achieve forest conservation and fulfill their livelihood needs. But the representation of DAGs in community forestry is symbolic, without power (Article IV). Representation of disadvantaged people has merely validated the decisions of the elite in the executive committee of community forest user groups and has thus fulfilled the basic requirements of the current forest policy of Nepal. Such representations are therefore sometime misused by the elite of community forest user groups. To increase social justice in the benefit sharing process, the representation of DAGs should be enhanced through the power of strong deliberation. The deliberative power of the DAGs has increased, but the pace is slow. In the sub-groups, which are homogeneous bodies, the DAGs have better deliberation as compared to in other big forums such as the general assembly and the executive committee, which are heterogeneous in nature. When members feel there is strong injustice in the society, the form of deliberation that evolves is strong and effective. The case of a women going to the meeting of the executive committee of Janapragati CFUG and putting her strong objections over the benefit sharing process can be considered as an example of such case where the case of injustice made her more deliberative. The issues of ethnicity, indigenous rights and socio-economic differences are further drivers of justice in community forestry (Satyal 2017). Strong deliberation power keeps users of community forestry deployed in the decision-making process. In a community where the users are not educated, representation and deliberation are not sufficient to empower local communities without the responsiveness of the local leaders. With the introduction of new forest policies and interventions like REDD+, the priorities of community leaders have shifted, and their attitudes have changed. The community leaders are motivated to enhance the livelihood of DAGs through the implementation of income generating activities in community forestry. This is due to the realization that without fulfilling the basic needs of the forest dependent people, the goal of forest conservation and management cannot be reached. The implementation of REDD+ in community forestry has brought about a positive reaction in the responsiveness of community leaders towards forest conservation and as regards serving the needs of local users.

The theoretical approach of the current study to the concept of forest governance is general. Specifically, the study takes into account the role of climate change mitigation measures in shaping governance outcome. The study has focused on the REDD+ piloted community forest with the aim of investigating the paradigm shift in governance values. The context is specific and may not be generalized to the whole community forestry system. Moreover, the respondents' responses were more general and concerned community forestry rather than specifically directed at REDD+ implementation, so the findings are equally applicable to the community forestry system in general. The governance values discussed in this dissertation are also interlinked, so it is difficult to distinguish their specific impact precisely. Besides, it was challenging to operationalize the concept of good governance within the actual field situation. This was due to the multiple interpretations of governance in the existing literature (Ayana 2014).

Due to the budgetary limitations for field data collection and unavailability of funding for the whole study period, the study did not cover a wider geographical range with regard to data collection, therefore empirical data of this study were limited to three community forests in the Terai region of Nepal. Second, with regard to the methods adopted for the
study, it was challenging to ensure that all the respondents shared the same understanding of community forestry governance. The well-being ranks of the community forest users used in the study are contextual and relative, so generalizations of the findings with respect to well-being ranks are only comparative. Third, the study relied on perception-based data. The shortcoming of such a method is that the ability of respondents to recall and understand the concepts under study may vary widely (Tegegne 2016). However, efforts have been made to represent a wide range of stakeholders and to rely on multiple approaches to draw conclusions.

The methodological approaches adopted in the study tried to consider the representation of all the stakeholders of the community forestry. However, the voices of poor and disadvantaged groups during the focus group discussion seemed to be influenced by the rich and elite members of the society. To minimize the influence of elite members of the society, focus group discussions were made more homogenous, and subsequently in-depth key informant interviews were also employed. In-depth key informant interviews were a more suitable method to address the proposed research questions during the study. On the other hand, it was difficult to organize focus group discussions because of community forest users' limited time to be available for interviews at the same hour of the day.

6. CONCLUSIONS

The foremost reason given by users for participating in community forestry programs is the amount of benefits received. People perceive the factors of good governance, based on the institutional arrangements, which may influence their rights and offer justice in relation to benefit sharing. The educational status and awareness level are the most important governance values for the poor users of CFUGs. The experience of local stakeholders and the academic discourses on values of good governance are closely related, but the priorities are context specific. Formulating polices or implementing interventions depends on the community's preparedness for such initiatives. Successful interventions consider both on-the-ground reality and academic theories. From the experience of implementing REDD+ piloting in community forest of Nepal, we can conclude that such interventions can reshuffle the order of priorities but cannot change the established values of communities.

The factors such as economic status of users, decision-making process, conflicts in demand and supply of forest products and accountability of community leaders are considered important for successful implementation of REDD+ in community forestry. A gap exists between the needs of the poor forest dependent users and the interests of the community leaders in governing the community forests, and this gap was one of the major reasons for conflict in community forestry. It is empirical to ask who should govern community forests? REDD+ in its present format cannot redistribute power to the poor users of community forests. Despite this shortcoming, users' participation primarily for benefit sharing has increased under the implementation of REDD+. The participation, however, of disadvantaged groups in decision-making structures was unable to influence the decision-making process. Such participation was superficial and lacked empowered representatives. The poor users cannot translate their rights into proportional benefits because of their poor capability. The rich and elite people through their social and political influence remain in leadership positions for several terms. When the same individual remains in a leadership position over a long period, that person may become less accountable to the users of community forest.

Dalits cannot influence the decision-making process due to their lack of education and confidence. This also limits Dalits' ability to challenge the decisions of the elite members of community forestry. The empowerment of Dalits is considered as the main way of improving their participation in natural resource governance. For such empowerment to occur, the duty bearers should be ready to share resources and power with the Dalits. This can help to bring Dalits into mainstream of development and natural resource governance. Though culture is changing and policies are being revised to ensure greater participation of Dalits in every sector, Dalits still remain at the bottom level of the pyramid in terms of their participation in decision making in community forestry governance.

The income generating activities implemented under community forestry have resulted in greater participation of users in community forestry. Such activities have also supported the deliberation of disadvantaged groups in community forums. Deliberation depends on the ability, capacity, need and willingness of the participating forest users. The situation of injustice in the community pushes individual members into forceful deliberation. The leaders' responsiveness is often affected by the socio-economic strength of the institutions they represent. REDD+ has contributed to social inclusion of disadvantaged groups in community forestry governance. However, even the representation of disadvantaged groups in decision-making structures, as guided by the new forest policies, is determined by the rich and elite members of society. The power dynamics and socio-economic situation of the society have an influential role in providing justice for disadvantaged groups in community forestry.

The outcomes of community forestry governance are contextual, and these contexts are not static. The conceived good practices of community forestry during its initiation are not enough to address the current governmental and environmental issues. The engagement of forest users in decision-making structure needs further empowerment to enhance the capabilities of forest users to practice good forest governance. Interventions such as REDD+ cannot improve governance attributes without political stability and support within the REDD+ implementing country. The priorities of governance attributes in community forestry governance have changed due basically to socio-economic development and its impact on global climate change. In addition, both the local and global migration trend has brought about new discourses in environmental governance. Economic opportunities for poor forest dependent people should therefore be considered by generating employment opportunities to gain their continuous support in forest conservation; those incurring costs should benefit, and leaders should be responsive to the needs of poor forest users.

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APPENDIX-1: ABSTRACT IN NEPALI

सहभागितादेखि उत्तरदायित्वसम्म : नेपालको तराइका सामुदायिक वन शासनको परिवर्तित प्राथमिकताहरू

सारांश

शासन पद्दतिमा स्थानीय समुदायको संलग्नता, पिछडिएका समुदायको निर्णय प्रक्रियामा भरपर्दो र पारदर्शी भूमिका तथा लाभको न्यायोचित बाँडफाँड रेड प्लसको (वन विनास र क्षयीकरणबाट हुने हरितगृह ग्यास उत्सर्जन न्यूनीकरण, वन संरक्षण, वनको दिगो विकास र कार्वन सञ्चित्तीकरणको अभिवृद्धि) स्वीकार्यताको लागि उदाउँदो रणनीति हो । यद्यपि रेड प्लसको प्रभावकारिताको मूल्याइकन गर्न, यसको वैधानिकतामा योगदान पुऱ्याउन र वन व्यवस्थापनका शासकीय पक्षहरू बीचको अन्तरसम्बन्ध बुभ्ग्नको लागि वन शासन पद्दतिको मूल्य मान्यताको गहन अध्ययनको आवश्यकता छ । अर्कोतिर स्थानीय स्तरमा कस्तो शासन पद्दति अपनाउँदा रेड प्लसका लक्ष्यहरू हासिल गर्न सकिन्छ भन्ने अस्पष्टता राष्ट्रिय तथा अन्तर्राष्ट्रिय दुवै तहमा कायम रहेको छ ।

यस विद्यावारिधि शोधले जलवायु परिवर्तन न्यूनीकरणको लागि सामुदायिक वन शासन पद्दतिले अङ्गीकार गरेको व्यावहारिक एवं प्राथमिक पक्षहरूको साथसाथै उपभोक्ताहरूले गरेका पहलहरूको मूल्याङ्कन गरेको छ । यसले मुख्यतः लाभांशको बाँडफाँड प्रक्रियासँग सम्बन्धित कारकहरू, सामुदायिक वनमा पछाडि परेका समुदायको संलग्नताको अवस्था र नेपालको तराई क्षेत्रका सामुदायिक वनमा रेड प्लसको कार्यान्वयनले सामाजिक समावेशीकरणमा पारेको प्रभावलाई जोड दिएको छ । यो अध्ययन गुणात्मक दृष्टिकोणको धरातलीय सिद्धान्तमा आधारित छ, जुन तीनवटा सामुदायिक वन उपभोक्ता समूहको सबाल र रेड प्लसको कार्यान्वयनको प्रतिफलमा आधारित छ । साभा स्रोत व्यवस्थापन पद्दतिको सिद्धान्तमा आधारित यस अध्ययनले वन व्यवस्थापन पद्दतिको मूल्य मान्यताहरूका नीतिगत लक्ष्य र उपलब्धिहरु बीच समानता र भिन्नताको मूल्याङ्कन र तिनको प्रभावको अध्ययन गर्दछ । दोस्रो, यस अध्ययनले लाभांशको बाँडफाँडलाई असर पार्ने कारक तत्वहरूको प्रकृति र तिनले रेड प्लस र सामुदायिक वनका अन्य लाभको बाँडफाँड प्रक्रियामा पार्ने प्रभावको वर्णन गर्दछ । तेस्रो, वर्तमान नीति र अभ्यासहरूले कसरी दलित समुदायलाई सामुदायिक वनको शासन प्रक्रियामा संलग्न गराउँछ भन्ने पनि उजागर गरेको छ । अन्त्यमा, रेड प्लस अन्तर्गत कसरी सामाजिक समावेशीकरणले विपन्न समूहहरुको प्रतिनिधित्व र भूमिका बढाउँछ र सामुदायिक वनका अग्वाहरूलाई थप उत्तरदायी बनाउँछ भनी अनुसन्धान गरेको छ ।

यस अध्ययनका नतिजाहरू लक्षित समूहसँगको गहन छलफल, अन्तरवार्ता र नेपालको तराई क्षेत्रका तीन सामुदायिक वनहरुको अवलोकनमा आधारित छ । वन शासन पद्दतिका कारकहरू बीचका समानता र भिन्नताहरू प्रत्येक समुदायको विशिष्ट पक्ष हुन् । शासकीय पहलहरूको कार्यान्वयनमा गुणात्मक भिन्नताले सामुदायिक वन उपभोक्ताहरूमा असन्तुष्टि बढाएको छ । सामुदायिक वनमा निमुखाहरू अत्यधिक निर्भर भए तापनि निर्णय लिने संरचनाहरूमा असन्तुष्टि बढाएको छ । सामुदायिक वनमा निमुखाहरू अत्यधिक निर्भर भए तापनि निर्णय लिने संरचनाहरूमा पहुँचवाला उपभोक्ताहरूको नियन्त्रण भएकाले तुलनात्मक रूपमा सम्भ्रान्त उपभोक्ताहरू नै बढी लाभान्वित भएको पाइन्छ । सामुदायिक वनमा विपन्न वर्गको संलग्नताको लागि औपचारिक संरचनाहरूले पूर्ण सहभागिताको लागि पर्याप्त अवसर प्रदान गरेका छैनन् । त्यसैले रेड प्लस कार्यान्वयनका फाइदाहरू अपेक्षा गरिएबमोजिम विपन्न वर्गसम्म पुग्न सकेको छैन । यद्यपि रेड प्लसको कार्यान्वयनले सामुदायिक वनको शासन पद्दतिमा भने सकारात्मक भूमिका खेलेको छ । सामुदायिक वनको संस्थागत संरचनाहरूमा पछाडि परेका समुदायको समानुपातिक प्रतिनिधित्व भए तापनि जीविकोपार्जनका लागि सामुदायिक वनमा निर्भर समुदायको समावेशीकरणलाई सुनिश्चित गर्न विद्यमान मापदण्डमा पुनर्विचार गर्न आवश्यक छ ।

मुख्य शब्दहरू : जवाफदेहिता, साम्दायिक वन, निर्णय लिने, सहभागिता, रेड प्लस, उत्तरदायित्व ।