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**GOVERNING FOREST CARBON:
THE POLITICAL ECOLOGY OF
REDUCING EMISSIONS FROM DEFORESTATION AND FOREST
DEGRADATION (REDD+) IN ACEH, INDONESIA**

By

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A Dissertation submitted to the
Graduate School-New Brunswick
Rutgers, The State University of New Jersey
in partial fulfillment of requirements

for the degree of

Doctor of Philosophy

Graduate Program in Geography

Written under the direction of

Richard A. Schroeder

And approved by

New Brunswick, New Jersey

October 2014

ABSTRACT OF THE DISSERTATION

Governing Forest Carbon:

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The global climate change mitigation initiative, Reducing Emissions from Deforestation and Forest Degradation plus (REDD+), has been seen as a new form of environmental rule to govern human-forest relationships. Through analyzing a case study of the Ulu Masen REDD+ project in Aceh, Indonesia, this dissertation examines how REDD+ has been translated into policies and practices, and examines the dynamic process of policy interpretation, negotiation, and even contestation in a particular area. The dissertation addresses five goals: *first*, examining the extent to which the neoliberalization of nature has been articulated in REDD+ and how REDD+ outcomes have been affected by Indonesia's social and political landscape; *second*, investigating governmental rationalities, technologies, and practices through REDD+, and how these

emerging forms and techniques could (or could not) engender new environmental subjects; *third*, analyzing the translation of several elements in REDD+ into project practices; *fourth*, elucidating how the narratives of conservation and development have been played out in project development and implementation; and *finally*, examining the significance of local agency in shaping the global REDD+ agenda, and the extent to which it provides an arena to negotiate and contest claims to forest resources at the local level.

This dissertation research seeks to provide new insights that reveal a more nuanced understanding of the early impacts of the REDD+ initiative, hence providing theoretical contributions to the burgeoning field of political ecology, particularly in the area of critical climate change studies. To guide the research inquiries, multiple methods have been employed including a household survey, focus group discussions, participant observation, semi-structured and in-depth interviews, and archival research.

ACKNOWLEDGEMENTS

I am deeply indebted to many people and institutions that have supported me in completing this dissertation. My PhD study was generously funded by the Fulbright Presidential Scholarship Program. My dissertation research and writing was funded by a National Science Foundation Dissertation Improvement Grant/ NSF-DDIG (2011-2013), UNDP Human Development Fellowship (2011-2012), Louis Bevier Fellowship for dissertation writing from Rutgers University (2012-2013), Geography Department Teaching Assistantship (Fall 2013), and the Margaret McNamara Memorial Fund/MMMF (2013-2014). Travel grants from the Rutgers University pre-dissertation travel grant, USINDO travel research award (2010), and the working group on Tropical Landuse Change – Rutgers University (2013) also facilitated my dissertation research. I received four travel awards from the Geography Department at Rutgers University, the Graduate School of New Brunswick, Rutgers University, and Oxford University to present initial papers based on my dissertation research at several conferences. I wish to thank all of those institutions for making my PhD journey possible.

I would like to express my deepest gratitude to Richard Schroeder at Rutgers University for his unending support and dedication in reviewing my dissertation proposal and dissertation drafts and writing many recommendation letters. He has been an inspiring academic adviser and mentor who patiently nurtured my intellectual growth. Without his patience, support, and trust, it would have been impossible for me to come this far. I wish to thank Melanie McDermott for her insightful comments on my dissertation proposal and drafts, encouragement to broaden my networks and

perspectives, and willingness to listen to my angst and concerns about the dissertation, sometimes over coffee. I express my gratitude to Trevor Birkenholtz for his insightful comments and continuous support. I am also thankful to Charles Zerner, whose works I have followed for years, for agreeing to be an external reader for this dissertation and for providing his insightful comments.

In Aceh, first and foremost, I would like to express my gratitude to all key informants in Banda Aceh and at the two research sites, who unfortunately I cannot mention one by one here. Since the first day of my decision to conduct the study in that area, I have been welcomed with open arms and helped at every turn. Their wit and courageous acts have never ceased to inspire me. Thank you for the lessons in life. A special thanks goes to Dewa, who has opened the doors to so many key sources and generously shared his knowledge, insightful thoughts, and resources to support the completion of my dissertation research. I also thank my research assistants, Mahlizar and Eko, who patiently assisted me in conducting surveys and focus group discussions, as well as having stimulating discussions in between. To Matthew, Adie, Syarifah, and their families, thank you for your warm welcome and support during my dissertation fieldwork. I also acknowledge assistance from Fachry for his interview transcription and data compilation work.

In Jakarta, I would like to thank several key informants who generously allocated their time for interviews. I thank Giorgio who has generously shared information and time for discussion; Arif for sharing information and his knowledge on Aceh and Feby for genuine friendship. I especially acknowledge Pak Piet and Mbak Adele of AMINEF for their support during my tenure as a Fulbright fellow. I also thank Reed Merrill who

was my work advisor and mentor during my brief stint with the ESP-USAID project, which introduced me to the world of Aceh.

I am grateful for the continuous support and encouragement from my former thesis advisor, Krisnawati Suryanata of the University of Hawaii at Manoa. I thank my colleagues at WOCAN in Bangkok, especially Jeannette Gurung, who has been my professional mentor for years, and Barun Gurung, who has had his own way to encourage me finishing the PhD program.

I have been fortunate enough to be surrounded by very supportive friends at Rutgers. A special thanks goes to Irene who has always been there through thick and thin during the PhD ordeal, and reached out to me even when we were thousands of miles apart. I also thank Debby, my ‘academic sibling’, who has been so supportive and enthusiastic in our dissertation-writing group. I thank other graduate students at the Geography Department for their friendship: Colleen, Jennifer, Mark, Eric, Ariele, Diya, Ida, Katya, Monica, Luke, Jeanna, Taby, Monica, Ali, and Sean. I also wish to thank former and current staff members of the Geography Department for their assistance in navigating through the Rutgers system: Kelly, Theresa, Cleo, Michelle, Betty Ann, Johnny, and Mike. For the last several months of dissertation writing, I spent countless of hours at the Alexander Library and made several friends and acquaintances who would stop and talk to me from time to time and with whom I sometimes had tea or lunch during our writing breaks. I want to especially mention Raysa, Susanna, Tefla, Gulia, Dina, and Muteb. I thank you all for making these months bearable.

I would also like to thank the Indonesian communities in the US who have been my ‘surrogate’ families during my stay here. I express my gratitude to Dorita, who has

tirelessly provided support all along, ears to listen, and suggestions to keep me grounded. I would also like to thank Merlyna, for her genuine friendship and support, and for spending countless hours to chat whenever I needed an intellectual and moral boost. I thank Harnida and Taufan, Arie, Ayu, TH Rabu families, Bari, Upik, Ethika, Tri, Handi, Ronny, Wan, Putra, and Ika for their kind friendship. Furthermore, I wish to acknowledge Joan Scanlan for her amazing proofreading and editing work.

I am fortunate to be blessed with many siblings, nieces, nephews, and relatives who have been very supportive of my intellectual endeavors early on. Special shout to Mbak Ida, Mbak Sun, Mbak Khana, and *Nda* (Mega) who have never given up on me and have always been there to back me up whenever I doubted the life path I have taken. Finally, I dedicate this dissertation to my late father and mother who never had a slight doubt about their daughter's dreams, and who nurtured me with their endless love to be the person who I am today. I am eternally grateful to have such wonderful parents. Thank you is an understatement.

DEDICATION

This dissertation is dedicated to:

My late father and mother:

Usman and Siti Marfu'ah

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LIST OF ACRONYMS

AFEP	Integrating Environment and Forest Protection into the Recovery and Future Development of Aceh project
AMAN	<i>Aliansi Masyarakat Adat Nusantara</i> (Indigenous People National Alliance)
AWG-LCA	Ad Hoc Working Group for Long-Term Cooperative Action
BAPENAS	<i>Badan Perencanaan Nasional</i> (National Planning Agency)
BAPPEDA	<i>Badan Perencanaan Daerah</i> (Regional Planning Agency)
BAPEDAL	<i>Badan Pengendalian Dampak Lingkungan</i> (Environmental Impact Management Agency)
BAL	Basic Agrarian Law
BFL	Basic Forestry Law
BKSDA	<i>Balai Konservasi Sumber Daya Alam</i> (Natural Resources Conservation Bureau)
BNP	<i>Badan Pertanahan Nasional</i> (National Land Agency)
BUK	<i>Bina Usaha Kehutanan</i> (Forest Business Unit)
CCBA	Climate Community and Biodiversity Alliance
CC	Carbon Conservation
CDM	Clean Development Mechanism
CRU	Conservation Response Unit
CO ₂	Carbon Dioxide
CSF	Indonesia Civil Society Forum for Climate Justice
COP	Conference of the Parties
DPRA	<i>Dewan Perwakilan Rakyat Aceh</i> (Provincial Parliament of Aceh)
DI/TII	<i>Darul Islam/Tentara Islam Indonesia</i> (Islamic State/Islamic Indonesian Army)
<i>Depsos</i>	<i>Departemen Sosial</i> (Department of Social Affairs)
DNPI	<i>Dewan Nasional Perubahan Iklim</i> (Climate Change National Council)
EoA	Eyes of Aceh
ESP USAID	Environmental Services Program – United States Agency for International Development
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FFI	Fauna and Flora International
FGD	Focus Group Discussion
FoEI	Friends of the Earth, Indonesia
<i>Forsaka</i>	<i>Forum Sayeung Kalok</i> (Forum for Kalok River)
FPIC	Free, Prior, Informed Consent
GAM	<i>Gerakan Aceh Merdeka</i> (Free Aceh Movement)
GDP	Gross Domestic Product
GHG	Green House Gases
GoA	Government of Aceh

GoI	Government of Indonesia
<i>Golkar</i>	<i>Golongan Karya</i> (Party of Functional Groups)
JKMA	<i>Jaringan Kerja Masyarakat Adat</i> (Aceh's Indigenous Peoples Network)
HGU	<i>Hak Guna Usaha</i> (Business Utilization Rights – plantation permit)
HPH	<i>Hak Pengusahaan Hutan</i> (Forest Concession Rights – logging license)
HKm	<i>Hutan Kemasyarakatan</i> (Community Forestry)
HTI	<i>Hutan Tanaman Industri</i> (Industrial Plantation Forest – plantation permit)
HTR	<i>Hutan Tanaman Rakyat</i> (Community Plantation Forest)
HUMA	Community and Ecology Society for Law Reform
ICDP	Integrated Conservation and Development Project
IFCA	Indonesia Forest Carbon Alliance
IMF	International Monetary Fund
IPCC	Intergovernmental Panel for Climate Change
IPHHK	<i>Ijin Pemanfaatan Hasil Hutan Kayu</i> (Timber Extraction Permit)
IUPHHK	<i>Ijin Usaha Pemanfaatan Hasil Hutan Kayu</i> (Timber Utilization Permit)
IUPJL	<i>Ijin Usaha Pemanfaatan Jasa Lingkungan</i> (Environmental Services Utilization Permits)
KTP	<i>Kartu Tanda Penduduk</i> (National Identification Card)
LOGA	Law of Governing Aceh
LoI	Letter of Intent
MK	<i>Mahkamah Konstitusi</i> (Constitutional Court)
MoF	Ministry of Forestry
MRV	Monitoring, Reporting and Verification
NAD	Nangroe Aceh Darussalam
NGO	Non-Governmental Organization
PA	<i>Partai Aceh</i> (Aceh Party)
PES	Payment for Ecosystem Services
PDD	Project Design Development
PDI	<i>Partai Demokrasi Indonesia</i> (Indonesian Democratic Party)
PHKA	<i>Pelestarian Hutan dan Konservasi Alam</i> (Forest Protection and Nature Conservation)
PMU	Project Management Unit
PNPM	<i>Program Nasional Pemberdayaan Masyarakat</i> (National Program for Community Empowerment)
<i>Pamhut</i>	<i>Pengaman hutan</i> (forest rangers)
<i>Polhut</i>	<i>Polhut</i> (forest police)
PRISAI	Principles, Criteria, Indicators of REDD+ Safeguards Indonesia
PPP	<i>Partai Persatuan Pembangunan</i> (United Development Party)
SAP	Structural Adjustment Program
Stranas REDD+	<i>Strategi Nasional REDD+</i> (National Strategy of REDD+)
TGHK	<i>Tata Guna Hutan Kesepakatan</i> (Forest Land Use Agreement)

TIPIRESKA	<i>Tim Penyusunan Rencana Strategis Pengelolaan Hutan Aceh</i> (Drafting Team for Strategic Planning of Forest Management in Aceh)
RAN GRK	<i>Rencana Aksi Nasional Penurunan Gas Rumah Kaca</i> (National Action Plan for Green House Gases Reduction)
REDD+	Reducing Emissions from Deforestation and Forest Degradation Plus
R-PP	Readiness Preparation Plan
RTRW	<i>Rencana Tata Ruang dan Wilayah</i> (Land Use Planning)
UKP4	<i>Unit Kerja Presiden Bidang Pengawasan dan Pengendalian Pembangunan</i> (The President's Unit for Development Monitoring and Oversight)
UN	United Nations
UN-REDD	United Nations Reducing Emissions from Deforestation and Forest Degradation Programme
UNDRIP	United Declaration on the Rights of Indigenous People
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VER	Verified Emissions Reduction
VCS	Verified Carbon Standard
Walhi	<i>Wahana Lingkungan Hidup</i> (Friends of the Earth Indonesia)
YRBI	<i>Yayasan Rumpun Bambu Indonesia</i> (Indonesian Bamboo Groves Foundation)

LIST OF TERMS

<i>Adat</i>	Literally means “the way of life.” <i>Adat</i> refers to cultural beliefs, rights and responsibilities, customary law and courts, customary practices and self-governance institutions.
Additionality	In the context of REDD+, it means that the REDD+ project should be able to generate emissions reductions that are additional to what would have happened without any intervention.
<i>Gampong</i>	The lowest government level, usually led by Kuechik. It is also known as Kampong in Acehnese. Gampong is equivalent to village administration (<i>desa</i>) outside of Aceh.
<i>Keuchik</i>	Village Leader. It is also known as Geuchik.
<i>Keujrun Blang</i>	An Acehnese customary institution responsible for decisions related to rice fields such as irrigation, planting, harvesting as well as resolving disputes in relation to rice fields.
<i>Imeum Mukim</i>	The head of Mukim level of administration.
Leakage	The displacement of activities that cause deforestation and/or degradation from the project site to another site.
<i>Mukim</i>	An administrative/governance structure that was originally part of the Aceh Sultanate system. A <i>mukim</i> traditionally covers all villages that are linked to the main mosque in the area.
<i>Musyawarah</i>	A customary process of deliberation and discussion to resolve disputes, usually at the village or neighborhood levels.
<i>Panglima</i> <i>Uteun/Pawang</i> <i>Uteun</i>	Acehnese term of an <i>adat</i> institution on matters related to the management of <i>adat</i> forests including both timber and non-timber forest resources, collecting taxes, advising on forest management and settling disputes regarding <i>adat</i> law relating to forests. It is part of the <i>mukim</i> institutions.
Permanence	The propensity of the reduced emissions not to re-enter the atmosphere. In the context of REDD+, it means that the forest areas designated as part of a REDD+ project will remain forested or un-degraded permanently, or for the duration of the REDD+ agreement.
<i>Peutua Senabok</i>	Acehnese term for the <i>adat</i> institution with authority to arrange the clearing of forests for fields and plantations in mountain and valley areas; resolve disputes over the management of these fields. It is part of the <i>mukim</i> institutions.
<i>Qanun</i>	Local regulations issued by the provincial or district government in Aceh. It is also known as <i>Peraturan Daerah</i> /Perda in other areas in Indonesia.
<i>Sharia</i>	Islamic Law.

CHAPTER 1. Introduction

The calculating exactness of practical life which has resulted from a money economy corresponds to the ideal of natural science, namely that of transforming the world into an arithmetical problem and of fixing every one of its parts in a mathematical formula. It has been money economy which has thus filled the daily life of so many people with weighing, calculating, enumerating, and the reduction of qualitative values to quantitative terms (Simmel, 1903 as cited in Mitchell, 2002, p 80).

1.1 Introduction

In April, 2007, a historic meeting took place in Denpasar, Bali. It was organized by the World Bank and aimed at promoting “avoided deforestation”¹ initiatives, which would later transform into Reducing Emissions from Deforestation and Forest Degradation Plus (REDD+), a potential solution for mitigating climate change. The meeting, which was attended by provincial government representatives of Aceh, Papua and West Papua Provinces, was filled with optimism on the future of carbon trading. During the meeting, Dorjee Sun, an energetic carbon broker and the CEO of Carbon Conservation, an Australian carbon dealer company, delivered a presentation to convince the governors on the potential of avoided deforestation projects as an avenue to support regional development while at the same time ensuring environmental sustainability. Under his proposed plan, investors around the world would pay millions of dollars to

¹ Avoided deforestation refers to an approach to reduce greenhouse gas (GHG) emissions by not clearing forestlands.

forest owners to support forest conservation while maintaining economic growth in the tropical countries. Despite finding the technical explanation of the initiative difficult to grasp, the representatives of three provinces were excited about its potential to provide alternative resources for regional development. After the meeting, the CEO of Carbon Conservation and the Governor of Aceh, Irwandi Yusuf, signed an agreement to collaborate in a project, which later came to be known as the Ulu Masen REDD+ Project.²

REDD+ demonstration activities have been implemented around the globe, particularly in developing tropical countries. They have also been part of the international negotiation processes on climate change, i.e. United Nations Framework Convention on Climate Change (UNFCCC). The United Nations initially conceived of REDD as a market-based climate change mitigation strategy. Under the original REDD initiative, industrialized countries would be allowed to offset their carbon emissions by purchasing carbon credits from developing countries. In turn, the latter would agree to avoid deforestation and reduce forest degradation activities.

Gradually, the REDD framework has been broadened to include social and ecosystem benefits. The Bali Action Plan developed at the 2007 UNFCCC meetings accordingly launched a new initiative known as REDD+, which added goals pertaining to conservation and sustainable forest management to the original emphasis on the

² The meeting was vividly captured in a documentary movie, 'The Burning Season' (Henkel, 2008).

enhancement of forest carbon stocks in developing countries. This re-envisioning of REDD promised a "triple win" solution because it simultaneously promoted green economic growth (via carbon markets), protected the environment, and enhanced local community well-being (Humphreys, 2008; Wollenberg & Springate-Baginzki, 2009; Lawlor & Huberman, 2008; Sunderlin, et al., 2009; Angelsen, 2012). In terms of concrete development goals, this meant that forest dependent communities could use forest conservation incentive payments to improve education, health care and local incomes. In this light, REDD+ projects are seen as contributing to the goals of enhanced livelihood security and better social services.

While opportunities to simultaneously mitigate climate change, conserve biodiversity, and improve local development sound ideal, there are growing concerns regarding the split focus of REDD+ projects. Specifically, critics are concerned that the 'global' objective of reducing carbon emissions could potentially undermine local access to forests used to fulfill livelihood needs. Some scholars have argued that indigenous groups in particular could lose access to the forest under REDD+ projects (Baldwin, 2009; Sunderlin, et al., 2009, 2014; Griffith, 2007). Furthermore, most official REDD+ documents retain an emphasis on emissions reduction and related ecosystem benefits as the *primary* measures of success (UN REDD, 2010; Bappenas, 2010). Important safeguards to help ensure that REDD+ projects work for the poor have been proposed (Peskest. et al., 2008; Griffith, 2007; UN-REDD, 2012), yet robust empirical studies that gauge the effectiveness of the broader REDD+ policy agenda are lacking.

In Aceh, a province that was already among the poorest provinces in Indonesia and was then dramatically impacted by the tsunami disaster in 2004, REDD+ is considered a promising avenue to achieve economic growth and conserve the environment. After the tsunami hit the province, the government relied heavily on international assistance to support its reconstruction efforts. With the withdrawal of most international agencies in 2009, however, the province was forced to devise a new and more sustainable strategy for regional development. In the intervening years, the development agenda shifted toward more active consideration of climate change as a growing threat to human development in the region. The Ulu Masen REDD+ project is a direct expression of this additional concern.

I arrived in Aceh in April 2008, a year after the Bali meeting, accompanying a carbon economy expert to conduct an initial assessment on the possibility of USAID's upcoming project to support the Ulu Masen project.³ By then, there had been influx of potential investors interested in financing the project and international agencies eager to provide technical assistance. Dorjee Sun was considered a hero for Aceh because he had successfully put Aceh in the international spotlight and transformed the province's image from an unsafe and conflict-ridden zone into a promising place for green investment with the establishment of the first REDD+ project in the world.

Without a particular connection, getting access to arrange a meeting or conduct an interview with the 'inner circle' or think tank of the Ulu Masen project was not easy. We

³ I worked as a national watershed management coordinator for a USAID project in 2007-2008, which was implemented in five provinces in Indonesia, including Aceh.

failed to ‘crash’ a lavish party organized by the Governor of Aceh to honor Dorjee’s birthday in our effort to arrange a meeting with them. Along with some technical ‘experts’ from two international NGOs, we then traveled to Jalin Village, located just two hours from Banda Aceh, the capital city of Aceh Province, to conduct a focus group discussion involving some community representatives. The village was considered an ideal place for implementing project activities as the community members had been deemed successful in conserving their local watershed (see Chapter 6). We expected to get a better sense of their understanding of REDD+ and the extent to which they had been involved in project activities. However, to our surprise, none of them knew about either Ulu Masen REDD+ or carbon trading. Mahmud,⁴ an outspoken middle age man who had heard about the Kyoto Protocol from the news on television, posed an intriguing question,

If the Kyoto Protocol was issued in 1992, why do people just come here now and inform us about carbon trading? I do not understand its meaning but I am afraid that the lure of [financial] compensation will dissolve communities’ voluntary commitment to conserve the watershed because we want to maintain the clean water supply.

Mahmud’s statement has been in my mind ever since and inspired me to carry out this dissertation research in Aceh. In particular, I am interested to explore how a global climate change mitigation effort like REDD+ has been translated into policies and

⁴ All of the key informant names mentioned in the dissertation are pseudonym to protect their privacy.

practices, and also to examine the dynamic processes of its interpretation, negotiation and even contestation in a particular area.

1.2 Research Questions and Dissertation Goals

To guide my inquiries, I propose five main research questions: *First, how and to what extent has the neoliberalization of nature been articulated in REDD+?* Here, I am interested to answer the call of critical geographers to investigate “actually existing neoliberalism” in environmental governance (McCarthy and Prudham, 2004; Castree, 2008a, 2010) by exploring the local reverberations of global climate mitigation initiatives and examining how the particular contours of a social and political landscape could shape policy and project and thereby influence the outcomes. While there are some common features of the neoliberalization of nature found in the REDD+ initiative, this study challenges the claim that the rise of neoliberal environmental policies inevitably diminishes the capacity of the state through revealing the important roles played by the state institutions in the process as well as highlighting the continued territorialization practice through REDD+.

Second, what rationales and goals are subsumed under the “plus” in the REDD+ project and governmental technologies employed to pursue those goals? By posing this question, I am interested to examine governmental rationalities, technologies and practices through REDD+ and how these emerging new forms and techniques could engender new environmental subjects (or not) who are able to discipline themselves and their actions in accordance with the pursuit of carbon mitigation reduction goals.

Third, how are REDD+ policies translated into project practices? Through posing this question, I want to examine the translation of several elements associated with REDD+ into project practices, which include REDD+ ideas, benefit-sharing mechanisms, the concept of community, and Free, Prior, and Informed Consent (FPIC). In doing so, I want to elucidate how the translation of those elements could shape project outcomes and identify potential material and social consequences.

Fourth, how are the conservation and development goals of REDD+ coordinated - to what extent are they compatible with each other, and with the original REDD goal of carbon marketing? While it is early to gauge the impacts of REDD+ on conservation and development in Aceh Province, through this question, I want to understand how the narratives of conservation and development have been played out in project development and implementation.

Fifth, how has Aceh's REDD+ project been received by Acehnese - to what extent does it provide an arena to strengthen, negotiate and contest claims to forest resources at the local level? Here, I want to examine diverse responses of local actors and the general population toward governmental tactics and strategies. At this point, I intend to highlight the political agency and capacity of local communities and other actors to react to, resist, or creatively accommodate such interventions.

This dissertation research seeks to provide new insights that reveal a more nuanced understanding of the impacts of such a global initiative, hence providing theoretical contributions to the burgeoning field of political ecology, particularly in the

area of critical climate change studies. Furthermore, I also identify several potential directions for future research on REDD+ based on the findings of this dissertation.

1.3 Theoretical Engagement

While questions related to property rights and access claims, distributive justice (benefit-sharing), competing livelihood strategies, and the ecological and social consequences of global environmental programs have been interrogated by scholars in the burgeoning field of political ecology (Blaikie, 1985; Bryant and Bailey, 1997; Peet and Watts, 2004; Robbins, 2004; Schroeder, 2008), studies that explore these questions within the context of climate change mitigation initiatives represent a new direction for the field. Recent studies suggest that the global political ecology framework could be productively deployed to elucidate climate change issues, for instance the centrality of experts' discourses and knowledge in defining problems and shaping potential solutions to climate change (Peet et al., 2011; Bumpus and Liverman, 2011).

Adopting a political ecology approach, the study contributes to this new research effort through its examination of the re-envisioned REDD+ project. In particular, this research will contribute to the literature devoted to three overlapping issues: critical studies of the global climate change agenda; efforts to 'integrate' conservation and development initiatives; and the expression of political agency in the face of global change interventions.

Critical Climate Change Studies

Over the last two decades, scholarship devoted to the issue of climate change has emerged in a number of different disciplines. Within geography, scholars have critically examined a variety of themes such as the politics of climate change related scientific knowledge claims (Grundmann, 2007; Jasanoff, 2010; Szerszynski, 2010; Baldwin, 2009), equity and justice issues in the implementation of climate change mitigation projects (Brown and Corbera, 2003; Nightingale, 2010; Corbera and Brown, 2010), institutions and governance (Corbera and Brown, 2008), cultural and social contingencies that shape and reshape the implementation of climate policies in different places (Hulme, 2008; Bailey, 2008; Nightingale, 2009), and the significance of carbon offset marketing as a means for capital accumulation (Lohman, 2005, 2010; Bumpus and Liverman, 2008; Lovell, et al., 2009; Lovell and Livermann, 2010).

Since most REDD+ initiatives throughout the globe are still in the preliminary stage, or largely known as the ‘readiness’ phase,⁵ studies devoted to them tend to focus on technical and institutional issues in preparing for implementation (e.g. Angelsen, et al., 2008; Sikor, et al., 2011). By contrast, I situate my own research among more recent critical studies on REDD+ that emphasize the social and political dimensions of the initiative. In the past several years, increasing attention has been devoted to examine REDD+ by addressing a variety of critical themes such as equity and justice issues,

⁵ REDD+ readiness phase usually includes activities implemented at the national level, such as developing a REDD+ national strategy, a national reference level, a robust and transparent forest monitoring system, and conducting institutional and technical capacity building activities, among others.

particularly in regards to benefit-sharing mechanisms (Okoreke and Dooley, 2010; McDermott, et al., 2013; Pasgaard and Chea, 2013; Mahanty, et al., 2013c), institutions and governance (Corbera et al., 2010; Corbera and Schroeder, 2011; Thompson et al., 2011); and discourses around which the initiatives are framed (Beymer-Farris and Bassett, 2012); among others.⁶ Some scholars have also cited potential risks that REDD+ might bring to individual and community livelihoods and potential conflicts that may result from major changes in access to, and distribution of, forest resources and the change of property relations (Nightingale, 2009; Peskett et al., 2008, 2010; Fairhead, et al., 2012; Milne, 2012; Mahanty et al., 2013a, 2013b). Contentions may also arise from the transfer of forest control from local communities to national or global actors (Beymer-Farris and Bassett, 2012). Nevertheless, a detailed ethnographic study that interrogates these critical issues in a particular REDD+ project is still lacking. Therefore, this study documents the processes of REDD+ policy and project development and implementation and explores the potential social consequences of such an initiative. As Indonesia's first REDD+ initiative, the Ulu Masen project presents an opportunity to study early impacts and generate timely recommendations to improve future climate mitigation efforts.

There has been a growing scholarly attention to the need to interrogate REDD+ using the literature on neoliberal environmental governance. In this respect, REDD+ has been described as part of an increasing trend toward neoliberalization of environmental

⁶ Many of these studies draw on experiences from Payment for Ecosystem Services/PES projects.

governance that promotes neoliberal strategies such as deregulation, privatization, decentralization, and reliance on the market to govern the environment (McAfee, 2012; McAfee and Shapiro, 2010; McGregor, 2010; Bumpus and Liverman, 2011). Yet, studies to investigate the extent to which REDD+ initiatives actually function as a neoliberal market mechanism in practice are lacking. This study, therefore, will help fill this gap.

Some studies on neoliberal environmental policies and initiatives have found that their implementation often substantially deviates from core neoliberal principles (Mansfield, 2007; McAfee and Shapiro, 2010; McElwee, 2012; Fletcher and Breitling, 2012). Mansfield (2007), for instance, shows that the state plays a central role in creating and maintaining property rights over the ocean through the processes of ocean privatization and enclosure. Similarly, McElwee's study on PES (Payment of Ecosystem Services) in Vietnam (2012) also reveals a high degree of the state intervention in creating and controlling PES and that the markets fail to materialize. My study in Aceh supports this finding.

Political ecology scholars have argued that neoliberalization of nature is a complex and contested set of processes that is geographically and historically contingent (McCarthy and Prudham, 2004; Heynen, et al., 2007; Castree, 2008a, 2008b). Indeed, neoliberalization processes do not occur in a vacuum but are profoundly influenced by existing policies and institutions in specific national and regional context thereby producing hybrid forms of neoliberalism (Larner, 2003). For example, the findings from studies on PES initiatives in Mexico (McAfee and Shapiro, 2010; Shapiro-Garza, 2013) and in Costa Rica (Fletcher and Breitling, 2012) suggest that despite the initial

conception of PES initiatives as market-based instruments, in practice, they are hybridized with state regulations and subsidies that are inconsistent with market based logics. Following these models, this dissertation seeks to explore the manifestation of the neoliberalization of nature in the context of REDD+ and explore how the political and social backdrop of Indonesia, particularly in Aceh Province, affects the shape and processes of REDD+ policy development and implementation.

Recent contributions in geography and other social sciences, such as Larner (2000), posit that neoliberalism is not merely a set of policies but is instead a new form of “political-economic governance” that is comprised of individuals and institutions in compliance with market norms. Neoliberal policies could, thus, form self-governing and autonomous neoliberal subjects. This proposition has spawned a growing literature that employs the Foucaultian concept of “governmentality” (Foucault, 1991, 1995), “environmentality” (Agarwal, 2004; 2005) or “green governmentality” (Rutherford, 2007) to understand that the creation of market incentives could alter human behavior toward the environment.

Foucault defines governmentality as a “conduct of conduct” that embraces the exercise of discipline over bodies, ‘policed’ supervision of the inhabitants of the sovereign territory, the bio-political regulation of the ‘species life’ of a population, and self-formation through ethical care of the self (Foucault, 1991, 1995; Huxley, 2007). Governmentality, thus, acts from within and is enforced by the subjects themselves. In fact, governmental power is distributed across numerous self-governing actors at many different levels. It is important to note that Foucault’s conception of governmentality

goes beyond state power by looking at how societies use more subtle methods of ‘government’ through a network of institutions, practices, mechanisms, and techniques that regulate social conduct (Foucault, 1991, 1995; Li, 2005). Foucault (1980) considers power not as something that can be held, seized or acquired, but as a phenomenon that is embedded in social relationships between two or more entities. He argues that power is not repressive but ‘productive’ through social construction of subjects rendering the governed governable. It produces subjects, forms their character, and ‘normalizes’ them, making them willing to, and capable of, complying with norms of various forms of propriety. Foucault calls this process “individualizing technology of power” through which power “targets individuals right up to their bodies, in their behavior; it is *grosso modo*, a type of political anatomy, an anatomy that targets individuals to the point of anatomizing them” (Foucault, 2007, p. 160).

Foucault (1991, 1995; Rose, 1999) notes two crucial elements in the production of governmental subjects: *first*, the production of knowledge about the subjects to assist the governing entities to formulate problems to be solved, identify priorities and goals, and rationalize forms of interventions (Rose, 1999); *second*, the creation of technologies of government, such as by establishing institutions and developing policies, documents, etc. to alter people’s conduct (Rose, 1999; Li, 2007). Both elements are closely intertwined,

Equally importantly, the conduct in question had to be made amenable. It had to be susceptible to some more or less rationalized set of techniques or instruments that allowed it to be acted upon and potentially transformed. There was a little point or so it seemed from the perspective of the government, in identifying a problem unless one simultaneously set out some measures to rectify it. The solidity and separateness of ‘problems’ and ‘solutions’ are thus attenuated (Miller and Rose, 2008, p. 115).

Using this analytical framework, scholars increasingly investigate how neoliberal environmental policies work and identify strategies and tactics used to produce and govern neoliberal subjects (Agrawal, 2005; Li, 2007; Birkenholtz, 2009; Ruthland and Aylett, 2008). Ruthland and Aylett (2008), for example, productively combine a governmentality concept with Latour's actor network theory in examining how an assemblage of actors emerges to support efforts that tackle climate change, and how a particular representation of the local environment is developed in the process. They find that the city of Portland has 'successfully' produced 'climate change subjects' through educating its citizens to reduce activities that emit carbon dioxide and other greenhouse gas emissions. They argue that the production of such subjects is not a series of neutral or directionless processes. Instead, certain types of subjects are produced who conduct specific actions, and in so doing divert us away from other courses of action (Ruthland and Aylett, 2008).

In the context of Reducing Emissions from Deforestation and Forest Degradation (REDD+), some scholars contend that the initiative can be seen as a new form of eco-governmentality, one that introduces global norms and storylines based on international carbon economies to govern local human-forest relationships (McGregor, 2010; Bumpus and Liverman, 2011). Therefore, it has been suggested that a governmentality framework could help to assist the examination of the process through which REDD+ initiatives produce certain environmental subjects as well as the disciplinary effects of carbon reductions (McGregor, 2010; Bumpus and Liverman, 2011). The framework could also

be utilized to interrogate how the exercise of power through knowledge production in REDD+ could transform social relations (Bumpus and Liverman, 2011).

Indonesia is an excellent site for pursuing the concerns addressed in the critical climate change literature. A major study of REDD+ in Indonesia is being conducted by the Center for International Forestry Research (CIFOR) as a part of a global comparative study. In addition, several dissertation projects on REDD+ are currently underway in the country. Existing publications on REDD+ in Indonesia focus on the following elements in REDD+ governance: *first*, the importance of secure tenure for REDD+ effectiveness and the extent to which it has been addressed by the REDD+ proponents (Sunderlin, et al., 2009, 2013; Larson, et al., 2013; Resosudarmo, et al., 2014); *second*, the analysis of political economic context in Indonesia, which could provide challenges and opportunities of REDD+ development and implementation and processes (Luttrell, et al., 2014; Giorgio, et al., 2012); and *third*, the processes and challenges of implementing REDD+ social safeguards (Sunderlin, et al., 2014) and benefit-sharing mechanisms (Luttrell, et al., 2014).

Conservation and Development

Numerous efforts have sought to achieve sustainable development by practically and conceptually linking development and conservation activities. This approach is based on the premise that providing rural communities with alternative livelihoods and reducing poverty are the most effective means to achieve conservation goals (Sanjayan, et al., 1997). Proponents seek to direct cash income and other economic benefits to local

communities in order to enhance their receptiveness to conservation activities (Abbot, et al., 2001; Blom, et al., 2010). Unfortunately, these so-called Integrated Conservation and Development Projects (ICDPs) have poor track records. Studies have documented a number of flaws in ICDP projects such as a tendency for communities to develop project dependency due to paternalistic interventions, few positive conservation and development outcomes, and high transaction costs (McShane and Wells, 2004; Grieg-Gran, et al. 2005; Wunder 2005, 2006; Sunderland, 2008). Furthermore, West (2007) finds that different interpretations and expectations on the part of community residents and conservation practitioners have often contributed to these failures. These findings have led scholars to criticize the underlying assumptions of the ICDP approach (Blom, et al., 2010).

REDD+ projects, by contrast, have been portrayed as a new approach to integration with greater potential to bring ecological benefits through reduction of carbon emissions and biodiversity conservation as well as providing social benefits to local communities (Humphrey, 2008; Angelsen, et al., 2008, 2012). REDD+ is also considered a more effective means of safeguarding the environment than “common-and-control” regulation by states or international treaties (Humphreys, 2008). Nevertheless, questions on whether this new initiative can deliver equitable benefit distribution to local communities linger. Some scholars have argued that the initiative is liable to repeat the failure of previous ICDPs in the region (Gene and Aliadi, 2009; Blom, et al., 2010). Others posit that the project is likely to increase the marginalization of indigenous people from accessing the forest, trigger land disputes, and increase state and ‘expert’ control over forests (Griffith, 2007; Lawlor and Huberman 2008; Fairhead, et al., 2012).

Moreover, the global carbon conservation agenda might conflict with local desires to maintain access to forest resources. Critics have suggested that a purely benefits-based approach to conservation fails to comprehend the complex local economic forces motivating the destruction of forest resources (Emerton, 2001; Schroeder, 2000, 2008) and undermines diverse factors (e.g. moral, aesthetic and ethical) that motivate environmental stewardship (West, 2007; Vatn, 2010). In addition, benefits distribution is often carried out in an uneven way (Schroeder, 2008).

Some scholars also raise concerns on the uncertain effects about the REDD+ initiative in terms of a tradeoff between market efficiency and development goals. Oftentimes, the former is given priority (Corbera and Brown, 2010; Osborne, 2011; Hiraldo and Tanner, 2011). Some more recent empirical studies on forest carbon offsets or REDD+ projects provide findings that validate these concerns about uneven access to benefits (Corbera and Brown, 2010; Pasgaard and Chea, 2013), and non-monetary co-benefits are often overlooked due to emphasis on market efficiency (Osborne, 2010, 2012; Botazzi, et al., 2014). In her study of a forest carbon offset project in Chiapas, Mexico, for instance, Osborne (2012) finds that although farmers who participated in the project continue to have formal land rights, they lost access to short term benefits of their land, especially from subsistence and annual cash crops. In addition, building on the broader discussion of the dilemma in reconciling conservation and development goals under REDD+, some scholars have examined how project proponents cope with market and policy uncertainties by combining REDD+ and ICDP approaches (Sunderlin and Sills, 2012).

While it is too early to gauge the impacts of Ulu Masen REDD+ project in terms of its development and conservation outcomes, this dissertation research seeks to extend the conservation and development literature by: *first*, examining the processes through which discourses on conservation and development come into play in the REDD+ project; and *second*, tracking efforts to coordinate both goals.

Political Agency

Most literature on REDD+, and forest carbon offset initiatives more generally, is either heavily skewed in favor of or in opposition to such approaches (McGregor, 2010). Scholars working from such polarized perspectives tend to overlook or downplay the diverse nature of local actors' views and reactions to these projects. This research explicitly examines the complex responses of local people toward REDD+ projects, and how different responses contribute to actively shape the initiative at the local level.

Earlier studies have documented the ways communities have contested development interventions (Scott, 1985; Guha, 1989; Peluso, 1992). In his landmark study in Kedah, Malaysia, for example, James Scott, who productively employs a Gramscian approach, argues that peasants' resistance toward the Green Revolution is often manifested in mundane activities such as food dragging, dissimulation, desertion, false compliance, etc. These "everyday forms of resistance", which "...require [] little or no coordination or planning; make use of implicit understanding and informal networks;...represent a form of individual self-help; [and]...avoid any direct, symbolic confrontation with authority" (Scott, 1985, p. xvi). Informed by Scott's study and other

relevant literatures on agency, resistance against environmental interventions has long been of interest to political ecology scholars. In Java, Indonesia, for instance, Peluso (1992) examines peasants' resistance against state-based forest management by placing it within social history in the region. In this manner, peasant movements are positioned not as unique and discrete events but rooted in the long tradition of forest-based resistance.

However, recent studies suggest more nuanced understandings on the communities' responses toward development and the need for conservation interventions (West, 2007; Li, 2007; Wilshusen, 2010). Many improvement schemes in the neoliberal age not only involve a plethora of actors and operate in multiple scales but also increasingly use persuasive strategies to instill new behaviors and produce subjects, instead of coercive measures (Agrawal, 2005; Li, 2005, 2007; West, 2007). In this context, Li (2005) argues that Scott's binary categories of state/society, state space/non state space and power/resistance are inadequate to illuminate the logic of improvement schemes and their effects and provide a limited understanding of the responses of differently positioned local actors toward the schemes. Borrowing a Foucaultian approach on power, Li (2005) suggests that power and resistance cannot be separated. Indeed, Foucault acknowledges the inherent possibility of resistance as he puts it, "Where there is power, there is resistance, and yet or rather consequently, this resistance is never in a position of exteriority in relation to power" (Foucault, 1980, p. 95).

Many improvement schemes entail not only contestation and negotiation but also compromise among actors that ultimately transform people's identities, spatial practices, and the interventions themselves. For example, Wilshusen's study on the impact of

neoliberalism in Mexico suggests that local communities have creatively accommodated neoliberal policies and programs by adopting “hybrid logics, property regimes, forms of organization and modes of change” (Wilshusen, 2010, p. 769). In Indonesia, some conservation projects have created possibilities for local communities to shift power relations by representing themselves as indigenous environmentalists possessing valuable local knowledge of resources. They have drawn on such identity claims to assert their territorial claims and rights over resources (Tsing, 1999; Li, 1999, 2002, 2007; Lowe, 2006). In addition, Li (2007) also provides rich stories about how development interventions work to provoke political agency of local populations by productively combining Gramscian and Foucaultian approaches.

Considering the long history of Acehnese resistance toward the central government’s control over resources, the need to pay particular attention to local agency and local capacity to shape the REDD+ project is crucial. As will be described in Section 5 of this chapter, Aceh has been known as a conflict zone where the separatist, Free Aceh Movement (GAM) operates. The change of political landscape in Aceh, especially after the signing of peace agreement between GAM and the Indonesian government in 2005, has opened up wider opportunities for local communities to be engaged in development initiatives in the region, including the REDD+ project. Community engagement and support for carbon conservation goals are critical elements of project success (CIFOR, 2007; Sunderlin, et al., 2009; Awono, et al., 2013). Therefore, this dissertation explores Acehnese strategies to compromise, collaborate with, or resist the REDD+ project, and places these different responses in the broader historical context of engagement with

various development and conservation agencies. Viewing REDD+ in Aceh from these perspectives, it is hoped that this research will open up some possibilities and alternative strategies to enable people to gain new benefits from climate mitigation policies or projects.

1.3 Research Methodology

Pre-dissertation Methods

A pre-dissertation research grant from the Graduate School of Rutgers University enabled me to conduct eight weeks of preliminary research in Jakarta and Banda Aceh in 2009. I initially planned to focus my dissertation research on indigenous politics in the context of decentralized forest governance. Drawing on my network of professional contacts, I spoke with environmental activists, policy makers, and various actors both at the national and provincial level. Most people that I spoke to encouraged me to shift my research focus to an emerging initiative: the Ulu Masen REDD+ Project. The fact that the project was the first REDD+ project being implemented in Indonesia, the world's second largest contributor of carbon emissions resulting from deforestation, suggested that it could be closely studied as a model for future climate mitigation initiatives.

During this trip, I was able to interview numerous key actors engaged in the Ulu Masen REDD+ project including Flora and Fauna International (FFI) employees, local forest agency staff, and some community representatives in the Aceh Besar District. I examined project implementation progress and explored views on opportunities and

challenges that project personnel had already encountered. I also attended two focus group discussions involving local communities. My findings from this trip indicated that some forest communities living in the Ulu Masen area had unclear information about how the REDD+ project worked and how project benefits would be distributed to them.

I made a second two-week field visit to Banda Aceh in November 2010 as part of a USAID funded research team for a study on “Gender and REDD in Asia”. Once again, I was able to conduct interviews with FFI personnel, members of the Aceh REDD task force, the staff members of the “Aceh Green” secretariat, and local community members. This research allowed me to update myself on the progress of project implementation and explore potential site selections for research purposes. I also observed the dynamics of the relationship between local communities and other stakeholders by attending project meetings. I conducted informal interviews with various key actors at the national level to illuminate the broader picture of REDD+ policy development and implementation in Indonesia. I also collected numerous project documents and meeting notes. In July 2011, while attending an international land tenure conference in Lombok, Indonesia, I interviewed several Acehnese and national activists on REDD+ progress and broadened my research contacts before commencing formal dissertation fieldwork.

Dissertation Methods

Central to a political ecology approach is illuminating how multi-scale political and economic processes impact people either in urban or rural settings. Thus, in carrying out my dissertation research, I employed multi-sited ethnography to allow careful and in-

depth critical analysis of REDD+ policies, whilst paying attention to the complex social relations between various actors at multiple scales. While deploying this method, I also followed West's suggestion to keep in mind "the agency at and within each scale" (West, 2007, p. 24).

In August 2011, I returned to Indonesia to carry out dissertation field research in Jakarta, Banda Aceh and two selected village sites: Jalin and Turue Cut Village. Jalin Village, which is administratively under Aceh Besar District, is a village surrounded with scattered forest cover needing sustainable forest management. In contrast, Turue Cut Village, which is administratively under Pidie District, is surrounded with intact forest known for its rich biodiversity needing protection. By choosing those villages, I wanted to compare interventions implemented by the project proponents and examine the impacts of those interventions. In collecting the data, I combined multiple methods including semi-structured and in-depth interviews, household surveys, focus group discussions and participant observation. I spent about 10 months performing these activities, which involved more than 200 research participants (see Appendix 3). Details of each research activity are described below.

Semi-structured and In-depth Interviews

In Jakarta, I performed semi-structured and in-depth interviews with REDD+ policy makers and donor agencies and environmental activities through snowball sampling drawing from my previous professional contacts. I was able to explore the debates and processes of translating REDD+ policy at the national level and the

institutional complexity facing those charged with implementing the policies. I also extended my analysis by conducting an interview with civil society representatives to illuminate their views and positions toward the initiative.

In Banda Aceh, I conducted in-depth interviews with policy makers, key project staff members and civil society representatives. I initially came to Aceh as an officer of a USAID project implemented in several provinces, including Aceh. One of the project sites was Jalin Village, one of my chosen field sites. On the one hand, that previous experience gave me the advantage of having known most of the village leaders and some important key informants related to Ulu Masen REDD+, so that they were eager to talk to me and assisted me as needed when I started conducting my own research. On the other hand, it clearly influenced my perceptions and to a certain degree shaped the responses of the key informants. However, no matter how engaged the researcher, it has been argued that subjectivity and reflexivity are inherent features of qualitative research (Denzin and Lincoln, 2013). Thus, I endeavored to maintain an awareness of my positionality when carrying out the research and tried to make to be transparent by making clear my research agenda and my role as a researcher (not a development agent). In order to represent the events and narratives as objectively as possible, I made a follow up trip to Aceh in June, 2013 to communicate some initial findings and obtain key informants' feedback to clarify certain issues.

In Aceh, I also became increasingly aware of the fact that scheduling an interview and conducting it in a formal setting such as government's office was not as easy as I imagined. Initially, I arranged some interviews several days beforehand to ensure that the

key informants could allocate around an hour of their time to participate. Nonetheless, many of them became unavailable in the last minutes prior to the interview. I realized that it was indeed easier to schedule an interview on the same day or just try to get hold of them in one of the variety of social venues in Aceh. Fortunately, I had local contacts who understood such situations and were able to inform me where and when to ‘catch’ important figures in the Ulu Masen REDD+ project. On some occasions, I simply waited in a well-known coffee shop where many Aceh political figures met. In Aceh, coffee shops (*warung kopi*) are significant social venues for the majority of people, particularly men. It was indeed easier to talk to most participants in the coffee shop as they became much more open and relaxed in engaging in the conversation.

With policy makers and the project proponents of Ulu Masen REDD+, I inquired about their understanding of REDD+, the rationale of creating and implementing REDD+ policies, and the Ulu Masen project. We discussed how these could contribute to conservation and development goals, the political processes behind the project creation, and the strategies that they used to pursue those ends. I also asked them to explain their rationales of governing space through the new forest zoning system, challenges that they encountered, and the strategies used to enforce zoning restrictions through the hiring of forest guards and community forest rangers. Project personnel and former project staff members were interviewed about the process of translating REDD+ policy and strategies taken to coordinate these potentially competing goals. I inquired about the participatory mapping exercises they conducted with project participants and what goals they felt were achieved through those interviews.

In the village sites, I performed in-depth interviews with villagers and village leaders to deepen the topics discussed during focus group discussion, especially on the change of forest access and use as well as gender differentiated access to forest resources. I also conducted interviews on the history of development and conservation in the area as local residents understood it, how local residents have responded to such initiatives, and what goals and aspirations locals hold for the future. I also delved further into local residents' feelings toward community rangers, forest guards and project proponents, and how the nature of these relationships has influenced their attitudes toward project activities.

Based on the household survey, most villagers had limited understanding about REDD+. Therefore, in the interviews with villagers, I only inquired whether they had heard about REDD+, and if so, the extent to which they understood REDD+ and the degree of villagers' participation in project design and implementation. I conducted in-depth interviews on this topic with village leaders and community rangers and explored their perspectives on whether REDD+ provided solutions to local development and conservation needs. I asked them to explore the extent to which their interests and concerns were understood and acted upon by the project proponents as well as their aspirations regarding benefit distribution mechanisms. I also asked them what, if anything, they had done to help achieve the REDD+ conservation goals.

With the community forest rangers, I conducted in-depth interviews on their motivation to join the program, their understanding about REDD+ and their perspectives about the development and conservation goals under the initiative, their strategies to

achieve the goals, and their assessment of villagers' contributions and reactions to conservation activities.

Participant Observation

I conducted participant observation while attending several REDD+ meetings in Jakarta, Banda Aceh, and in the project sites. In Jakarta, I was able to participate in a number of meetings held by the Ministry of Forestry and UN-REDD Indonesia. In Banda Aceh, I attended a consultation meeting organized by the national REDD+ task force and was engaged in a regional workshop involving carbon players in Southeast Asia. I attended a number of village meetings involving project proponents and villagers. This method revealed interesting insights on how different stakeholders interacted with one another, and the dynamics of implicit power relationships that could not be observed during individual interviews. I observed what concerns and issues were being raised and negotiated, which strategies were being taken by the villagers to assert and defend their claims, and the strategies adopted by project personnel to respond to them. Observing these meetings also allowed me to understand the ways the project proponents articulated and explained the REDD+ initiative in the public setting.

Focus Group Discussions (FGDs)

Two research assistants were hired to help me conduct focus group discussions and a household survey. Focus group discussions were carried out in the two selected village sites identified above. In each village, I initially conducted a village level meeting

with village leaders and members to introduce myself as a researcher and explained planned research activities in the village. During this visit, I also ensured that the communities understood my role as a researcher.

The focus group discussions that followed were conducted with women and men in each village through stratified random sampling based on the household survey. I held men's and women's group discussions separately in each village to allow both groups to express their opinions more freely. In each group, I asked residents to discuss the history of environmental change in the region, particularly in forested areas, and related changes in the seasonal availability of forest resources. I also asked them to discuss the change of institutions governing forest access and gendered access to use of forest resources. I probed their understanding of REDD+ project objectives and to what extent they had been involved in the project activities.

Household Survey

I initially collected secondary socio-economic data on Jalin and Turue Cut Village through a review of government records and other available studies carried out on livelihoods and economic activities prior to project implementation. When the study was carried out, Jalin Willage population included 67 households (224 inhabitants). For the most part, the people of Jalin are ethnic Acehnese. The majority are farmers and casual laborers (Gampong Jalin, 2010). In 2011, Turue Cut Village population was 264 households (460 men and 475 women). There is no clear record on the composition of ethnic origins in the village. As detailed household income and land ownership data was

not available in both villages, I used a simple random sampling method. In doing so, along with two research assistants, we followed a path of travel in each village and selected one of every two (Jalin Village) or five households (Turue Cut Village) that we passed until a targeted quota met. Through household surveys, I gathered socio-economic data in both sites to better understand household income levels and asset distribution (including land ownership), and collected detailed data on resource based livelihood strategies (see Appendix 4 and 5). In addition, I explored different uses of forest resources by men and women, the amount and value of forest resources harvested and used, and communities' understanding of and participation in REDD+ project activities.

In order to triangulate the data gathered from the household surveys, participant observation and interviews with villagers were conducted, through which I also gathered more in-depth information about the history and pattern of forest resource access and use, concerns and issues being raised and negotiated by the villagers, and the strategies taken by the villagers to assert and defend their claims.

Archival Research

I conducted archival research in Banda Aceh and Jakarta to gather primary source documents such as policy documents, proposals, relevant government/non-government reports, meeting notes, and government records on forest governance and development in Aceh, and as well as secondary literature produced by other scholars. I traced the processes of REDD+ policy development and implementation, explored the perspectives of state and non-state actors toward these processes, and investigated institutional

complexities to implement the policies at the national and local level. At the Ulu Masen project, I gathered information on the processes of project development and implementation. I conducted content analysis of project documents (meeting notes, plans and reports) to understand the project rationale, tactics and strategies taken by the proponents to translate the project on the ground, and how they navigated through local complexities.

1.5 Area Background and Research Context

Aceh, strategically located in the northern part of Sumatra, is known as a resource rich and rebellious province in Indonesia. In some respects, it is an ideal place to conduct the study about the politics of REDD+ development and implementation. Not only was the first REDD+ project implemented in the area, but also the long history of the Acehese struggle to gain independence from Indonesia provides a rich context in which to understand the ways local actors negotiate, contest, and ultimately shape REDD+ initiatives. In this section, I provide an area background and historical context of the rebel movement, which cannot be separated from the struggle over resources.

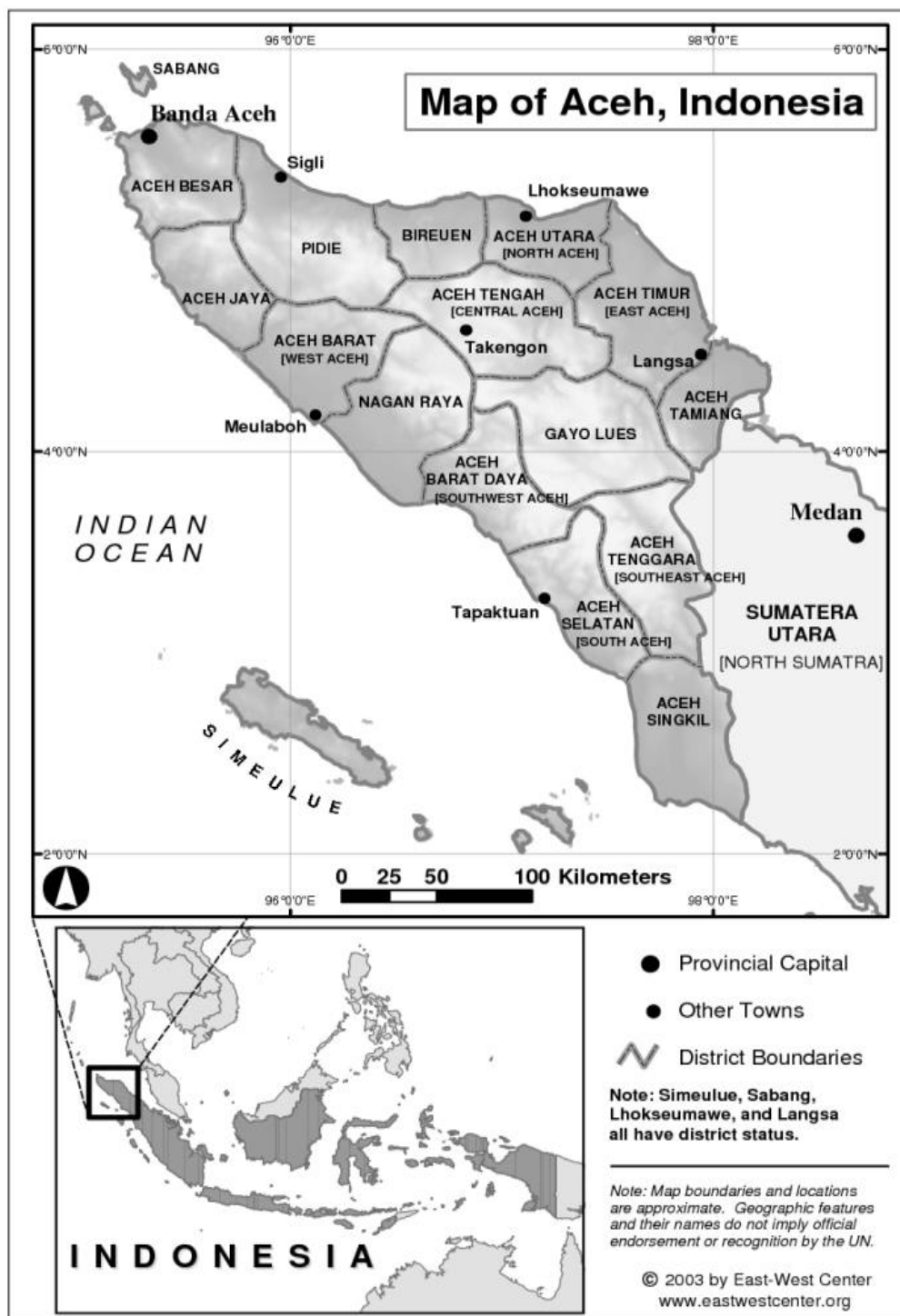


Figure 1.1 Map of Aceh

Ulu Masen Area and Forest Governance

Compared to other regions in Indonesia, Aceh still has significant intact forest area and is accordingly an important REDD+ target. The relatively intact forests are due in part to the fact that prolonged civil conflict effectively rendered Aceh's forests unsafe for would-be exploiters for nearly three decades. The province is also heavily mountainous, and this has prevented easy access by loggers (EoA, 2009; McCulloch, 2010).

The Ulu Masen ecosystem is a contiguous forest area located in the northern part of Aceh Province that covers approximately 750,000 ha. It lies across five districts including Aceh Besar, Pidie, Pidie Jaya,⁷ Aceh Jaya and Aceh Barat. The area has various climatic zones from the driest on the east coast to a wet area on the west coast. It is also the home of rich biodiversity, which includes charismatic and endangered species such as the Sumatran tiger, rhinoceros, orangutan, and elephants, thereby making it a target for protection by environmental conservation organizations. The area is also known for its high commercial value tropical hardwood trees, like *seumaram*, *merbau* (*Instia bijuga*), *kruing* (*Dipterocarpus confertus*), and *meranti* (*Shorea*) (PDD, 2007). Interestingly, the term Ulu Masen ecosystem is relatively unknown among locals, and was initially used by FFI to name its 'area of intervention' for conservation purposes. As suggested by Scott (1998), place naming is part of a larger project of social simplification to make a certain area 'legible' for governmental intervention (see Chapter 5).

⁷ Pidie Jaya District, which was initially part of Pidie District, was established in 2007. Thus, it does not appear in Figure 1.1 produced in 2003.

The Ulu Masen ecosystem is surrounded by 548 *gampong* (village) with a combined population of approximately 130,000 people, most of whom are members of indigenous ethnic groups (PDD, 2007). These *gampong* are administratively organized under 78 *mukim*.⁸ The majority of populations living adjacent to the Ulu Masen forest are farmers whose livelihoods rely on the availability of suitable land and soil fertility (Anonymous, 2011). Forest resources also contribute to local livelihoods, according to which local communities collect timber and non-timber forest products, most commonly rattan and *jernang* (dragon blood).⁹ Other significant non-timber forest products include: fish, deer, birds, and a variety of plants.

⁸ *Mukim* is an administrative/governance structure that was originally part of the Aceh Sultanate system (Dunlop, 2009). A *mukim* traditionally covers all villages that are linked to the main mosque in the area. *Mukim* is often equivalent to *kecamatan*/sub-district.

⁹ *Jernang* is used as a dye and is usually sold for cash income (PDD, 2007).

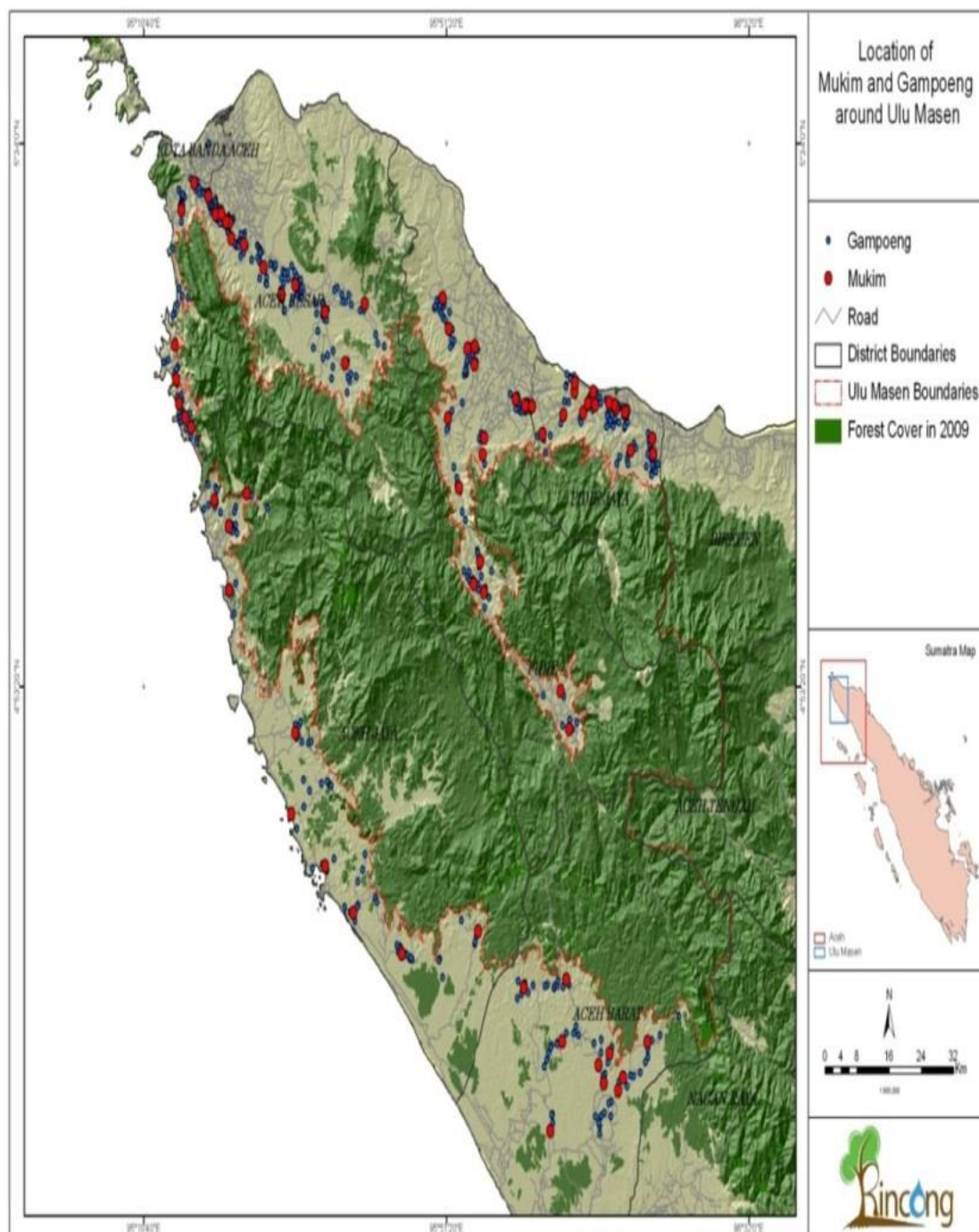


Figure 1.2 *Gampong* and *Mukim* around Ulu Masen Area

Property relations in the Ulu Masen forest are typical for Indonesia, in which the area classified as forest is considered as the state property. Despite *de facto* customary forest tenure arrangements that continue to be practiced by local communities, they usually do not have formal property rights over the forest area. Hence, forest tenure disputes are common. Local communities arrange their land tenure around a mixture of communal and individual property rights (Dunlop, 2009). The communal land tenure is usually in the form of permanent communal grazing lands, locally known as *padang meurabe*, where farmers take their livestock on a daily basis taking turns to watch over them (Anonymous, 2011). While the majority of landowners do not have formal land title certificates, some of them have locally recognized documents signed by the village head (*keuchik*) or the sub-district head (Dunlop, 2009). Those documents are usually in the form of letter of evidence of ownership rights (*Surat Keterangan Hak Milik*). If land disputes occur, the villagers usually turn to the *keuchik* and other customary structures (*imeum mukim*, *tuha lapan* and *tuha peut*) to assist in mitigating the conflict.¹⁰

Aceh forests have been targeted for commercial timber extraction since the colonial era because of their high quality hardwoods. During the Suharto era (1965-1998), forest areas were systematically extracted, in which 75 percent of the total area in Aceh was allocated for logging and plantation concessions (DTE, 2000). By 2000, there

¹⁰ *Imeum mukim* is the head of *mukim* and is considered as the executive body of the customary institution; *tuha peut* (literally means four members) is a legislative body in the village that consists of four members who will make important decisions and *tuha lapan* (eight members) is an extension of *tuha peut* that is responsible for carrying out functional decision making at the village level (*musyawarah desa*) and resolving neighborhood disputes (Nazamuddin, et al., 2010).

were at least 28 logging companies and five timber estates operating in the province. In addition, Aceh's topographical and climatic condition has also been considered ideal for oil palm plantations; hence some plantation concessions have been issued to oil palm plantation companies (EoA, 2007). However, plantation operations were severely limited during the conflict as many plantation workers and farmers fled from the area.

Legal and illegal logging activities have long been part of the local economy (see further in Chapter 5 and 6). In the Ulu Masen area, it is conservatively estimated that approximately 4,400 people are employed in logging industries with a range of occupations such as timber cruisers, chainsaw operators, and road builders (PDD, 2007). This figure does not include several thousand people employed in the wood processing industries around the Ulu Masen area. Illegal logging has been widespread in Aceh even during the conflicts. McCarthy's research in the southern area of Aceh shows that illegal logging was conducted by intricate logging networks that involved various actors, such as military officers, police, GAM combatants and local communities (McCarthy, 2006).

Since the tsunami hit Aceh in 2004 and the signing of a peace agreement between the government of Indonesia and GAM in 2005, forest areas have become safer and more accessible. As a result, illegal logging has dramatically increased (EoA, 2009). Moreover, the need for cash to pursue post-tsunami reconstruction goals has led many in the province to clear forests and produce palm oil based biofuels. These factors have heightened international concerns regarding increased carbon emissions from the province.

In response to such concerns, Indonesia's first REDD+ project, the Ulu Masen initiative was developed by the Aceh provincial government in collaboration with Fauna and Flora International (FFI) and Carbon Conservation (CC). This initiative aims at making carbon financing a means to improve community livelihoods and provide incentives to protect forests. The Ulu Masen project is expected to avoid over three million tons of carbon emissions annually, and contribute up to USD 432 million toward sustainable economic and social development over the next 30 years (PDD, 2007). Carbon finance funds would be established to 1) offset all or most of the opportunity costs of avoiding deforestation; 2) support project activities and operation; and 3) contribute direct benefit to local communities and forest rangers.

Natural Resources and the Background of the Aceh Conflict

Scholars have argued that the struggle over natural resources has contributed to conflict in Aceh, even though it was not the sole or primary causal factor (McCarthy, 2007; Aspinal, 2007; Graham, 2005). McCarthy (2007) contends that the state's centralized mode of natural resources extraction produces "a demonstration effect," which amplifies other grievances and strengthens the articulation of a separatist discourse. Despite Aceh's significant contribution to national revenue from the oil and gas sector, until very recently the province remained one of the poorest provinces in Indonesia. Multinational companies and Jakarta-based actors have benefited most from resources extraction in Aceh (McCarthy, 2007; Sulaiman, 2006). This situation, entangled with the state's increasingly repressive measures to curb the rebel movement,

fueled anti Jakarta sentiment among the Acehnese and increased the popularity of the Free Aceh Movement (*Gerakan Aceh Merdeka*/GAM).

Acehnese struggles against the Indonesian government started early on in the 1940s. Prior to Dutch colonialization of Sumatra, Aceh had functioned as a separate, self-governing sultanate with its own distinct language, institutional order, and culture (Sulistyono, 2001). Under the rule of Sultan Iskandar Muda in the 19th century, Aceh become the most important trading center in Southeast Asia. Acehnese leaders fought against Dutch attempts to colonize the archipelago (that later became united as the Republic of Indonesia). When Indonesia declared its independence in 1945, the conflict between the Indonesian state and Aceh emerged. One of the important sources of early dispute between Aceh and the Indonesian government was a disagreement on whether or not the new state would be an Islamic state (Sulistyono, 2001). While national leaders of Indonesia were still debating this issue, the Aceh population was already united under Islam. Thus, Aceh decided to remain in its pre-colonial independent status. Indonesia's first president, Sukarno, successfully convinced Aceh leaders to join the Indonesian Republic, promising that Aceh would be granted autonomy status to govern its region based on Islamic Law. Believing in the president's promise, Aceh agreed to join Indonesia and gave generous contributions to support the young republic, such as purchasing Indonesia's first aircraft and financing various government expenses.

Nonetheless, the promise was never fulfilled. As a result, an insurgent movement known as *Darul Islam/Tentara Islam Indonesia* (DI/TII or Islamic State/Islamic Indonesian Army) emerged in early 1953 (Sulistyono, 2001; McCarthy, 2007). By 1961,

as the Acehese struggle gained no result, rebellion leaders negotiated a special status for the province (*Provinsi Daerah Istimewa Aceh*) within the Indonesian Republic. The Government of Indonesia subsequently allowed Aceh to enforce Islamic Law for Muslims within its territory in 1962 (Miller, 2006).

However, after only a decade of peace in Aceh, discontent re-emerged in the early 1970s. During this phase, natural resources and distributional injustice issues dominated, particularly after the discovery of the largest Liquid Natural Gas (LNG) field in the world in Aceh Utara in 1971 by Mobil Oil Indonesia. This led to the forced resettlement of Acehese villagers, arrival of non-Acehese and non-Muslim skilled workers to operate the oil and gas industry, and the increasing presence of military force to secure the lucrative asset (Miller, 2006). While the GDP of Aceh dramatically increased because of the contribution of natural gas revenues, the poverty rate also increased sharply by 239 percent during the period from 1980-2002 (Graham, 2005). The situation was exacerbated by the state's excessive control over natural resources and unjust distribution of benefits from extractive industries, particularly under the Suharto administration (1965-1998). Those complex factors led to the renewal of struggles involving DI/TII activists and a group of younger Acehese intellectuals under a new separation movement flag known as GAM (*Gerakan Aceh Merdeka/ Free Aceh Movement*) (McCarthy, 2007).

GAM was initiated by Hasan di Tiro, the son of a prominent religious leader in the Pidie District who was a longtime supporter of DI/TII. He spent some years abroad, earning a master's degree in Columbia University and working as an intern for

Indonesia's permanent mission at the United Nations (McCarthy, 2007; Sulaiman, 2006).

When he returned to Aceh in 1974, he failed to secure a contract to build one of the pipelines for Mobil's natural gas extraction field in Arun, North Aceh (Pane, 2001 as cited in McCarthy, 2007; Sulaiman, 2006). It was argued by some Acehnese that this disappointment was one of the reasons that led Tiro to advocate the separatist cause. Later on, GAM often targeted Arun oil and gas facilities in their insurgent operations (Pane, 2001 as cited in McCarthy, 2007).

With his educational background and work experience in the United Nations, Hasan di Tiro incrementally reformulated the Acehnese struggle toward a secular direction to fit with the modern independence movement (Pane, 2001 as cited in McCarthy, 2007). Unlike the rebel movement's predecessor, DI/TII that used Islam as its ideological base, Tiro deployed the decolonialization concept from international law as GAM's ideological foundation. He argued that the Acehnese had been subjected to Javanese colonialization under the form of the Indonesian Republic (McCarthy, 2007). In addition, the benefits of natural resources extraction had mostly flowed out of Aceh into Java, benefiting the Indonesian military forces and others, hence marginalizing the political interests of the Acehnese. Therefore, GAM called for separation from the Indonesian state and advocated for economic justice, especially with respect to lucrative oil and gas exports. There are two main discursive differences between GAM and DI/TII: *first*, unlike DI/TII, which tried to establish an "Islamic Acehnese Republic", GAM demanded Acehnese control over resources; *second*, GAM sought Acehnese

independence while DI/TII sought more rights under the already established Republic of Indonesia (McCarthy, 2007).

While initially the GAM insurgency could hardly mobilize a mass base, it became increasingly popular and gained wider support from the Acehnese due to prolonged military repression and massive human rights abuses (Mahdi, 2004). The collapse of Suharto's regime in 1998 transformed the country's political landscape. Many civil society activists increasingly pressured the government to carry out reform in various sectors and to be held accountable for human right abuses in conflict zones such as Aceh. In response, the Government of Indonesia (GoI) attempted to renegotiate with GAM and stipulated the special autonomy laws to win over the hearts of Acehnese (McCarthy, 2007; Sulaiman, 2006; Miller, 2006). The most important laws include Law 18/2001 and Law 44/2001, which allowed Aceh to receive 70 percent of revenues from oil and natural gas mining and control 70 percent of the hydrocarbon reserves and other natural resources in the province. This endeavor was meant to address distributional injustice and Acehnese grievance with respect to natural resources benefits (McCarthy, 2007).

In addition, Aceh was also allowed to enforce Islamic law and has since established a Sharia court for Muslims through the issuance of Law 44/1999 (Miller, 2006). Nevertheless, implementing the laws proved difficult, particularly in the absence of a transparent and accountable local government, which instead has been beset with corruption and patronage politics (McCarthy, 2007). In such a situation, the special autonomy status only benefited Acehnese administrative elites and business. Thus, efforts to restore peaceful conditions in the region were fruitless before the tsunami disaster

engulfed the region in 2004. A peace agreement was subsequently signed between GAM and the GoI in 2005.

1.6 Dissertation Structure

This dissertation is organized in six further chapters. In Chapter 2, “REDD+ in Indonesia,” I explore the background of REDD+ policy development at the international level and the process of translating the policy in Indonesia. I draw on literature on neoliberal environmental governance and shed light on some common ways that REDD+ contributes toward the neoliberalization of nature. However, I extend my examination to analyze how the political and social context in the country contributes to the process of policy development. I also explore the engagement of civil society representatives in policy development and the ways in which they utilize formal political channels that are available to promote indigenous and local communities’ rights over resources and forest tenure reform.

Chapter 3, “From Aid to Trade: The Making of The Ulu Masen REDD+ Project”, describes the political rationalities and processes of Ulu Masen project development. I start the chapter by elaborating a theoretical framework and describing the particular historical conjuncture that made the project attractive for Aceh. I then dissect and analyze project documents, meeting notes, and interviews to understand the governmental rationality of the project, and how the ‘calculation’ of nature and people is central to the process. The following three sections describe different positionalities and perspectives

of three project proponents: the Government of Aceh (GoA), Carbon Conservation (CC) and Fauna and Flora International (FFI).

Chapter 4, “REDD+ in Translation: Community, FPIC, and Benefit Sharing Mechanisms,” describes the process of translating the REDD+ policy model into practices. The chapter begins by explaining how several elements of the REDD+ project have been articulated by project proponents and how these acts of translation could lead to certain social and political consequences. These elements include: the concept of REDD+; Free, Prior and Informed Consent (FPIC); participation; community; and benefit sharing mechanisms. In the last section I focus my investigation on the ways in which one of the project proponents, FFI, translates these ideas into project practices and navigates through local complexity.

In Chapter 5, “The Fantasy of Fixity: Governing Ungovernable Space and People,” I investigate the project proponents’ efforts to govern space and people through two main governmental strategies: *first*, the spatial strategies, which include the revision of provincial land use planning and participatory mapping; *second*, the hiring of community and forest rangers to secure Ulu Masen forests. I extend my investigation by analyzing the ways communities have reacted to these efforts and illuminate the limits of ‘government’.

Chapter 6, “Encountering REDD+: Two Case Studies”, I further investigate the attempts to produce REDD+ subjects by drawing on two cases studies in Jalin Village, Aceh Besar District and Turue Cut Village, Pidie District. I situate both case studies in the long history of community engagement with development and conservation

interventions to illuminate the ways communities' political agency is shaped by their encounter with various development agents. The last chapter, "Conclusions" describes the recent development of Ulu Masen REDD+ in the context of a rapidly changing political situation in the province. I also provide conclusions for the dissertation and identify potential future research endeavors.

CHAPTER 2. REDD+ in Indonesia

2.1 Introduction

Since 2005, the idea of Reducing Emissions from Deforestation and Forest Degradation (REDD+), which allows developing countries to reduce carbon emissions from deforestation and forest degradation in exchange for financial payment, has grown increasingly popular, especially among policy makers. This approach is widely seen as an efficient and cost-effective strategy to mitigate climate change (Stern, 2006; Pearse, 2012). There are around 50 countries worldwide that are members of UN-REDD with plans in place to implement a REDD+ program (IIED, 2012). Moreover, substantial investments have been made to support institutional readiness and policy development, as well as implement demonstration projects in numerous locations globally, particularly targeting the voluntary carbon market.

Indonesia is considered an important country in the development of REDD+ initiatives. It is the world's third largest CO₂ emitter, and it has aggressively pursued REDD+ objectives. The Government of Indonesia (GoI) has announced its voluntary commitment in 2009 to reduce GHG emissions 26 percent by 2020 with the country's own funding; fourteen percent of this target goal is to be met by reducing deforestation and forest degradation as well as improving forest management (Satgas REDD+, 2012; anonymous, 2012). Factoring in international support, the GoI increased its commitment to reducing GHG emissions up to 41 percent over the same period. Since then, REDD+

policy development and projects are well underway as Indonesia's officials work to develop various REDD+ related policies and institutional frameworks (Satgas REDD+, 2012). Despite the regulatory complexity and unclear institutional arrangements, many parties have also invested in readiness and demonstration activities in the country.

Through describing the political processes of REDD+ policy development and investigating the rationale for adoption of REDD+ in Indonesia, this chapter seeks to respond to a call of critical geography scholars for examining 'actually existing neoliberalism' (Castree, 2008a; Castree, 2010; McCarthy and Prudham, 2004). The second section provides a brief history of REDD+, while the third examines some elements of REDD+ that to some extent resemble common features of the 'neoliberalization of nature'. The fourth section lays out the political economic context, especially related to the forestry sector, which contributes to the shape of REDD+ and presents opportunities and challenges for its implementation. The fifth section investigates the process of translating REDD+ into Indonesian policies and explores institutional complexities that arise from this process. The final section elaborates the roles played by civil society in REDD+ debates and how the initiative influences the dynamics of the climate justice movement in the country.

REDD+ policy development in Indonesia involves highly political processes that play out at the national and provincial levels. In this chapter, I argue that despite the claim of some scholars that REDD+ is a part of efforts to deepen markets in forest governance marked by 'rolling back' the state, the Indonesian government has maintained a continuing role in forest carbon commodification. Indeed, state power

remains significant, though in new institutional forms and ways, in the context of neoliberal environmental policies. Despite the argument that civil society engagement in environmental governance could be a neoliberal strategy to rectify market failure, environmental and indigenous activists in Indonesia have strategically taken advantage of formal political channels available during REDD+ policy development to advocate for forest tenure reform and promote the acknowledgement of indigenous and communities' rights over forestlands and resources.

2.2 A Brief History of REDD+

Some studies suggest that deforestation and forest degradation contribute approximately 10-20 percent of the greenhouse gas (GHG) emissions that are driving global climate change (IPCC, 2007; Stern, 2006). Furthermore, forests are considered to be important carbon sinks in which approximately 650 billion tons of carbon is stored (FAO, 2010). Thus, it is suggested that reducing emissions from the forestry sector is a rapid, cost-effective mitigation option (Stern, 2006). Initially, the mechanism was not included during the negotiation meetings of the United Nations Framework Convention on Climate Change (UNFCCC). It was during a Conference of Parties (COP) in 2005 that Papua New Guinea and Costa Rica, supported by the 'Coalition for Rainforest Nations (CfRN)' - a group of nine developing countries,¹¹ jointly submitted a proposal to

¹¹ When CfRN was established in 2005, it consisted of nine countries, which include Bolivia, Central African Republic, Chile, Congo, Democratic Republic of Congo, Dominican Republic, Nicaragua, Papua New Guinea and Costa Rica. The membership of countries continues to grow. To date, there are 41

incorporate emissions from deforestation and forest degradation in the future global climate change agreement. Subsequently REDD was formally incorporated as an agenda item in climate change negotiations following the COP meeting in Bali in 2007. The initial goal was to reward developing countries for avoiding deforestation. REDD programs were later broadened to enhance forest carbon stock through forest restoration, sustainable forest management, and conservation. These enhanced REDD initiatives were labeled REDD+. Since then, the initiative has increasingly been promoted as a key strategy to reduce GHG emissions.

There have been at least three major points of contention concerning REDD+ during the climate change negotiations. Growing concern about the possibility of REDD+ causing social and environmental harms prompted the Ad Hoc Working Group for Long-Term Cooperative Action (AWG-LCA) to agree on including social safeguards in the text on REDD+ during COP16 in 2010 (Hiraldo and Tanner, 2012; Setyowati, et al., 2012).¹² Moreover, the parties also debated issues related to Monitoring, Reporting, and Verification (MRV). Some developing countries highlighted the need for transfer of technology and financial support to expand their monitoring capacity. They also requested data to help set reference levels and carry out complex MRV processes (Moss and Kovacevic, 2012). The latest COP meeting in Warsaw of 2013 underscored this need

countries in the CfRN alliance. The complete membership list can be seen at <http://www.rainforestcoalition.org/>

¹² AWG-LCA is a subsidiary body under UNFCCC that is responsible to carry out a comprehensive process for long-term cooperation beyond 2012 for gaining an agreed outcome to be presented in the COP for adoption. Retrieved on Jan 4, 2014 from <http://unfccc.int/bodies/body/6431.php>

by mandating that all developing countries abide by MRV procedures similar to those governing the GHG inventories of developing countries if they want to continue accessing financial support for climate change related forest management activities (Dupont, et al., 2013).

Finally, there have also been debates on the use of carbon markets as a key component for financing REDD+, which provokes heated arguments between pro- and anti-market advocates (Hiraldo and Tanner, 2011; Corbera and Schroeder, 2011; Moss and Kovacevic, 2012). For proponents, marketing forest carbon is considered a triple win solution in terms of ecological, economic, and social benefits. Long-term financial assurance for supporting REDD+ initiatives remains a challenge, however, and private sector engagement is deemed to be a key component for moving forward. Carbon market creation could provide incentives for private actors (Kossoy and Ambrosi, 2010). Similar to the Clean Development Mechanism (CDM) under the Kyoto protocols, credits from REDD+ could be sold to either government or private actors to enable them to fulfill their pledged or potential future mandatory GHG emissions reduction commitments (Corbera and Schroeder, 2011). Various countries such as Australia and the USA have supported the proposal, as have several multilateral agencies. The World Bank's report optimistically suggests the potential of carbon trading for climate change mitigation, "At that point carbon will have a price worldwide and will be traded, taxed, or regulated in all countries. Once an efficient carbon price is in place, market forces will direct most consumption and investment decisions toward low-carbon options." (World Bank, 2010 as cited in McAfee, 2012, p. 271).

By contrast, those who oppose a market based approach as a means to finance REDD+ argue that the approach does not address equity issues in forest owning countries. These mostly low and middle income developing countries are expected to conserve their forests and slow down their development while high emitter countries continue to emit and expand their economies with little regard for GHG impacts (Indarto, et al., 2012). Others argue that market based offsetting mechanisms could potentially lead to economic inefficiency by paying for already conserved forests and reducing the price of emissions permits in the industry and energy sector (Corbera and Schroeder, 2011).

During the 2013 COP meeting in Warsaw, the parties agreed on several key issues related to REDD+, which included finance arrangements, safeguards, forest reference emissions levels, and modalities for MRV, among others. In addition, the USA, UK, and Norway pledged a level of financial support for the initiative that reaches USD 280 million (UNFCCC, 2013). However, a closer examination of the text produced in the Warsaw meeting reveals that much has yet to be done for REDD+ implementation. For instance, meetings were scheduled for developing financial arrangements without any agreement on emissions reduction obligations. Without the latter many are skeptical about the future of carbon trading through REDD+ (Lang, 2013c).

2.3 REDD+ and Neoliberal Environmental Governance

The body of critical geography studies that address the intimate link between neoliberalism and the current trend of environmental governance has grown rapidly (McCarthy and Prudham, 2004; Castree 2008; Heynen, et al., 2007). These works

highlight the importance of studying environmental governance as an arena in which neoliberal ideas and policies are realized and contested. In this regard, McCarthy and Prudham (2004) suggest that the term neoliberalism could not be captured in a single definition, as it “...stands for a complex assemblage of ideological commitments, discursive representations, and institutional practices, all propagated by highly specified class alliances and organized at multiple geographical scales” (p.276).

As described in the first chapter, there are some common elements of the neoliberalization of nature (McCarthy and Prudham, 2004; Castree 2008a, 2008b, 2010). *First*, proponents of neoliberalism note the importance of environmental fixes to deal with endemic problems of sustained economic growth by integrating nature fully into the market system through commodification and marketization (Castree, 2008a). In the context of REDD+, one underlying assumption is that performance based payments will be used to compensate forest owners and users who contribute to reducing emissions (Angelsen, et al., 2009). It is assumed that the payment will entice the forest owners and carbon users to see forest conservation as more lucrative than the alternatives. To provide such a financial incentive, carbon credits are expected to be sold in voluntary and highly anticipated regulated markets. Through the process of commodification, forest carbon is ecologically decontextualized and socially dis-embedded (Castree, 2003 as cited in Corbera and Brown, 2010). However, the commodification of forest carbon is not easily realized; indeed a crisis of legitimacy persists (Peterson, 2010). Moreover, as noted above, there have also been concerns over the possible flooding of the market with cheap carbon credits, which will in turn undermine the mitigation efforts (Pearse, 2012).

The second element of the neoliberalization of nature is the process of ‘rolling back’ the state (deregulation) and market-friendly re-regulation to improve market effectiveness. Since the state’s engagement in the marketization of nature is considered a barrier to capital movement, proponents argue that its role in regulating nature should be limited (Castree, 2008a, 2010; McCarthy and Prudham, 2004). Deregulation focuses on reducing the central state’s role in various areas of environmental governance and transferring responsibilities to other entities, such as the private sector, lower levels of government, communities and even individuals. This approach has been manifested in the privatization and commodification of state or common property resources (e.g. forests, water and biodiversity), rescaling environmental governance (e.g. decentralization of resources management and the community-based approach), public-private partnership in environmental management, and downsizing government interventions and subsidies, among others (McAfee, 1999; McCarthy and Prudham, 2004). Re-regulation entails enhancing the state’s role in facilitating the privatization and marketization of nature (Castree, 2008a).

In the last two decades, forest governance in many tropical countries has undergone deep structural changes, especially with the implementation of decentralization policies. Scholars have argued that decentralization and devolution of forest management has been considered a promising avenue for reforming the forestry sector and ensuring forest sustainability and equitable benefit sharing (Agrawal and Ribot, 1999; Chhatre and Agrawal, 2009). This reform is especially important in the context of REDD+ as good forest governance has been considered as a pre-requisite for

its successful implementation to ensure accountability, transparency and participatory decision-making processes (Kanninen, et al., 2007 as cited in Scheba, 2011).

Nonetheless, some studies have documented unintended impacts of decentralization, which might be counterproductive to the goal of reducing carbon emissions (McCarthy, 2004; Wunder, 2010). In addition, some scholars warn of the possibility of forest governance *recentralization* since the REDD+ initiative could potentially provide incentives to national managers (e.g. increasing revenue and authority to govern forest) thereby easing the burden for reducing forest management costs (Phelps, et al., 2010). REDD+ could potentially expand the role of national forest managers due to the need to design detailed forest management plans, develop reliable baseline data, and implement MRV standards. Since REDD+ is a performance-based initiative, many countries could potentially design centralized forest management schemes to avoid the risk of non-payment due to local-level failures. Thus, to avoid disempowering more local actors and avoid excessive re-centralization, Sikor, et al. (2010) propose a ‘nested’ approach to REDD+ that enables decision making processes to occur at multiple levels and connects the processes at the local, national and global scales.

Another element in a neoliberal regime is privatization through assigning clear and legally enforceable property rights over nature (Castree, 2008a, 2010). While they do not advocate for privatization, many scholars argue that clarification of forest tenure and carbon ownership is a must if REDD+ is to be successful (Sunderlin, et al., 2009; Resosudarmo, et al., 2014). As will be elaborated in Chapter 5, unclear tenure arrangements and widespread forest tenure conflicts are common especially in the

tropical countries where most REDD+ initiatives are located. On the one hand, REDD+ could potentially provide incentives for countries to clarify forest tenure arrangements (Wollenberg & Springate-Baginzki, 2009; Lawlor & Huberman, 2008; Sunderlin, et al., 2009). On the other, it could potentially lead to global ‘green land grabbing’ by the private sector and the state (Fairhead, et al., 2012). With potentially increasing values of forests, rights of individuals and communities over forestlands may be challenged under REDD+. Adding to this complexity is the question of who holds the rights to forest carbon. Carbon is a new commodity and policies on rights to carbon are still unclear in many countries, including Indonesia. Some propose that the rights should be attached to land ownership, while others do not (USAID, 2011). Using land ownership as the only basis for granting carbon rights might not be practical, they argue, particularly over the state’s forestlands as many of them are *de facto* managed by local communities.

Furthermore, the process of the neoliberalization of nature is often marked by the inclusion of civil society in governing nature in order to potentially rectify market failure (Castree, 2010; McCarthy and Prudham, 2005). As will be demonstrated later in this chapter, various civil society organizations have not only implemented REDD+ demonstration activities but also actively contributed to the development of relevant policies in Indonesia. Finally, the production of free, self-governing, self-sufficient, and entrepreneurial individuals and communities who conform to market logics is crucial in the neoliberalization of nature (Larner, 2003; Castree, 2010).¹³ Through REDD+

¹³ The production of neoliberal subjects will be discussed in detail in Chapter 5 and 6.

readiness activities, capacity-building activities are being carried out to disseminate knowledge on REDD+ and produce REDD+ subjects.

Those arguments show that REDD+ is deeply implicated in the neoliberalization of nature. Nevertheless, it is worth interrogating how particular REDD+ initiatives are being interpreted and negotiated by specific groups in particular places and how this contestation has affected REDD+ outcomes. As described in Chapter 1, there has been a burgeoning literature in critical geography that shows that the neoliberalization of nature is not a monolithic process that creates universal effects globally. Instead, it is a complex and contested set of processes that is geographically and historically contingent (McCarthy and Prudham, 2004; Heynen, et al., 2007; Castree, 2008a, 2008b). This chapter, therefore, is devoted to analyzing the process of conception and development of REDD+ initiatives in Indonesia and examining the ways localized political and social dynamics could shape the initiative.

2.4 Political Context of REDD+ in Indonesia

In Indonesia, the state has long been a central actor in forest management, especially during the Suharto regime (1966 – 1998). State forest management has been strongly influenced by Dutch colonial policies, which adopted ‘scientific forestry’ to establish the structures, ideology, and means of reproducing a state-led forestry regime, most notably in Java (Peluso, 1992; Peluso and Vendergeest, 2006). Under the system imposed by the colonial government, forests were to become sources of state revenue, and all unclaimed land and forest areas were declared state property (Peluso, 1992).

After independence, the Indonesian constitution provided the legal basis for the state to control land and natural resources: “Land and water and the natural resources found therein shall be controlled by the state and shall be exploited for the maximum benefit of the people.”¹⁴ However, it was not until the Suharto period that the state intensified its territorial control and natural resources extraction on the outer islands of Indonesia.¹⁵ Two laws governing land and natural resources were stipulated. *First*, the Basic Agrarian Law (BAL) of 1960 legitimized state control over all lands. It differentiated between land holdings with and without formal titles (Safitri, 2010 as cited in Resosudarmo, et al., 2014). Titled lands are defined as all lands whose owners hold statutory land rights, whilst lands without statutory rights or untitled lands are considered as state land. *Second*, the Basic Forestry Law (BFL) of 1967 advanced the state’s control over forestlands by claiming nearly 75 percent of Indonesia’s territory as state forest (Li, 2002; Resosudarmo, et al., 2014; Indarto, et al., 2012). In order to increase the effectiveness of resource extraction, the state also passed the Foreign Investment Law (Law No.1/1967) to facilitate foreign investment, particularly investment relating to natural resource exploitation.

Since then, the extraction of forest and other natural resources has always been a pivotal source for development. It has not only generated revenues, provided employment, and financed economic development, but has also been used as a source of political and economic leverage by the central government and a few business elites

¹⁴ Indonesian Constitution of 1945 (*Undang Undang Dasar 1945*), article 33 (Clause 3).

¹⁵ Outer islands of Indonesia means islands outside Java Island.

(Barr, 1998; Resosudarmo, 2014). By the 1990s, the forestry sector had been allocated 585 concessions covering 60 million hectares spread out throughout the country (Barr, 2002 as cited in Gellert, 2008). Most of the logging concessions were granted to large forestry conglomerates with close ties to Suharto's family and the army (Casson & Obidzinsky, 2002). For example, Indonesia Corruption Watch (ICW) reported that Suharto's children were granted concession rights covering 1,360,763 hectares of forest areas for more than 20 years (ICW, 1999). During this era, community and *adat*¹⁶ or indigenous rights over forestlands and resources, were limited, leading to the dispossession of lands held by many indigenous groups throughout the country. Land conflicts between local communities and the state were widespread. Oftentimes, military forces were deployed to curb the resistance and secure the state's territorial control.

Indonesia started to implement neoliberal reforms in the forestry sector in 1999. This entailed deregulation to allow freer trade and forest investment, the elimination of overprotected national forest based industries, public-private partnerships aimed particularly at easing the state's budgetary burden for forest governance, and decentralization of forest management. The major impetus of the reforms was the severe economic crisis in 1997, intertwined with complex events including a crisis in the state's legitimacy and growing domestic and international pressures for reforms. The 1997

¹⁶ *Adat* literally means "the way of life." *Adat* refers to cultural beliefs, rights and responsibilities, customary law and courts, customary practices and self-governance institutions (Alcorn, 2000). See further discussion on *adat* community and law in Indonesia in Zerner (1994).

economic downturn led to a 13.6 percent decline in economic growth and an 80 percent loss in the value of Indonesian currency (Gellett, 2004; 2005).

Many development agencies, such as the World Bank, argued that the economic crisis in Indonesia was caused by the lack of central government capability and its inability to organize and manage the national economy (Tambunan, 2000). Thus, 'rescaling' the government away from the national state was deemed an appropriate prescription to cure Indonesia's economic problems; this was done by not only implementing measures for enabling freer trade but also through decentralization (Tambunan, 2000; Gellert, 2008).

These complex events forced the Indonesian government to sign a loan agreement with the International Monetary Fund (IMF) in order to rescue the economic situation in the country. The IMF's rescue package was conditional on the implementation of various reform measures intended to deregulate markets, impose fiscal austerity, and privatize state owned enterprises (Barr, 2001). Nonetheless, it is argued that the IMF conditionality was beyond the reform of market as it also sought to encourage the fundamental transformation of the state's governance systems (Robison, Rodan, & Hewison, 2002 as cited in Gellert, 2005). After signing the agreement in 1998, the government of Indonesia committed itself to far reaching structural adjustment programs proposed by the IMF to restore economic growth and rectify the Indonesian monetary system (Barr, 2001).

In the forestry sector, a structural adjustment program (SAP) proposed by the IMF included several policy reforms. The main goal of the IMF conditionality in the forestry sector was the liberalization and rationalization of forest-based industries to enhance their

effectiveness, with actions such as reducing the tax on sawn timber by 10 percent, allowing foreign investment to come freely, and removing all forms of plywood marketing regulation (Barr, 2001; Gellert 2005; Indarto, et al., 2012). In addition, The World Bank also proposed conditions for forestry policies and institutional reforms by introducing transparency in forestry development and promoting sustainable forest management (Indarto, et al., 2012). Some scholars argue that this proposition is problematic as it is based on the assumption that the state has the capacity to carry out such reforms within a ‘sustainable forest paradigm’ (Barr, 2001; Gellert, 2005). Nevertheless, the GoI could hardly carry out many of these conditions, partly due to its lack of capacity and political turbulence, especially in the early phase of reform. Thus, scholars suggest that it would have been more useful to devise strategies to reduce pressure on forests from excessive demand and easy finance (Barr, 2001; Gellert, 2005).

At the same time, there were also increasing domestic pressures for reforms in Indonesia nurtured from frustration generated by decades of centralized control of resources (McCarthy, 2004). Unequal sharing of benefits from resource extraction has enriched the Jakarta- and Javanese- dominated bureaucracy while local communities have been deprived of land and livelihood opportunities. This condition led many local actors to organize protests throughout Indonesia demanding the authority to govern their own regions in order to gain greater profit sharing from the resources generated locally.

In response to these events, the government of Indonesia enacted new legislation on regional autonomy in 1999 (Law no.22/1999 revised with Law 32/2004) that delegated some decision-making authorities to the provincial and district levels of

government. Under the rubric of decentralization, district and provincial governments are now empowered to set up their own resource use and spatial planning. Along with regional governance, the Indonesian government passed Law no.25/1999 (revised with Law 33/2004), which significantly reduced government subsidies towards regional development. Therefore, lower levels of government needed to meet their own routine expenses and provide services and infrastructure in order to promote local development (Thornburn, 2002; McCarthy, 2004). Previously, district governments depended heavily on national subsidies for regional development. After decentralization policy came into force, the district and provincial government were required to generate district revenue to support local development.

Implementing the forestry reforms in the context of deep structural changes in Indonesia has proved to be challenging, especially when the structures, relationships, and division of power between different levels of government are unclear (McCarthy, 2004; Lutrell, et al., 2014). As lucrative natural resources have been a significant source of wealth for the central government, it is not surprising that forestry ministers and civil servants are keen to maintain their historical control over land (Peluso and Vandergeest, 2001). As a consequence, the central government resisted decentralizing natural resource management to lower levels of government and would only transfer limited power for this purpose. While the decentralization policies have considerable impacts on production forest areas, over which the central government devolves a certain degree of authority to the lower level of governments, the central government tries to retain its control over national park management. Under the Regional Autonomy Law, the management of

conservation areas covering nearly 23 million hectares remains under the central government's responsibility, meaning that the central government still holds absolute control over the management of national parks throughout Indonesia. Moeliono (2006) notes that since 2000, the GoI has established 20 new national parks, resulting in a total of 50 national parks and enlarging their total area. This move could be a strategic means to exert the central government's territorial control over forests that has been weakened by decentralization processes. Moeliono (2007) further argues that the designation of new national parks is a sign of a power struggle between the central and local government rather than concerns over conservation issues. In addition, the Ministry of Forestry (MoF) has attempted to retain its control over state forest areas by crafting laws that are contradictory to decentralization policies. For instance, the 1999 version of Forestry Law (Law 41/1999) maintained the hierarchical relationship between different levels of government and retained the central government's significant control over forest management.

At the local level, natural resource extraction has also become a source of wealth and influence for local elites who maintain patron-client relationships with logging entrepreneurs to fuel their political machines (Barr, et al., 2006; Setyowati, 2006). Despite popular elections of provincial and district administrations, former power networks persist and are able to adapt in the context of decentralization (Lutrell, et al., 2014). Such networks include logging and other forest-based industry networks which have expanded during decentralization and are mediated by district level modes of clientism (McCarthy, 2004; Setyowati, 2006).

During the initial few years of post-Suharto period,¹⁷ district governments were authorized to allocate timber utilization permits (IUPHHK) and timber extraction permits (IPHHK) (Gellert, 2008).¹⁸ In that brief period, many district governments issued forest concession permits and stipulated district regulations to establish direct administrative control over forests in their territories (Casson, 2001). In many cases, the district regulations legalized logging activities that were considered illegal by the Forestry Department (Setyowati, 2006). The rush to issue permits and stipulate regulations led the central government to revoke thousands of district regulations and issue a new regulation PP 34/2004 that cancelled district and provincial rights to grant the licenses. Subsequent revisions of the regulations have enabled greater oversight and coordination from the higher level, to a certain extent increasing the power of the central government (Indarto, et al. 2012; Lutrell, et al., 2014). This vertical topography of power relations between the central, provincial, and district level presents significant challenges for the implementation of REDD+ policies.

In the post-Suharto era, advocacy for the recognition of *adat* rights over forestlands and resources has resulted in the revision of the state's constitution and other relevant laws that acknowledge those rights. For example, the revised Forestry Law of 1999 includes a provision acknowledging a new category of *adat* forest (*hutan adat*),

¹⁷ Post Suharto period is also known as *era reformasi* (reform era).

¹⁸ The IUPHHK (*Ijin Usaha Pemanfaatan Hasil Hutan Kayu* or timber utilization permit) is a permit issued for twenty years on areas up to fifty thousand hectares; IPHHK (*Ijin Pemanfaatan Hasil Hutan Kayu* or timber extraction permit) is a permit issued for one year on small areas of one hundred hectares.

which was defined as “State Forest within the territory of customary law community.”¹⁹ However, this definition is problematic as it still maintains the state’s forest ownership. Furthermore, article 5 in the Law also suggests that *adat* forest is only determined if it exists in reality and its existence is recognized by the government. If the *adat* forest is recognized, it must be officially identified, licensed, and monitored by the government (Li, 2002; Moeliono, 2002). With inconsistent and unclear regulations, it is not surprising that overlapping forest tenure claims persist. This issue has been addressed by the recent decision of Indonesia’s Constitutional Court (*Mahkamah Konstitusi*/MK), which ruled that *adat* forests could no longer be considered state forests.²⁰ Nevertheless, the impact of this decision remains to be seen and some have argued that the process of recognizing *adat* forests still requires complicated bureaucratic procedures such as designation through a district regulation (Satari, 2013a).

2.5 Policy Development and Institutional Arrangements

REDD+ is considered pivotal for a successful climate mitigation strategy in Indonesia, in which 80 percent of its GHG emissions came from the conversion of peatland (45 percent) and forestlands (35 percent) (DNPI, 2009). Despite the recent data that indicates a declining trend in forest loss, deforestation rates have remained

¹⁹ Forestry Law of 1999, Article 6 no.1.

²⁰ Constitution Court decree issued on May 13, 2013 revised the contents of the Forestry Law of 1999 (UU Kehutanan 41/ 1999). One of the revisions is article 1.6, which stipulates that *adat* forests are forest areas located in the indigenous territory (*Hutan adat adalah hutan yang berada di wilayah masyarakat hukum adat*). This decree is a result of a judiciary review proposed by a coalition of indigenous and civil society groups over the forestry law to the constitution court.

considerably high in the past three decades (Indarto, et al., 2012). The high rate of deforestation is directly attributed to various forest conversion activities such as agriculture, mining, illegal logging, and forest fires, among others, which are closely linked to an Indonesian economic structure that greatly depends on extractive industries.

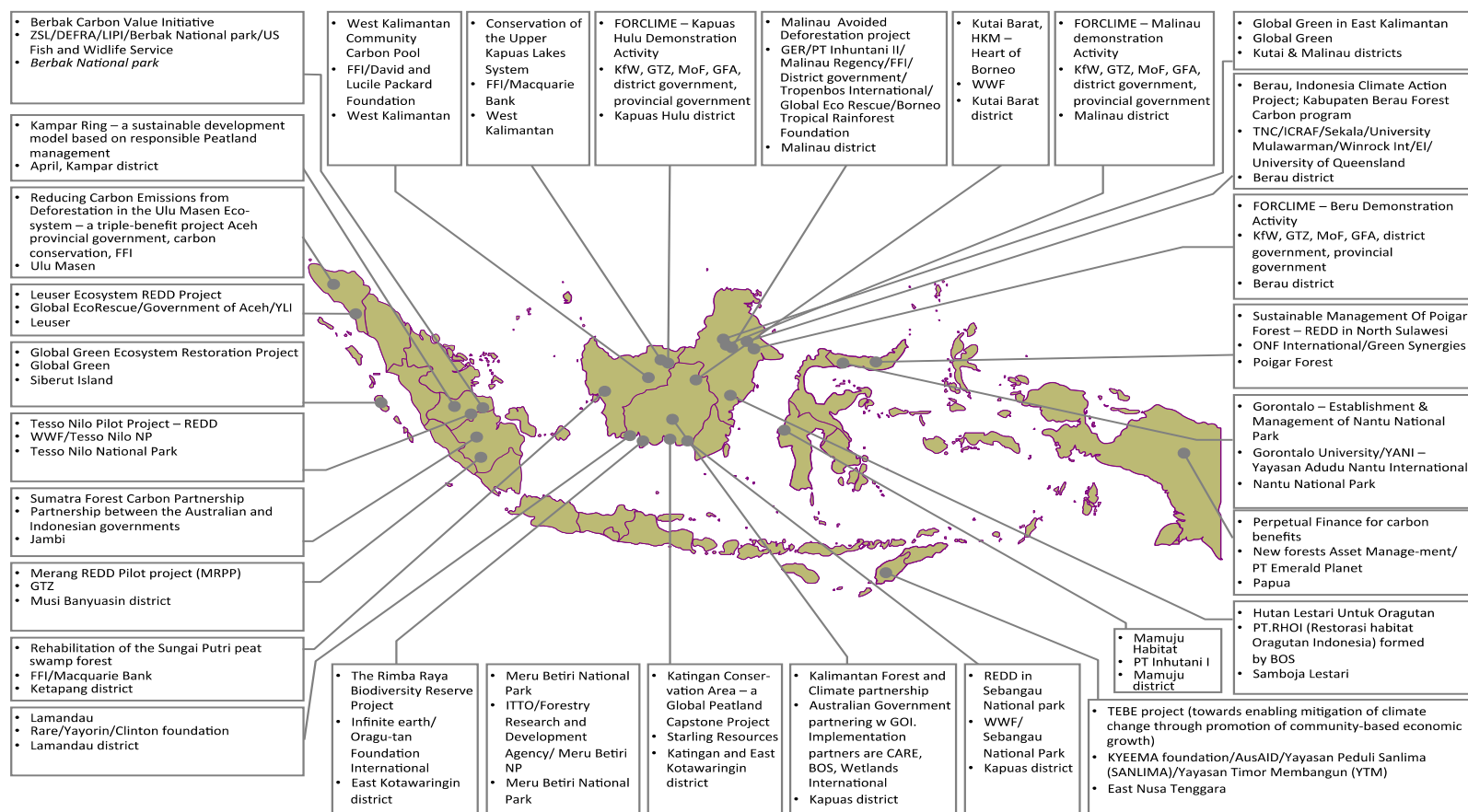
Currently, Indonesia hosts the largest number of REDD+ projects in the world. As of 2012, there were more than 60 projects at various stages of development (“REDD+ Demonstration Project”, 2012). For example, despite its [perceived] status as the highest contributor of GHG from deforestation, Brazil only hosts around 25 REDD+ demonstration activities in various state of development in its national territory.²¹ In Indonesia, the projects are implemented by a range of different actors and supported by a variety of financial arrangements, from multilateral funding to private carbon companies targeting voluntary carbon markets.

It is important to note that the adoption of REDD+ initiatives does not happen in a vacuum but is situated in the context of shifting international aid strategies in Indonesia that increasingly promote market-based mechanisms for environmental governance. For instance, the World Bank’s research on strategic options for forest assistance in Indonesia underlines the importance of incorporating issues of climate change and promoting payment for environmental services (PES) (World Bank, 2006). This approach can be implemented by linking environmental services (e.g. carbon storage and water supply) to markets or transferring PES payments that reward land users who employ sound

²¹ See the detailed list of REDD+ projects in Brazil in <http://theredddesk.org/>

environmental management practices. Prior to REDD+ implementation, several PES projects were already in place, such as the Rewarding Upland Poor for Environmental Services project (RUPES) carried out by the World Agroforestry Center (ICRAF). Some Clean Development Mechanism projects have also been implemented, although none of them are CDM forestry (Indarto, et al., 2012).

The GoI has placed greater emphasis on the REDD+ mechanism because it is perceived to be an effective way to reduce climate change impacts, protect the forest and access development funding without destroying the forest (Indarto, et al., 2012). It could also enable the country to tap into the flow of international aid available to support REDD+ initiatives in conjunction with emerging carbon markets (Purnomo, 2012). In 2006, the Ministry of Forestry (MoF) formed the Indonesia Forest Climate Alliance (IFCA) to conduct a comprehensive study in support of the development of a Readiness Preparation Proposal (R-PP) to be submitted to the World Bank. The study analyzed available data on carbon stocks and land use, examined the driving forces of deforestation and forest degradation, prioritized actions to address them, examined mechanisms for engaging with carbon markets and managing REDD+ payments, and explored opportunities for actions within the existing legal and policy frameworks. The GoI also launched a national action plan as a reference for all sectors to prepare policies related to climate change (Indarto, et al., 2012). The government's commitment culminated in a formal announcement at the UNFCCC COP 15 in Copenhagen that by 2020 Indonesia would reduce GHG emissions by 26 percent without outside funding, or 41 percent with outside financial support.



Note: This map was produced by CIFOR and North carolina State University. Contributors – Stibniati Atmadja, Liwei Lin, Erin Myers, Daju Resosudarmo, Agus Salim, Ratih Septivita, Erin Sills. Contact person – Stibniati Atmadja, s.atmadja@cgiar.org, last updated – March 2010

Figure 2.1 Map of REDD+ Project in Indonesia in 2010 (Indarto, 2013)

Along with this commitment, there has been a proliferation of multilateral funds to support the development of REDD+ policies and projects in the country, which include the UN- REDD program and the Forest Carbon Partnership Facility (FCPF) managed by the World Bank.²² When Norway announced its commitment to allocate USD 1 billion to support REDD+ development in Brazil in 2008, it stimulated other countries, including Indonesia, to seek out opportunities for similar bilateral cooperation. In a detailed account of negotiations between Indonesia and Norway, Purnomo (2012) suggests that the GoI was very keen on obtaining financial compensation to create enabling conditions for reforming forest and peatland management.

After a series of negotiations, the letter of intent (LoI) between Indonesia and Norway on REDD+ was signed in May 2010. In the LoI, Norway agreed to allocate up to USD one billion to support REDD+ in Indonesia, which would be disbursed in three phases: USD 200 million for the first (preparation) and second (transformation) phases up to 2014. The third phase will be contributions for verified emissions reduction in which the remaining funds can be gradually disbursed. The latter will, however, be conditional on Indonesia's performance in reducing GHG emissions from the forestry sector.

The GoI announcement for the bilateral cooperation with Norway surprised numerous actors in the country, particularly among policy makers, as it comes with significant responsibility to shift policy orientation and make carbon emissions reduction

²² GoI received USD 5.6 million from the UN-REDD Programme, USD 3.6 million from FCPF. In addition, Norway pledged to allocate USD one billion from Norway.

a top priority. Some are skeptical toward the outcome of this commitment (Indarto, et al., 2012). As described earlier, historically, Indonesia has been dependent on natural resource extraction to fuel its economic development. Although currently forestry contributes to only 0.8 percent of the GDP, activities related to forestland conversion have significantly contributed to GHG emissions in the country (Lutrell, et al., 2014). More recently, state planners expressed their intent to expand new oil palm plantations up to seven million ha by 2020 (USDA, 2010 as cited in McCarthy, et al., 2012), along with nine million ha of new timber plantations by 2016 (Obidzinski and Dermawan 2010 as cited in McCarthy, et al, 2012). The president also has set a target to achieve a seven percent annual economic growth during his second term (Abidin, 2011 as cited in Lutrell, et al., 2014). It remains unclear how the target of economic growth rate can be reconciled with a rather ambitious target for reducing GHG emissions.

The slow progress of reform in forest and other natural resources sectors in the country have been attributed to not only embedded powerful interests in the ministries but also bureaucratic hurdles. A similar concern is raised with regard to REDD+, as such challenges remain and might undermine much needed reform to achieve carbon emissions reduction targets. Considering bureaucratic hurdles that often hamper initiatives for reform in Indonesia, under the LoI between Indonesia and Norway, Indonesia proposed to set up a ‘super power’ REDD+ agency, with significant authority to enable it to coordinate and encourage collaboration among relevant government agencies and push forward multi sectoral reforms.

To prepare the way for launching the new agency, a new ad hoc REDD+ Task Force was developed under the President's Office, and is led by the head of the President's Delivery Unit for Development Monitoring and Oversight (UKP4).²³ The Task Force is responsible for assessing REDD+ institutional arrangements and overseeing national readiness activities, especially with regard to the LoI between Indonesia and Norway. Under the Indonesia-Norway partnership, the GoI should establish the Indonesian REDD+ Agency; develop a comprehensive national REDD+ strategy (*Strategi Nasional*/Stranas); implement an interim funding instrument; develop a measurement; reporting and verification (MRV) framework; and select pilot provinces. To carry out these duties, the Task Force is comprised of ten working groups with members consisting of not only relevant government administrators but also representatives from civil society and academia.²⁴

Developing an ad hoc agency is a not a new phenomenon in Indonesia (Luttrell, et al. 2014). The government has a tendency to create new task forces instead of creating a strategy for more institutionalized bureaucratic reform. In the context of REDD+, some argue that the task force was much needed to break through the bureaucratic hurdles that prevented reform, especially in the forestry sector (Raka, interview, July 4, 2013;

²³ UKP4 (*Unit Kerja Presiden Bidang Pengawasan dan Pengendalian Pembangunan*) is a special delivery unit under the President, which is responsible for evaluating and monitoring the ministerial performance. Its mandate was expanded to oversee the performance of various task forces established during Yudhoyono's administration, which include the justice mafia eradication unit (*Satgas mafia hukum*), and the REDD+ Task Force (*satgas REDD+*).

²⁴ The task force working groups include: 1) National REDD+ Strategy; 2) Institutional REDD+; 3) Funding Instrument; 4) Monitoring, Reporting and Verification (MRV); 5) Pilot Province; 6) Moratorium Monitoring; 7) Communications and Stakeholder Engagement; 8) Legal Review and Law Enforcement; 9) Mainstreaming REDD+ into the National Plan; and 10) Knowledge Management and Support.

Stevanus, September 12, 2012). Nevertheless, it has been argued that the approach might not be effective in the long term as it could lead to confusion over authority, legitimacy, and the chain of command (Lutrell, et al., 2014). Oftentimes, task forces, including the REDD+ task force, have unclear mandates as to whom they should be accountable. This lack of authority and legitimacy is demonstrated in the slow and contentious process of the development of a REDD+ national strategy as described below.

Some government administrators interviewed argued that the nature of the REDD+ task force as an ad hoc institution, and the fact that its members include large numbers of non-government actors, had left them confused about the government's own roles in the process (Hasan, interview, September 17, 2012; Wati, interview, September 12, 2012). Such an inclusive approach in the REDD+ task force makes government administrators uneasy and has led to a refusal by some to adopt policy change recommended by the task force. Furthermore, some government informants from the Ministry of Forestry and National Planning Agency also stated that they preferred not to make any significant decisions related to REDD+ until President Yudhoyono has completed his term in October 2014 (Sri, interview, September 12, 2012; Wati, interview, September 15, 2012).

It has been a longstanding problem in Indonesia in that policy orientation often shifts with the change of administration. This situation has worsened with the fact that the current President Yudhoyono, whose term will conclude at the end of 2014 has assigned key positions in the bureaucracy to members of a coalition of political parties that supported his re-election in 2009, including the Ministry of Forestry (Lutrell, et al.,

2014). This situation has put him in a political conundrum and prevented him from making decisions in a timely manner or making decisions that might not go hand in hand with his political supporters' interests.

The REDD+ agency was formally established in September 2013 through the issuance of a presidential decree (The Jakarta Post, 2013a; 2013b). Nevertheless, due to complex political negotiations and poor reception from some relevant ministries, the appointment of the head of the agency had been long delayed. The appointment was eventually made at the end of 2013 (Saturi and Nugraha, 2013).

In term of policies, Indonesia has been rather advanced in developing a variety of policies to support REDD+ implementation.²⁵ Some activities described in LoI have also been carried out such as designing a REDD+ national strategy, establishing an independent agency for MRV, selecting a pilot province for demonstration activities, and issuing a presidential decree for a moratorium on granting forest concession licenses (Indarto, et al., 2012). Central Kalimantan Province has been selected as the pilot province for REDD+ demonstration activity under LoI between Indonesia and the Norway. In addition, considering the absence of a national consolidated map and clear forest tenure arrangement, the REDD+ task force also instated a One Map Initiative to

²⁵ Some important policies include: Ministry of Forestry Regulation (P.68/ Menhut-II/2008) on the implementation of REDD Demonstration Activities (DA); Ministry of Forestry Regulation (P.30/ Menhut-II/2009 on Reducing Emissions from Deforestation and Forest Degradation); Ministry of Forestry Regulation (P.36/Menhut-II/2009) on Procedures for Licensing of Commercial Utilization of Carbon Sequestration and/or Storage in Production and Protected Forests; Government Regulation No 61/2011 on GHG National Action Plan (RAN GRK); Government Regulation No 71/2011 on the implementation of the Action Plan for reducing Greenhouse Gases Emissions; and a two year moratorium on issuing new forest concessions.

produce an integrated map repository that contains relevant information on forest licensing and land use claims to be used as a reference for all ministries and provincial governments (see Chapter 5).

However, a bureaucratic culture beset with intra-sectoral competition and a lack of coordination amongst sectors faces big challenges for implementing these policies. It has been widely acknowledged that ministerial programs often narrowly focus on sectoral objectives and targets (Lutrell, et al., 2014). This dynamic could clearly be observed in the processes of developing a national strategy of REDD+ (*Rencana Nasional/Stranas*).

The national strategy of REDD+ is a guideline for developing and implementing REDD+ policies and programs for relevant ministries, government agencies, and other stakeholders. Initially, two versions of Stranas were separately developed by Indonesia's National Planning Agency (*Badan Perencanaan Nasional/Bappenas*) and the MoF. Each draft consists of an identification of drivers of deforestation and forest degradation, and the formulation of national strategies to address these issues. The drafting process of Stranas developed by Bappenas involved intensive public consultations with various stakeholders (Ismail and Astuti, 2012).²⁶ When the REDD+ task force was established in 2011, a specific working group was assigned to take over the process of finalizing the Stranas document, in which both earlier drafts were integrated. The working group members consisted of government and non-government individuals (e.g. civil society activists, academia, and staff members of international organizations) chosen based on

²⁶ The consultation processes conducted in seven regions in Indonesia and engaged nearly 400 participants – representatives from government, civil society, academics and business sector.

their expertise. The process of consultations and the finalization of the draft were quick and involved a smaller number of stakeholders. A member of the working group suggested that such an approach was necessary to push forward the draft completion and forestry reform:

They [MoF and Bappenas officials] already did what had to be done but they were not successful. It's hard to create a breakthrough as they [MoF and Bappenas officials] resisted any ideas for reform. Every new ideas/plans have been rejected, like the boundary delineation of state forests, reviewing permits and policies that are crucial for implementing REDD+. It is hard to move forward. Therefore, five people assigned for the Stranas working group were not bureaucrats and considered to have a thorough understanding on the subject. When we conducted the public consultation, we invited all of them [relevant ministries] and we asked for their input. So we basically integrated their recommendations into the new draft of Stranas (Raka, interview, July 4, 2013).

This action has provoked resistance, particularly from the Ministry of Forestry and the National Planning Agency, partly due to minimal involvement of both agencies in the process. MoF staff members interviewed for this research also suggested that the development of Stranas should be given to the 'authority owner' (*pemangku kewenangan*) over forestlands, i.e. to the MoF itself (Rani and Suryanto, interview, September 17, 2012).

The final draft of Stranas should have been mainstreamed into Indonesia's national development plan. However, little progress has been made so far. A key informant from the National Planning Agency suggests that many government officers position the Stranas as the task force's product so it is not their responsibility to implement the strategy (Sri, interview, September 12, 2012). Similar problems occurred in the development of REDD+ social safeguards where different agencies developed their

own safeguards (Setyowati, et al., 2012).²⁷ In addition, there has been overlap between policies regulating REDD+, particularly the Stranas and national action for GHG reduction (RAN GRK/*Rencana Aksi Nasional penurunan Gas Rumah Kaca*). Criticisms have also been raised concerning the two-year moratorium permits. Indarto, et al. (2012) suggest that the policy has many loopholes, as some exceptions could be applied to allow the permit issuance over forestland conversion despite the moratorium.²⁸ For instance, a permit can be granted if ‘the project is of vital national importance with regard to food and energy security’. This exception could be widely interpreted to justify the issuance of forest concession licenses.

2.6 Strategic Maneuvering or Co-optation? Civil Society and REDD+

As described earlier, one feature of neoliberal environmental governance is the inclusion of civil society representatives in environmental governance as they might potentially fill the vacuum created under insufficient market regulation (Castree, 2010). In Indonesia, while their positions toward REDD+ are diverse, civil society representatives have been heavily engaged in key decision making processes related to

²⁷ The National REDD+ Task Force developed its set of social safeguards known as PRISAI (Principles, Criteria, and Indicators of REDD+ Safeguards Indonesia) and MoF developed a separate set known as SIS (Safeguards Information System) REDD+. While both drafts are arguably complementary to each other, efforts to integrate them have been very slow to date.

²⁸ Basically, the instruction prohibits the issuance of new licenses pertaining to primary forests and peatlands for two years. However, there are four exceptions when the new licenses are allowed: 1) the in-principle permit is already in the process of being issued; 2) a project that is considered vital national importance with regard to food and energy security; 3) extensions of forest use licenses so long as the applicant’s business license is valid; and 4) economic restoration activities (Indarto, et al., 2012).

REDD+. Furthermore, some non-government organizations (NGOs) have also actively implemented REDD+ demonstration activities throughout the country.

This trend reflects a broader shift of civil society and state relations in the context of environmental governance in Indonesia. During the Suharto administration, environmental movements flourished and became a safe space where activists could assist local people and promote an environmental agenda because any political resistance against the state was intolerable (Peluso, et al., 2008). Nevertheless, collaboration with the government administration was only possible after the fall of Suharto, which provided more civil liberties and to some extent opened up opportunities for civil society to be engaged in the decision making processes. For instance, many environmental groups started collaborating with district and government administrations as well as parliament members who were sympathetic toward the goal of agrarian and environmental movements (Peluso, et al., 2008).

In the context of REDD+ there are at least three different positions of civil society groups. While it might simplify the dynamics of each group, this categorization could illuminate civil society positions toward REDD+ in Indonesia. The first group consists of those who take a critical opposition toward REDD+. ²⁹ While the arguments to oppose REDD+ are diverse, many NGOs in this group argue that REDD+ is not the solution for underlying problems in forestry and carbon trading, and will only bring disastrous effects

²⁹ The examples for this group include WALHI (*Wahana Lingkungan Hidup*/ Friend of the Earth Indonesia) and JATAM (*Jaringan Advokasi Tambang*/ Mining Advocacy Network), both are among the most outspoken NGOs opposing REDD+.

to the environment and forest dependent communities. The second group includes those who take a middle ground position, in which they do not completely reject the idea of REDD+, but argue that the initiative will not work unless pre-requisites for good forest governance are fulfilled (CSF, 2010).³⁰ Among the latter are those who support forestland tenure reform and the recognition of indigenous people's rights over forestlands. Some activists in this group are also wary of potential adverse effects of carbon trading through REDD+. As described in the interview conducted by REDD Monitor with an Indonesian NGO activist:

Every scheme related to REDD+ must respect human rights and be based on the Free, Prior and Informed Consent [FPIC] of affected communities. If the scheme of carbon trading is rejected by communities, it shouldn't be forced. In general, we have to be critical about any scheme that comes from outside and has the potential to adversely impact local communities and indigenous peoples, including carbon trading ... For HuMa, we don't think it's a good solution to force communities that still live their traditional ways of life to the one single global agenda of creating carbon markets. We strongly believe that they have better options to manage forest sustainably without the turbulence of cash money, not only from the carbon market but also from the agenda of commercializing REDD to simply reduce it to "easy money scheme". They could keep their way of life as long as they want to. We shouldn't force them to follow outsiders' needs (Bernadius Steni - April 17, 2012 as cited in Lang, 2012).

Finally, the third group consists of those who have enthusiastically supported REDD+ and actively implemented demonstration activities in various parts of Indonesia. They generally consider REDD+ to be a positive move in the direction of improving forest conditions and believe REDD+ provides an incentive mechanism for good forest

³⁰ Examples of this group include AMAN (*Aliansi Masyarakat Adat Nusantara*/ Indigenous People National Alliance), ICEL (Indonesian Center for Environmental Law), HUMA (Community and Ecology Society for Law Reform), and WARSI (*Komunitas Konservasi Indonesia*/ Indonesian Community for Conservation), among others.

governance (Indarto, et al., 2012). This group ranges from international and national conservation organizations that implement the demonstration activities to those that seek to integrate community forestry into REDD+ initiatives.³¹

Some NGOs in the first and second group have become a part of the Indonesia Civil Society Forum for Climate Justice (CSF), a network whose main goal is to increase public awareness on the impacts of climate change and advocate climate justice. This forum was established in 2007, prior to the Bali climate change meeting, with members that consisted of around twenty NGOs. With regards to REDD+, this network highlights concerns that REDD+ might exacerbate forest conflicts if forest tenure rights and safeguards are not addressed. It also advocates for stronger rights for forest dependent communities.

As described earlier, when the national REDD+ Task Force was established, some movement leaders of CSF became members of the task force. Such an inclusive approach has received mixed responses among civil society actors. Some argue that this approach could be a form of the state's co-optation over the climate justice movement (Veni, interview, July 5, 2013). To some extent, CSF has become less outspoken toward REDD+ after the inclusion of its leaders into the task force. Others argue that this is a strategic maneuver to ensure that civil societies' inputs are directly integrated into REDD+ policy development (Budi, interview, July 4, 2013).

³¹ Examples of this group include FFI (Fauna and Flora International), WWF (World Wildlife Fund), TNC (The Nature Conservancy), CI (Conservation International), and LATIN (*Lembaga Alam Tropika/ Tropical Nature Institution*). Some of them try to integrate community forestry with REDD+.

While earlier studies suggested that institutionalization of social movements could lead to their co-optation and weakening, some scholars increasingly find evidence that environmental movement actors could successfully counter the hegemonic discourse and influence the policy making process through cooperating with the state and using conventional policy channels (Bebbington, 2010 as cited in Gregario, 2011). Similarly, in the case of REDD+, interviews with some NGO activists provide a more nuanced understanding of the dynamics of their involvement in the National REDD+ task force. While working with government counterparts and other actors, they form an informal caucus among civil society representatives in the task force to keep each other informed about the progress of policy development and share lessons learnt on how to negotiate terms with other actors in the task force. Raka, an NGO activist who is also a member of the REDD+ Task Force, adds that his involvement in the task force has also enabled him to inform other activists to devise advocacy strategies and divide their roles in that regard (Raka, interview, July 4, 2013).

Similar approaches have also been practiced by civil society representatives in some provincial REDD+ Task Forces in Indonesia. An indigenous leader, who is also a member of provincial REDD+ task force of the Central Sulawesi Province, indicated that she decided to be a member of the task force because it allowed her to advocate strategically for increasing involvement of indigenous representatives and promote the acknowledgement of indigenous rights over forestlands and resources (Nurlaela, interview, September 28, 2012). Along with other civil society representatives, she regularly meets indigenous and civil society groups as a check and balance mechanism,

which allows her to report the results of negotiations in the task force and gain inputs to be advocated in policy development. Nonetheless, straddling different political settings is not an easy task. An NGO activist noted that, although he learned how to frame and articulate his message in a certain way so that it is more acceptable and convincing to the government administrators thereby allowing policy and regulation change, such an approach has somewhat constrained him in delivering arguments (Budi, interview, July 4, 2013).

Environmental activists also use narratives that relate to climate change and REDD+ issues to further the environmental and agrarian movement agenda. For example, they deploy a “No Rights, No REDD+” narrative to advocate for land tenure reform and the recognition of indigenous and women’s rights over forestlands and resources. To some extent they have been successful in using REDD+ to leverage the movement agenda in the development of REDD+ social safeguards: Principles, Criteria, and Indicators of REDD+ Safeguards Indonesia (PRISAI). These mandate the implementation of FPIC in REDD+ project development and implementation and emphasize the acknowledgement and respect of indigenous/communities’ rights over forestland and resources (Setyowati, et al., 2012). Nevertheless, whether or not PRISAI can effectively be implemented remains to be seen. This evidence shows how environmental activists are able to utilize political space to advance the environmental and agrarian movement agenda, while minimizing the potential of being co-opted by the state.

2.7 Conclusion

This chapter has briefly described the history and negotiations concerning REDD+ during climate change negotiations and has investigated the rationale and processes of REDD+ policy development in Indonesia. REDD+ is being implemented in the context of deep structural change, particularly the enactment of decentralization policies where it has been unclear which authorities are responsible for governing the forests. As this chapter has illustrated, REDD+ has been a new site of contestation between different levels of government in Indonesia.

The idea of establishing a ‘super power’ institution reflects not only a deeper power struggle between different government levels but also debunks the assumption that neoliberalization processes often ‘hollow out’ the state by minimizing the state’s role in regulating markets to improve market effectiveness. Indeed, the Indonesian case suggests that REDD+ can be utilized to increase the presence of the state in controlling forest resources. The establishment of the agency could potentially re-centralize decision making processes, particularly in the forestry sector, in which the agency would have a powerful authority to oversee all REDD+ implementation, set up standards and outcomes to be achieved by the local government, and control permit issuance for REDD+ project development. In addition, despite democratic elections, old power networks persist, particularly at the local level. This includes district modes of clientism that mediate forest access and use. These conditions could hamper reforms necessary to make REDD+ work.

As described above, REDD+ is very prone to being affected by changing political circumstances. This has been proven by the closure of several REDD+ projects, such as

the Kalimantan Forest Carbon Project (KFCP), funded by the Australian government, due to changing political situations in Australia that led to the donor's shift of priorities and complex situations in the province. In addition, quick creation of REDD+ institutions and policies will not be effective in the long run if they are not rooted in legitimate institutional and legal processes (Luttrell, et al., 2014). The future of REDD+ in Indonesia remains uncertain, particularly with the ending of President Yudhono's administration in 2014.

This chapter also briefly describes different civil society positions toward REDD+ and the dynamics of their involvement in REDD+ policy development. This study further suggests that by engaging in the policy processes of formal political channels, environmental and indigenous movement actors have maintained their ability to challenge state administrators and further the environmental movement agenda, especially to ensure the inclusion of FPIC and the acknowledgement of indigenous and communities' rights over forestlands and resources. Having said that, more in depth investigation is needed to understand how this engagement could influence the dynamics of civil society-state relations and the climate justice movement.

CHAPTER 3. From Aid to Trade: The Making of Ulu Masen REDD+ Project

3.1 Introduction

Until very recently, trading carbon credits generated from REDD+ projects as an avenue to mitigate climate change was unimaginable to many, including the Government of Aceh (GoA). Since the inclusion of REDD+ in the climate change negotiations during the UNFCCC COP meeting in Bali in 2007, however, there has been growing enthusiasm on the part of various actors to develop and implement the initiative. This chapter explains how and why carbon markets have become a desirable option for addressing Aceh's problems. In doing so, it examines the origin and the trajectory of the Ulu Masen REDD+ project; analyzes the discourses used to justify the project as a rational planning objective; and explores the different motives of project proponents for collaborating on the project's development and their different positionings toward it.

I argue that the way problems associated with deforestation and forest degradation have come to be represented has allowed the REDD+ project to emerge as a logical solution to longstanding problems in Aceh. Specifically, it involves the conceptualization of Aceh problems in ways that are amenable to carbon markets. In addition, numerous actors involved in the making of Ulu Masen REDD+ have diverse motives and have actively negotiated the project terms in their own self interest thereby influencing the form that the project ultimately takes.

In the second section, I describe the conceptual framework used to inform the analysis in this chapter. The third section illuminates the process of developing the Ulu Masen REDD+ project, and the fourth section explores the discourses used by the project proponents to justify project design and project implementation. The fifth section describes the ways in which the GoA tries to extend its control over natural resources and investigates the continuous negotiations underway between officials at different levels of government in implementing the project. The sixth and seventh sections examine Fauna and Flora International's (FFI) role in the project and describe the problematic roles of the carbon broker, Carbon Conservation, as an intermediary for selling carbon credits generated from Ulu Masen REDD+.

3.2 Political Rationalities and Rendering Forest Carbon Technical

Critical development study scholars position 'development' as a discursive and material project that is, in part, constituted by capital accumulation (Ferguson, 1990; Mitchell, 2002; Li, 1999, 2007). They argue that central to designing a development program/project is a process of "calculation." It involves constructing knowledge about what is going on, formulating problems, marshaling categories, identifying deficiencies that need to be rectified, and formulating interventions to solve these deficiencies (Li, 2007; Mitchell, 2002). Li (2007) suggests that in the modern practices of government, calculation and technical problem definitions are necessary "...because government requires that the 'right manner' be defined, distinct 'finalities' prioritized, and tactics finely tuned to achieve optimal results. Calculation requires, in turn, the processes to be

governed be characterized in technical terms. Only then, can specific interventions be devised” (p.6). The production of discourse is especially important in this context, not so much because of the meaning that it produces, but because it serves as an *intellectual technology* that provides mechanisms to render reality thinkable, predictable, and amenable for particular actions (Miller and Rose, 1990).

However, in developing programs/projects, designers often “...address some problems, and necessarily not others” (Li, 2007, p. 2). Thus, development discourses serve not only to legitimize an arena for intervention but also to depoliticize it. Ferguson (1990) has described this mechanism as an “anti-politics machine”. He argues that development interventions are discursive and inherently political, and as such, they produce and frame local realities that justify certain interventions. However, the production of bureaucratic discourses serves to depoliticize the intervention and at the same time produces particular social side effects or “instrumental effects” that enhance regimes of power-knowledge (Ferguson, 1990). This critical approach has informed a number of scholars who analyze: 1) the ways “green development” projects use environmental discourses to justify particular set of interventions (Beymer-Farris and Bassett, 2012; Milne and Adams, 2012); and 2) how the interests of environmental subjects become aligned to those of the state (Agrawal, 2005; Birkenholtz, 2009).

As described in Chapter 2, REDD+ can be seen as a part of the neoliberalization of nature, a process whereby forest carbon is integrated fully into the market through commodification and marketization. To enable the exchange and trade of carbon credits generated from the REDD+ project, carbon emissions reduction is transformed into a

“fictitious commodity” in the form of carbon credits by detaching them from complex social constraints and putting them under the auspices of the self-regulating market (Polanyi, 1944 as cited in McCarthy and Prudham, 2004; Kosoy and Corbera, 2010). This can be done through the development of specific forest carbon offset projects in which the outputs can be quantified, owned, and traded (Bumpus and Liverman, 2008). The commodification of forest carbon is thus a discursive process in which “specific sites and objects enter into a field of intelligibility in a manner that allows for some ways of understanding them while foreclosing on others” (Lansing, 2011, p. 734). It requires the simplification of complex forest ecosystems and the enabling of universal standardization and definition of carbon content (Scott, 1998; Boyd, 2009; Kosoy and Corbera, 2010). Building on this framework this chapter analyzes the discursive process leading to the conception of Ulu Masen REDD+ and extends the investigation by examining the political process of project development and its ultimate outcomes.

3.3 Greening Aceh Development

Prior to the 2004 tsunami, international development assistance was limited in Aceh. Preceding the disaster, the Government of Indonesia restricted ‘international interventions’ in the region due to political sensitivity. The tsunami opened the door to an influx of foreign aid and development assistance into the province. The first wave of the assistance primarily focused on disaster relief and reconstruction projects. However,

starting in 2007, the newly elected governor³² began to explore long-term strategies for development in Aceh considering that most international agencies planned to withdraw their assistance in 2009. At the same time, international agencies also started to transform their assistance strategies to address long-term development needs in the province.

In early 2007, a meeting was held between the Governor of Aceh and the vice president of the World Bank to discuss development needs after the completion of post-tsunami reconstruction projects in the province. The governor keenly expressed his concern to overcome Aceh's dependency on international aid and proclaimed "Aceh needs to trade, not [to receive] aid" (as cited by Atmojo, interview, September 10, 2011).³³ Nevertheless, a key challenge was finding a product that could be quickly produced and traded to address Aceh's development needs. Traditionally, high quality products, such as palm oil and coffee, were considered as potential source of income. But a new 'product' also came to the forefront. The meeting concluded that producing and trading 'environmental services', like carbon sequestration, could support Aceh's development by allowing the GoA to tap the benefit of emerging carbon markets while at the same time ensuring environmental sustainability in the region.

The emergence of 'green development' in Aceh is situated in the context of international agencies' shift of assistance strategies, particularly to support efforts for mitigation and adaptation to climate change. There are at least 18 international

³²Irwandi Yusuf was the first governor in the province directly elected by Acehnese after the tsunami.

³³Atmojo, an advisor to the governor, was one of the masterminds behind the efforts for greening Aceh's development and accordingly closely involved in the conception and negotiations of Ulu Masen REDD+ project.

organizations involved in the effort to ‘green’ Aceh (Meehan, 2009). One of the projects, Aceh Forest Environment Project (AFEP) – a four-year USD 17.53 million program funded by multiple donors and managed by the World Bank – was started in 2006. It mainly focuses on helping the GoA’s efforts for climate change mitigation and adaptation. The project is implemented by FFI and Leuser Ecosystem, and it partially supports the initial development of Ulu Masen REDD+.

Assisted by an advisory board consisting of Indonesian and international experts, the GoA comprehensively formulated a new development strategy for the province and has advised the governor to adopt ‘green development strategies’ under the Aceh Green vision. It is claimed that the plan is a ‘green’ version of the Marshall Plan, which would enable Aceh to recover and rebuild its economic situation. It is argued that Aceh Green is not a policy; it is rather a vision that aims to integrate themes of climate change via renewable energy and land use management, community development, commerce and conservation (Anonymous, 2008). Choosing a ‘green’ approach is considered a strategic choice for mobilizing international support. By using language that is more receptive to a wider audience, the GoA has been able to align Aceh’s development efforts to global environmentalism and climate change issues.

There are three important elements framed by the experts as a rationale for greening Aceh’s development. *First*, the green vision of Aceh Governor, Irwandi Yusuf, is deemed an important asset for successfully promoting the green development initiative

in the province (Robert and Christ, personal communication, June 2, 2009).³⁴ In Indonesia, having the most important figure in the province actively aware of environmental issues is rarely found, let alone one enthusiastically promoting a green development strategy. Governor Irwandi's long-term engagement in environmental activism and close connection with international agencies and international environmental NGOs has made him a 'green governor'.³⁵ *Second*, Aceh still has large areas of forest covering 3.3 million hectares with rich biodiversity and providing habitat for remaining endangered species such as the Sumatran tiger and orangutan. *Third*, there is an increasing need to conserve and protect these forest areas due to growing illegal logging rates and an influx of entrepreneurs trying to open logging and plantation businesses in Aceh. Moreover, increasing timber needs for post-tsunami reconstruction projects as well as the palm oil boom threatened the rapid conversion of forest and agriculture areas. These factors have contributed to growing attention paid by international agencies and donors to environmental issues in Aceh. As described by one of the Governor's advisors,

That's why we're really keen on Aceh...It has probably the largest tract of natural forest in all of Sumatra, and Irwandi is a green governor. He wants to do what can be done so that the forest does not disappear. And if he can get paid for it, even better (Walker, 2008).

In the Aceh Green concept paper, it states that the Aceh Governor completely understands that in order to complete reconstruction efforts and promote the peace

³⁴ Robert was an officer of World Bank and Chris is a manager in a USAID project.

³⁵ Before elected to be the governor, Irwandi worked for FFI as an elephant veterinarian. Hence, he already had a particularly strong environmental vision when he was elected as the governor of Aceh.

process, it is necessary to create programs and policies that quickly generate employment and income opportunities for all Acehnese, with particular attention given to ex-combatants (GoA, 2008). The document also describes the governor's deep concern for ensuring the protection and preservation of Aceh natural resources as a key to sustainable economic development.

At the same time, major investments are needed to finance post-tsunami reconstruction and regional development. Hence, mobilizing investors to support the governor's vision is pivotal. The document also states that the Aceh government will need public-private partnerships, non-governmental oversight, and private sector involvement to manage clean energy, generate biofuel feedstock, promote reforestation, and avoid deforestation, all of which involve issues related to carbon and a commitment to green development.

Prior to the formulation of the Aceh Green vision, a governor's instruction in June 2007 issued a moratorium (Governor Instruction No.5/INSTR/2007) to effectively stop all logging in natural forests, and a team was established in the following year to eradicate illegal logging activities. This gave the provincial government time to review the current status of Aceh's forests, develop a proper and sustainable forest management strategy, and enforce stronger measures for violation of the policy. The logging moratorium is also considered as proof of the GoA's commitment to green development and a message "...to the international community that the province is willing to stop deforestation but not without receiving something in return, i.e., new revenues from trade, not only aid" (GoA, 2008, p.2). In addition, the Aceh Green secretariat, an ad hoc

institution with members from relevant provincial government agencies, was established in 2008 to support the provincial government in mainstreaming green development into relevant sectors in the province. Clearly, Aceh Green is inspired by a neoliberal economics perspective. It attempts to combine development and conservation concerns through deepening market incentives and decentralized environmental governance.

When Carbon Conservation, the Australian carbon broker company, approached the governor of Aceh during the Bali meeting as described in Chapter 1, the governor was instantly inclined to support the idea of a project centered on avoiding deforestation, which was later transformed into REDD+. The REDD+ project is considered a promising avenue to solve two main challenges for Aceh: ensuring sustainable forest management while at the same time generating a source of financial revenue for development. As the governor's advisor puts it,

It is the government's responsibility [to ensure sustainable forest management] in Aceh, but the governor wanted that Aceh's forest should not be a free facility, a 'septic tank,' for the world. The government of Aceh wants to help developed countries to reduce emissions but we do not want to let our people be hungry (Atmojo, interview, September 10, 2011).

In several media interviews, the governor repeatedly used the metaphor that Aceh is not a 'septic tank' to emphasize that Aceh deserves to obtain compensation for conserving the forest because its forest absorbs carbon emissions and that benefits the world.³⁶ The governor and his advisors are well aware of the politics of carbon trading

³⁶ One of the interviews: *Hutan Aceh "Septic Tank" Limbah Negara Maju* (Aceh's Forest as a 'Septic Tank' for Developed Countries). Format News. Retrieved on March 1, 2013 from <http://formatnews.com/v1/view.php?newsid=44963>

and unequal relations between the first world forest carbon credit buyers and the producers in the developing world, as described in Chapter 2. However, they are willing to utilize the potential opportunities provided by a carbon market to generate revenue for local development.

As an integral part of the Aceh Green vision, the provincial government is developing Ulu Masen REDD+. To develop a REDD+ project, one needs to have sufficient knowledge about climate change, carbon markets, project design and operational principles carbon monitoring, accounting, and validation procedures. Expertise in technology involving satellite imagery, trading platforms and databases is also crucial (Corbera and Brown, 2010). Additionally, capital investment is required to enable REDD+ project developers to start the project in the first place. Therefore, most REDD+ projects rely heavily on international technical experts and intermediary actors, thus allowing the formation of an assemblage of state and non-state actors to govern forests.

Ulu Masen REDD+ project was developed in close collaboration with Carbon Conservation and Fauna and Flora International (FFI). Carbon Conservation has been appointed as the sole seller of the carbon credits generated from the project and provides assistance with the project design, whilst FFI is assigned to provide technical assistance, such as community development and carbon stock monitoring, among other functions. The project objective is to utilize carbon financing as a means to enable community livelihoods and forest protection strategies and to conduct land use planning reforms that would reduce illegal logging and forest conversion threats. The project proponents

estimate that the project would reduce deforestation in the area by 85 percent and avoid carbon emissions totaling 3,369,848 tons per year (PDD, 2007). Local communities living adjacent to the forest areas would be among the key beneficiaries of the project's interventions and programs.

Prior to the development of the project, its proponents needed to define the environmental problems that needed to be solved in Aceh. The project development was quick and involved the elite inner circle of the governor's office in regular communication with FFI and Carbon Conservation. Engagement of other agencies at the provincial level, such as Bapedal (*Badan Pengendalian Dampak Lingkungan/* Environmental Impact Management Agency) of Aceh, provincial forestry officials, plantation agencies, and local communities was limited. As a consequence, communities' perspectives on local problems were not included in the project development. Instead of using a rights based approach, the decision on who should be engaged in project design was based on friendships and existing networks (McCulloch, 2010). The hastiness of project development was partly due to a desire to build on momentum created during the United Nations Framework Convention on Climate Change (UNFCCC) meeting in Bali in December 2007 to launch the project. Project proponents also tried to utilize the absence of clear legal instruments regulating REDD+ in Indonesia to make an early move for marketing carbon credits.

In order to enable the carbon credit generated from the Ulu Masen REDD+ project to become tradeable in the market, the project needed to be validated using a certain standard, such as the Verified Carbon Standard (VCS) or Climate, Community

and Biodiversity (CCB) standard developed by Climate, Community, and Biodiversity Alliance (CCBA), in order to ensure reliability of methodology and vouch for the fact that a given REDD+ project has meet all requirements set by the validation entities. The Ulu Masen Project Design Document (PDD) used CCBA validation standards to secure carbon financing. Based on an audit by Smartwood, the first version of project documentation was deemed insufficient because it failed to elaborate on communities' livelihood strategies and specify means to alleviate risks and distribute benefits to communities (Smartwood, 2008). The methodologies for evaluating deforestation rates were also considered inadequate. Therefore, the project missed out on the golden rating and was granted silver rating.³⁷

To support the implementation of Ulu Masen REDD+, a provincial REDD Task Force was established on January 28, 2010 (The Governor Decree No.522/18/2010). This group consists of representatives from all of the relevant government agencies, such as The Forestry Agency, The Legal and Economic Bureau, and Community and Empowerment Agency. The task force is responsible for involving and coordinating among relevant stakeholders. FFI provides technical assistance to support the working group. An institutional framework was also planned to be developed for long-term management of the Ulu Masen REDD+ project.

³⁷ As CCBA does not issue credits/carbon certificates, the project proponents planned nonetheless to obtain VCS validation in 2011. The plan was never materialized due to the change of political situation in Aceh, which will be described in detail in Chapter 7.

3.4 Calculation of Nature and People

Similar to carbon offset projects, the REDD+ Project Design Document (PDD) is utilized by the project developers to establish and legitimize particular initiatives to potential buyers, investors, and carbon standard bodies (Bumpus and Liverman, 2011). The document usually describes project rationales, sets up methodologies to calculate potential carbon reductions, and establishes carbon monitoring procedures to prove that the carbon reductions are verifiable and permanent. As described by Bumpus and Liverman (2011), the underlying reason for justifying the carbon offset projects is “the ability to sell or use carbon credits for compensating emissions in one area over another” (p.208).

To understand the project rationale, diagnosis, and tactics, a closer examination of project documents is necessary. There are two different documents available: the first was submitted by the project proponents to Smartwood for project validation purposes in November 2007; the second was a revised version of the Project Design Document (PDD) based on Smartwood’s inputs. For the purpose of this chapter, I examine the revised version of PDD. In general, the PDD defines the problem by illustrating how Aceh’s forest, which is endowed with rich biodiversity, is encountering increasing threats from legal and illegal logging, oil palm plantation expansion, and poaching, among others. It also notes that without any interventions, the deforestation rate would significantly increase. This is partly due to the cessation of Aceh’s conflicts and the normalization of political and economic situations in the region, which makes Aceh’s

forest safer and more accessible for logging activities. To resolve the problem, PDD proposes to use carbon financing:

Project proponents can, with adequate carbon finance, institute measures that will reduce legal and illegal deforestation, promote reforestation and foster sustainable community forest management. Carbon-finance funds will be established to offset all, or most, of the opportunity costs of avoiding deforestation as well as support project activities and operations (PDD, 2007, p. 35).

While some activities would eventually be conducted such as establishing policy and regulatory frameworks for carbon rights and carbon credits, searching alternative livelihoods for communities, and capacity building for carbon accounting, the major tactic employed to implement the project entailed land reclassification. In theory, this step would have eliminated the legal possibility of land conversion and logging on a permanent basis (see Chapter 5).

In PDD, project proponents had to prove that the project ‘interventions’ could reduce CO₂ emissions from deforestation and forest degradation. The emissions reduction resulting from the project had to demonstrate additionality, that is the project activities funded by carbon financing needed to reduce deforestation and/or forest degradation below the level of reduction that would happen without the project intervention or a ‘business as usual scenario’ (USAID and WCS, 2008; Bumpus and Liverman, 2008). Furthermore, the PDD had to demonstrate that the project activities would not result in a substantial amount of leakage, which refers to displacement of activities that cause deforestation and/or degradation from the project site to another site and, thus, a decrease in the net CO₂ emissions reductions achieved by the REDD project (USAID and WCS, 2008). The Ulu Masen PDD elaborates the methods used for those measurements and

describes the results at length, gauging future scenarios of CO₂ emissions with and without the project and going further to describe the assurance of permanence or long lasting impact of the project during the project cycle, 30 years and even beyond.

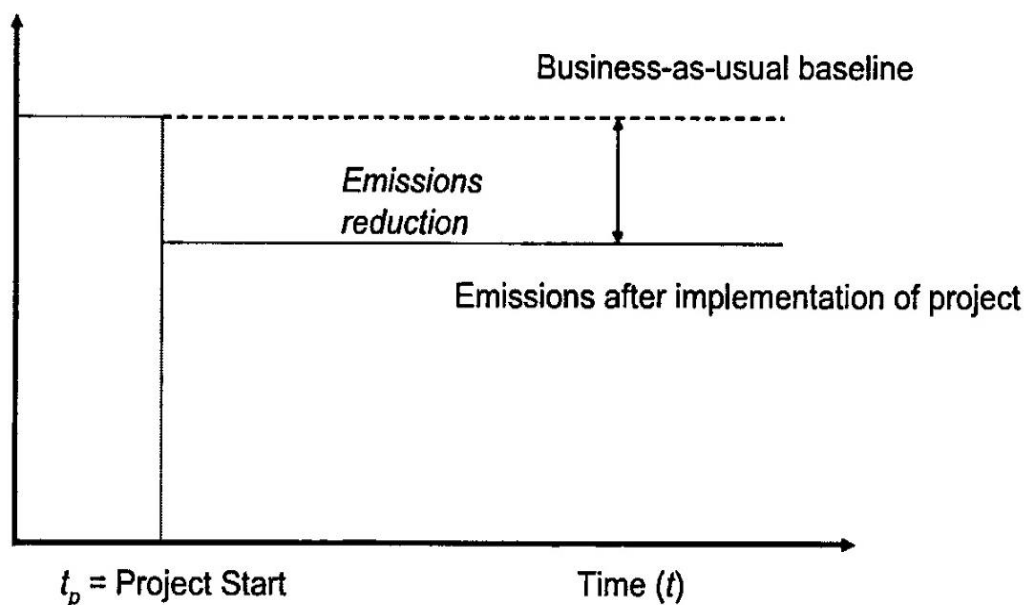


Figure 3.1 Simplified Principle of the Baseline

(Adapted from Michaelowa, as cited in Bumpus and Liverman, 2008, p.135)

It has been acknowledged that methodologies to comprehend carbon reductions through baseline calculations are extremely complex. For instance, determining the amounts and sequestration of carbon in the forests can be complicated by weather variations and related monitoring difficulties (Bumpus and Liverman, 2008). While the PDD of Ulu Masen REDD+ acknowledges existing ‘unresolved’ methodological issues on establishing land use baseline scenarios in the UNFCCC negotiations and other

methodological uncertainties, project proponents nonetheless reassert the world's moral obligation to save the Aceh forest,

We acknowledge methodological uncertainties in general, as well as specific gaps in our data and understanding. We cannot at present provide every final piece of information on carbon stocks, or reference emissions scenarios, or leakage or any other desired or required data set. Still, we believe the world does not want to argue methodologies while the largest unprotected bloc of Sumatran rainforest disappears (PDD 2007, p. 3).

The project proponents also present the justification to use one of the baseline scenarios that are available, although it might need revisions and additional work. Lovell and Liverman (2010) observe that the techniques for measuring carbon offsets have evolved overtime and that the objects of measurement also change to suit the measurement techniques that are available.

In terms of 'calculating' people, the PDD (2007) describes how local communities living in and around Ulu Masen REDD+ rely on timber and non-timber forest products for their livelihood needs. It correctly points out that legal and illegal logging has long been part of the local economy. While admitting that the scale of economic opportunities created by legal and illegal logging is difficult to determine, the project proponents continue to emphasize, without sufficient elaboration, that the benefits generated by the project can 'trade off' the opportunity lost, and that "...the communities will be better off with this project than without" (PDD, 2007, p. 32).

In describing the baseline scenario for communities in the next 30 years, project proponents assume that the availability of carbon financing and potential employment generated from the project would entice the communities to support forest conservation

and forgo opportunities from logging activities. But they also acknowledge that the baseline scenario on communities excludes factors that could influence the project but are not ‘governable,’ such as disaster and political uncertainties:

Predicting the future of communities in the project area over 30 years is an exercise in educated guesswork. The land use assumptions project proponents have created do not account for the possibility of conflict returning to Aceh, another massive earthquake or tsunami and other extreme event uncertainties (PDD, 2007, p. 31).

Communities would be engaged in the project activities through the involvement of *mukim*, which is considered a legitimate stakeholder for participatory forest management. To govern the communities, project proponents propose to enhance enforcement, develop agreements with communities, create employment for local people, and conduct forest monitoring and patrols. Technical assistance and funding will be provided for communities “that commit to protecting forest” (p.24). The project proponents seek to render the communities responsible to enhance their commitment to forest conservation and also expand entrepreneurship, in the sense that they are expected to find viable alternative economies that are not harmful to the forest. Such characteristics are promoted through setting conditions that encourage them to behave in a certain way. The vision of communities as neoliberal subjects is eloquently described by Dorjee Sun, the CEO of Carbon Conservation:

Ultimately we’ve been trying to think about ways where it’s not hand-outs. So the money will get to the people by the forest, but we feel that it’s actually damaging to give them money without recourse, without strings, because if it seems as though it’s money for free then people won’t appreciate it, they won’t invest it, they won’t learn the skills required to actually create a meaningful life (as cited in Lang, 2013).

Sun's statement echoes discourses employed in neoliberal social policies that position the community as a self-governing formation that could be in charge of local livelihoods, both their successes and their failures (Castree, 2010). Rose (1999 as cited in Li, 2007) calls this practice 'government through community' insofar as communities are encouraged to be responsible for their own improvement by participating in the markets, learning how to be competitive, and making rational choices. In this manner, the role of government is transformed, not to plan but to 'enable, animate and facilitate' community action (Li, 2007, p. 234). This proposition is based on the growing evidence of the failure of state based planning and governance.

In the same vein, the Ulu Masen project also put an emphasis on *mukim* as the foundational forest management unit. Communities are expected to engage actively in the project, understand its conservation objectives, seek alternative 'environmentally friendly' commercial activities, and apply entrepreneurial skills to map market demands. In the PDD, project proponents acknowledge that rural communities have systematically been alienated from getting secured access to land and resources due to policies that override customary tenure. The document also describes potential conflicts over the forest tenure arrangements in the project:

The vast majority of the project site is designated as national forest land (*Hutan Negara*) but as is common elsewhere in Indonesia, there is potential for conflict over land status where local communities regard adjacent forestlands as traditional/customary lands. For example, when *mukim* leaders are asked about the extent of the area under their management, they routinely claim that the adjacent forests are managed by the *mukim* (PDD, 2007, p. 14).

Therefore, in the planned activities, technical solutions are proposed to resolve tenure conflicts by involving communities and *mukim* leaders in the participatory land use planning process, establishing jointly agreed boundaries between the local communities and the state on the forest areas and land use patterns, and developing a multi-stakeholder management structure with community representation for the Ulu Masen ecosystem. The PDD also refers to the Law of Governing Aceh (LOGA No.11/2006), which delegated substantial authority to the Aceh government, including in the forestry sector, as a basis for a formal recognition of customary rights to forest resources and lands and *mukims*' authority in forest management.

The PDD does not address overlapping regulations that could jeopardize the *mukim*-based land use planning. Despite claims made by many indigenous groups on their rights over *ulayat* (customary land), most forestlands in Indonesia, including those in Aceh, are classified as 'state forest'. Customary or *adat* systems of forest management will be able to operate with the approval of the central or the provincial government based upon the classification of forest areas (see Chapter 5). In addition, careful reading of the LOGA text reveals that the law, indeed, does not specifically acknowledge of *mukim* authority over forests. The PDD does not elaborate further on strategies to mitigate potential tenure conflicts. Instead, the document advocates efforts to reduce legal and illegal logging through 'spatial fixes' by reclassification of forestland.

To summarize, the Ulu Masen PDD has failed to acknowledge the complexities, uncertainties, and potential risks inherent in local land tenure issues. There is no doubt that the simplification of defining forest, deforestation and forest degradation carries

some risks as such a definition detaches the complex relationship of people to forest and simplifies their livelihood patterns. It is also unable to accommodate people's understanding of forests and the dynamic nature of property relationships.

3.5 Reclaiming Aceh's Autonomy

As described in the previous chapter, REDD+ advocates highlight the importance of extending the market's role in governing the forest under the REDD+ initiative, hence minimizing the state's role. However, the GoA has a particular vision for how the project should be implemented and the extent to which the private sector should be involved. As stated by Atmojo,

We do not want business as usual in the context of REDD or carbon trading. We should change both. It means that we should consider it as a way to reduce emissions but we should also be able to address social issues... We cannot give an authority to the private sector on REDD+ although they promise to distribute benefits to communities. In developing REDD, the GoA has been approached by private sectors to grant concessions to them. But the government refused. *First*, Aceh's natural resources belong to the Acehnese and the government receives the mandate to manage. The government cannot delegate the mandate to other entities. *Second*, there should be a mechanism to ensure its benefit to communities and not ignore communities' rights (Atmojo, interview, September 10, 2011).

Indeed, the provincial government uses REDD+ as an avenue to further its control over resources. This vision is strengthened by the fact that the province is granted a special autonomy status in the context of decentralized government in Indonesia.

Unlike other regions in Indonesia where decentralization was focused on the district level, Aceh and Irian Jaya were granted special autonomy status to curb pro-independence discontent in those provinces. The special autonomy status is seen as a

tradeoff that the central government was willing to make for the unity of the Republic of Indonesia (Barr, et al., 2006). Based on Law 18/2001 on the special autonomy of Aceh, the province would obtain more revenue from natural resources extraction than in other provinces. According to this law, 80 percent of revenue is allocated for the Aceh provincial government and 20 percent for the central government. However, the law does not describe the division of regulatory power between the central government and the provincial government in regards to natural resources management. Thus, it opens wide and potentially conflicting interpretations on the division of authorities between the central and provincial government.

Following the signing of a peace agreement between GAM and the Government of Indonesia, the Law on Governing Aceh (LOGA) as described above, was passed. This law delegated even more authority to the Acehnese government and superseded limitations imposed by previous legislation (GoA, 2008). It allows the provincial government to manage, plan, implement, and supervise the exploration and exploitation of its resources.

For the provincial government, the LOGA provided the legitimacy to collaborate with international agencies to formulate Aceh Green vision and the Ulu Masen REDD+ Project and speed up the marketing of carbon credits. The provincial government also bases its legitimacy on Government Regulation 6/2007, which governs forest planning, management, and use. This regulation gives authority to the district and provincial governments to regulate environmental services utilization through the issuing of permits (*Ijin Usaha Pemanfaatan Jasa Lingkungan/IUPJL*) including carbon sequestration. An

IUPJL permit can be issued for a period longer than 30 years if needed. The GoA has selectively chosen regulations that can serve its needs. This process is akin to Ribot and Peluso's notion of 'forum shopping', where certain actors have the capacity to "select the arena of law, custom, or convention that's favored to their objectives. The importance of political, economic, and cultural forces beyond the legal sphere became more evident in determining who can use law, custom or convention, when and for what purposes" (2003, p.157).

The special autonomy status of Aceh is appealing for carbon dealers who assist the provincial government to develop projects for selling carbon from Aceh's forest. An important element for selling the carbon is the certainty of land/forest tenure because the carbon buyers are interested in projects with long-term assurance about land ownership and use in the future. In other provinces, unclear authority across different levels of government in forest governance, and the lack of recognition for customary rights over forests have created overlapping claims and widely divergent arrays of interpretations on forestland ownership. Although such conditions also occur in Aceh, it is expected that the new spatial planning and policies stipulated by the provincial government could clarify forest tenure arrangements.

Table 3.1 Forest Designation and Authorities within Ulu Masen
(modified from McCulloch, 2008)³⁸

Legal Classification	Total Area (ha)	Percentage	Administrative Power	Current Status
Conservation Forest	15,865	2.14	Central Government	Fully protected from logging and conversion
Protection Forest	292,641	39.56	Central Government	Semi-protected. District or province can propose conversion but the decision is with the central government
Protection Forest-Temporarily designated	2,485	0.33	District and Province	Weak level of protection. It was proposed for permanent protected status
Production Forest	274,188	37.06	Central Government	Logging concessions, which are suspended due to the moratorium. Final decision on activities lies with central government at the recommendation of the province and district
Production Forest	67,271	9.1	Central Government	Logging concessions (plantation forests). Administered by the central government with limited inputs from province and district
Community Development Zone	5,281	0.71	District and Province	Agricultural and/or development area
Unprotected Forest	82,057	11.1	District and Province	Potential for agriculture, community settlement and other uses
Total	739,788	100		

³⁸ The table is based on Ministry of Forestry and Plantation Decree (SK Menhutbun) No. 170/KPTS-II/2000 on the Designation of Forest and Marine Area in Aceh.

Even though the law provides much greater autonomy to Aceh on paper, in reality, there are various regulations that are counterproductive to the LOGA. For instance, the Forestry Law (Law 41/1999) maintains the hierarchical relationship between different levels of government and retains the central government's significant control over forest management. In addition, as described in Table 3.1, nearly 88 percent of forest in the Ulu Masen ecosystem is under the control of the central government (McCulloch, 2010). The area covers broad ranges of forest categories such as conservation, protection and production forests. The forest areas included in the Ulu Masen REDD+ area are based on the anticipated successful outcomes of negotiations to transfer forest management authority from the central government to Aceh's provincial government. Therefore, by utilizing the Ulu Masen REDD+ project and the revised land use plan, the provincial government hopes to negotiate greater authority in managing Aceh's forest.

Early moves by the Aceh government to formulate and initiate the pilot project of REDD+ in Ulu Masen have, however, fueled tension between the central government and Aceh provincial government. Most Ministry of Forestry officers that I interviewed argued that the Ulu Masen carbon trading scheme could not proceed because it was not in line with central government regulations. Based on the Ministry of Forestry Regulation on the Implementation of Demonstration Activities on REDD (P68/Menhut-II/2008), the central government should be a proponent and partner of the demonstration activities. In addition, it is also responsible for endorsing the demonstration activities. However, in the project design of the Ulu Masen REDD+ project, the central government is neither

positioned as a proponent nor a partner (Gene and Aliadi, 2009). Only the provincial government, FFI, and Carbon Conservation appear in the document, which has been construed as a breach to government regulations.

Another problem found in the project document is that the agreement to sell carbon credits was signed between foreign parties, namely Carbon Conservation and Merrill Lynch, without involving the central government. The Ministry of Forestry officials argue that any international financial transaction of the kind described above requires the endorsement of the Indonesian Ministry of Finance and the Ministry of Foreign Affairs (Gene and Aliadi, 2009). In response, the provincial government argued that the project was initiated before the central government issued the endorsement procedure described earlier. It also claimed that the Ulu Masen project document had been sent to the central government and was expected to get approval in early 2008. However, the central government officers deny that they received the document (Anonymous, 2009).

Aceh government's 'independent move' in initiating the project has escalated tension between the provincial government and central government. One of the Ministry of Forestry officers claimed that the GoA's excitement toward potential financial gains from forest protection has made them "jump (...) to implementation by seeking money and making commitments with foreign donors" (Murray, 2009, p. 22). Another MoF officer stated that, "if you want to see how *not* to do it, look at the Aceh project."

There is some speculation on the reasons the central government has refused to endorse Ulu Masen REDD+ demonstration activities. *First*, there are different

interpretations of regulations between the central government and the Aceh government (Gene and Aliadi, 2009); they seek different sources of legitimacy to justify their claims. *Second*, it is assumed the Aceh government would see the institutional reform and the prospects brought forward by REDD+ as an opportunity to further its independence from the Indonesian government. This second reason has been raised by a Ministry of Forestry officer and a journalist that I interviewed (Daryanto, interview, June 2, 2009; Ahmad, October 1, 2011). The central government officers also fail to see why they have been left aside in the Ulu Masen project, as it is the Indonesian government that would ultimately be accountable to the UNFCCC (Gene and Aliadi, 2009). Finally, the central government's resentment toward the project could also indicate incomplete trust building processes between the central government and GAM. The governor of Aceh expressed his frustration,

Should I request a permit if I want to sell palm oil or coconut? Now I just want to sell the 'wind'.³⁹ We do not have to exploit anything. But the central government makes unnecessary complaints and prevents us from doing so...it is difficult for the provincial government because we cannot do anything beyond our authority. It seems to be better for the provincial government to do nothing rather than doing something innovative like this. If we do so [innovative move], it will just be considered as a default (*wan prestasi*) (Irwandi's statement cited by Atmojo, interview, September 10, 2011).

The GoA is gradually aware of the complexity of REDD+ project implementation and the need to get the central government's endorsement to allow the Ulu Masen project to be included in the REDD+ national initiative. Thus, the provincial government has

³⁹ The term 'wind' is a metaphor of forest carbon that is widely use on the island (see Chapter 4).

changed its strategy in communicating and maintaining relations with the central government and has become more cooperative with the Ministry of Forestry and other relevant agencies at the national level. However, its effort to get the endorsement and to get the new spatial plan approved has not come to fruition due to unclear institutional arrangements and policies of REDD+ at the national level.

It has been acknowledged that the state is not a homogenous entity with a unified vision on the ways forests should be governed and used. Indeed, the state is constituted by everyday mundane actions, spaces, and actors with a variety of interests (Nightingale and Ojha, 2011). Conflicting policies toward forest management are not only issued by different departments, but also by different agencies within the department.

Disagreements among different directorate generals in the MoF are common:

After the implementation of the logging moratorium, the central government's view over Aceh was divided. They feared that logging concessions would be given to GAM people and the governor's cronies. They also worried that the Aceh government would convert all forest areas into conservation areas. We just asked them, 'So what do you really want?' They just do not know. BUK (Forest Business Unit) was afraid that all forestlands would be converted to conservation areas, and the PHKA (Forest Protection and Nature Conservation Agency) was afraid that the GoA would take control over forestlands. They actually fight with each other, not knowing what the other will do - conserve or exploit the forests (Atmojo, interview, September 10, 2011).⁴⁰

Another key challenge to implement Ulu Masen REDD+ is convincing the district governments to harmonize their policies in order to support the project goal to reduce

⁴⁰ *Bina Usaha Kehutanan/BUK* (Forestry Business Unit) is an agency responsible for managing forestry business at the MoF, whilst *Pelestarian Hutan dan Konservasi Alam/PHKA* (Forest Protection and Nature Conservation) is responsible for forest conservation activities.

carbon emissions. As the Ulu Masen area covers five districts, the district governments' support is crucial for successful project implementation. Due to unclear arrangements regarding the authority for governing natural resources between different levels of government, diverse actors interpreted the implementation of various decentralization policies differently based on their own interests. Some district governments in Aceh see potentially lucrative economic activities that could yield district revenues. This situation is complicated by the existence of a corrupt political system that leads district political elites to use revenues from local resources to fuel their political machines and maintain patron-client relations with their political supporters. As a member of the provincial REDD+ Task Force explained,

It is difficult to talk to the district government, they are just not interested. You know the implication of regional autonomy. Many new 'kings' are born and rule the district. To fuel their political agenda, they make promises [to those who support them] to convert the forestlands. It is just too contradictive. Some district governments in Aceh have also been approached by carbon cowboys; they were informed about the potential financial gain from the REDD+ project. The district governments are really interested in the financial benefits (Krisna, interview, September 3, 2011).

The Aceh Green secretariat, which is responsible for coordinating the development of the new provincial land use plan and reviewing applications for concession permits, receives endless requests from the district heads or groups of local communities to convert forest areas into agricultural zones (Barnawi, September 16, 2011). While some use arguments that communities are in desperate need of productive agriculture land, others argue that the forestlands have been 'occupied' by the community, so there is no point in maintaining the areas as protected forests. To

complicate matters further, the Aceh Green secretariat often finds that the land proposed to be converted has rich mineral deposits, particularly gold, and that district elites have vested interests in accessing those areas (Barnawi, Lukman, Muhammad, group interview, October 2, 2011).

3.6 Conserving Aceh's Forest

Fauna and Flora International, a non-governmental conservation organization (NGO) headquartered in London, was one of few international NGOs that operated in Aceh during the conflict. It has carried out conservation activities in the province since 1997, which mainly focus on human-wildlife conflict mitigation, particularly in Aceh Jaya District. In the earlier initiative, FFI promoted protected area management and biodiversity conservation using a species flagship approach, particularly elephants and the Sumatran tiger. FFI's long experience in Aceh has enabled it to develop a network of local contacts within the province. This has helped the institution to flexibly adapt to changing political economic circumstances, particularly after the tsunami (FFI, 2009).

After the tsunami in 2004, FFI started to adopt more participatory approaches to conservation in Aceh, while retaining the focus of human-wildlife conflict mitigation. It initiated activities that strengthen indigenous customary forest management, such as participatory mapping and *mukim*-based forest management planning. The result was the designation of the Ulu Masen ecosystem as a strategic area (*kawasan strategis*) in the proposed provincial spatial plan. With the change of international assistance to support the climate mitigation initiative in Aceh, FFI has expanded its focus to include climate

change and has promoted market-based mechanisms for providing sustainable financing to conservation since 2007. As described by Frank Momberg, a regional programme development coordinator of FFI:

During the post-tsunami reconstruction and rehabilitation of Aceh, forest conservation issues were high on the agenda. We saw a chance after the tsunami to work on a sub-national agenda for forest conservation and post-tsunami sustainable re-construction. REDD+ was one of the opportunities for sustainable financing for conservation (as cited in Lang, 2012).

FFI plays a crucial role in the conception of Ulu Masen REDD+. The agency was first approached by Carbon Conservation in 2006, as they were trying to find suitable areas to pilot new REDD concepts (Lang, 2010). With FFI's assistance, the Carbon Conservation was able to connect with provincial government authorities and communicate project ideas. At the same time, FFI also assisted the provincial government by providing legal support to negotiate a fair deal with Carbon Conservation. FFI's close engagement in REDD+ and support of the provincial government's vision of greening Aceh reflect contemporary environmental governance marked with the changing nature of the state and engagement of a plethora of non-state actors in 'the governing of society' (Bulkeley and Newell, 2010 as cited in Corbera and Schroeder, 2011). Those state and non-state actors influence each other, and their interaction contributes to the shape of projects.

Having a close connection with the governor, who is also a former FFI staff, enables the FFI team not only to closely collaborate and provide technical support to the provincial government but also to access the funding sources that are available to support the initiative, one of which was the AFEP project described above. Through the project,

FFI also hires and trains community rangers to assist the government in monitoring forest use and helping communities to mitigate human-wildlife conflict in support of the Ulu Masen REDD+ project (see Chapter 5). During the initial conception of the project, FFI was quite optimistic about the promise of the forest carbon market to provide local incentive and has been approached by countless potential private investors (Anonymous, 2008). FFI also proactively engaged in overseeing Carbon Conservation's investment project.

Using experiences gained from the Ulu Masen project, FFI has developed several other REDD+ projects in Kalimantan, Indonesia, two of which (Kapuas Hulu and Danau Siawan Belida) use an ecosystem restoration concession approach. It is an alternative approach to conserving ecosystems by restoring and re-managing former production forests (Sitompul, et al., 2011). The carbon credits generated from these projects will be sold in voluntary carbon markets. However, none of the projects have sold carbon credits yet, particularly due to bureaucratic hindrance and the corrupt licensing system in the country. Momberg notes,

I find it almost a disgrace that after five years we still have no carbon credit sales from Indonesia on the voluntary market. This is mainly due to massive bureaucratic hindrances. You need lots of recommendations from national and local authorities and if you want to stay clean and do the right thing, well, then you sit and wait. Because a license based REDD+ system is not really different from licensing oil palm or licensing logging concessions. You still have the same politicians that could become subject to corruption. Without a simplified license system that is transparent and a good governance system in place, REDD+ is going to face the same problems as other licenses in relation to governance and corruption (Frank Momberg as cited in Lang, 2012).

When the tension between CC and the Aceh government escalated, FFI decided to step out from its initial commitment to supervise Carbon Conservation's investment project and focused instead on providing technical support to the government to find viable ways to continue the project.

Furthermore, FFI's close involvement in the project and its relation with the provincial government has led to major speculation, and to some extent misperception, about its role in the project in Aceh. This is partly due to the lack of transparency, particularly during the initial project design. As described in one of the local newspapers, the assumption that FFI was the prime manager of the carbon fund gave rise to controversy,

The carbon fund should not be managed by a foreign NGO. The carbon fund that is given to Aceh by a donor country should be managed by the provincial and district government so that each district chief can protect the forest in their territory (Waspada, 2009 as cited in McCulloch, 2010).

Exaggerated stories on the value of the project circulated around the province. Some local NGOs suspect that local communities would receive 'insufficient' compensation.

The ability of FFI to mobilize financial resources to support its conservation activities has also increased 'jealousy' among local environmental NGOs who compete to secure funds (Hidayat, interview, July 12, 2011). With the withdrawal of most international donors from Aceh in 2009, many environmental NGOs that previously enjoyed lucrative funding sources to support post-tsunami rehabilitation and reconstruction efforts in Aceh are struggling to secure alternative financial sources to

support their projects. This situation has indeed been used by some project field staff to explain the resentment of local NGOs toward the Ulu Masen REDD+ Project,

Many local environmental NGOs are jealous of FFI. They think that just because the governor used to be an FFI staff, we gain access to everything. The problem is that we usually work directly with *mukim*, not with local NGOs. They just provoked the communities to oppose REDD+ and those communities do not even live in the Ulu Masen area. They consider that the governor pays too much attention to Ulu Masen but not other areas (Joko, interview, October 9, 2011).

3.7 Brokering Carbon Markets

When this study was carried out, the forest carbon market had risen steadily despite the global economic crises. A report of Ecosystem Marketplace suggested that up to 2011, the transaction value of the carbon forestry offset reached USD 237 million within the global marketplace, which showed a 33 percent increase from the previous year (Peter-Stanley, et al., 2012). Hence, it was not surprising that the forest carbon industry was no longer inhabited by only scientists, environmentalists, and policy makers, but also intermediary actors who sought to gain profit from the technical complexities of constructing and negotiating REDD+ project deals, such as consultancy firms, entrepreneurs, and bankers.

The involvement of intermediaries in constructing and implementing REDD+ increases the transaction costs to establish the project. A report of the Swedish Society for Nature Conservation (SSNC) suggests that the transaction costs include not only actual implementation and payments to ‘trade off’ incomes that are foregone when forest remain intact, but also other costs for establishing reference emissions levels and other measurements, registration, and validation as well as brokerage for these activities

(SSNC, 2012). Such expensive transaction costs could significantly reduce the amount of payment to be received by local communities. These findings challenge the wide claim that REDD+ is a 'cheap' mitigation initiative.

In Aceh, the role played by carbon brokers and REDD+ experts is central in constructing the project. GoA admits that the project would be impossible without outside involvement, as it has limited access to technical knowledge about REDD+, capital and markets,

The problem is that this project will be impossible or really slow to develop without brokers. The activities might be similar [to other conservation initiatives], but REDD+ requires different measurements and much more complicated performance evaluation such as how much carbon is being sequestered, how to design accurate monitoring, avoid leakage and ensuring permanence. It's not simple (Atmojo, interview, September 10, 2011).

In the statement above, REDD+ is not seen as much different from other conservation approaches; it is the measurement technology and performance based payment that makes it different.

Carbon Conservation was the first company approaching the GoA to set up a carbon offset project. It particularly plays an important role in securing commitment from investors to purchase carbon credits generated from the Ulu Masen REDD+ project. There are two schemes planned to finance the project: *first*, putting the carbon emissions reduction (CER) credit into a voluntary market; *second*, entering the 'non voluntary market' in the intergovernmental cooperation for REDD+ scheme, which would depend on the result of UNFCCC negotiations. Carbon Conservation has been assigned to engage with private sectors and mobilize the resources from investors to support the project.

The process of intense lobbying of state officials and investors to finance the Ulu Masen REDD+ is captured in a documentary movie, “The Burning Season” (Henkel, 2009). The title of the movie mimics the older movie *The Burning Season* (Frankenheimer, 1994), which describes the struggle of Brazilian rubber tappers and on the life and death of their leader, Chico Mendez. However, in this movie, Dorjee Sun, CEO of Carbon Conservation, is portrayed as a new generation of environmental hero. Unlike Chico Mendes, Sun is a young and energetic executive who constantly travels across the globe to chase investors and convince them to invest in the project to save the Ulu Masen forests. Sun eloquently uses high moral discourse emphasizing the ‘responsibilization of the market’ (Shamir, 2008 as cited in Pearse, 2012). In the movie, Sun continuously invokes how the project could benefit local communities.

In a voluntary carbon market, the narrative and stories about certain carbon credits are central for attracting potential buyers or investors to purchase the products. Indeed, it is not complex abstract processes and calculation audits that make the carbon credits credible, but rather attractive stories that could connect consumers of the offset with a particular offset projects so that carbon credits “...can be sold at a premium as ‘gourmet’ or ‘boutique’ carbon with an emphasis on their poverty alleviation ‘side benefit’ ” (Lovell and Liverman, 2012, p. 260).

To sell forest carbon credits from the Ulu Masen project, there are at least three main narratives produced by the project proponents, especially Carbon Conservation. *First*, the story about the tsunami that wiped out the province killing thousands of people and leaving many others without access to basic services. *Second*, the increasing threats

to Aceh forests and biodiversity, particularly after the ending of decades of conflict (Merrill Lynch, 2008). The rate of illegal logging has been presented in such a way that could compel the potential buyers.⁴¹ *Third*, description of the many ways the project could save Aceh's forest, benefit Aceh's people, and provide alternative sources of employments. These stories are continuously narrated during the lobbying and negotiations with the potential buyers and investors as well as eloquently elaborated in the project design development.

Carbon Conservation's efforts finally came to fruition when it successfully secured Merrill Lynch's (now Bank of America) commitment to make a USD 9 million investment into the project for four years. This deal was subsequently awarded the 'Carbon Finance Deal of the Year' by *Environmental Finance* and praised widely by carbon market players. Merrill Lynch's involvement in the project was considered a breakthrough in financial transactions, because for the first time a wealth management firm was willing to participate. The company plans to sell the credits from Ulu Masen REDD+ to investors who demand more environmentally friendly products. As a result, Dorjee Sun was listed among *Time Magazine*'s Heroes of the Environment in 2009.

As a capital enterprise, Carbon Conservation has a particular vision about REDD+ project, viewing it as a new frontier for capital accumulation. As described by Sun:

⁴¹ Abyd Karmali, the managing director and global head of carbon markets at Merrill Lynch (now Bank of America) stated that one of the reasons to invest in the project in Aceh is because the deforestation 'statistics are so alarming' ("Carbon Finance Transaction of the Year", 2008).

Because what we are doing is so new. We need to gain public acceptance. Particularly because it's so big, you need to talk to someone that 'Hey no one else in the world is doing it.' But it's potentially worth billions of dollars. People kind of surprise and not sure to whether or not they should believe you...this is why the business model of this business is so cool. It's the more forest that we manage and protect, the more money we make. I mean, bring it on, baby! Like if we could have millions and millions of hectares under our management protecting forest and farming carbon, this could be a hugely profitable and yet hugely well-intentioned company that does good (Dorjee Sun as cited in Henkel, 2008).

Sun's statement encapsulates the simplification of marketing forest carbon as a new avenue to generate capital and obscure complex social and political issues that could influence the project implementation. Such a simplification is problematic as it could manifest in the 'project practice' that brings material consequences particularly for people who live in around the Ulu Masen area. For example, a project practice that highly prioritizes forest protection could lead to the enclosure of local access to forests. A similar view is shared by Merrill Lynch, which considers it a 'high-risk and high-return project' ("Carbon Finance Transaction of the Year", 2008).

Some key informants from the provincial government suggest that Carbon Conservation has used every possible method to negotiate the terms in the contract to allow the company to obtain a sole concession over the Ulu Masen ecosystem. As a key informant puts it,

They wanted to have full authority over 738,000 hectares through a concession permit. That was not acceptable. Aceh government would not give away its sovereignty in managing forests. We do not want [the Ulu Masen project] to be a new privatization story through minimizing our authority in forest governance (Rudi, interview, September 8, 2011).

While the company tried to gain private control over the Ulu Masen area by proposing to obtain a concession permit covering the entire project area, the provincial

government repeatedly insisted that the REDD+ project should enable them to maintain their 'sovereignty' to control natural resources. Some key informants of the governor's inner circle acknowledged that negotiating terms to be included in the contract with a carbon broker company was difficult due to a lack of knowledge on REDD+ financing mechanisms, carbon markets, and legal issues related to the project (Atmojo, interview, September 10, 2011; Krisna, interview, November 1, 2011). In addition, when the GoA chose Carbon Conservation, it was unaware that there was a wide array of carbon broker companies that they could select to facilitate the project. In the end, Carbon Conservation was assigned to be sole seller for the carbon credits generated from the market.

In 2011, Carbon Conservation made an infamous deal with East Asia Minerals, a Canadian mining company that has strong interests in the gold mining industry in Aceh. The mining company bought a half share of Carbon Conservation. In return, Carbon Conservation assisted the mining company in negotiations with the GoA to allow East Asia Minerals to open 6,000 open pit gold mines inside the Ulu Masen ecosystem area (Atmojo, interview, September 10, 2011). In a press release, the mining company claims that the REDD+ project can be used to offset the impact of mining operations in Aceh and plans to operate 'green' mining practices.

Through the acquisition of a 50% equity interest in CC, the Company [East Asia Minerals] will develop a "green" mining project which will use carbon and biodiversity offsets and the latest in environmentally friendly mining practices. In the process, the Company will participate in developing a "green" brand for its Miwah project which will potentially allow it to command a premium for its product in the market as well as to potentially facilitate a smoother process for approval of, and support for, mining permits. The company notes that there are precedents of large retail jewelers boycotting gold taken from mines that are not engaged in environmentally friendly practices, or that extract gold from

environmentally sensitive areas (“East Asia Minerals Announces Acquisition”, 2011).

The company’s statement above clearly states its motive, namely that the purchase of CC shares would likely ease the process of obtaining mining permit approval from the provincial government.

To facilitate the mining company’s interest, Carbon Conservation tried to renegotiate a reduction of the Ulu Masen project scale. In the project document, the Ulu Masen REDD+ project covers 738,000 hectares. However, in 2011, Carbon Conservation proposed to limit the project area, so that it would cover only logging concession areas within the Ulu Masen ecosystem. It was considered easier to negotiate with logging concession holders rather than communities in order to avoid dealing with more complicated tenure conflicts.

The incident has broken the trust between the GoA and Carbon Conservation. The GoA considered the mining company and Carbon Conservation’s effort an example of green washing, which helps to boost the mining company’s image in public because of its commitment to a seemingly ‘green’ project. The GoA did not anticipate such an incident,

It’s just a different world. For the buyers, they want to buy the [carbon] products. But they do not want to buy the one with a bad image. Many buyers are aware of the principles that should be respected in commodification of forest carbon. The problem usually lies with the carbon broker... They just want to create a great package and saleable product but do not really care who will buy that. They also want to sell the product quickly (Atmojo, September 10, 2010).

The ensuing disagreement between the Aceh government and Carbon Conservation has contributed to bringing the project to a complete standstill.

3.8 Conclusion

This chapter examines the political rationalities and processes behind the making of the Ulu Masen REDD+ project and investigates how differently positioned actors with diverse motives go hand in hand in establishing the project. It reveals a particular historical conjuncture that makes the initiative a desirable solution for Aceh's problems: the retreat of many international aid agencies from Aceh after the completion of tsunami relief support; increasing availability of funding to support market based climate mitigation initiatives; the governor of Aceh's commitment to promote green development; and a special autonomy status of the Aceh Province that allows the provincial government to have more flexibility to collaborate with non-state actors. Those events come together and provide conducive conditions to legitimize REDD+ and allow the formation of state and non-state actors assemblage in an endeavor to govern forest carbon.

I delve deeper into understanding the political rationalities of project development by closely examining the project design document. Specifically, I analyze the discursive formation where the 'problems' of legal and illegal logging and other forest extraction activities are articulated in ways that make REDD+ as a logical means to rectify them. In formulating problems, the project proponents draw the boundaries of what is knowable and manageable and exclude other elements that are considered ungovernable such as the resumption of conflicts in the province and natural disasters. Indeed, the project proponents have formulated Aceh problems that are appropriate to the types of interventions that they have to offer. Furthermore, the project document has overly

simplified land tenure issues and problems associated with deforestation and forest degradation. Thus, the project carries the risk of being unable to accommodate the dynamics of property relationships and local understanding of forests and livelihood patterns.

As this chapter has shown, the social and political context in Aceh has contributed to the shape of the project itself. This finding validates arguments by critical geographers, as described in the Chapter 2, regarding the political and geographical contingency of neoliberal environmental policies which often produce different outcomes in different places (McCarthy and Prudham, 2004; Castree, 2008a, 2008b). While I broadly agree with the argument that REDD+ could be a type of environmental fix (Bumpus and Liverman, 2011), this chapter also reveals that the REDD+ project is not just an extension of global capitalist processes to local sites. Indeed, in the Aceh's case, the creation of Ulu Masen REDD+ project is partially driven by the eagerness of local actors to adopt the project and utilize it as a means to pursue their own ends. In addition, the project development is also situated in particular conditions that make this project desirable in the first place.

The formulation and implementation of the Ulu Masen REDD+ project has involved messy and conflicted processes in which different actors, with different views and motives, have attempted to give 'new' meaning to the project. For the government of Aceh, REDD+ has been seen not only as an alternative source of regional development while ensuring forest conservation, but also as an avenue to assert increasing control over forest territory in the province. The green strategy has also been

considered strategic to mobilize international support for such an effort. Carbon Conservation, on the other hand, sees REDD+ as a new business opportunity to gain profit from the emerging carbon market. Furthermore, FFI positions REDD+ as an avenue to ensure sustainable financing mechanisms for conservation efforts in Aceh. This complex competition that has ensued to control the forest in the province is not solely unique for Aceh, and it reflects broader challenges to efforts for “greening” development. The fact that the Ulu Masen REDD+ project has been taken over by political dynamics suggests that such an initiative is very prone to changing local political situations.

CHAPTER 4. REDD+ in Translation: FPIC, Participation and Benefit Sharing

Mechanisms

4.1 Introduction

As a policy model, REDD+ consists of technical and bureaucratic discourses that could conceal the politics of development intervention and related social side effects generated (Ferguson, 1990; Milne and Adams, 2012). There are at least two ways that policy models are inherently political: *first*, they involve simplification of intricate and politicized problems and construct the problems suitable for available solutions they have to offer; *second*, they are politicized through project practices in which policies are translated, mobilized, and utilized in day to day project activities (Milne and Adams, 2012). In the context of neoliberal conservation and development policies, Buscher (2010) argues that the policies are inherently political in the sense that they allow “all values to be interchangeable but can be dealt with by reconstituting conservation and development arenas into marketized, commodity spaces” (p. 48).

While such a critical view of intervention is useful, it does not unravel the nuances of policy implementation processes and does not address the relationship between policy and practices (Mosse 2004, 2005). Hence, investigating the translation of policy into practices is essential to shed light on how elements of REDD+ shape project outcomes and their potential social and political consequences. Mosse (2004, 2005) suggests that policy models and project designs become tools to maintain coherence and

provide purpose to project activities. They also serve as guiding metaphors to translate messy realities and the complicated process of project implementation into ‘authorized categories’ for project actors. Therefore, the failure or success of the project will depend on the ability to create authoritative and coherent interpretations of events and sustain them socially. It is through the process of translation that the alignments between the objectives of those wishing to govern and the subjects of governments are formed (Rose, 1999). Such a translation process requires ‘skilled brokers’, which include policy makers, donors, NGOs, field facilitators, community leaders, among others, who translate the project’s meaning into ‘different institutional languages’ (Mosse, 2004, p.9).

Building on these frameworks, this chapter traces how the ideas embedded in the REDD+ policy model are translated into project practices, particularly those related to the notion of Free, Prior, and Informed Consent (FPIC),⁴² participation, and REDD+. I also investigate the ways in which ‘benefit sharing mechanisms’ have been interpreted and negotiated in the context of wider efforts to coordinate conservation and development goals under REDD+. In addition, I examine how the project proponents, particularly Fauna and Flora International (FFI), navigate through local complexities in realizing the

⁴² FPIC embodies principles that respect the rights of communities affected by development to give or withhold their consent for any development initiatives in their area. The consent can be sought after the communities have full information about the scope and impact of any proposed development activities (Ward, 2011 as cited in Sunderlin, et al., 2013). FPIC is a relatively new process and it has been advocated in various other global negotiation processes, e.g. the Convention on Biodiversity’s access and benefit sharing protocols governing bio-prospecting. The principles have also been adopted in the United Declaration on the Rights of Indigenous People (UNDRIP) of 2007. In the context of REDD+, proponents should ask consent from all local stakeholders before proceeding with project implementations.

project design into practices. I finally investigate how local communities have responded to such interpretations.

4.2 FPIC, Participation, and Community

Most REDD+ projects operate at the local level where communities form the frontline of efforts to reduce carbon emissions. This has led to growing concerns over the impacts of projects on community level livelihood practices as well community engagement in forest governance. Some argue that it would significantly strengthen community based natural resources governance, while others note it could potentially recentralize decision-making power over forest use (Phelps, et al., 2010; Milne and Adams, 2012). Furthermore, scholars have also cited potential problems caused by REDD+ such as project benefits being captured by elites in the communities and the increased risk of communities losing access to forests due to limited acknowledgment of their rights over forestlands and resources (Sunderlin, et al., 2009, 2013; Baldwin, 2009; Griffith, 2007). Those concerns have fueled a growing literature on the importance of establishing safeguards in REDD+ design and implementation to avoid social harms (such as Brown, et al., 2008; McDermott, et al., 2012). This has led to the promotion of FPIC as one of the REDD+ guiding principles. The REDD+ framework that was agreed upon during the Conference of Parties (COP) 16 of the United Nations Framework on Climate Change Convention (UNFCCC), known as the “Cancun Agreement”, includes FPIC in the safeguard principles, and encourages participating agencies to promote, support, and implement them. UN-REDD (2012) suggests that FPIC differs from

consultation because it allows the communities to meaningfully participate in the decision making processes, negotiate fair deals, and withhold their consent if they find that REDD+ programs do not adequately address their needs, priorities and concerns. In this regard, FPIC needs to be implemented as early as possible, including in the REDD+ project design. Furthermore, meaningful participation of communities in all phases of REDD+ design and implementation is seen as key to ensuring successful achievement of its goals and sustainable outcomes (Anderson, 2011).

FPIC has been an integrated aspect of numerous schemes of validation and verification, which could be used to demonstrate that the production of forest carbon is socially responsible. Under market logic, FPIC could serve as a tool for carbon credit sellers to produce added values for a project that implements it. Nevertheless, recent research suggests that FPIC could also be ‘an unachievable myth’ that conceals underlying social relations of production (Milne and Mahanty, unpublished).

In REDD+ projects, Project Design Development (PDD) serves as a policy model to guide the translation of project ideas into practices. When the PDD of Ulu Masen REDD+ was developed in 2007, the notion of FPIC had barely entered into REDD+ negotiations. Therefore, it is understandable that the PDD does not mention FPIC although it does highlight the project proponents’ commitment to develop the project through a participatory process by involving civil society and different levels of government. The PDD also emphasizes the inclusion of marginalized groups in the project such as former GAM fighters, women, internally displaced peoples, and other

under-represented communities. It assigns a key role to *mukim*, referring to the Law of Governing Aceh (LoGA), in the management of the law and its natural resources.

In designing the project, proponents encountered a dilemma in choosing between conducting the consultation processes effectively, which required substantial time and expense, or getting the REDD+ project moving more immediately, and they chose the latter. As a result, the processes of project design were very elitist involving only a few actors in the provincial government and other project proponents. Proper consultation particularly with local communities who lived in and around the Ulu Masen area was nearly absent (Anderson and Kuswandono, 2008; Gene and Aliadi, 2009; McCulloch, 2010). Initial socialization workshops were held after the PDD was finalized implying that they assumed '*prima facie*' local communities had agreed with the project design and would be consulted as the project progressed (Clarke, 2010).

The project validation report for the CCB (Climate, Community, and Biodiversity) standard revealed that the project did not provide a clear explanation on what kind of processes and efforts were undertaken to engage other stakeholders, particularly local communities (Smartwood, 2008). Surprisingly, Smartwood, an institution that conducts validation processes, decided that the communities' involvement in the project design was not a compulsory criterion for project approval but was an optional point.

The project proponents did not seem to view such an exclusive and elitist process as being problematic (McCulloch, 2010). A government officer argued that the project proponents did not want to give communities unrealistic expectations about the project

due to looming uncertainties, particularly with regard to when the project's financial benefit could be accrued and how it would be distributed (Idham, interview, October 26, 2010). During initial informational workshops, the project proponents carefully crafted the message delivered to communities, downplaying the prospect of earning fast cash from the project. While they described how REDD+ connected to global efforts to mitigate climate change, the potential benefits and risks of the initiative were rarely explained. In some occasions, NGO representatives and local leaders directly requested more transparent information from the project proponents but received no clear answer (Rusman, interview, July 11, 2011).⁴³ The limited transparency of the project design has led to various speculations and misinformation in the province, for instance, exaggerated stories about the value of project (McCulloch, 2010).

However, efforts to conceal information on REDD+ and its potential income stream were fruitless as communities could access information through various means such as newspapers and television. For instance, *mukim* and village leaders in Jalin Village were increasingly aware of the project's potential benefit due to their exposure to REDD+ issues. The village, which was considered an exemplary site for the Ulu Masen project, has regularly received national and international attention and visits from those who wanted to learn about REDD+. Such interaction has not only enabled the village leaders to access information about REDD+ but also build broader networks. For

⁴³ Rusman was a director of a local NGO who attended the workshop organized by FFI, June 2009. During the workshop, some community leaders and local NGOs asked for more comprehensive information about the project scheme and progress but FFI representatives declined to provide it.

example, Mahmud, a *mukim* leader in the area, explained that he maintained close ties with a foreign journalist who occasionally covered the news on Ulu Masen REDD+ project through emails, in an attempt to update on the REDD+ issues (Interview, September 17, 2011).

An assessment could also be a source of information for villagers. When a survey on land tenure and REDD+ conducted by an international organization also covered topics about benefit sharing mechanisms and compensation, it unintentionally increased communities' awareness of these issues. As the head of Aceh Green puts it,

I have warned the researchers about their questionnaires [that would likely generate unreliable expectations over REDD+]. I have told them that Acehnese are not ready [to learn] REDD+. Now people accused *us* to have received the REDD+ payment. Their high expectations are hard to manage. Everyone assumes that they will receive compensation, no matter where they live, from those living near Ulu Masen forest to those living near the beach. It is actually mandatory for everyone to protect their environment, but now they expect compensation (Barnawi, September 16, 2011).

The statement above reveals not only the government officer's endeavor to limit information about REDD+ to communities, but also his perception of Acehnese ignorance and lack of capacity to comprehend the complicated concept of REDD+. He also tries to undermine communities' rights to REDD+ compensation by highlighting citizens' responsibility to conserve the forests.

Due to increasing pressures from civil societies, NGOs, and so forth, the project proponents eventually made a more concerted effort to develop a comprehensive plan for consultation and FPIC implementation. The proponents were also motivated to implement FPIC in order to get a premium price of carbon credit generated from the

project as they planned to apply for VCS (Voluntary Carbon Standard) validation (Krisna, interview, September 3, 2011).

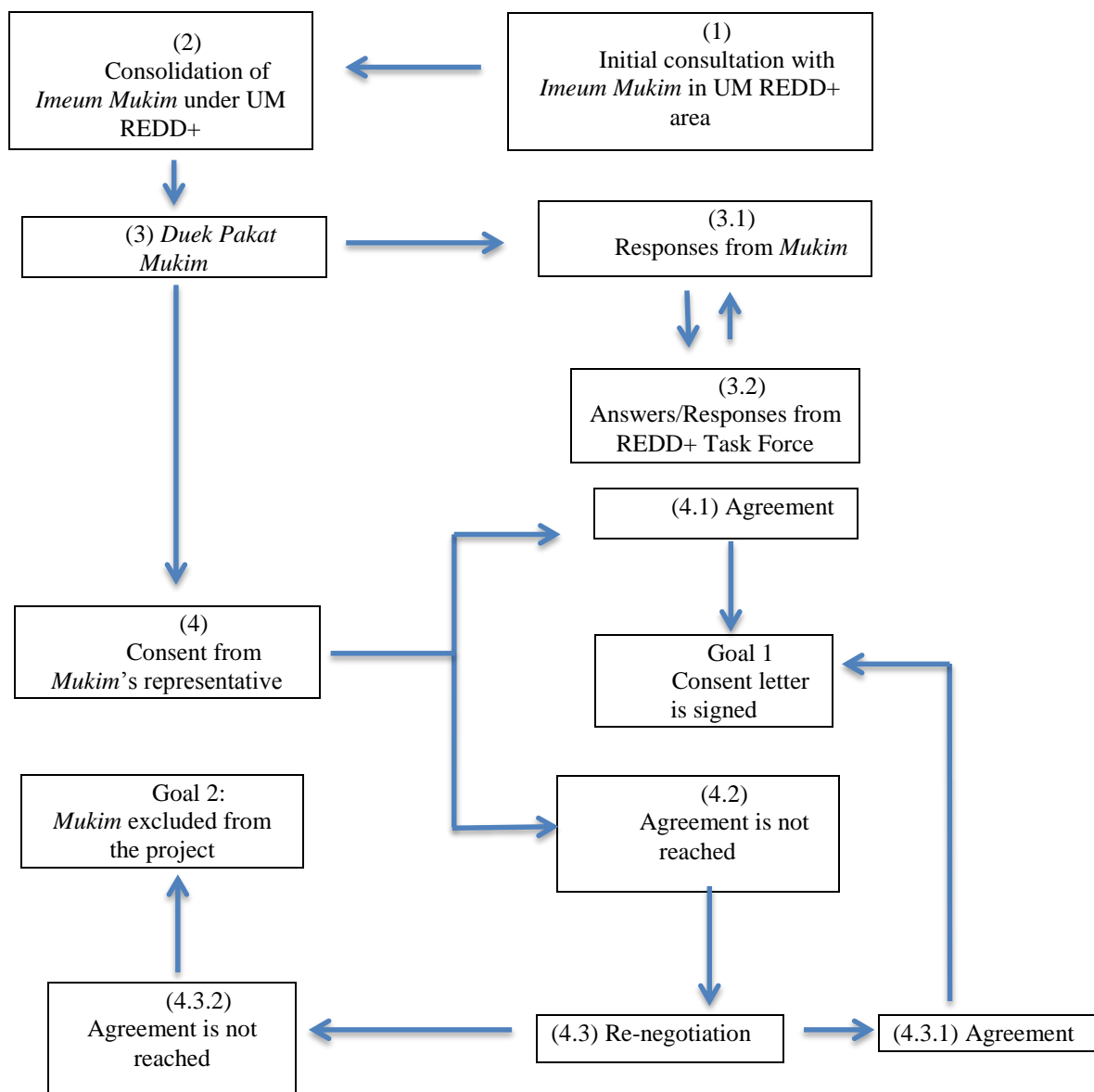


Figure 4.1 FPIC Processes Chart of Ulu Masen REDD+ (Aceh REDD+ Task Force, unpublished)

The provincial REDD+ task force designed a comprehensive mechanism for FPIC implementation as described in Figure 4.1, which opened up the possibility for communities to accept or decline the project. Based on the scheme to implement FPIC, the *mukim* leaders would be engaged in the consultations, and they would be expected to disseminate the information to community members and organize consultation meetings (*duek pakat*) at the *mukim* level before making an informed decision on behalf of communities. The policy model used in the FPIC design relies explicitly on using the *mukim* institution as the basis of participation and calls on *mukim* leaders to represent communities during consultation processes. The approach to engage communities through involving *mukim* leaders is rooted in the assumption that the community is a homogenous entity. Similar to Payment of Ecosystem Services (PES), REDD+ projects are often based on the agreement between single sellers and providers; hence simplified notions of community are practical and pivotal for project formulation and implementation (Milne and Adams, 2012). Nonetheless, putting communities in the ‘black box’ of single service providers could potentially disempower community members because it ignores power dynamics and diverse interests within communities. This echoes concerns raised by scholars who have addressed the risks of simplifying the notion of community in conservation and development projects (Agrawal and Gibson, 1999; Li, 2002; Tsing, et al., 2005).

Initial consultation processes were conducted by the provincial REDD+ Task Force in the mid of May 2010 in five districts including Aceh Besar, Aceh Jaya, Aceh Barat, Pidie, and Pidie Jaya. The aim was to increase participants’ awareness of the Ulu

Masen REDD+ project followed by a series of consultation processes to obtain consent from *mukims* located in and around Ulu Masen Ecosystem. These consultations involved 83 *imeum mukim*, 50 *mukim* leaders, and other *mukim* representatives chosen based on their positions in the local institutions. This group was mostly male. It was assumed that those participants would then disseminate information to community members in their *mukim* area. Such an assumption is problematic as it fails to recognize power relations embedded in the culture and social structure within the communities, which can result in the exclusion and marginalization of certain groups, such as women. It could also potentially lead to elite capture in which local elites take advantage of their positions to disproportionately garner a large share of resources or a flow of benefits (Bardhan, 2002 as cited in Persha and Andersson, 2013).

During the consultation workshops, the project proponents also circulated questionnaires to gauge participants' level of understanding on REDD+ and their concerns and hopes toward the project (Aceh REDD+ Task Force, 2010). Based on the survey, 60 percent of participants indicated that they had heard about REDD+ from newspapers. However, it was unclear the extent to which they understood the subject. They hoped that in addition to mitigating climate change, the project could enhance forest protection, reduce illegal logging activities, increase local income, and create employment, among other objectives. Surprisingly, only a few hoped that the project would strengthen communities' rights over forest. Most participants expressed their concerns on the possibilities of communities being excluded from project planning and implementation and thus unable to access the project benefits.

Despite the Aceh REDD+ Task Force's claim that the majority of *mukim* leaders understood and supported REDD+ (Aceh REDD+ Task Force, 2010), detailed comments given by the participants showed that majority of participants failed to comprehensively understand the project mechanisms and had an unclear stand on the initiative. A participant addressed his concern about the impacts of the project and how it was situated in global politics, but he did not clearly understand the REDD+ concept,

All policies/programs implemented should focus on improving communities' well-being. Will REDD ensure the improvement of local income and livelihood? REDD will only benefit foreign countries whose forests have been degraded. Those countries are worried about global warming, which will eventually lead to human extinction due to the lack of oxygen. REDD program will increase timber prices thereby poor people will not be able to fulfill their household needs for timber (respondent no. 57, cited in Aceh REDD+ Task Force, 2010).

Operationalizing FPIC for a large-scale project like Ulu Masen REDD+ was challenging. Krisna, a member of the provincial REDD+ Task Force and also a senior staff member of FFI, who was assigned to lead a team to design FPIC implementation, admitted that the project proponents were rather confused (interview, June 30, 2013). When the team started the initial consultation process, the scope of the project was still being negotiated by Carbon Conservation and the Government of Aceh (GoA). As described in Chapter 3, Carbon Conservation renegotiated with the GoA on the project scale to only cover logging in concession areas, which had not been agreed upon by the GoA. Therefore, it was unclear which communities should be involved in the consultation processes. This led to further confusion in determining: 1) the project beneficiaries and what criteria and indicators are used to select them; 2) who should

represent the communities; and 3) whether those selected to represent the communities could reliably prevent elite capture.

Furthermore, the team also debated the extent to which communities should be consulted and whether or not obtaining their consent was necessary to implement the project. The fact that one of the proponents was the government and the project was located in the state's forest led some team members to assume that communities' approval was unnecessary. Seeking communities' consent was deemed to potentially challenge the state's authority and ownership over Ulu Masen forests (Krisna, interview, June 30, 2013). Moreover, if the communities declined to participate in the project, their area should be excluded from the project. As a consequence, the project proponents would need to revise their PDD, which was highly undesirable because it would be time consuming and costly. In addition, the governor's advisor argued that FPIC might create a heavy 'burden' for REDD+,

The funny thing is that FPIC seems to be required only for the REDD+ project. In fact, it should be applied to plantations, mining and other sectors. It [FPIC] has been treated like something new. But in fact, it is not new. If we carry out [the project] the old fashioned way, we could just give compensation to [affected] communities and FPIC would be considered complete. It is not participatory. Participation without full knowledge could mislead the communities...but full participation of communities [in development projects] could not guarantee that it would bring the best for communities. What communities want is not always something that they need (Atmojo, interview, September 10, 2011).

The statement reflects the perception shared by many government officers that the government is more knowledgeable, and knows what is best for the communities. The doctrine of past President Suharto's regime on the role of government to develop or guide (*membina*) villagers has shaped the terms of engagement between villagers and

government officers into a traditional patron-client relationship (Rhee, 2007). Such a perception is still prevalent as most of the government officials, especially senior officials, were trained as civil servants during Suharto's period.

4.3 Translating and Transmitting Knowledge on REDD+

To date, regulations and policies on REDD+ are still being simultaneously developed at international, national and sub-national levels. At the same time, many REDD+ demonstration projects have been implemented in various locations globally. Methods for carbon accounting, MRV (Measurement, Reporting, and Verification) and social safeguards are being tested on the ground, and this will, in turn, contribute to policy development. The complex processes of creating and justifying REDD+ demonstration projects have produced a new form of expertise and consultancy and have opened up a lucrative carbon knowledge 'industry'. International organizations and consultancy firms, like Carbon Conservation and FFI, are among the actors who claim expertise in this relatively new technical field.

Like most REDD+ projects, the Ulu Masen project also uses a 'learning while doing' approach while testing various implementation approaches at the local level. Joe Hefferman, a former PDD specialist of FFI suggests,

We should not forget that REDD is a new initiative, so there's not an 'expert' in the world yet. There are probably only a handful of people who already understand REDD...we are all learning together, we are struggling together and none of us are expert (McCulloch, 2010, p.23).

While the ‘learning by doing’ approach is commonly practiced by project implementers as REDD+ policies are still being negotiated both at international and national levels, Anderson (2011) argues that such an approach carries a high risk, which could result in adverse impacts on the rights of indigenous people and local communities.

Officials in the Aceh Province were deeply aware of the power of having access to technical knowledge on REDD+, such as forest carbon stocks assessment. When FFI hired foreign experts to calculate the forest carbon stocks, the GoA demanded that FFI involve provincial forestry officers and train them accordingly. This would theoretically provide an opportunity for ‘knowledge transfer’ and ensure that methods used were suitable to the local forest condition (Saujana, interview, September 11, 2011). This resulted in a draft of Standard Operating Procedures for Carbon Stock Assessment being developed by the foreign experts and the provincial forestry officers.

As described in the Chapter 3, the provincial government agencies are far from monolithic in terms of their interpretations of REDD+. Most provincial forestry agency officials interviewed in this study, however, argue that the initiative is just another form of forest management. They also suggest that the ways to frame the initiative to villagers should emphasize the ecological instead of financial benefits to avoid villagers’ monetary expectations about REDD+. A provincial forestry agency officer elaborates the argument as follows,

My colleagues and I in the Forestry Agency understand that REDD+ is synonymous with a form of forest management. It just has different name. But whatever the label, the main point of this initiative is protecting the forest cover and we support such a goal...[in communicating REDD+ to communities] the entry point should not be REDD+ and money. Please understand that in Aceh,

REDD+ is not about the money, but it is about our effort to reduce carbon emissions. We have to emphasize this message to the community: if certain areas have carbon stocks, it will ensure good hydrological cycle and ensure communities have sufficient water supply for their daily needs. If we talk about money, communities will think differently. We have to talk about the importance of forest protection that will benefit the communities. We can add that it can also bring financial benefit in the form of development program or other, especially for those who are committed to conserve the forests (Saujana, interview, September 11, 2011).

In the statement above, while highlighting the ecological benefits that could result from REDD+ initiative, Saujana retains the view on its potential for conditional payment for community members who support conservation agenda.

Some provincial forestry agency personnel suggested that the financial benefits should be simply positioned as a ‘bonus’, not the main goal of REDD+ (Ridwan and Khalid, interview, September 12, 2011). In the context of the post-tsunami and post-conflict situation of Aceh, where local social capital has been weakened, various NGOs, government institutions and the like have become increasingly careful in framing their language when introducing development interventions to villagers. Some informants suggest that post tsunami reconstruction approaches, particularly Cash for Work (CfW), which was caused by the push from donor agencies for quick delivery of aid, have changed the ways most Acehnese perceive development projects (Barnawi, September 16, 2011; Hidayat, September 10, 2011). Many of them do not hesitate to ask for monetary compensation for their engagement in meetings and activities initiated by ‘outsiders’. Indeed, the programs have been said to undermine social volunteerism among Acehnese (Mahdi, 2007). In this context, framing financial benefits of REDD+ merely as a bonus might be strategic to manage villagers’ expectations. Nevertheless, such framing

is potentially precarious because it could preclude its alternative framing in terms of communities' rights and entitlement to the benefit.

For local communities, becoming REDD+ literate is a pre-requisite to allow them to make an informed decision about the initiative. They need to understand what the initiative is about, what their engagement would be, and what costs and benefits can be expected from their participation. Nevertheless, efforts to enhance communities' understanding about REDD+ have been lacking. Awareness-raising activities on the issue have mostly been focused on the provincial government level and *mukim* leaders. The provincial government is aware of the exclusiveness of Ulu Masen REDD+ processes but lacks the capacity to address it.

As Ulu Masen was among the first REDD+ projects established in the world, there has been confusion over how to explain it to communities and other stakeholders and how to implement it on the ground. Explaining REDD+ ideas to local communities is not an easy thing to do. This is partly due to the highly technical language of REDD+ that needs to be translated into simple and easily understood local language. It becomes more problematic when the community facilitators who are responsible for deciphering the REDD+ concept for villagers do not have sufficient understanding of the mechanism themselves. As a consequence, they often provide misleading information to villagers. I observed that most *mukim* leaders labeled REDD+ as a project to “sell the wind” (*jualan angin*), a metaphor that was initially introduced by the project proponents to simplify the abstract and complex nature of the initiative during informational workshops. The metaphor is rooted from the cultural perception in Indonesia on the wind that is

considered similar to the nature of REDD+: invisible, abstract, and highly unpredictable. Due to language simplification, information about project mechanisms, potential risks, and benefits have been obscured.

Joko, an FFI field officer, suggests that such a simplification is employed out of necessity to ensure that REDD+ information is understandable for villagers since their low level of education may limit their capacity to understand the project (interview, November 5, 2011). My observation during a village meeting in Aceh Besar District included one meeting participant asking Joko to explain REDD+. Joko elaborated the project while simultaneously drawing the scheme on a big paper to make his point,

REDD is a government program. Simply put, it is the ‘wind’ program (*program angin*). People from Europe and United States need oxygen. We breathe in oxygen and breathe out carbon dioxide. Carbon dioxide is poisonous. Anyone graduating from high school knows this logic. It is also produced by factories, cars and others which mostly came from the US and Europe. Carbon is being absorbed by the trees and they produce oxygen. So the logic is that countries in Europe and the US have a limited amount of trees and their carbon dioxide circulates around the globe. Similarly, oxygen produced by our trees also travels. Therefore, developed countries like the US, European countries, Japan need to pay us because we have many trees. So REDD, it’s an English term, means that the white people (*bule*) established many factories, so they have to pay us. The more trees we have, the more oxygen we produce and the more money we get. All big trees and other kind of trees such as corn, cocoa, and other fruit trees produce oxygen. But big trees produce more oxygen than other types of trees (Joko, village meeting, November 5, 2011).

Joko has provided the communities with overly simplified and misguided information about the initiative. He also emphasizes how communities are entitled to obtain compensation simply because they have trees without describing long term commitment to conserve and potential tradeoffs the project might require. His emphasis on communities’ rights to obtain compensation is also counterproductive in light of the

provincial forest agent's statement described above that highlights the importance of framing REDD+ in terms of its ecological benefits to communities. Hence, it is not surprising that some community rangers, who are more knowledgeable on REDD+ than other village members due to their engagement in project activities, understand REDD+ simply as a compensation program. As suggested by a forest ranger in Jalin Village,

We do not fully understand the definition of REDD yet. But we assume that it is a compensation program. This is what we understand. Please correct us if we are wrong. So it compensates those who have protected the forest, just like the saying "no pain, no gain". We have to endure the pain to get the compensation (Arif, interview, October 22, 2011).

Most *mukim* leaders who participated in consultation meetings were confused with the concept of REDD+ and reluctant to share the 'knowledge' that they obtained by attending informational meetings. One of the *mukim* leaders mentioned,

One of the meetings that I attended was in Sigli. There were 22 *mukim*. So we were told that the government would sell the wind, the carbon produced from our region. The wind is produced by our trees. I do not know the English term, the Aceh Green people know that. But I have not informed the villagers because I am still unclear, the program is unclear. We just do not want to get into trouble to inform something uncertain. If we got more certain information and how it works, perhaps villagers will give more support. Villagers do not really know about forests and forest protection (Ferizal, interview, November 8, 2011).

Mukim leaders refused to put their credibility at stake by disseminating information on REDD+ due to uncertain implementation processes and benefits to be obtained from the project. Moreover, they are also reluctant because they fear being blamed by the villagers if the initiative fails to materialize.

Based on the interviews and focus group discussions with men and women in both study sites, the majority of villagers have not heard about REDD+, although some of

them have heard about climate change from television, newspapers, and posters distributed by FFI. Thus, there seems to be limited understanding among villagers on their rights and responsibilities within the project as well as the benefits they may stand to obtain and the risks it might produce.

4.4 Conservation vs. Development

As suggested in Chapter 1, REDD+ has been considered a promising initiative that allows the achievement of conservation and development goals. Nevertheless, evidence from previous conservation projects, especially Integrated Conservation and Development Programs (ICDP), suggests that conservation and development often appear as tradeoffs from the perspective of their respective proponents (Blom, et al., 2010). Critics have suggested that a purely benefits-based approach to conservation fails to comprehend the complex local economic forces motivating the destruction of forest resources (Emerton, 2001; Schroeder, 2000, 2008). Furthermore, inserting a powerful vision of the potential financial value of ecosystem services from forests could create an oversimplification of the relationship between people and nature, which is mediated by material concerns of economic costs and benefits (Milne and Adams, 2012). Such oversimplification could undermine other potential motivations for people to conserve. The REDD+ initiative carries similar risks.

In Aceh, the debates surrounding conservation versus development are already complex. There are at least three different dominant discourses in the debates (McCulloch, 2010): *first*, advocating the provincial government to place conservation and

sustainable resource management as the core of development policies; *second*, encouraging investors to expand and develop natural resources extraction and plantation development; and *finally* promoting community development through certain activities, such as expanding smallholder agriculture land rights, among others. The introduction of Aceh Green vision and Ulu Masen REDD+ project complicates the efforts to coordinate conservation and development goals in the province. Both initiatives require a dramatic shift in approaches to achieve regional economic growth while simultaneously reducing carbon emissions.

To coordinate conservation and development goals, the Ulu Masen REDD+ project develops a holistic approach, envisaging the enhancement of forest carbon stocks, biodiversity conservation and community development. It proposes various activities to improve local livelihoods through engaging the communities in forest conservation, restoration, and accelerated tree planting; orchard, mangrove and fruit farms; and job training for alternative employment opportunities. In addition, it also includes benefits to communities by having better recognized, documented, and legalized access to forest resources (PDD, 2007).

A sales and marketing agreement signed in 2008 by the Aceh Government and Carbon Conservation describes that 70 percent of the credits from the Ulu Masen REDD would be sold, whilst the remaining 30 percent would be set aside as a risk management buffer (FoEI, 2009). The sale of these credits would be managed by a collection agent selected by Carbon Conservation and the Aceh Government. After the collection agent takes their fee (unclear amount), Carbon Conservation receives a 15 percent marketing

fee and the remaining 85 percent is delivered to the project account that will be used to distribute funds for various activities and actors, including communities.

The project proponents plan to provide alternative income sources for local communities through environment-friendly activities, which require investment. Thus, the project seeks to establish a number of financial mechanisms (i.e. community development funds, alternative livelihood funds, and community based forestry funds) to support project activities for 30 years. A disposition fund would also be created to deliver cash to community groups, or to members who provide labor for reforestation, forest management, or other conservation activities (PDD, 2007). Unlike ICDP projects, the release of most funds would be conditional on communities' performance in complying with the forest protection and sustainable forest management requirements specified in agreements with *mukim*. It is assumed to be a strategic approach to provide sustainable financing for conservation while at the same instilling new behavior by providing rewards for those who contribute to conservation efforts. It is in line with the core idea behind the REDD+ concept, which is providing performance-based payment to forest owners or users who manage forests better and clear less forestland. These groups would then find that forest conservation is more lucrative than the alternatives (Angelsen, et al., 2009), and targets for reduction emissions from deforestation and forest degradation could be effectively achieved.

In order to ensure that project benefits are commensurate with villagers' losses due to REDD+ activities, a comprehensive cost-benefit analysis would be required. Nevertheless, such a study has never been conducted. Thus, the proposition that project

benefits would compensate for communities' opportunity costs was simply asserted without empirical justification. In addition, alternative livelihood sources proposed in the project including orchards, mangroves, and fruit farms, could only generate local income if market demand for such products exist and communities could access relevant market outlets. The villagers needed to be convinced on the market availability and their entrepreneurial skills needed to be enhanced to sustain commercial productions of the products (Gene and Aliadi, 2009).

In the PDD, local communities are positioned as rational service providers who are willing to give up their forest-based livelihood for project compensation:

The full, active and informed support of all stakeholders will be critical for the successful development of carbon finance distribution systems...FFI and its partners will facilitate a consultative process to reach agreement on mechanisms for the distribution of benefits...Carbon finance funds will provide incentives to communities, districts and the province to re-classify lands currently slated for logging. Communities have indicated a strong willingness to participate provided there are financial incentives for conserving forests (PDD, 2007, p. 37).

Initial project activities showed that the project proponents heavily emphasized conservation efforts through hiring forest and community rangers and re-classifying of forest areas, whilst giving less attention to activities related to community development (see Chapter 5). At the provincial level, formal discussion of benefit sharing mechanisms did not begin until August 2011 when project proponents invited 36 community leaders from the Ulu Masen Area to participate. For the project proponents, the meeting's goal was disseminating information on the potential benefits of REDD+ and garnering community leaders' ideas on the percentage of REDD+ benefit distribution at the different levels. The community leaders were expected to further disseminate information

and discuss the idea to their communities.

The discussion of benefit sharing mechanisms within the communities was planned to be held in conjunction with FPIC implementation. However, holding workshops on benefit sharing mechanisms at the same time with the implementation of the FPIC process was problematic as it seemed the proponents assumed all *mukim* in Ulu Masen area would give consent to participate in the project. Moreover, engaging *mukim* leaders who have not fully understood REDD+ in consultation meetings on benefit sharing mechanisms only created further confusion. Thus, they could hardly negotiate effectively and equally during the meetings. Some *mukim* leaders misunderstood that the government had received the monetary compensation, and they were being asked to give input on how to distribute it to different stakeholders. A *mukim* leader from Aceh Besar District comments,

So, during the workshop, Bappeda [Provincial Planning Agency] told us that the fund [monetary compensation] was available and we were asked to think about the mechanism to distribute the benefits, how much percentage allocated for communities, district, and the provincial government (Syahalam, September 17, 2011).

In contrast, government officials also expressed their frustration in explaining complex and uncertain situations regarding the future of the project and its potential financial benefits, as informed by the head of Aceh Green secretariat,

I told them that the meeting was to start discussion [on benefit sharing mechanism]. We just wanted to explore the ideas of benefit sharing mechanism. They were shocked; they asked how much money we already received? We are really concerned about this [wrong assumption]. From now on we should tell them the actual process of project implementation and how we would establish benefit-sharing mechanisms (Barnawi, interview, September 16, 2011).

Furthermore, different ideas on the forms of benefit and how it should be allocated also emerged. While the government of Aceh is far from monolithic, their vision toward the mechanism to distribute REDD+ benefit tends to be consistent. Interviews with government officers suggest that they are in favor of a mechanism that allows the revenue generated from the project to be managed by a project management unit (PMU) under the guidance of a provincial REDD+ Task Force (Idham, interview, October 26, 2010; Saujana, interview, September 11, 2011). The PMU would facilitate the local communities to develop a village development plan to be funded using the payment. Under this mechanism, the REDD+ fund is expected to reduce the government's financial burden to support development initiatives at the local level.

Despite their long-term engagement in the market economy, for most Acehnese, the idea of carbon trading and calculating their 'services' to conserve forests is hard to grasp. In one of the research sites, Jalin Village, community members have initiated a multi-village watershed protection forum to ensure the availability of water supply for their household needs. During my initial visit to the area in early 2008 (see Chapter 1), some village leaders were concerned that monetary compensation from the REDD+ project could potentially undermine communities' voluntary commitment to protect water catchment areas.

Nevertheless, in more recent visits to the village, Jalin Village leaders have become increasingly eloquent in expressing their expectation toward monetary compensation and other benefits from the project, which is partly due to their broader exposure to the issues. They have quickly learned more compelling frames to articulate

their expectations. Despite the differences in understanding REDD+ and expectations on forms of benefits and how they were going to be distributed, most village and *mukim* leaders and community rangers that I interviewed expected that it could bring certain kinds of development (*pembangunan*) in their area. The notion of development has a certain structure of feeling for villagers, which translates into governmental provision of public services such as infrastructure, schools, health care facilities, and income generating activities, among others. It is rooted in the New Order government's interpretation of development.

While infrastructure and other public service development is desirable for most communities in the study sites, particularly *mukim* leaders and community rangers, monetary compensation is especially expected. Community rangers in Jalin Village felt that they deserved higher monetary compensation since they have done more efforts to protect the forest than the rest of villagers. As described by a community ranger,

We are expecting fair compensation based on efforts that we have contributed to conserve the forest. We have been working voluntarily to protect the environment, but we are concerned whether or not we can continue protecting the forest on a voluntary basis. We hope that all of our voluntary work can be fairly compensated, which means that the [monetary] compensation should cover our daily needs so that we can just focus our energy on protecting the forest. Maybe some people say that [REDD+] compensation will be used for improving the quality of village infrastructure, but we [rangers] do not need that. The infrastructure might be needed for other villagers, but we prefer to have monetary compensation (Hamzah, interview, October 19, 2011).

In another study site, however, villagers have less exposure and also more limited understanding on REDD+ and benefit sharing system.

We just do not know; it is really confusing. How can we divide the benefits between urban and rural communities? How much will the rural and urban

communities get from the project? If the urban communities do nothing, why should we share it with them? We could not explain it to the communities because it is still unclear to us. The *mukim* also does not have any clear idea about carbon and benefit sharing. We also do not understand what kind of responsibilities that we carry if we accept REDD+ in the area (Abdulrahman, Focus Group Discussion, November 7, 2011).

Although their ability to express their expectations and concerns toward the project has increased, most villagers are unable to provide an estimation of the financial value of their services to participate in conservation efforts, as described in a dialogue between a United Nations (UN) officer and villagers,

- | | |
|------------|---|
| UN Officer | I just want to ask a really tough question right now. I want you also to ask the same question to villagers and [community] rangers here. You spent your time and resources to protect forest, protect water resources, both just for your own use and other people's use. And let's say you also spend your time and resources in dealing with global warming. How much is that worth to you in dollars? How much do you feel it's equitable for your resources? |
| Mukim head | We cannot count how much the cost for all communities' voluntary activities. We have been doing that for years. |
| UN Officer | How much? |
| Mukim head | It will be a trillion rupiahs (laugh) |
| UN Officer | What does that translate in dollars? 100,000 dollar per year? |
| Villagers | We do not know, really, we do not know. |
| UN Officer | This is a serious question, if you want to ask payment for your services, you have to know how much your services are worth (Village Meeting, October 19, 2011). ⁴⁴ |

The dialogue above demonstrates how villagers are expected to behave as 'rational economic beings' who are able to estimate the monetary values of their labor for forest conservation. Although it might be too soon to gauge the impact, the incorporation of

⁴⁴ The village meeting was held in Jalin, Aceh Besar District as a part of a field visit involving UN agencies and various voluntary carbon market players from Southeast Asia.

market logics in conservation efforts could alter behavioral patterns because it prioritizes individualism and competition rather than community and reciprocity values (Vatn, 2010). Furthermore, such a practice could also sideline the moral, aesthetic, and ethical dimensions of conservation, thus undermining other motivations to conserve forest such as environmental stewardship (Kosoy and Corbera, 2010). In her study on a conservation and development project in Papua New Guinea, West (2007) suggests that in spite of supporting environmental conservation, the commodification of nature could lead to people's disengagement with their environment and eventually environmental destruction, as it could transform the ways people value objects.

After nearly six years without clear evidence of REDD+ benefits, most villagers have become disappointed and jaded. They use the same language initially produced by the project proponent to express their criticism, as described by Anwar Ibrahim, the head of *Mukim* Association in Aceh Besar, "We have never seen anything from REDD. It's like the wind. We cannot see it, cannot touch it" (Lang, 2013a).

4.5 REDD+ 'Lost in Translation'

At the project level, FFI through its World Bank funded project, AFEP (Integrating Environment and Forest Protection into the Recovery and Future Development of Aceh project), implemented a wide array of activities in support of the Ulu Masen REDD+ project, which included the development of spatial plans in district and provincial levels, hiring and training community forest rangers (Chapter 5), and conducting activities for alternative livelihoods. As suggested in Sunderlin, et al. (2012),

many REDD+ demonstration projects adopt a hybrid approach by combining an ICDP approach, which is characterized as a “pre-REDD+” initiative, with REDD+ as a strategy to cope with market and policy uncertainties. In the same vein, the Ulu Masen project also initiates activities directed at creating alternative livelihoods for local communities based on the assumption that it will reduce the need to depend on forest based income and entice the local population to accept restrictions on forest access.

Despite the initial plan to include local communities in the Ulu Masen area as project beneficiaries, in practice, project activities targeted mostly ‘key target groups’, namely loggers, poachers, and former GAM combatants who were considered potential threats to forest conservation. They were recruited as community rangers and involved in forest patrolling and monitoring and activities to create alternative livelihoods. Such an exclusive approach has generated social jealousy within the communities considering the fact that most of project beneficiaries are considered ‘bad boys’ at the village level (Saujana, interview, June 30, 2013).

Alternative livelihood creation was translated in a narrow fashion through allocating livelihood funds for community rangers. The livelihood activities were not considered as an end in itself but an entry point for the broader conservation agenda. A senior staff member of FFI suggests that this assumption is problematic, as many field officers do not envisage a clear plan and strategy to make alternative livelihood initiatives sustainable. In addition, focusing on distributing the livelihood funds might deviate from efforts to introduce performance based payment. In some ways, the approach taken in this project to create alternative livelihood strategies resembles ICDP. Some studies have

documented ICDP failures due to the tendency of project developers to carry out conservation, poverty reduction, and capacity building activities in a paternalistic manner, which creates communities' dependency (Vermeulen 2004; Hammill, et al., 2005 as cited in Gene and Aliadi, 2008). Others argue that the initiative is often marked with high transaction costs, few positive conservation outcomes, and limited financial benefits for the villagers (Sunderland, et al., 2008).

Although livelihood activities were supposed to be designed and implemented through participatory planning processes assisted by field facilitators, livelihood funds in most project locations are used to establish community tree nurseries and livestock, regardless of differing social and economic situations in each *mukim*. Both activities have been implemented by FFI in its prior conservation projects in Aceh. A senior staff member of FFI suggested that the tendency to replicate similar old approaches for alternative livelihoods was due to field facilitators' lack of skills in participatory development processes, and their limited understanding of the importance of considering the social context in conservation planning. As he explained,

They themselves [field facilitators] do not really understand that importance of social context when they implement certain interventions. They are too focused on the conservation side, talking [with rangers] about habitat and species conservation. As a result, rangers just focus on conducting forest patrolling and inventory...rangers have to be able to go out from their 'comfort zone' and start to engage with the communities, they should facilitate the communities. We should have asked them to educate rangers so that conservation activities are not detached from the social context. They also misinterpret the notion that community rangers are independent entities. What we mean by independent entities is that they can choose their own political stand. However, some field facilitators interpret this notion by leaving the decision for field activities to rangers without adequate guidance. This is just problematic (Krisna, interview, June 30, 2013).

Indeed, the results of participatory planning could be easily manipulated by an outsiders' analysis of problem and interests (Mosse, 2004).

An FFI staff person further added that livelihood development had never been a 'core competency' of his organization, which made it difficult to realize participatory and market driven conservation projects on the ground. As described in the previous chapter, until very recently, FFI in Aceh mostly focused its activities on mitigating human-wildlife conflicts. A holistic and participatory approach to conservation that combines activities for conservation, local development, and tapping market incentives for financing conservation has only been adopted by the organization in the last few years. The FFI staff suggested there had been continuous negotiations between two 'factions' within the organization on how to implement the Ulu Masen project, one which focuses on conservation *per se*, and another that acknowledges the importance of tailoring conservation efforts into particular social and political contexts. While changing policy models for conservation is easy on paper, translating it into project practices requires not only large amount of work for 'skilled brokers' to communicate goals in local terms but also a transformation of institutional practices within the organization. Mosse (2004) suggests that "project practices were shaped less and less by the formal goals (of policy/design) and more and more by the organization's system of goals that revolves around the preservation of rules and administrative order" (p. 653).

4.6 Conclusion

This chapter describes how different ideas associated with REDD+, including participation, community, FPIC, and benefit sharing, have been translated into project practices. It also explores the potential political and material consequences these practices might produce. In addition, this chapter also reveals that Ulu Masen project proponents could hardly provide a coherent translation of the policy model nor could they mobilize support. The process of translation becomes much more challenging when those who are responsible to mediate the process do not hold a comprehensive understanding of the issue and instead, oftentimes provide counterproductive explanations, especially to local communities.

At the project level, REDD+ has been translated into project practices that in many ways resemble ICDP projects, insofar as they retain an emphasis on reconciling conservation and development as described in the PDD (2007). The project primarily focuses on conservation activities, and the creation of alternative livelihood activities is positioned as an entry point to achieve the broader conservation agenda. In this context, the targeted beneficiaries are limited to those who help patrol and protect the forest resources.

The chapter also demonstrates how the simplification of community and FPIC ideas mask power dynamics and limit broader inclusion of other actors in project design and implementation. Furthermore, the limited involvement of local actors in the process of Ulu Masen project design and implementation indicates that project proponents did not consider a proper participatory approach a priority in the process. The potential for elite

capture and/or further marginalization of social groups or individuals in the communities is increasing accordingly. With limited information and understanding about the project scheme, it is impossible for local communities to negotiate effectively over FPIC and the development of benefit sharing mechanism processes. Furthermore, operationalizing FPIC on a large scale is especially challenging when the project boundaries and scope have not been clearly defined.

The project proponents also place the local communities in a somewhat awkward position. On the one hand, the REDD+ scheme requires communities to act as ‘rational service providers’ or market subjects who understand the monetary value of their services and would give up forest based livelihoods in exchange for compensation. On the other, the project proponents seem unprepared to deal with communities’ enthusiasm over the potential stream of REDD+ financial benefits and have complicated matters further by trying to conceal the potential monetary benefits of the project.

CHAPTER 5. The Fantasy of Fixity: Governing Ungovernable Space and People

5.1 Introduction

In the darkness in the middle of Ulu Masen forests, a group of men and women stood in the river. Lit by flaming a torch, each of them took turns being dunked by the ‘Master Trainer’ beneath the water (FFI, 2011). It was not a television episode but rather a ‘graduation’ ceremony organized by Fauna and Flora International (FFI) that marked the completion of several weeks of training for community rangers. The ‘baptism’ process symbolically represents that those people have absolved their past and are ready to embrace their new life and responsibilities as community rangers. Following the ceremony, each ranger received a uniform to wear when they performed their duties as community rangers.

Hiring and building the capacity of community rangers is a part of the project proponents’ governmental strategies to increase surveillance in the Ulu Masen forests. This chapter draws on Foucault’s concept of ‘governmentality’ to examine how the proponents of the Ulu Masen REDD+ project attempt to govern space and people to achieve the project goal of reducing carbon emissions. However, I extend the investigation on the limit of government practices (Li, 2007; Rocheleau, 2007) by the exploring diverse responses of local actors toward endeavors that make implementing the strategies challenging.

The second section describes the theoretical framework employed in this chapter. The subsequent section explores a spatial strategy utilized by the Government of Aceh (GoA) to revise provincial land use planning by the re-classification of forest areas and increasing the area categorized as forest. In the fourth section, at the community level, I examine FFI's *mukim*-based spatial planning exercise and investigate the challenges encountered by project proponents to make forest zone categories real. The fifth section closely examines the efforts to discipline people living around the Ulu Masen area by hiring forest rangers (*pengaman hutan/pamhut*) and by educating community members to be community rangers to assist project proponents in securing forestland and resources.

I argue that territorializing forest zones and boundary making around forests is central to the production of forest carbon in the REDD+ project. The techniques enable the governing entities to define an area of intervention, measure and quantify potential carbon credits, maintain carbon storage for monitoring purposes as well as control people's movement and activities across forest space. In addition, this approach leads to production of REDD+ subjects who come to care for the environment, hence complying with the rules of governing zones which are also crucial to support the effort to reduce carbon emissions. However, despite meticulous governmental strategies planned and carried out by the project proponents, they have failed in their efforts due to complex patterns of forest access and use, tenure arrangement, local politics and resistance from various actors.

5.2 Governmentality, Governable Spaces and the Limit of Government

As described in Chapter 1, critical geographers and other social scientists have increasingly and productively employed Foucault's concept of governmentality to elucidate the impacts of neoliberal environmental policies (Li, 2007; Ruthland and Aylett, 2008; Birkeholtz, 2009). Studying neoliberalism as governmentality will require a close examination not only of the governmental technologies that are aimed at shaping and governing the behavior of the self and others and directing the qualities of population, but also on the goals, aspirations, and rationalities that shape, normalize and instrumentalize the conduct, thoughts, and decisions required to achieve desired outcomes (Rose, 1999; Huxley, 2007). The relevant technologies of government include a variety of approaches and mechanisms, which range from policies and practices to new means of management and institutional arrangements (Miller and Rose, 1990; Dean, 1999 as cited in Lovell and Liverman, 2005).

Thus, in studying neoliberalism as governmentality, instead of simply asking what happened and why, we should ask how the problem is defined to pursue what goals, what strategies and techniques are employed, and what kind of authorities are created (Rose, 1999). In her study on development interventions in Sulawesi, Indonesia, for instance, Li (2007) investigates how 'government' works through tactics that educate desires and configure habits, aspirations, and beliefs. In a different setting, Agarwal's study on decentralization of forest management in India reveals how forest dependent communities willingly internalize conservation goals and shift their environmental practices so that they conform to the state's conservation goals (Agarwal, 2004, 2005).

He introduces the term ‘environmentality’, which is defined as “the knowledges, politics, institutions, and subjectivities that come to be linked together with the emergence of the environment as a domain that requires regulation and protection,” to investigate decentralization of forest governance (Agrawal, 2005, p. 226). In this study, Agrawal finds the intimate link between the production of new knowledge to inform regulation and the shaping of practices and human subjectivities toward the environment.

Rendering space visible and thereby amenable to government is a crucial element in governmentality (Rose, 1999). The creation of governable spaces allows the governing entities to set up boundaries and territorial limits and determine types of objects and subjects to be governed (Rose, 1999; Huxley, 2006, 2007; Elden, 2007). In this regard, the creation of a map is crucial not only to make spaces presentable and representable but also serve as an ‘inscription device’, which enables “...the extension of authority over that which they seem to depict” (Rose, 1999, p. 37). In this process, Rose (1999) argues that features that are considered important to governing entities are made visible, while others features deemed non salient are rendered invisible.

In efforts to reduce carbon emissions, the making of carbon territories, territorial ordering, and the production of carbon-relevant citizens are also important (Rice, 2010). In her study on everyday practice of climate governance in Seattle, Rice suggests that the *territorialization* of carbon, in which carbon is bounded and quantified and spaces of carbon producing activities are produced and ordered, has allowed local governments to engage in the global arena of climate politics. Through these practices, Seattle has also

been enabled to exercise state power through territorial claims over material natures (i.e. Green House Gases).

Nevertheless, governmentality has its limits (Li, 2007; Rocheleau, 2007). It is not a one-way process because it also “opens to manipulation from below,” such as counter appropriation of new identities and series of adjustments to environmentalism (Rocheleau, 2007, p.222). Li (2007) argues that there are at least three governmentality limits: *first*, the limit posed by politics. Emphasizing Foucault’s point on the inherent possibilities of resistance, she argues that governmental interventions always provoke the possibilities of critiques to challenge and reject governmental diagnosis and prescriptions. She further adds, “Government, from this perspective, is a response to the practice of politics that shapes, challenges, and provokes it” (p.12). *Second*, governing population is not an easy task to do. People have agency and dynamically respond to any attempts to govern and control them. *Third*, the forms of knowledge and techniques to govern are limited. The role of knowledge is crucial to understand the population and also devise calculated interventions to shape their social conducts (Mitchell, 2002; Li, 2007). Li (2007) asserts that it is impossible to know everything about the population, yet it is counterproductive to regulate society in a totalizing manner. Thus, the goal of government is to “sustain and optimize the processes upon which life depends” (p.18).

Building from this framework, this chapter focuses on the technology of rules that have been carried out by Ulu Masen project proponents through organizing forest space and the production of REDD+ subjects through conducting training for forest rangers and

community rangers to increase surveillance over forest areas. I also extend the investigation to the challenges of making the governmental technologies succeed.

5.3 Land Use Plan Revisited

Spatial ordering and classification is crucial to govern people and space because it allows the government to control not only resources but also people's movement in the space. In his landmark study that examines how the modern state works, Scott (1998) underlines the centrality of mapping as a tool to order space, and as an integral part of the processes of modern statecraft. More than just a process of producing maps, it is anticipated that the creation of maps, "...when allied with the state power, would enable much of the reality that they depicted to be remade" (Scott, 1998, p.3).

In the context of REDD+, the creation of land use maps serves as a tool that enables the government or project proponents to regulate activities in the different forest zoning systems, thereby supporting the achievement of targeted carbon emissions reduction. Moreover, it could support efforts to clarify tenure arrangements, a crucial element to ensure successful REDD+ project implementation, because 1) it allows the project proponents to decide who gets project benefits; 2) devises benefit sharing mechanisms; 3) determines incentives for behavior change and 4) ensures long term security for the project (Larson, 2010; Peskett and Brodnig, 2011; Corbera and Schroeder, 2011).

In Indonesia, unclear and overlapping forest tenure arrangements are common. Efforts to organize and control forest space were initiated in the early modern state of

Indonesia, but they were not intensified prior to the Suharto regime. When Suharto took power in 1967, the government soon issued a regulation, Basic Forestry Law (BFL No.5/1967), to reorganize forest institutions and extend forest exploitation into the outer islands of Indonesia (Carson & Obidzinski 2001). Forestlands were claimed, mapped, bounded and categorized. Citizens, as well as their environments, were numbered and tabled. Vandergeest and Peluso (1995) call it a process of “territorialization”, in which the state sets geographic boundaries and tries to control activities of people, especially with regard to their access to resources within those boundaries.

Under the BFL, a forest area (*kawasan hutan*) is defined as “a geographical area where trees grow which as a whole is a biological community with its surroundings and is designated by the state as forest” (article 1, verse 1). This law and its implementing regulations justify the state’s ownership over all lands that are not held under private title and classified as ‘forest’; this comprises nearly three quarters of the nation’s territory. BFL implies that most activities in and around the forest are illegal. By this definition, the state agency has the authority to designate or change the status of land.

In the early 1980s, the government agencies attempted to increase control over forests by initiating a mapping exercise over forest areas and producing the Consensus Forest Land Use Plan (*Tata Guna Hak Kesepakatan* or TGHK) (McCarthy, 2000, 2006). It divided the geography of forest areas in Indonesia based on categories designated in the BFL. By developing TGHK, the government also facilitated the development of the forestry industry, particularly the allocation of forest access and use rights. Forest land use is classified into four types (Moniaga, 1993; McCarthy, 2000): (1) Nature reserves or

conservation areas; (2) Protection forests; (3) Production forests and limited production forests, in which the forest agencies maintain indirect control and grant long term leases through forest concession rights (*Hak Pengusahaan Hutan/ HPH*); and (4) Conversion forests or convertible production forests. In the latter, the state can authorize the conversion of forest for plantation agriculture and Business Utilization Rights (*Hak Guna Usaha/ HGU*) to lease resources from state land and other relevant licenses.

For the state agents, a forest-zoning system becomes a guidance to direct and manage what types of activities can be conducted around the state forest areas. It has been considered an important tool for making the forest a ‘legible’ space that can be easily controlled, standardized, measured, and categorized, thereby rendering it governable (Scott, 1998). It also brings material consequences, particularly for forest users, as it gives the forestry agency the authority to define what is constituted as ‘forest’, and determine which zones can be accessed by whom and for what purpose. For instance, in the forest areas classified as nature reserves and protection forests, communities’ access to various forest resources, particularly timber, is strictly prohibited.

The forest classification through TGHK was conducted using a macro scale map (1: 500,000) (Resosudarmo, et al., 2011). The mapping was also largely conducted through desk review, whereby the real conditions on the ground were rarely taken into account. It was not surprising that oftentimes, communities’ settlements and forestlands were classified as the state forest areas and their customary rights and systems were ignored (Resosudarmo, et al., 2011).

About a decade later, another regulation was issued, a Spatial Planning Law (*Undang Undang Rencana Tata Ruang dan Tata Wilayah/RTRWP 24/1992*), which includes provisions to enhance environmental planning procedures and required provinces to prepare Provincial Spatial Plans (McCarthy, 2006; Resosudarmo, 2014). The law establishes new criteria that divide the land into cultivation and non-cultivation areas (McCarthy, 2006). As a result, land classification in the map produced based on the Spatial Planning Law often contradicts with the Forest Maps. Therefore, it is common to find different government agencies using different map references for planning and implementing their programs. In response to such inconsistencies, the government tried to clarify TGHK and RTRWP through reconciling the maps (*peta paduserasi*) (Brockhaus, et al., 2012 as cited in Indarto, 2012). This effort has, however, been delayed due to complexities and difficulties to harmonize both systems.

After the fall of Suharto, the Basic Forest Law was revised into the Forestry Law of 1999 (See Chapter 2). Under this law, forestlands are divided into three types: protection and conservation forests, production forests, and production forests for conversion. Unlike the BFL, the Forestry Law of 1999 provides an avenue for communities to participate in forest management. Yet, many scholars have criticized the more recent law as well because it still retains core elements that make the recognition of communities' and indigenous people's rights over forest difficult (see Chapter 2 and Li, 2002).

Table 5.1 List of Policies for Organizing Forest Space

Policies	Notes
Basic Forestry Law of 1967	The law declared nearly 75 percent of Indonesia's territories as forest areas
Consensus Forest Land Use Plan (TGHK)	The regulation provides different forest classifications and facilitates the development of forest industry though allocating forest access and use rights
Spatial Planning Law of 1992	Include a provision that divide land into cultivation and non-cultivation areas
Forestry Law of 1999	It is a revised version of BFL which includes a provision on <i>adat</i> forest and new categorization of forestlands

In order to effectively govern the territory, fixing the boundaries of forests on the ground is considered a procedural pre-requisite. The processes of verification and validation of the state forest boundaries seem never ending due to the large size of forest areas to be delineated and the forestry agency's limited resources to do so. Hence, the state's forest demarcation is far from complete. As of 2012, only around 10 percent of the total state's forest area has been delineated, which prompts various interpretations of what constitutes the state forest elsewhere (Indarto, et al., 2012). Indigenous communities who claim customary rights inhabit many of these areas. As of 2009, there are 9103 (23.6 percent) out of 31,864 villages throughout Indonesia located in forest areas (MoF and BPS, 2009 as cited in Indarto, et al., 2012). Moreover, due to unclear boundaries between villages and state forests, it was predicted that there were around 22.5 - 24.4 million ha areas subjected to conflicts between the communities and the state.

To clarify forest tenure arrangement, particularly with regard to REDD+ implementation, the Presidential Delivery Unit for Development and Monitoring

Oversight (UKP4) and the REDD+ Task Force at the national level have initiated the One Map Initiative (OMI) to develop an integrated map repository for a single reference to be used by all ministries and local government (Satgas REDD+, 2012). A set of indigenous maps produced by the national alliance of indigenous people (AMAN) and Participatory Mapping Networks (JKPP) are planned to be integrated in the OMI. However, it remains to be seen how this effort will impact on the state's recognition over indigenous territories.

In Aceh, forest areas have been designated and categorized based on the BFL. As described in the Table 5.2, the province's forest areas are covered by various designations that offer various levels of protection, from production forest to conservation forests (EoA, 2009). Nevertheless, those classifications do not reflect the reality on the ground in terms of the condition of forest cover and social relations that underpin the patterns of forest access and use in different forest zone categories.

Table 5.2 Forest Designation in Aceh (EoA, 2009)⁴⁵

Forest Functions	Area (Ha)
Nature Reserve Forest	
▪ Nature reserve (<i>Cagar Alam</i>)	16,940
▪ Wildlife reserve (<i>Suaka Margasatwa</i>)	102,370
Nature Conservation Forest	
▪ National Park (<i>Taman Nasional</i>)	623,987
▪ Nature Recreational Park (<i>Taman Wisata Alam</i>)	16,412
▪ Grand Forest Park (<i>Taman Hutan Raya</i>)	6,220
▪ Hunting Park (<i>Taman Buru</i>)	86,704
Protected Forest Area	1,844,400
Production Forest Area	
▪ Limited Forest Production	37,300
▪ Fix Production Forest	601,280
▪ Convertible Production Forest	0
Total	3,335,713

A top forestry official in Aceh describes the process of determining the state's forest status and boundaries as one that first involves various stakeholders from the provincial to village level before final authorization by the district head, governor and Ministry of Forestry (Dunlop, 2009). However, many local communities contested the statement, as they were seldom involved in the delineation of state's forest boundaries (Focus Group Discussion, October 15, 2011; Focus Group Discussion, November 9, 2011). As described by a *Mukim* leader in Pidie District,

The Forestry Department from Pidie District undertook a process to claim protected forest in Tangse, which is known by the community here as *Gle Singgah Mata*. The Forestry Department's methodology for conducting the survey was to measure all land that was not 'owned'. However, according to custom,

⁴⁵ It is based on Ministry of Forestry Decree No.170/Kpts-II/2000.

forest without specific owners is customary forest as the community manages it collectively (cited in Dunlop, 2009).

In some areas, the state's forest boundaries are demarcated by signboards around the periphery. Oftentimes, those signboards are placed a kilometer (0.62 miles) apart making it difficult to determine the precise boundaries due to the wide spacing of the signboards. In most other areas, however, no clear boundaries have been designated.

There is a gap between the reality of the map grid and reality in the forest areas. In many cases, state agencies include communities' agriculture, fallow, settlement, swidden, and areas claimed as *adat* forest into the state forest areas. In this situation, the boundaries clearly delineated on maps have been breached in many ways. As described by Li (2007), state agents often fail to exclude communities from accessing the state forest areas, not only due to the state's limited resources to maintain surveillance over such a large forest area, but also due to the lack of economically viable alternatives for local communities. Furthermore, in Aceh, many communities are not aware of either the location of the state's forest boundaries, the existence of different forest categories or the meaning of forest categories, because such information is rarely available to them (Dunlop, 2009).⁴⁶ Even if local communities were aware of the boundaries, it would not stop them from clearing land in the forest for agriculture and gardens. Communities perceive the state forest boundaries as a result of one-sided decision making of the state and 'a continuation of colonial policies about forest boundaries' (Dunlop, 2009, p.42).

⁴⁶ Communities also expressed similar views during FGDs conducted in Aceh Besar (October, 2011) and Pidie District (November, 2011).

Until very recently, Aceh possessed neither an official, standard map of its domain nor a common regulatory framework (Meehan, 2009). Different agencies in the same level of government, and different levels of government, have been using different map references to plan their programs. Under a more recent spatial planning law (Law No.26/2007), all provinces in Indonesia are required to develop a draft of spatial plans and a regulatory framework for the management of different land status. In this regard, as a part of the Ulu Masen REDD+ strategies, the Government of Aceh plans to produce a new map and spatial land use plans that take into account sustainable development principles. This is in line with the Ulu Masen REDD+ goal and the broader goals of Aceh Green Vision. Re-classification of lands through producing a revised spatial planning is deemed crucial to ‘permanently’ prevent both legal and illegal logging to occur in the designated forest areas (PDD, 2007).

To do so, the government of Aceh has established a team, TIPIRESKA (*Tim Perancang Kebijakan Redesign Kehutanan Aceh*/A Forestry Re-Design Team of Aceh), which is responsible for developing a new grand design for the forestry sector in the province that includes reorganizing forest space and clarifying roles and the authority granted to the provincial government institutions in relation to forest governance (GoA, 2011). A provincial land use planning and forest zoning-system would be amended to achieve the target of reducing 85 percent of legal logging (PDD, 2007). In the proposed land use plan, the GoA intends to expand areas classified as forests by 5 percent or around a half million hectares. The province initially has 65 percent of its area classified as forest, and this would be expanded into 70 percent in the proposed spatial plan. In

addition, the area classified as protected forest will also be expanded from 1.8 million hectares to 2.8 million hectares. In the new land use plan, there are four zones proposed which include: *first*, core zone /protected forests (covering 2.8 million hectares); *second*, restoration zone/replanting protected forests (covering 250,000 hectares); *third*, community based production zone/community forests (350,000 hectares); *finally*, land reform/smallholders plantation zone (250,000 hectares). The designation of new areas classified as forest was based on the scoring result of biophysics and slope gradient indicators, which were overlaid with other indicators such as wildlife conflict, conflict-prone areas, among others while ignoring the existing land use condition (Saujana, interview, September 11, 2011).

Revising the provincial spatial plan and reclassification of forest area is a daunting task that requires orchestrated negotiations with different levels of government and various government agencies. The GoA needs to not only obtain a substantive approval from the central government but also be able to convince the provincial parliamentary members and district governments to ‘buy in’ to the proposed plan. Different map references among the government agencies need to be ‘harmonized’. The existing complex tenure arrangements and diverse interests of different government agencies at various levels complicated the situation, as a staff member of the provincial forestry agency puts it,

If we talk about spatial ordering, we talk about how to order the whole of Aceh’s space. We have incomplete zonation systems. However, many district governments have resisted the provincial government’s proposal to revise land use planning, which makes it hard to be approved and implemented as soon as possible (Saujana, interview, September 11, 2011).

Strong opposition toward the revision of provincial spatial planning comes from a local political party established by former GAM combatants, the Aceh Party, which holds the majority of seats in the provincial parliament. As many ex-combatants enter into the state bureaucracy, a new lucrative patronage network has emerged in Aceh enabling GAM networks access to economic opportunities. Benefiting from political connections and position, some GAM elites have re-invented themselves as entrepreneurs dominating business sectors in the province (Anshori, 2012). This situation was worsened by a deeply entrenched local culture of nepotism and corruption that influenced the way bidding systems operated in Aceh. Most of those with strong political connections were able to secure lucrative contracts from the district and provincial governments for reconstruction projects and other business opportunities throughout Aceh. These contractors profited from various government projects for mining, roads, and other infrastructure (EoA, 2009). Thus, it is not surprising that many members of the parliament from the Aceh Party are against REDD+, as it will hamper their business pursuits.

The desire to fix forest zones might also potentially run aground. Some forestry agency officials admit potential challenges that they will encounter to enforce the new forest zoning system (Saujana, September 11, 2011; Khalid, September 12, 2011). They are deeply aware that in reality, the forests are not blank space as represented on the map. As Saujana, a provincial forest agency officer puts it,

Enforcement is another problem. Protected forest is supposed to be closed for people's access, but we know many communities have lived there. Many people

have also conducted their agriculture activities in the disaster prone or biodiversity rich area...furthermore, forest boundaries could not be understood only by the Forestry Agency, people should understand that (interview, September 11, 2011).

Moreover, a major part of the Ulu Masen area has been assigned to six logging companies whose concessions cover 404,704 hectares (PDD, 2007). Their concession permits would end in various dates ranging from 2011 to 2049. During the armed conflict period, these logging concessions were abandoned. However, with more conducive political climate in the province now, they could potentially resume their logging operations. The project proponents have expressed their concern that these companies could claim future carbon payment resulting from the Ulu Masen REDD+ (Resosudarmo, et al., 2014).

If the proposed land use plan is approved and enforced, it will certainly alter the extent to which communities can access and use the forest resources. Such potential consequences were addressed by a provincial forestry agency official,

In the context of REDD, land use plan (RTRW) gives a status to area. It will be more secure if we have the plan. However, without it is not a problem either. To be honest, it is just my opinion, not my institution's opinion, if the area is classified as forest, it will create a problem for communities. Because you know that to enable people to access [state's] forest area is regulated in some laws through several avenues such as HKm [Community Forestry] and HTR [Community Forest Plantation]. However, if we see the requirements for communities to participate in HKm and HTR, it is going to be hard for them to be qualified (Saujana, interview, September 11, 2011).

The statement above reflects the forestry agency official's understanding of the consequences that the communities would bear with a change in designation of the state's forest areas. He is also aware of the complexities of obtaining permits to enable local

communities to engage in the state's forest management. Based on the Forestry Law 41/1999, communities could participate in the forest management through several schemes: *Hutan Kemasyarakatan* (HKM/Community Forestry), *Hutan Tanaman Rakyat* (HTR/ Community Forest Plantation), *Hutan Desa* (Village Forest), and *Hutan Adat* (Customary Forest). Nevertheless, many have argued that obtaining permits for those schemes requires a host of information-gathering and registration measures that can intensify government control over community activity in the forest (Raharjo 1999; Li, 2002). The government requires local communities to follow bureaucratic legal permit procedures and centralized monitoring and evaluation. Furthermore, the designation of certain areas to be managed through community forestry depends on the Forestry Department's decisions that involve complicated bureaucratic processes in various government levels, and it usually takes several years until permission is finally granted. This situation is akin to the findings in Schroeder's research on community forestry program in Gambia, in which communities' ability to engage in the program is conditioned upon their compliance with a number of requirements set up by the government. Indeed in The Gambia's case, Schroeder argues that to a certain degree, the community forestry approach has been appropriated by the state as a strategy to cope with budgetary constraint for conservation (Schroeder, 1999).

5.4 Mapping Ulu Masen Forest

In designing and implementing REDD+ projects, like other forest carbon offset projects, the production of project maps is crucial to frame the space in order to stabilize

the ‘forest-as-carbon sink’ and create a sphere of action and intelligibility (Lansing, 2012). The map enables the project proponents and relevant actors to comprehend that “...this carbon exists in a contained area, one of the borders that separate the carbon friendly inside of the territory from the unpredictable and immeasurable ‘outside’ ” (Grove, 2009 as cited in Lansing, 2012, p. 210).

To effectively plan and implement the REDD+ project’s interventions, defining the Ulu Masen territorial boundaries is crucial. It not only ensures the clarity of the ‘area of intervention’ but also makes the calculation of carbon emissions reduction and project interventions possible. While it is largely unknown to most Acehnese, Ulu Masen Mountain, a small mountain located in Aceh Jaya District, is where the ecosystem area of the REDD+ project gets its name. FFI was the first institution using the name ‘Ulu Masen’ for its initial conservation initiatives prior to the conception and implementation of the REDD+ project. As described in one of its documents (FFI, n.d.)

Similar to other places, Ulu Masen Mountain is used to name the ecosystem area in the Aceh Province, which represents a whole forest ecosystem. Therefore, it would enable socialization processes of the area [to a broader audience] in order to protect the forest area and its environmental services and provide sustainable benefits to local communities.

Choosing the Ulu Masen ecosystem as the project location was considered sensible and logical (Saujana, interview, September 11, 2011; Atmojo, interview, September 10, 2011). Compared to other parts of Aceh, the area that covers six districts still has forest areas that are relatively intact. In addition, FFI has long engaged in conservation activities and community development in the area. Therefore, the area is considered to be especially suitable for REDD+ project implementation.

The only reason we have is that Ulu Masen is much more ready than other areas, the enabling condition for REDD+ is there, particularly because FFI has conducted activities for so many years in the area. The GoA and FFI have established good collaboration. We consider it as good social capital to start [the project]. We do not want to deal with too many uncertainties in REDD+ (Saujana, September 11, 2011).

During the project design, the project team developed a principal map, which was produced mostly through desk review conducted by the project ‘experts’ (PDD, 2007).

To implement the project, the provincial REDD+ Task Force planned to delineate project boundaries on the ground to define physical location of Ulu Masen ecosystem area. One of the important means employed to establish the project boundaries is through participatory mapping.

Prior to the conception of the Ulu Masen REDD+ project, FFI initiated community based spatial planning at the *mukim* level, particularly in Aceh Jaya District since 2006. The practice was then integrated into the REDD+ project and replicated in some other districts around the Ulu Masen area. The exercise is expected to assist the *mukim* “to take responsibility in sustainably managing their customary forests, including the provisions of alternative agroforestry options (e.g. tree nurseries)” (FFI, 2011, p.8).

among the communities. For FFI, this approach is used to formalize land use plans that would support conservation and benefit local communities. It is also expected to strengthen the *mukim*'s role in forest governance.

However, mapping *mukim* territory is not simply an act of delineating boundaries to develop a spatial plan. It is also a means for re-imagining and reviving the customary institution, *mukim*, which has not effectively functioned for decades. *Mukim* is a governance administrative unit that originated in the Sultanate era (17th Century) in Aceh. Although they do not always establish rigid land use categories, traditionally, *mukim* and *gampong* arrange space by functionally differentiating activities in different areas for socio-spiritual, economic, and environment purposes. Syarif (2007) explains that in general there are three main areas within *gampong*: settlement areas, cultivation (*budidaya*) areas and communal lands.⁴⁷ Nonetheless, the spatial arrangements are dynamic and change over time. Each *mukim* also has a governance structure, which varies across Aceh but it is usually headed by an *imeum mukim* (the head of *mukim*).

During colonial times, the Dutch government organized *mukim* by mapping *mukim* territories, particularly in Aceh Rayeuk (now Aceh Besar District) and Southeast Aceh. Syarif (2007) argues that this practice was utilized by the colonial government to claim the ownership over 'unused lands' in these areas. The colonial government

⁴⁷ The examples of cultivation area include: paddy field (*blang*), garden (*lampoh*), meadow (*padang*), fishpond (*neuheun*), whilst instances of collective lands include: river (*krueng*), jungle (*uteun rimba*), pasture (*padang meurabe, peruweren*), among others (Syarif, 2007).

delineated a line, known as *Bosch Wezzen*, which separated *mukim* and the colonial government's territory.

After the independence of Indonesia, *mukim* was still acknowledged as a governance structure positioned under the sub-district (*kecamatan*) level (FFI, 2009b). In the mid-1970s, however, the state implemented the Village Governance Act (*Undang-Undang tentang Pemerintahan Desa No 5/1979*) to better govern the population by creating a standardized government structure throughout Indonesia. Based on this regulation, diverse local institutions, particularly at village level, should be made uniform in the form of *desa* (village) administration. *Desa* is positioned as the lowest level administrative unit under sub-district (*kecamatan*) level and included in the central government bureaucracy (Dunlop, 2009). In Aceh, that policy significantly eroded the authority and legitimacy of *mukim* and other *adat* institutions in governing forest.

In the decentralization context, however, many provincial governments have attempted to revitalize and integrate *adat* government structure into formal government administration. In Aceh, the Law of Governing Aceh (LOGA) formally recognizes *mukim* as a government structure. The head of *mukim* or *imeum mukim* is positioned to bridge the communication between the government and *adat* communities (Syarif, 2007). In addition, the GoA has issued a local regulation (*Qanun*) on the governance of *mukim* (*Qanun* No 4/2003). In practice, however, many *mukim* struggle to perform their role meaningfully and tend to limit their involvement in *mukim* area governance issues. Instead, they often focus their role in traditional activities and conflict resolution (IDLO, n.d.). It is partly due to the pervasiveness of the impact of *desa* structure in the province.

While the local regulation recognizes that *mukim*'s territory includes forests, land, watersheds, and other natural resources, it underlines the fact that such territorial ownership is allowed only "as long as it does not breach higher existing laws and regulations" (*Qanun* No 4/2003, verse 18).

In the Ulu Masen REDD+ project plan, *mukim* is established as the basis of participatory spatial planning and forest management (PDD, 2007). Participatory planning started in the Aceh Jaya District has resulted in the *mukims*' spatial plans, which were proposed to the district government to be incorporated into district spatial planning. Subsequent community based spatial planning exercises were conducted for around three weeks in 2009, in each of 17 *mukim* in Aceh Barat, Aceh Jaya, and Pidie districts.⁴⁸ Communities were involved in identifying local problems and developing a *mukim*-based spatial plan to address them. Using Global Positioning System (GPS) technology, the boundaries pointed out by communities were overlaid on a map. Nevertheless, translating communities' conception of space into the map grid was not a simple process because they have different conceptions of space compared to that of the project proponents. Most *mukim* do not have a definite marker of their territorial boundaries but using a traditional method known as '*si uro jak wo*', which is literally translated as "a one day return journey," to measure the boundaries of customary forest areas. Such a fluid conception of boundaries is commonly shared by most of the *mukim* in Aceh (Aisyah, interview, September 20, 2011). A villager expressed similar views during my initial visit to one of

⁴⁸ Some *mukim* in Aceh Besar District also conducted the planning exercises assisted by Environmental Services Programme, USAID project.

the study sites “when we have tired of walking in the forest, that’s the boundary of our forest” (Focus Group Discussion, November 2, 2010). It reveals that community members would like to continue to have access to areas within walking distance. The farther away from their village areas, generally up in elevation, they believe that lower intensity of forest uses is suitable.

Aisyah, a former staff member of FFI who facilitated the *mukim*-based spatial planning, noted that many *mukim* leaders extended their *mukim* territorial claims as far as possible thereby causing territorial overlaps among different *mukim*. This situation could potentially causes territorial disputes. As described by Aisyah,

In the process, a concern was raised about *mukim* areas (*wilayah mukim*). They wanted that the *mukim* boundaries should cover one day round trip measured from the edge of their villages. Although we saw variations among *mukim*, but it seemed there was a common agreed understanding around Ulu Masen area that the *mukim* boundaries could be measured in a one day round-trip from the edge of village areas. However, we found that by using this method, some *mukim* areas would overlap...they [*mukim*] just want to have their forest boundaries as far as possible. They said it could be 12 kilometers from the edge of their village. We did not refuse their proposal because we just facilitated the discussion. But we reminded them that they should consider their capacity in managing the large *mukim* territory that they wanted to claim (interview, September 20, 2011).

When the team proposed territorial boundaries of *mukim* for the principal map described above, *mukim* leaders were reluctant to accept it. Although they finally agreed with the principal map, community leaders rejected the term ‘*mukim* border.’ They were aware that once they agreed with the border, it would restrict their access to the forest area.

In conducting *mukim*-based spatial planning, FFI was assisted by several personnel from a local NGO, *Yayasan Rumpun Bambu Indonesia* (YRBI), which has extensive experience conducting *mukim*-based participatory mapping in Aceh. While

allowing some of its staff to continue their involvement in the exercise, the local NGO later on declined to have an institutional involvement in the activities due to its disagreement with FFI pertinent to their mapping approach and ideology that motivates the adoption of participatory planning. As an activist of YRBI put it,

They create the map too quickly because they have to fulfill their target and to some extent it only strengthens forest areas that have been initially designated [by the project]... We were initially involved in the process because we wanted to anticipate the potential risks which could result due to REDD. We do not have a certain position toward REDD+, we just want to help them to consolidate their territory and help them to better understand potential implications of the project (Hidayat, interview, October 19, 2011).

For Hidayat, an activist who has been involved in the participatory mapping for nearly two decades, mapping *mukim* territory is an act of claiming *mukim* rights over forestlands and resources. This is in line with that of ‘counter mapping’ (Peluso, 1995), in which the tool of mapping is used to re-claim forest and agriculture lands. With such a spirit, YRBI emphasizes the importance of communities to understand the meaning and ideology of participatory mapping,

I sometime tell [the staff], there is no need to rush the map-making process. We need to make communities cognizant about the process and implications (Hidayat, interview, October 19, 2011).

This dispute reveals that participatory mapping has double-edged effects. On the one hand, it can be a tool for communities to claim their rights over forestland and resources. On the other hand, it can be used by the project proponents to clarify the state’s forest boundaries and subtly legitimize and strengthen the state’s forest claims. Involving communities in delineating the state’s forest line could also be a tool to avoid territorial dispute between the state and communities. Indeed, some previous studies have

documented unintended consequences of participatory mapping (Hodgson and Schroeder, 2002; Fox, et al., 2006). Hodgson and Schroeder's study (2002) on participatory mapping in Tanzania, for instance, suggests the need to carefully consider diverse interests and structural positions of the different agencies involved in the participatory mapping. Failure to do so could bring to unwanted social and material consequences.

5.5 Securing Trees, Disciplining People

Policing the forest and a militaristic style of forest security is a crucial aspect of forest management in Indonesia, which originally developed in Java during the Dutch colonial government (Peluso, 1993). Forest protection in the country has employed two approaches: *first*, preventive measures that include activities to get to know villagers, regular patrolling of the forest areas and awareness raising in the communities; *second*, repressive measures, which are usually taken if the preventive measures fail. Such forest policing practices have been replicated by the Forestry Department to secure forest areas throughout Indonesia, including in Aceh. The *polhut* (*polisi hutan*/forest police) support and enforce the work of the provincial forest agency as well as other central government's forestry agencies stationed at the provincial and district level. They are at the frontline to secure the state's forest resources. Nevertheless, with the change of political climate, particularly after the fall of Suharto, the Forestry Department became much more cautious in implementing the repressive measures.

As described in the first chapter, Aceh was, for decades, the scene of armed conflicts between the Indonesian military and GAM. During intensified conflicts, forest

policing activities were not effectively functioning. This particular situation benefited military personnel and government officials. At this period, it was impossible to conduct business in the province without dealing with the military and the police as they monopolized numerous commercial activities through their direct and indirect involvement (McCulloch, 2002 as cited in Mahdi, 2004). Thus, law enforcement with regard to forest protection was almost impossible.

The implementation of the Ulu Masen REDD+ project renews the GoA's awareness of the importance of increasing monitoring and policing activities over forest areas. To increase territorial control over Aceh forests and ensure people's compliance with the rules governing different forest zoning systems, the GoA has planned to establish some measures, as described in an Ulu Masen REDD+ proposal submitted to the national REDD+ Task Force,

A Forest Protection System will be developed to establish three levels of security measures: Forest Police of the Provincial Forest Agency will collaborate with the Police Department (forest crime section) to operate and prosecute [forest crimes]; forest guards (*pengaman hutan/pamhut*) that serve as patrolling teams in the ring boundaries of forest; and finally, community rangers to engage communities living around the forest areas to conduct patrolling in their territory (GoA, 2011, p.7).

Based on the plan, the GoA not only includes two forest policing methods as described by Peluso (1993), but also intensifies the forest surveillance activities at the community level. As part of the process, 3000 forest rangers would be hired as non-civil servant staff within the provincial forestry agency. By the end of 2011, approximately 2300 forest rangers had been recruited (Saujana, interview, June 30, 2013). At the village level, FFI recruits some local community members to be community rangers, and they in

turn collaborate with and assist the state agents to secure the Ulu Masen forest area. This is an integral part of the Ulu Masen REDD+ project and has become one of the strategies to increase surveillance over forest areas and people's behavior.

Most forest rangers and community rangers are former GAM combatants, illegal loggers and poachers. Engaging those who are perceived as 'threats' to Ulu Masen forest is crucial because it could 'reduce pressure on the forest' by providing alternative livelihood for those likely to place protected forest at risk (FFI, 2011). Involving ex-combatants in the activities is also assumed to reduce the likelihood of them resuming into conflict with the government law enforcement agencies. In addition, the combatants are considered good candidates for the position because of their knowledge of the forests, as described by an FFI top management officer "you have got a pool of well-trained forest experts with jungle skills. They [GAM ex combatants] make great rangers" (Marshall, 2009).



Figure 5.2 Community Rangers of Ulu Masen (Source: DFID)

Forest rangers and community rangers are expected to assist the project proponents in enforcing conservation rules by policing and patrolling in the Ulu Masen area and monitoring forest conditions, thereby extending the state's surveillance over forest areas. In addition, they are expected to facilitate activities for raising environmental awareness of local communities to produce REDD+ subjects, those who conform to conservation ideas and values and behave accordingly. The project document of Ulu Masen REDD+ also describes that the community rangers and forest guards will be trained to monitor forest cover and conditions,

The project will establish, equip, and train teams comprising of community members and government rangers to monitor and report on forest cover and condition, and human activities, verify information from remote sensing on the ground, and provide a visible presence to support the protection of carbon forest... Forest monitoring teams will also be involved in a range of education and outreach initiatives...community monitoring teams will not carry weapons. If routine monitoring detects illegal activity, the incident will be reported to the appropriate local authorities through appropriate channels (PDD, 2007, p.7).

The program to hire forest rangers not only serves the government of Aceh's interest to secure the forest areas in order to establish enabling conditions for the REDD+, but also provides a 'quick fix' for unemployment problems experienced by former GAM combatants (PDD, 2007).⁴⁹ Therefore, it could also be a key for successfully implementing the reconciliation process in the region. With the cessation of conflict, many GAM combatants have come out from their hiding place in the forest without skills and income, thereby turning to illegal logging activities (EoA, 2009). Due

⁴⁹ Similar information was also informed by a mid-ranking provincial forestry officer, Saujana (interview, September 2011).

to budget constraints, those who were recruited received roughly six weeks of training to improve their skills on policing, navigating and monitoring the forest areas. After completion of the training, the forest rangers have been stationed in various districts throughout the province. The district government is expected to allocate the budget to support their daily operation.

At the community level, FFI facilitates the recruitment of community rangers who are selected from the communities living in and around the Ulu Masen ecosystem, that would enable the local communities to ‘take ownership’ and ‘feel responsible’ for what they are doing in their duties as rangers (FFI, 2011). Local communities propose the candidates while the final selection is made by FFI. During the first phase of selection, priority is given to ex-combatants and those committing forest offences, such as illegal loggers and poachers, to provide alternative livelihoods for them while at the same time increasing forest monitoring and community outreach. In the first batch, all of the community rangers were men. But in later phase of recruitment, some women have also been recruited.

The community rangers are engaged in the training that equips them with numerous skills such as human-wildlife mitigation, forest monitoring, and forest conservation knowledge, among others. Despite the expectation that they would be involved in activities to increase community awareness on conservation, no specific participatory skills were delivered in the training. As of 2011, around 80 community rangers have been hired and trained. They are organized into four teams and responsible for conducting patrolling in some *mukim* territories in Pidie, Aceh Jaya, Aceh Besar and

Aceh Barat Districts. To support the team, FFI provides a daily stipend, equipment, and technical support (FFI, 2011). Those rangers are to be the project proponents' 'eyes and ears' to closely monitor the forests and behavior of the local population, as described by the manager of FFI Aceh,

It is amazing to see that among these hardened men, these guys are going from outcasts and criminals to heroes. They are becoming our eyes and ears. They let us know what is going on in very remote parts of the jungle, places that are normally very difficult to monitor (Matthew Linkie as cited in Gelling, 2010).

In this manner, the Forestry Agency is able to extend forest monitoring and control at the community level. This is akin to what Neumann (2001) calls as 'self-surveillance' through which the villagers involved in conservation activities through delegating the burden of forest protection to them. They are expected to "take control and surveillance duties on themselves after being instructed and trained on standard police procedures and scientific wildlife management" (p. 326). Hence, the creation of disciplined villagers who are willingly to internalize conservation values and practices are central to the success of forest conservation (Agrawal 2004, 2005). It has been claimed by FFI that using this method has been effective in, enhancing community rangers' willingness to support forest protection and their sense of pride with their new identity. A quotation of a community ranger described in the report,

Eighty percent of us [from the community rangers] were once involved in illegal logging. We were ashamed of what we did, and felt guilty, but we didn't understand the consequences of our actions. Now we understand, we will not log again, and we will persuade others who are still cutting trees to stop (cited in FFI, 2011, p.9).

Nevertheless, the effectiveness of the forest rangers program and community rangers has been far from ideal. In terms of the forest rangers program, I find that forest rangers could not effectively function due to the absence of budget to cover operational costs for conducting routine forest patrolling and monitoring. Some personnel of the provincial Forestry Agency pointed out that such a situation is not surprising because the main goal of the forest ranger program is not necessarily to secure the forest areas but to provide an alternative income, particularly for ex-combatants (Ronny, interview, June 29, 2013).

A forest police informant argues that the six-week training period was also inadequate to build the capacity of forest rangers. Not only was the duration of the training too short, but it was also conducted by the provincial Police Department who had insufficient 'technical' knowledge about the forest. This shortcoming was later rectified through involving FFI in providing technical assistance for the training (FFI, 2011). The process of recruitment and training has received criticisms from some members of the provincial forest police unit itself. Khalid, a member of this unit, argues that the recruitment processes were unclear and unaccountable.

I think 200 additional forest rangers who are well trained are much better than 1000 additional forest rangers [untrained]. When they were hired in 2007, the training was chaotic. Imagine how difficult it was to train 1000 forest rangers all together! It became much more challenging because most of them were former GAM combatants who did not have a technical forestry background...It can be a boomerang for the forest agency...it's hard to rely on them to protect the forest because of unclear recruitment processes (Khalid, interview, September 12, 2011).

The newly recruited rangers are hired on a yearly contract basis. Thus, there were concerns on the risks that they would not be ‘loyal’ to their duties to secure forest resources because they might utilize their position as forest rangers to achieve short term economic gain by engaging in illicit activities. Another concern has also been raised by a provincial administrator noting an unintended consequence that might result from the recruitment of forest rangers. He argued that with increasing forest related knowledge and skills gained by the forest rangers through trainings, when their contracts end, they could misuse their skills and knowledge to ease illegal logging activities (Ronny, interview, June 29, 2013).

Although many of ex-GAM combatants feel that they are entitled to employment as forest rangers, not all of the former combatants are willing to do so (Focus Group Discussion, November 8, 2011). There are at least two reasons that make some former combatants reluctant to be forest rangers: *first*, the incentive for being forest rangers is considerably lower than the fast cash that they could earn from engaging in logging activities; *second*, it would be difficult for them to be in an opposite position toward logging players who used to support them during the conflict. A former GAM combatant explained that many GAM combatants have intricate network ties with logging business actors, as they often obtained logistical support from them. GAM’s involvement in the illegal logging business is an open secret in Aceh. A former GAM combatant suggested that illegal logging was one source of funds for GAM operations during the conflict era.

Forest ranger positions are for us [GAM combatants], but not all of us want it. It will be difficult for us to be forest rangers because sometimes the timber players gave us rice [food] during the conflict period. So it will be hard for us to confront

them. So we often gave the opportunities to other villagers but they got the recommendation from us (Amien, interview, November 8, 2011).

As for community rangers, while some have taken on their new roles and responsibilities with a sense of pride and enjoy elevated social status, they face a dilemma in performing their duties. Their private interests are sometimes quite incompatible with the roles that they have been hired to perform. With limited income as forest rangers, many of them have hardly been able to make ends meet. Some turned to illegal logging activities and were subsequently fired (Khalid, interview, September 12, 2011).

Curtailing illegal logging in Aceh is a challenging task, particularly due to the presence of deeply entrenched illegal logging networks, which have successfully adapted to the changing of political situation in Aceh. Eyes on Aceh (2007) reports an increased number of former GAM combatants engaged in illegal logging after the signing of the peace agreement. Furthermore, illegal logging has also been an important part of the local economy around the Ulu Masen area for the last several decades (PDD, 2007). It is reported that there are around 2000 - 3000 villagers in the Ulu Masen area engaged in illegal logging activities (FFI as cited in PDD, 2007). The number might be higher in reality considering the scale of illegal logging operations. In the past, illegal loggers often collaborated with forest police (*polhut*) to avoid getting arrested. A former illegal logger turned community ranger recalled that he closely collaborated with the forest police to give insider information on the schedule of forest patrolling.

Polhut here are not currently active. They should actually patrol and catch illegal loggers. But we never met them. Some of them in fact are involved in illegal

logging. [When I was still logging timber illegally], I used to collaborate with the *polhut*. They would let us know if the inspection (*pemeriksaan*) would happen so we could stop the operation and avoid being arrested. They would say, “Do not bring the trees tomorrow and please hide the logs.” From them we had information [about the best time to log trees] (Razak, interview, November 7, 2011).

Turning ex combatants, poachers and illegal loggers into community rangers *cum* community facilitators is not an easy task to do. It requires not only the transformation of their self-positioning *vis a vis* the local communities but also equipping them with participatory skills to increase local communities’ awareness on the conservation issues. Reworking relationships between villagers and former GAM combatants turned forest rangers or community rangers is also challenging. Although GAM previously gained support from many Acehnese, there are also large numbers of Acehnese who still have fears of GAM combatants due to the stigma attached to the combatants. Acehnese reported that GAM combatants were sometimes involved in kidnapping and extorting villagers (Rini, 2009). Indeed, people have diverse backgrounds and motivations to engage in GAM and not all of them understand the ideological vision that GAM wants to pursue (Syaf, interview, November 6, 2011).

Community rangers explained the difficulties in gaining communities’ trust considering their past identity (Focus Group Discussion, November 7, 2011). As a result, they proposed to FFI to assign them conducting community awareness raising activities not in their own *mukim*. Some community members expressed their opposition toward the community rangers as they tried to educate communities about conservation and

prohibit them from conducting illicit activities in the forest area, something that they did in the past.

5.6 Conclusion

This chapter traces various efforts to organize forest spaces since the early modern state of Indonesia, which strongly influence the current practices in governing and ordering space for implementing REDD+ projects in the country. While some forms of technologies of rule governing forest management (e.g. mapping forest territory, delineating boundaries, and policing forest zones) have been continuously practiced by the state, this chapter reveals a partial shift of governmental strategies in the case of REDD+, which still maintains certain rules but rather than impose them by force, project proponents seek to instill them through the production of environmental subjects.

In governing forest carbon, more intimate governmental strategies and meticulous calculations are required to facilitate the measurement and monitoring of carbon emissions reduction. In this respect, the project proponents of Ulu Masen REDD+ have carried out measures to make the space 'legible' and make people 'governable' by revising land use plans, conducting participatory planning, as well as hiring and holding trainings for forest rangers and community rangers. Through the revision of land use plans, the proponents propose to expand the area classified as forest, particularly protected forest areas. If such a plan is successful, it could enhance the state's territorial control over forest areas, hence increasing the risk to indigenous and local communities of losing their access to forestlands and resources. As described above, the state agents at

the local level are, oftentimes, well aware of the potential risks that the communities will encounter if the revised land use plan is approved.

Nonetheless, no matter how meticulous the calculation of interventions that has been formulated, there is always the limit of ‘government’ that could create spaces for the possibilities of creative accommodation, or resistance to such an intervention. Indeed, efforts to govern forest carbon through techniques of rule can be thwarted for various reasons. In terms of spatial planning revision, the project proponents encounter challenges to fix state forest boundaries and zoning systems due to complicated patterns of forest access/use and overlapping forest tenure claims. In addition, the plan has also been resisted by local politicians whose business interests are potentially endangered by the land use revisions.

Despite the potential risks of land use plan revision to limit communities’ access to forest resources, communities participate in the participatory mapping processes. Nonetheless, their participation in the mapping exercise is strongly motivated by their desire to have their *mukim* territory recognized by the state. Moreover, they want to maintain their fluid conception of territorial boundaries to allow them to have continuous access to forest areas. Therefore, efforts to delineate the project territorial boundaries through participatory mapping could run aground as local communities have different conceptions of spatiality and territoriality. As this chapter has shown, the participatory mapping produces contradictory effects. While it can be a tool to clarify forest tenure arrangement and assist the communities to claim their rights over forestlands and resources, it can also be utilized by the state to justify the state’s forest claims.

Project proponents' endeavors to discipline people through hiring forest rangers and community rangers are also not without challenges. Limited available forms of knowledge to monitor forest, inadequate training, and budgetary constraints have prevented the forest rangers from performing their duties to monitor forest effectively. In addition, many ex-combatants turned forest rangers encountered dilemmas in performing their duties to tackle illegal logging as many of them were supported by illegal logging players during the conflict. At the village level, community rangers struggle to convince local populations to obey rules for conserving forest, and fail to gain the villagers' trust as many community rangers were themselves previously engaged in illegal logging and hunting.

CHAPTER 6. Encountering REDD+: Two Case Studies

6.1 Introduction

The car that I rented moved slowly, navigating through difficult terrain on my way to Turue Cut Village in Pidie District, a resource rich region and the heartland base of support for the Free Aceh Movement (GAM/*Gerakan Aceh Merdeka*). The area is also widely known as a hometown of Teungku Hasan Di Tiro, a founder of the Free Aceh Movement (GAM). During a decades-long conflict, Indonesian military counterinsurgency measures resulted in a great deal of human rights abuse being inflicted upon local residences. The journey was long, taking around seven hours to drive from the provincial capital city of Banda Aceh. We had to stop several times along the way so Pak Geng, the driver who is originally from North Sumatra with years of experience driving across the conflict zone, could gauge how to manage driving the car on a half torn road destroyed by a flood that occurred in the previous year. The road crossed dense Ulu Masen forest, and on the river along the way I observed some villagers carrying out wooden tools used to mine gold in the traditional way, a practice that is widespread, particularly after the tsunami disaster. It was nearly dusk when I heard a loud sound coming out from the back of our car. The source of the noise was unclear, whether it was from a flat tire or something else. “You know, that was just a regular shooting, and if we stopped here, some thugs could just rob us. That happens a lot in this area,” explained

Pak Geng calmly. He then assured my research assistant and me that we would reach the village safely.⁵⁰

Notwithstanding the signing of a peace agreement between GAM and the Government of Indonesia in 2005, Aceh still struggles to maintain political stability. While some former GAM combatants have successfully entered into the political and economic scene, others engage in a variety of illicit activities. In this post-conflict situation, how has a green project like REDD+ managed to establish itself at the village level? What does it mean for the local population? How have local communities responded to the project?

This chapter seeks to answer those questions by exploring two case studies conducted in Jalin Village in the Aceh Besar District and Turue Cut Village in the Pidie District. I extend the discussion on the production of REDD+ subjects by closely examining how local communities have responded to such an effort. The second section of this chapter elaborates analytical tools utilized in this chapter while furthering the discussion on environmental subjectivity as described in Chapter 5. The third and fourth sections examine case studies of Jalin Village and Turue Cut Village. These case studies are situated in the communities' long engagement with a variety of development

⁵⁰ The involvement of former GAM combatants in criminal activities has been widely reported in both local and national media, such as Detik, June 2, 2008. *Kawanan Perampok Mantan Anggota GAM Beraksi di Aceh*. Retrieved on February 14, 2014 from <http://news.detik.com/read/2008/02/07/225010/890533/10/kawanan-perampok-mantan-anggota-gam-beraksi-di-aceh>. During a focus group discussion in Turue Cut Village (Men FGD, November 8, 2011), it was suggested that the process of GAM disarmament was incomplete. Thus, many illegal arms still circulate in the province.

organizations and interventions. The last section further analyzes the case studies and concludes the chapter.

In this chapter, I argue that diverse responses of the Acehnese people toward the REDD+ initiative cannot be separated from their extensive prior engagement with various conservation and development initiatives. Their interaction with multiple development agents has provoked their practice of politics and increased their capacity to resist or utilize the initiative to claim resources that they consider as theirs.

6.2 Political Agency and *Muslihat*

As described in Chapter 5, the concept of governmentality, which inspires Agrawal's environmentality conception, has been useful to understand the process of environmental subject formation (Agrawal 2004, 2005). While acknowledging the usefulness of the governmentality concept, scholars have also pointed out that Foucault's approach does not elaborate the ways in which people become mobilized to resist (Li, 2007; Ekers and Loftus, 2008; Birkenholtz, 2009). Earlier studies have demonstrated that local communities are not passive recipients of development or conservation interventions. They have agency that produces not only resistance but also creative accommodation of efforts to privatize and commoditize natural resources (Nightingale, 2005; West, 2006; Birkenholtz, 2008; Wilshusen, 2010; Shapiro, 2013).

Therefore, scholars propose to productively combine the approaches of Foucault and Gramsci to address the limit of the Foucaultian approach to power (Li, 2007; Ekers and Loftus, 2008; Birkenholtz, 2009). Li (2007) argues that the Gramscian approach

could help us to understand “how and why particular, situated subjects mobilize to contest their oppression” (p.25). For Gramsci, to understand how resistance emerges we should closely examine diverse positions that people occupy, and various forms of power that they encounter, rather than paying attention to abstract concepts such as capital and labor. Li (2007) further contends that a Gramscian approach generates “an understanding of the practices of politics and critical insights on which it depends as specific, situated and embodied” (p. 23).

In the same vein, Birkenholtz’s research on groundwater governance in India addresses the technology of resistance employed by farmers to contest the decentralization of water governance by combining Foucault’s ‘governmentality’ and Gramsci’s ‘technology of rule’ (Birkenholtz, 2009). He argues that ‘prior to self-conduct’ taking hold, consent must be secured from the population. He further describes the situation in Rajasthan where the people did not consent and instead employed technologies of resistance against a state-mandated policy, such as non-participation, protests, and collectivization of water access.

In Aceh, after decades of the Indonesian military’s total war policy where frontal resistance was too risky, the Acehnese became skillful at playing dual performative roles of loyal/disloyal citizens, while working around repressive structures of power and turning them into productive mechanisms to serve their interests (Siapno, 2002). There is a range of examples where this strategy has been used, such as silently working within the government or a multinational business and publicly vowing loyalty to Pancasila state ideology and Indonesian citizenship, while at the same time supporting GAM.

In this context, Siapno (2002) argues that Acehnese political agency cannot be understood as a “pure, uncontaminated opposition”, but is in many ways produced in and through 'microphenal mechanisms' put in place by the occupying culture. To understand Acehnese political agency, Siapno productively uses a local practice known as *muslihat*. Tiwon (1985 as cited in Siapno, 2002, p. 10) describes *muslihat* as follows:

The word “*muslihat*” is not easily translated into the western scheme of values without using words or phrases that carry the unfortunate connotation of dishonesty. In the Malay world, however, *muslihat* can be construed to mean “using indirect means to attain the goal”. It is a neutral quality available to both hero and villain. The hero, always triumphant, is he who makes the most efficient use of *muslihat*. This can be done by hiding one’s physical presence, by disguising one’s true identity, by indirect movement, or by the indirect use of language.

In Aceh, the words ‘*muslihat*’, ‘*tipee-muslihat*’ or ‘*peunget*’ are known in “Acehnese tales and local practices as a positive strategy used by small animals or common people in forging alternative power relations *vis a vis* bigger animals or rulers” (Siapno, 2002; p.11). In the wider context in Indonesia, such a seemingly duplicitous behavior could be considered a negative behavior, as it is sometimes referred to as ‘*licik*’ or sly and tricky. Indeed, when informed that I had conducted my dissertation research in Aceh, some people in Jakarta warned me about Acehnese ‘*tipu muslihat*’. Siapno (2002) further argues that there is no clear line between power and resistance. Thus, we should consider multiple configurations of power relations that are intertwined with each other at different levels and “...seriously examine, not moralistically dismiss, co-optation, collusion and contamination, forms of political contestation that are not pure opposition...” (p. 16). Borrowing these analytical tools, this chapter examines the

multiple responses expressed by local Acehnese residents to REDD+ related interventions in the two selected sites of Jalin and Turue Cut.

6.3 Case 1: Jalin Village

Area Description, Demography and History

Jalin Village is located around three hours from the province capitol, Banda Aceh. It is administratively under Jantho *Mukim*, Aceh Besar District. During the dry season, from June to August, villagers often experience drought and famine. For many years, they encountered difficulties accessing clean water and proper sanitation. The area, surrounded by scattered forest cover, was in great need of sustainable management geared toward securing livelihoods and preventing environmental degradation. Based on the household survey conducted in this research (see Appendix 4), the villagers' economic condition is considerably higher than those in Turue Cut Village. Most of the houses in the village are wooden elevated houses (*rumah panggung*) built by the government in the mid-1990s. People use the area under their house for tending livestock such as chickens, ducks, etc.

Because of limited water availability and bad irrigation systems, farmers cultivate and harvest dry land rice once a year to fulfill their subsistence needs and commercial purposes. To supplement their livelihoods, they also cultivate corn, legumes, coconut, candlenut, areca nut and more recently oil palm. Forest resources also provide additional income, with villagers collecting rattan, fish, honey, firewood, medicinal plants and so

on. Although the intensity of timber collection is not as high as in Turue Cut, residents of Jalin also collect timber, mostly for household use. A survey suggests that logging activities in the district of Aceh Besar reached 12.9 percent at the village level, which is considerably lower than other districts in Ulu Masen area. This is partly due to the lower availability of marketable timber (Anonymous, 2011).

The inhabitants of Jalin initially lived in the Sieumileuk area located inside the protected area, around 25 kilometers from the current village location. It has been estimated that people have been settled in the area of Sieumileuk since before 1846. Some of them came from Pidie District and fled to Sieumileuk because of the battle between the Acehnese and Dutch in the late 1800s. They were mostly hunters and practiced shifting cultivation, which involved clearing and burning the forestlands for cultivating rice or other crops before moving on to another site to allow the former plot to regenerate. Current inhabitants explained that their ancestors cultivated durian, coconut, and other fruit trees in the forest areas. A village elder suggested that during the Dutch colonial period, a small portion of forest located nearby was designated as a nature reserve and some local residents were hired as forest guards (Focus Group Discussion/FGD, October 13, 2011). Nonetheless, he recalled that villagers still had relatively flexible access to the forest, collecting forest products and hunting seasonally.

In Jalin, as was the tradition in many Acehnese villages, the *gampong* (village) was cooperatively led by the *keuchik* (village head), who was responsible for government affairs, and the *teungku meunasah* (village mosque leader), who was responsible for religious affairs (Sjamsuddin, 1994 as cited in Siapno, 2002). Both leaders were

supervised by and responsible to the *tuha peuet* (four elder leaders elected by the villagers to represent their interests) and *imeum mukim* (*mukim* head) who supervised several villages and village leaders. In terms of forest management, there are traditionally several positions within *mukim* such as *peutua seunubok*, *panglima uteun* and *kejruen blang*. The *peutua seunubok*'s role was making decisions to clear forests, establishing gardens in forested areas and resolving disputes in relation to land clearing between community members, while the *panglima uteun* or the *pawang uteun* was in charge of managing forests (Dunlop, 2009). The *kejruen blang* was responsible for managing activities related to irrigation, planting, and harvesting rice.

During the New Order era (1966-98), numerous development programs aimed at reordering rural landscapes and livelihoods were implemented in the village through a wide array of techniques, such as resettlement, forest enclosure, and agriculture intensification. When Jantho was designated as the capital of the Aceh Besar District in 1979, the government started reorganizing the region by resettling local populations who lived scattered in the forests to places that were more accessible in order to ease the deliverance of 'development' programs.⁵¹ The program also allowed the state to exclude people from the area classified as the State's forest area. In the early 1980s, a forest reserve (*cagar alam*) was designated not far from the Jalin village area covering 16,640 ha (Gampong Jalin, 2010; BPS Aceh Besar, 2013).

⁵¹ Re-settlement projects started to be implemented throughout Indonesia during Suharto's administration by the Department of Social Affairs (*Depsos*), usually targeted to hill farmers labeled as "*masyarakat terasing*" (estranged/isolated people) to help them to be 'ordinary average Indonesians'. For more discussion about this project in Indonesia, see Li (2000, 2007).

In terms of village administration, the implementation of Village Law under Suharto's administration (see Chapter 5) eroded Acehnese village organization and transformed the village leadership to fit with the Javanese village model (Samsuddin, 1995 as cited in Siapno, 2002). The village was then headed by the *keuchik* and the role of the *teuku meunasah* was marginalized. While the *mukim* structure has been revitalized in the last several years, traditional structures for managing natural resources are not functioning. In Jalin Village, the *kejruen blang* is the only position that still effectively functions.



Figure 6.1 Housing in Jalin Village

Most villagers do not own land titles, including those pertaining to customary (*ulayat*) forest. Like other communities around Ulu Masen, Jalin villagers regard their

customary forest boundaries to be within one-day walking distance from their village boundaries. Despite efforts in recent years to delineate state forest boundaries, most villagers could only remember the boundaries set during the Dutch period, known as *Bosch Wezzen* (see Chapter 5).

For many years the village was rather isolated, without proper electricity or roads, and with limited access to other public services such as health and education facilities. In the mid-1990s, infrastructure improved when the government established a transmigration village nearby which was settled by 150 Javanese families and 50 Acehese families from other districts.⁵² Since then, the government has enhanced local infrastructure by building roads, bridges and education facilities. Nevertheless, compared to Turue Cut Village, the road access to the Jalin Village remains poor and transport of agricultural and other products to market is difficult.

Jalin villagers responded to the transmigration with mixed feelings (village history FGD, October 13, 2011). While most villagers were content that the transmigration program paved the way for ‘development’ to come to the area in the form of public infrastructure, some were displeased with the government’s discriminatory treatment towards local villagers. After all, the government improved infrastructure only after the transmigration families settled in. Furthermore, the area designated for transmigration was previously a communal cattle-grazing area, locally known as *padang*

⁵² The transmigration program is an inter-island resettlement program implemented particularly during the New Order era that is aimed at moving people from areas considered being overpopulated and scarce in resources such as Java and Bali to areas considered under populated and rich in natural resources (Li, 2007).

meurabe. The area was allocated for transmigration without the community's consent. Public opposition from local villagers was rare, especially during the conflict, because people were aware of potential harsh consequences that might have been inflicted upon them by the government. Nonetheless, villagers felt compelled to express their grievance by attempting to burn the transmigration village, but no major damage was reported. Despite early opposition, Jalin villagers quietly observed and learned how Javanese villagers practice modern agriculture and they slowly combined more permanent farming practice with their traditional shifting cultivation.

The state's administrators often refer to the Acehnese as trouble makers who are lazy and hard to govern. Government administrators in Jakarta also expressed these sentiments to me while discussing my dissertation research. Local government administrators have referred to local practices of hunting and shifting cultivation as reminiscent of the Stone Age (*kebudayaan jaman purba*) (FGD, October 13, 2011). Jalin villagers are aware of such stereotypes but refuse to be labeled as such. Instead, they blame the failure of government in delivering public services for their past low economic condition, as described by the *keuchik* (village head),

We were not lazy, but there was no sufficient infrastructure for us. Our parents cultivated legumes (*kacang-kacangan*) but there was no access to transportation [to bring the produce to the market...]. Roads and transportation are very important for development (*pembangunan*). There were no bridges or roads (Irfan, interview, October 13, 2011).

During the conflict period, Jalin village was considered a 'red area' (*daerah merah*) by military officers because the rebel combatants often used the village area to flee and find sanctuary in the Ulu Masen forests. As a result, villagers were subjected to

frequent military surveillances. Thus, the villagers' mobility was strictly limited. At the same time, GAM combatants also often left the villagers with no option other than assisting them to hide and providing shelter and food as necessary. As described by a villager,

It was a really difficult situation for us during the conflict. We were afraid to go anywhere. We were afraid of GAM so we avoided the forests, and we did not travel to the city because we were scared of military officers. Sometimes GAM came down and gave us money to buy food supplies and cigarettes. When we were questioned by the military, we did not know how to answer. If we were honest, they would beat us. If we lied, they would do the same. The condition here was as dangerous as in Pidie. We were too scared to go out during the evening (village history FGD, October 13, 2011).

When the conflict escalated in 2000, all of the transmigrant families fled for security reasons, except those who came from Aceh. One of the guerilla strategies employed by GAM was cleansing Javanese migrants as they were perceived to be colonial settlers sent by Jakarta and potential collaborators for the army (Schulze, 2006). As of 2001, somewhere between 120,000-176,000 migrants, mostly Javanese, fled to North Sumatra to avoid the conflict while many others returned to Java. Villagers reported that only a few of them returned to the transmigration village, thereby large parts of agricultural and settlement areas are still abandoned.

Having been in a difficult political situation, the villagers learned how to make the best use of the resources and opportunities around them. The *muslihat* custom described above was widely practiced to assist in survival, particularly during the conflict. Villagers made sure they had valid Indonesian identification cards (*Kartu Tanda Penduduk*/KTP) and proclaimed their loyalty to Indonesia, but at the same time supported GAM. In

addition, having been exposed to the somewhat coercive power of the state that displaced Jalin villagers through the resettlement program has somewhat increased communities' social cohesiveness to act collectively in response to development interventions. Their exposure to environmental NGOs, which will be described below, and various development agents in the village enabled them to be strategic and tactful in accessing development assistance. In an interview with a group of villager leaders in the *keuchik*'s wooden house, Syahalam, the *imeum mukim* of Jantho described how Jalin villagers had made their best efforts to improve village conditions by proving that they were obedient citizens and could be developed (*bisa dibangun*). As he explained:

In the New Order era, there were only three parties: Golkar [*Golongan Karya*/ Party of Functional Groups], PDI [*Partai Demokrasi Indonesia*/ Indonesian Democratic Party] and PPP [*Partai Pembangunan Indonesia*/ United Development Party]. The sub-district head said that if Golkar won by 50 percent in this village, the government would build the bridge [connecting the village to other areas]. I said, 'No worry, it is doable'. The following night I discussed it with the *Keuchik* and we agreed to put our best efforts [to convince people to vote for Golkar]. The bridge started to be built before the election and Golkar won by 65 percent. So they knew that villagers here could be "developed". The following election, they built the road and Golkar won by 85 percent. Until now, anyone who leads the village should open the door for village development (Syahalam, interview, October 13, 2011).

During the Suharto administration, Golkar, the ruling party, had been known to use various measures to win votes. Aceh was among only a few provinces where Golkar was unable to win the majority votes and lost to an Islamic party (PPP) in the early 1980s (McGibbon, 2006). When Ibrahim Hasan, a quintessential Acehnese technocrat took power as a governor of Aceh (1986-1993), he fiercely promoted Golkar's political agenda to ensure the party's victory in the province by campaigning 'through the window

of religion' and mobilized the *ulama* (Islamic religious leaders) throughout the province. Hasan, a Golkar insider himself, understood that a Golkar victory would enable the province to obtain greater development funding from the central government. With the increasingly oppressive climate because of a military counter insurgency campaign and Hasan's strategy, Golkar won a 52 percent majority in the 1987 election and 60 percent during the 1992 election, which resulted in a 750 percent increase of the province's development budget (McGibbon, 2006). This system of state patronage has been well established from the provincial to the village level, which has to some extent influenced village level leadership styles.

Jalin Villagers have actively participated in development programs that enable them to access various governmental subsidies for people living under the poverty line and they have maintained good relations with local government elites to gain more benefit from development programs. To date, Jalin village has been also known in Aceh Besar District as a village that frequently receives development assistance because of their ability to craft proposals for accessing development grants. In the recent World Bank sponsored program, National Program for Community Empowerment (PNPM), the village won competitive village development grants four years consecutively because of the quality of their proposals (Joko and Irfan, interview, October 13, 2011).

Exposure to Environmentalism and Environmental NGOs

Jalin villagers have interacted with environmental NGOs such as Fauna and Flora International (FFI) and Friends of the Earth Indonesia (Walhi), and engaged in

environmental activism since the mid-1990s. The village leaders have participated in a wide array of trainings organized by environmental NGOs in order to enhance their awareness on environmental issues, and they have engaged in protests to oppose some development projects that threatened the protected forest area. For instance, in the early 2000s, the village leaders participated in a protest organized by FFI and other environmental NGOs in Aceh to oppose the government plan to build a road connecting Aceh Besar and Pidie District, which would have ultimately run through the protected area in Aceh Besar District. The plan was subsequently abandoned by the government not only because of the protest but also the escalation of conflict in the area. These engagements have equipped the village leaders with new skills and the proper language to demand better services from the government.

A deeper process of environmental subject making in the village was carried out through activities implemented by the Environmental Service Program (ESP) of USAID, which began in 2006. One of the main project goals in the village was developing a community based watershed management plan and forming environmental subjects who would be willing to support conservation initiatives in the watershed catchment area. In doing so, villagers initially engaged in field school activities, which included a series of environmental awareness raising efforts through participatory planning processes and participatory mapping of the watershed catchment area. The planning processes encouraged villagers to not only turn to their own communities to solve their problems, but also enhance their awareness on environmental issues. Usually, the village facilitator held the field school sessions in a location near the water catchment area to allow

villagers to learn from ‘nature’ (ESP-USAID, 2006). These series of sessions were centered on instilling the idea of the importance of water and emphasized the need to conserve forest in the water catchment area if the villagers wanted to maintain continuous access to clean water. Through this approach, villagers were expected to come to think that it was in their self-interest to support forest conservation.

With the project support, Jalin villagers built a water pipeline to get access to clean water from the nearby river in 2007, and established a watershed protection forum called Forsaka (*Forum Sayeung Kalok*; Forum for Kalok River) along with five other villages in the area. The forum is aimed at protecting the Kalok watershed and the surrounding water catchment area and is managed by a committee that consists of representatives from six villages. Based on the results of participatory mapping, the forum currently protects 2,500 ha of forest area, locally known as Kapeusak. The forum collects management fees of around one dollar per month/household for maintenance of the facility.

With the assistance from the ESP-USAID project, Jalin village has also developed a *qanun* (local regulation) to govern the Krueng Kalok watershed area (Gampong Jalin, 2008). The regulation mandates the protection of the watershed area and prohibits various practices that might hamper the sustainability of the watershed area, such as sand mining and using fish bombs and poison in the local river, as well as practicing shifting cultivation.

Involving local people in the development and enforcement of local regulations is central to the creation of environmental subjects (Agrawal, 2004, 2005). Agrawal’s

research in India finds that villagers who engage in forest council activities, forest monitoring and environmental conservation are those who most likely to protect the forests and understand the needs to protect it. Similarly, in Jalin Village, to a certain extent, villagers' engagement in this project has increased their environmental awareness. Villagers understand the conservation discourse and use its language to represent themselves as responsible subjects who understand the importance of conservation and are able to govern themselves and show respect for the environment. They told me stories of their heroic acts in tackling illegal logging, one of which featured the illegal logging that occurred in 2008 because of the relocation of a group of tsunami survivors to a nearby protected forest in the area. Along with community rangers, villagers regularly monitored the area and actively reported illegal logging incidents to the local forest administrators, such as BKSDA (*Balai Konservasi Sumber Daya Alam*/ Natural Resources Conservation Bureau). They also described the difficulties in prosecuting the illegal loggers because of police and governmental official involvement in the illicit business. A village leader illustrated the reason for the villagers' conservation practice as follows,

After the communities experience the benefit of getting access to clean water, *Alhamdulillah* [praise to God], it brought a *hikmah* [lesson learned] for the whole *gampong*. They understand the risk of not having access to clean water, how painful it was. In this village, people say that it is better not being able to eat fish rather than not having access to water. They understand the importance of Forsaka to accommodate their interests and strive to support the improvement of the communities' wellbeing (village history FGD, October 13, 2011).

Forsaka committee members have also taken responsibility for watershed management into their own hands: they regularly patrol the water catchment area,

monitor villagers' activities, and enforce village regulations. They understand that 'educating' communities on environmental issues is essential to enable them to conduct themselves in compliance with conservation values. They employ the same rhetoric as the conservation agents on the importance of giving rewards or alternative livelihoods to entice people to support conservation efforts. For example, a Forsaka committee member suggested an idea allocating two hectares of land for each family for their agriculture activities. As he describes,

If we could provide assistance to intensify cocoa production, they will not have time to go to the forest. We can distribute the lands. They will be angry if their forest is being destroyed because with the disappearance of forest, the water debit will decrease and eventually people will lose their access to clean water, once again (village meeting, October 22, 2011).

During several meetings that I observed in the village, most participants were cognizant about the Forsaka and indicated that it was the water that tied them together (*benang pengikatnya air*) in the forum. Based on my own household survey, 60 percent of respondents are aware of the *qanun* on Krueng Kalok watershed governance, 43 percent of which specifically cited the prohibition of utilizing fish bombs and poison in the local river.

After the closing of the ESP-USAID project at the end of 2009, FFI began implementing activities through its AFEP project as a part of Ulu Masen REDD+ project. The main purpose of the project activities implemented in the village is to protect the forest areas, reduce illegal logging, and mitigate human-wildlife conflicts. Interventions related to Ulu Masen REDD+ conducted in this area are the hiring and training of community forest rangers. Livelihood improvement activities were implemented through

allocating a grant for community rangers (see Chapter 4). As of 2011, 18 community rangers (17 male, 1 female) in Jantho *Mukim* have been hired. The project also supports the establishment of community tree nurseries managed by the community rangers.

The role of community forest rangers in mitigating human-wildlife conflict seems to be well received not only in the village but also beyond Jantho *Mukim*. Often times, community rangers have to travel beyond their assigned territory in response to communities' requests, especially to drive away wild elephants that come down to the village area to seek food or to report illegal logging incidents. Rather than turn to forest police and rangers assigned for monitoring the forest area, villagers seek help from the community rangers. In general, villagers have skepticism toward the ability of state agents to perform their duties. The community rangers admit that this situation increases their burden to secure the forest area (community rangers FGD, October 22, 2011).

With proactive roles played by Jalin villagers to support conservation efforts, it is not surprising that the village is acclaimed as a model village for the Ulu Masen REDD+ project. Furthermore, its proximity to the province's capital has positioned the village as an ideal location for field visits for various Ulu Masen REDD+ project related activities (see Chapter 1 and 5). It has increased the local residents' exposure to REDD+ issues and activities and expanded their capacity to articulate their opinions and expectation toward the project. However, access to information on this initiative is differentiated by gender. While some male participants of focus group discussions have heard about REDD+, despite Jalin's prominence as a REDD+ site, no women in the village have heard about the initiative. In addition, men in the village have higher access to engage in REDD+

related activities. Needless to say, most of them shared similar concerns on maintaining access to clean water and its connection with maintaining the strength of the trees (women FGD, October 14, 2011; men FGD, October 15, 2011).

Villagers' engagement and encounters with various development interventions have also increased their critical sensibilities. They have become familiar with the discourse of conservation embedded in REDD+ documents as well as *adat* rights and are increasingly outspoken in expressing their opinions during various consultation meetings.⁵³ The process of participatory mapping has also increased villagers' sense of territorial boundaries and entitlement. They understand that they should assert their *adat* rights over their area and gain the state's recognition to secure their territorial claims. They initially proposed to the district head that he issued a decree recognizing the community managed water catchment area, Kapeusak, but they were unsuccessful. When the study was carried out, villagers explored another possible avenue to obtain the government's recognition of their rights by trying to obtain a permit from the Ministry of Forestry through its community forestry initiative (HKm). Syahalam explains,

Our focus right now is protecting 2,500 hectares of water catchment area. It will be helpful if [FFI] could help us to map the territorial boundaries of our *gampong* so that we know where we should protect, what exactly is our territory, and in the future we can sell it [carbon credit] for REDD+... We hope that overlapping claims over Kapeusak [Forsaka's water catchment area] can be clarified. As I mentioned earlier, we do not know exactly where the boundaries are of

⁵³ As I observed village leaders did not hesitate to express their views even if they sometimes contradicted the officials' view. For example, during a meeting attended by the District government and villagers around Ulu Masen Forests back in 2008, a Jalin Village leader interrupted the District head who gave a speech about the village condition and labeled the villagers as "*masyarakat marginal*" (marginalized people). The village leader argued that they might be poor but not marginal. He was acutely aware of negative connotation of the marginal term, which was often associated with cultural backwardness.

production, protected and *mukim* forest areas. Therefore, it could be easily encroached by outsiders. We need to get our rights to manage the area recognized by the government, by getting a permit or something like that, to ensure that people will respect our authority (Village meeting, October 22, 2011).

When discussing REDD+, I heard villagers talk more about the discourse of rights than conservation. They saw REDD+ as an avenue to get their rights over *ulayat* forest recognized and obtain compensation that could improve local economy and livelihood. However, villagers had a different vision than that of project proponents on how the *ulayat* forest should be managed. The *imeum mukim* indicated that the villagers wanted to maintain some access to timber products while limiting access to these resources in areas considered pivotal to be conserved.

So, we advocate the *ulayat* forest to be managed by the *mukim* to protect communities' interests. If communities want to build houses, *imeum mukim* will coordinate with the *pawang uteun*. So the *pawang uteun* can go with them and point out which area can be logged for supplying the house construction. Now, it is just difficult because all of the area is classified as protected forest. We urgently need the regulation to govern forest access, such as in certain elevations or two kilometers from the spring we cannot fell trees. We will stop all HTI [*Hutan Tanaman Industri*/ Industrial Forest Plantation permit], HPH [*Hak Guna Usaha*/ Plantation license] and HGU [*Hak Pengusahaan Hutan*/ Logging license] operations in the area and control over the forest should be returned back to communities. With such a regulation, communities will still be able to fulfill their needs while at the same time protecting the forest... It's not enough for us to only access non timber forest products... I know that *adat* laws and rights have been protected since the Dutch colonial government (Syahalam, interview, September 17, 2011).

Regardless of their enthusiasm for the REDD+ project during the initial phase of project implementation, the villagers became increasingly weary and pessimistic toward the initiative. Some expressed their frustration of having spent countless hours receiving

field visits and assessment teams, etc., while no significant progress has been observed.

According to Mahmud,

We are not that smart, but you know we are weary waiting too long for REDD+ and its benefits to materialize. We are bored... We could just manage the forest without a government permit but we still want to obtain it because we respect the government (interview, October 12, 2011).

Furthermore, despite strong environmental narratives, particularly from the village and *mukim* leaders, the result of the household survey tells a slightly different story. There are 14 households listing forest-clearing activities reaching 19.25 hectares annually and nearly 60 percent of the area was converted as oil palm plantation. The rest was converted for planting a variety of other commercial crops. Oil palm plantations have become an attractive livelihood alternative to many villagers because the Agriculture Department provided subsidies in the forms of seeds, fertilizer and costs for plantation maintenance for the farmers during the first year of planting oil palm (Irfan, interview, October 13, 2011). All of those who converted forest area argued that the forest area belonged to either the *mukim* or *gampong* and could be legally converted for agriculture purposes.

6.4 Case 2: Turue Cut Village

Area Description, Demography and History

Turue Cut Village is administratively under Lutueng Mukim, Mane Sub District, Pidie District, which is located in the west part of Aceh Province. The local residents

suggested that around 50 percent of the population is ethnically Acehnese coming from different parts of Aceh and moving to the area in the mid-1980s to work in the transmigration project or logging companies (village history FGD, November 8, 2011). Similar to Jalin Village, the village is administratively headed by a *Keuchik* (village head).



Figure 6.2 Women in the Paddy Field in the Edge of Ulu Masen Forest,
Pidie District

The village is located in a valley of paddy fields surrounded by dense Ulu Masen forest. It is famous for fertile soils and gold that is sometimes found in the nearby river. The area usually has a long rainy season, so long that the local residents playfully suggested that no rain for two days is considered a dry season. Most villagers have

concrete houses with proper sanitation facilities. The majority of residents are farmers. The area is known for high yield rice production, which is harvested twice a year, and the high quality of locally grown coffee. Villagers also earn income from tree crops such as areca nut, durian, cocoa, and other commercial crops such as corn, green beans, and chili. Similar to Jalin, people of Turue Cut have recently turned to oil palm plantations because of substantial government subsidies and the potential market of oil palm. Although the village has more fertile soils and richer natural resources, the household survey suggests that economic condition in the village is considerably lower than those in the village of Jalin (Appendix 4). The long period of conflict seems to give greater impacts to Turue Cut Village as the conflict was considerably more intense in the area.

Turue Cut villagers were well integrated into the market long before Indonesia gained its independence in 1945 through coffee and rice trade. In the past, a young man would only be allowed to marry if he planted and owned at least 500 coffee trees. However, such a practice has slowly disappeared (FGD village history, November 8, 2011). Due to the long period of conflict, many coffee plantations are currently unproductive and being abandoned (Hadi, 2009). Villagers also used to practice shifting cultivation. When the study was conducted, they still maintained shifting cultivation combined with more permanent agriculture practices. Despite challenges encountered during the peak of conflicts, when possible, villagers were willing to experiment with cultivating commercial crops that had high market demand, such as cocoa, areca nut, and patchouli (*nilam*), among others. Good roads have enabled villagers to have easier access to market.

Forest resources have significantly contributed to local livelihoods. Villagers extract timber and non-timber forest products, such as agar wood (alin), rattan, honey, resin, medicinal plants, dragon blood (*jernang*), fish, firewood, and meat supply from deer and wild birds. The boom of *gaharu* (*Aguilaria Malaccensis*)⁵⁴ in the 1980s prompted many traders from West Sumatra came to the village and urged villagers to collect the *gaharu* for good prices. At the same time, people hunted rhino and elephants for their highly valued horns and ivory, which were sold to middlemen (*tauke*) to be exported mostly to Thailand and Singapore (village history FGD, November 8, 2011).

Forests in Pidie District are home to various high value hardwood species such as meranti (*Shorea*), merbau (*Intsia bijuga*), and kruing (*Dipterocarpus confertus*) (PDD, 2007). During the Suharto era, numerous logging operations were active in the district. Among the logging companies that operated in the area was PT. ARS (1982-1987). In addition, a gold mining company, PT. Miwah, which was later bought by East Asia Mineral (see Chapter 3), began its operation in 1987. Local populations frequently found work as low paid laborers (EoA, 2009).

Illegal logging was widespread in this area, which involved not only GAM combatants, military, and police but also local residents. Most local people involved were day laborers who cut logs and helped move them from the forest to collection points. They received around 50,000 IDR per day (4 USD) or 100,000 to 200,000 (8-16 USD)

⁵⁴ *Gaharu* or also known as agarwood is a resin that may be found in the stem, branches, or roots of certain trees affected by fungi *Diplodia sp*, *Phytium sp* and *Fusarium solani* (Nurhayati, 1990). It is used for incenses or perfumes.

for transporting the timber, depending on the size of truck (EoA, 2009). The bigger share of profit flowed to the well-established logging mafia, those who mostly came from outside the area with access to market and capital. Most of the high value logs were sold in the international market through intermediary countries such as Malaysia and Thailand. EoA (2009) reported that military and police set up check points along the road, which was intended to inspect legal documents for timber transportation. However, security forces often utilized those check points as a business opportunity to charge an illegal ‘toll’ to get through each security post. Competition over valuable logs between military and police often led to armed clashes between them thereby escalating the conflict in the area (EoA, 2009).

In 1995, a transmigration village was established in the nearby area where more than a thousand families from Java who were resettled in the area (Hadi, 2009). That was followed by an influx of Acehnese who migrated to the village to work at the transmigration project. Despite a successful coffee harvest in 2000, many of these migrant families eventually fled the area when the conflict escalated in 2001. Until now almost none of them have returned to the area.

The village was considered a no go area during the conflict due to its close proximity to Geumpang *Mukim*, where the GAM headquarters was located. GAM combatants often passed through the village on their way between Aceh’s east and west coast. Informants claim that many community members in Lutueng *Mukim* were either combatants or GAM sympathizers. The *imeum mukim* suggested that there were 125

former GAM combatants living in Lutueng *Mukim* (Ferizal, interview, September 20, 2011).

The long period of conflict brought profound impacts on the villagers' lives and livelihoods. In addition to frequent torture and killings, villagers also lost their source of livelihood. Communities had limited mobility to conduct their daily activities, thereby affecting their ability to fulfill their daily needs. Some informants mentioned that there was an 'unspoken military rule' in which local residents could only move around a 100 meter range from their home otherwise they would be suspected GAM combatants (community rangers FGD, November 7, 2011; men FGD, November 8, 2011). As a result, large agricultural areas were abandoned. As Amien, a former commander of GAM, explained,

It was difficult to move or travel. People had difficulties fulfilling their livelihood needs. They could not go to the forest to find rattan and when they went to the paddy field, there was a time limit. The government and military were just like a 'bad' stepmom (*ibu tiri jahat*) for us. People were only allowed to walk within 100 meters from their home. If they went further, they would be shot (interview, November 8, 2011).

After the signing of the peace agreement, villagers struggled to start their lives over. Farmers slowly began re-cultivating their overgrown farmland, a process that required a lot of capital. When timber demand increased for post-tsunami reconstruction projects, many former combatants and villagers unsurprisingly turned to the illegal logging business. The logs were usually sold to middlemen in Bernun, a small city located two hours away from the village, or, ironically, directly to NGOs in need of the

timber for their reconstruction projects. The majority of people in the village were involved in this illegal business, including the *imeum mukim*.

I came here to work for a transmigration project in 1995. However, due to escalating conflict in 2000, the project practically stopped. Life was so hard and difficult back then. We could not fulfill our daily consumption. I was a village head back in 2001. As a village head, I was trapped in debt because I sometimes had to pay what was taken by the military officers from communities, such as livestock, food, and so on. After the tsunami, timber demands increased. I bought a truck from the payment of the transmigration project. Using my networks, I started an illegal logging business. I collected the timber from communities and sold them to the market in Bernun. The communities were also in need of fast cash. They barely made a living from agriculture. I paid a lot to bribe the police and military officers but I had no better choice than running the logging business. I could pay my debt and other family needs using the profit from the business. However, when the logging moratorium was taken into force, my nephew, who was also a GAM spokesperson, asked me to stop. "If you got into trouble, I will not help you," he said. And I just stopped doing it (Ferizal, interview, September 20, 2011).

Indeed, intricate logging networks have survived and been able to adapt to the new political and social landscape during the post-conflict period. In the survey conducted by a local NGO, Rincong, in collaboration with FFI and Aceh Green, logging activities in Pidie District are generally higher than in other districts in the Ulu Masen area (Anonymous, 2011). This heavy involvement by locals could be attributed to a greater availability of timber that is suitable for market. Military and police officers also continue their practice in forcing illegal loggers to pay a 'fee' to pass through the check points. A Turue Cut villager noted that there were around 20 checkpoints installed from the village to Bernun (Men FGD, November 8, 2011). At the same time, a more recent report suggests a slight decline of illegal logging rates (FFI, 2011). This is said to be due

to the decrease of timber demand as a result of the completion of post-Tsunami reconstruction projects and the implementation of a logging moratorium.

Conservation, Development and REDD+

Whereas programs under the government's national development agenda were difficult to realize during the conflict, villagers recalled that various agriculture programs had been implemented in the area to increase agriculture productivity. Due to security issues and strict prohibition from the government, only a few NGOs and international development agents, including FFI, were able to operate in the area during the conflict. FFI has operated in Pidie District since 1997. It implemented a conservation project in Geumpang *Mukim* to monitor wildlife and mitigate human-wildlife conflict and agroforestry. FFI also encouraged local communities to abandon shifting cultivation and trained them to adopt permanent agriculture techniques (Village meeting, September 20, 2011).

After the peace agreement, the village was targeted for a variety of development programs, such as reintegration programs for former combatants and conflict victims and post-tsunami reconstruction projects. As a part of an Ulu Masen project supported by AFEP of the World Bank funded project, FFI established the Conservation Response Unit (CRU), a facility to mitigate human-wildlife conflict and to train wild elephants, which was established on two hectares of communal land in Turue Cut village. The CRU complex consisted of some buildings that included a meeting hall, housing, and office buildings used by community rangers. Turue Cut village was considered a suitable

location for establishing the CRU because of the high rate of human animal conflicts. Due to continuous large-scale forestland conversion, since the 1980s various wildlife, especially elephants, often come down to the village in search of food (FFI, 2011). This has been considered one of the main threats to the communities' livelihood. FFI (2011) suggested that crop raiding by wild elephants could wipe out an entire farmers' harvest in one night. To tackle this issue, FFI assigned some well-trained mahouts to train wild elephants and recruited community rangers to oversee forest activities. As of 2011, there were 30 trained community rangers in Mane District (Syaf, interview, September 19, 2011). In addition, FFI also implemented activities to improve local livelihoods and divert forest-based livelihood activities through allocating livelihood sub-grants awarded to the community rangers (see Chapter 4).



Figure 6.3 Conservation Response Unit (CRU), Turue Cut Village,
Pidie District.

In 2009, FFI started implementing a comprehensive conservation campaign, known as Pride, in Mane District, which included a focus on Turue Cut village.⁵⁵ The campaign adopts private sector marketing strategies to ‘sell’ conservation ideas and instill new attitudes and behaviors toward conservation (Hadi, 2009). It also inspires people to be proud of local species and habitat as well as divert forest based livelihoods that are considered destructive. What makes the campaign different from prior initiatives is that it

⁵⁵ Pride campaign is a signature campaign strategy of RARE – a species based conservation effort that has been implemented around the globe. Further information can be seen at <http://www.rare.org/empowering-local-communities-solve-global-conservation-challenges>

includes ‘rigorous’ measurement of the changes in communities’ behavior toward conservation by conducting surveys before and after the campaign is implemented.

Prior to conducting the campaign, a thorough study was conducted to understand threats to conservation, collect local residents’ perceptions on conservation and identify the campaign messages and activities that were most suitable to gain the villagers’ support for conservation initiatives (Hadi, 2009). Some scholars have argued that knowledge about communities is crucial to render them technical as the domain to be governed (Rose, 1999; Li, 2005, 2007, p.7).

The Pride study suggested that the two main threats to conservation of elephants and the nearby forests were the local communities’ shifting cultivation practice and their lack of awareness on the importance of conserving biodiversity (Hadi, 2009). Based on this assessment, the technical solution offered was conducting the campaign to increase the communities’ awareness on the importance of forest conservation and the close connection between shifting cultivation and the increasing rate of human-elephant conflicts in this area. Again, it corresponds with Li’s argument that suggests in constructing development programs, the diagnoses of problems is often positioned not in terms of political economic relations (Li, 2007). In many case the problems are framed to suit the offered technical solutions. Thus, it is not surprising that the Pride study failed to consider broader issues that led to large-scale forestland conversion in the area such as the existence of extractive industries (e.g. logging and mining), oil palm plantations and intricate illegal logging networks, among others.

Based on the study, a series of interventions were devised including the distribution of posters, magazines and factsheets on the biodiversity value of Ulu Masen forests and a series of conservation awareness events and activities held in the local schools and with farmers. Farmers were encouraged to discuss the negative implications of shifting cultivation and trained to adopt intensified permanent agriculture practices and agroforestry. This program concluded in 2010 with mixed results (Hadi, 2009). There was only a slight increase (2.13 percent) in the villagers' overall understanding and awareness of conservation issues. On the other hand, there was a significant increase in perception towards the negative implications of shifting cultivation, in which 23 percent of survey respondents agreed that the practice could endanger the forest sustainability.

When this dissertation research was carried out in 2011, most of the study participants were unaware of FFI activities in the area, with the exception of the establishment of the CRU and agroforestry trainings. Some villagers even associated FFI's program in the village with the increasing incidents of human-wildlife conflicts, as described by a villager,

We do not really know why the elephants come to the area...Perhaps because their food stocks in the mountain decrease. However, some assume that it is because the people [FFI] rent communities' land here [to build CRU facilities] and brought the elephants from Saree [an elephant training center in Aceh Besar District] to here. This attracted other elephants to come down from the mountain; it's been three times within the last six months (Women FGD, November 9, 2011).

Unlike Jalin villagers, most Turue Cut villagers seem unfamiliar with and have little interest in conservation issues. Furthermore, people are also more concerned about the area's increasingly occurring land conflicts. The fact that most villagers have no legal

proof of land ownership makes them prone to land grabbing. In the past, military and police officers were often accused of seizing local people's lands for either their own use or for a third party (EoA, 2009). Nowadays, the threats come from companies and developers "who often pay local agents to 'acquire' land from locals, the majority of whom have no land certificates" (p.7). Land conflicts often occur not only between villages due to unclear village boundaries but also among villagers.

Notwithstanding the logging moratorium launched by the governor of Aceh in 2007, villagers still continue their logging practices. Based on the household survey, around 36 percent of the respondents still earn their livelihood from logging activities. Furthermore, 13 percent of respondents also reported their engagement in small scale gold mining inside the forest area. Some villagers, particularly those who have benefited from the lucrative logging business, referred to Governor Irwandi's logging moratorium with a more negative tone. They contended that they had been harvesting the forest resources 'freely', but it was only Irwandi's administration that prohibited them to do so (Men FGD, November 8, 2011). In addition, they also argued that the state's forest areas previously belonged to the villagers.

The majority of study participants also are unaware of nearby state forest classifications and regulations governing forest access. Some are aware of the classification but uncertain about the location of different forest categories. As described by a villager during a village meeting,

We know that the government prohibited us to clear land. Now here is the thing, we never heard anything related to that from the local government, but they just put announcement boards prohibiting us to do this and that. Sometimes they put

the marker of protected forest close to people's houses. It makes us worried. The boundaries between the state's forest and communities' areas are unclear...the district government should clarify the boundary of state forest areas...They just came to put the board. Even the village administrators do not really understand about such boundaries (Village meeting, September 20, 2011).

Placing signboards at the edge of forest that list prohibited activities in the forest areas is a common practice in Aceh. However, such a strategy is not effective in enforcing conservation regulations. With the unwillingness of villagers to cooperate with Forestry Department officials, law enforcement is especially difficult. Even without such a protest, policing the immense forest area with a limited number of forestry staff is challenging.

Decades of conflict left behind poignant memories for the villagers. During the Focus Group Discussion and interviews, people were much more eager to talk about their hardship during the conflict rather than envision the village's future. Most of them expressed a fear that conflict could re-emerge in the area. A villager claimed that over the last several decades, villagers had experienced a five-year cycle of escalating conflict followed by relative calm. Therefore, it was not surprising that many villagers doubt that the current peaceful condition could last more than five years.

Nevertheless, the inhabitants of Turue Cut are not anti-development. They also wish to get technical assistance to improve agriculture productivity and access to markets. They are enthusiastic to talk about the range of commercial crops that they want to cultivate in the area while at the same time listing challenges that they encounter in agriculture.

Turue Cut villagers' exposure to REDD+ related issues and activities were significantly lower than the residents of Jalin. It was only the village and *mukim* leaders who had been invited to a number of consultation processes in the district and provincial level who were aware of REDD+. Yet, they were reluctant to disseminate the information about REDD+ to villagers to avoid creating false expectations of what the initiative might deliver (see Chapter 4). It is not surprising that the term REDD+ is only known by the *imeum mukim*, *keuchik* and a few community rangers. Only one respondent of the household survey suggests that he has heard about it, but the extent of his understanding remains unclear. While participants of Focus Group Discussions of both men and women indicated that they never heard of REDD+, a few of them recalled seeing FFI posters about global warming caused by deforestation (women FGD, November 9, 2011; men FGD, November 8, 2011). Even the *imeum mukim*, Ferizal, who had frequently participated in meetings related to REDD+ both at district and provincial levels, has a somewhat vague understanding about the initiative. He was much more enthusiastic to talk about how *mukim* will utilize the carbon fund.

If we receive the carbon fund, we want to allocate it for local communities; we will train them how to cut the trees properly, how to manage forest properly. We could cultivate *segon* [*Albizia chinensis*]. We will make a local regulation though which every household will have to plant ten trees for one tree they cut for their household needs (Ferizal, September 20, 2011).

The *imeum mukim*'s statement suggests that he, indeed, does not envision REDD+ as something that could restrict access to timber and gain greater economic benefit from forestlands by planting highly commercialized trees, *Albizia chinensis*.

Responding to the palm oil boom, some companies and local entrepreneurs have come to the area to assess the possibility for establishing new plantations. When the research was conducted, a palm oil company, in collaboration with a local cooperative, approached villagers to start a 'pilot plantation' in the area that would cover around 2000 hectares. However, Ferizal, opposed the proposal and actively dissuaded community members from participating in the project. As he has witnessed how oil palm companies have changed the lives of villagers in other parts of Aceh, including his own family, he advocated stopping the development of oil palm plantation in the area.

I have told all communities not to plant oil palm, but I do not know if some of them plant them. I have witnessed the impact of oil palm plantation in Cut Gede. I know that initially people earned good income. But 20 years later, they will not be able to grow anything in their land and their oil palm will not produce. Within 20 exposure years, oil palm is not productive. And the communities will not have sufficient capital to uproot the plantation. I have asked Aceh Green to help us stop plantation development here and also the plantation agency to not encourage people to shift to oil palm. Communities will lose everything (interview, November 8, 2011).

Unlike Jalin, the discourse on REDD+, FPIC (Free, Prior and Informed Consent) and indeed environmentalism in general seems to be a distant concept for the most villagers. For the village and *mukim* leaders, are a partial exception, however. They noted that the concept of FPIC has enabled them to see local problems in a new light. Borrowing the idea of FPIC from REDD+ socialization events that he attended, the *imeum mukim* initiated a regulation draft that would include a requirement of *all* development agents coming to *mukim* to obtain FPIC. The draft had not been finalized by the time the dissertation research was completed.

6.5 Discussion and Conclusion

This chapter has described different responses of villagers from Jalin and Turue Cut toward REDD+ and situates these responses in the long history of engagement with a wide range of development interventions. In viewing villagers' subjectivities, I position them within particular matrices of power. Villagers' encounters with various conservation and development agencies have stimulated their practice of politics through producing different responses in different settings.

Table 6.1 Comparison of Jalin and Turue Cut Village

	Jalin Village	Turue Cut Village
Social and Economic Context	<ul style="list-style-type: none"> ▪ 67 Households; ▪ Acehnese majority, most of them have settled in the area prior to the independence of Indonesia; ▪ Mixed shifting cultivation and permanent agriculture; ▪ Commercial rice production (once a year), commercial crops such as corn, legumes, coconut, areca nut; ▪ Poor vehicle access. 	<ul style="list-style-type: none"> ▪ 264 households ▪ Acehnese majority, around 50 percent moved in 1980s to work in logging companies or transmigration project; ▪ Mixed shifting cultivation and permanent agriculture; ▪ Commercial rice production (twice a year), commercial crops such as cocoa, coffee, areca nut; ▪ Better vehicle access.
Ecological Condition	<ul style="list-style-type: none"> ▪ Less fertile soil, prone to drought and famine, lower availability of timber and other commercial forest products. 	<ul style="list-style-type: none"> ▪ Fertile soil, wet area, high availability of high valued timber, gold, wildlife products (e.g. ivory).
Access to Forest	<ul style="list-style-type: none"> ▪ Non timber forest product; ▪ Timber, mostly for household needs. 	<ul style="list-style-type: none"> ▪ Non timber forest product; ▪ Timber, gold.

History of Environmental Encounters	<ul style="list-style-type: none"> ▪ Involvement with environmental activism since mid-1990s. 	<ul style="list-style-type: none"> ▪ More recent encounter with environmental NGOs in mid 2000s.
REDD+ Related Activities	<ul style="list-style-type: none"> ▪ Prior activities through field school; ▪ Watershed management forum; ▪ Community forest rangers ▪ Livelihood improvement through livestock and tree nurseries; ▪ Frequent visits from relevant actors, which increase villagers' exposure to REDD+. 	<ul style="list-style-type: none"> ▪ Pride conservation campaign; ▪ Community forest rangers; ▪ Livelihood improvement through livestock and tree nurseries; ▪ Limited exposure to REDD+.

While both villages are located adjacent to Ulu Masen Forest, they exist in different social, economic and ecological contexts and have had different experiences with development encounters. Such different conditions directly affected efforts to produce REDD+ subjects. In Turue Cut Village, pressure on land and forest resources is high due to at least two reasons: *first*, the availability of high valued forest products (e.g. timber, gold, etc.) and fertile lands; *second*, high market demand and easier vehicle access to the area. These conditions have attracted new-comers, middlemen and other actors seeking to acquire local farmlands and participate in the commercialization of local products, hence increasing pressure on land and forest resources. In contrast, Jalin Village has poorer vehicle access, less fertile farmlands and lower availability of high valued commercial forest products, so the pressure on the resource based is reduced.

In the context of REDD+, regardless of the ecological and socio-economic differences, FFI has implemented similar project activities in each site, heavily

emphasizing conservation and mitigation of human-wildlife conflicts. In Jalin village, I found that villagers have been able to perform multiple roles depending on the various situations they encounter. Villagers of Jalin have actively taken the initiative to be engaged in state-led development agenda, including REDD+, but at the same time, they insist that the state fulfills their needs and aspirations based on their understanding on local situation.

With their engagement in environmentalism and relatively high awareness of environmental discourses, the villagers are able to internalize conservation values, govern their own conduct in accordance to environmental concerns and articulate their commitment to conservation. Furthermore, residents' experience of local ecological conditions such as drought and difficult access to water seems to provide a crucial base for them to be more willing subjects to adopt conservation values. Introducing conservation values through the water issue, something that is considered crucial locally, has helped the villagers to make sense of their situation and enhance it.

Despite their active roles in conservation activities and strong narrative of environmentalism, however, Jalin villagers refuse to be restricted from accessing various forest resources. Their engagement in the conservation initiative and REDD+ is strongly motivated by their desire to obtain rights over *mukim* forest and have their water catchment area legally recognized by the state. They also use the narrative of conservationists and indigenous activists to appropriate resources that they consider to be their own. The study also reveals that access to conservation and REDD+ related knowledge is differentiated by gender. While male participants are somewhat cognizant

about the issues, none of women have heard about REDD+ or are aware of conservation activities.

Compared to Jalin villagers, the villagers of Turue Cut have suffered enormous loss of life and livelihood during the conflict, and have struggled to get their lives back in order since it ended. With the availability of highly marketable natural resources products, such as gold and timber, villagers have turned to logging and mining for obtaining fast cash. This situation coupled with easier access to market and high land pressure from various actors to extract resources in the village have made efforts to produce environment subjects more challenging.

Despite a comprehensive conservation campaign program aimed at instilling new behavior to conserve forests and abandon shifting cultivation practices, many villagers still continue such practices and refuse to comply with conservation related rules and regulations. For the inhabitants of Turue Cut, environmentalism simply could not help them to make sense of their situation nor assist them to improve it. REDD+ also seems a distant concept for most of them. Only a few villagers, especially village and *mukim* leaders and community forest rangers, have even heard about the initiative. Furthermore, most of the villagers in Turue Cut are more interested to try out cultivating various commercial crops while expecting the development agents to provide technical and financial assistance for their endeavors.

This chapter shows that REDD+ outcomes are shaped by social relations, political and ecological context in the place where it is implemented. These findings suggest that REDD+ implementation will be smoother under certain conditions, such as clear and

secure tenure over forestlands, low opportunity costs, low commercial interests toward forest resources, less access to markets, local social cohesiveness, among others. In addition, the finding also suggests the importance of paying attention to the problems considered important by local residents and tailoring the approaches accordingly to produce environmental subjects. However, as this chapter and other chapters in this dissertation has revealed, such conditions seem to be idealistic and rare to find on the ground.

CHAPTER 7. Conclusion

7.1 Postscript

After failing to secure his re-election as the governor of Aceh, Irwandi Yusuf, attended the inauguration ceremony of his successor in Banda Aceh on June 25, 2012. The new governor, Zaini Abdullah, was a former Prime Minister of the GAM government and part of the “old guard” faction in the separatist movement. Zaini spent many years in exile in Sweden during the conflict. Irwandi Yusuf, by contrast was part of the “young Turks” who had fought on the battlefield (Schulze, 2007). The ceremony was attended not only by representatives of the central government and high-ranking military officers but also foreign dignitaries. When it was completed and the attendees made their way out of the building, someone yelled “traitor” and tossed an empty mineral water bottle at Irwandi’s head. It was reported that Irwandi was subsequently beaten aggressively in the face and head by the angry mob, allegedly initiated by Zaini’s supporters, until police officers secured him and rushed him to the hospital (Syafputri, 2012; Grayman, 2012).

Irwandi’s loss in the re-election bid dismayed many observers. In 2011, he still appeared to be the most popular candidate, hence the frontrunner in the election. Not only were his popular programs, such as free education and health care, well received by the local population, but Irwandi had also been deemed successful in consolidating the “new GAM”, whose supporters had backed him during his term (Grayman, 2012). Prior to the

election, the conflict inside GAM deepened between Irwandi's supporters and those who supported Zaini. Partai Aceh (PA), the sole inheritor of GAM ideology, decided to nominate Zaini because they thought Irwandi was not loyal enough to the party and did not patronize PA in his effort to govern Aceh for all people (Aspinal, 2009; Grayman, 2012). Thus, Irwandi ran as an independent candidate without endorsement from any political party. The elections were postponed several times as the representatives of Partai Aceh, who held majority seats at the provincial parliament, tried to halt Irwandi's candidacy by issuing a local election regulation that disallowed independent candidates (see Aspinal, 2011). In addition, a series of violent threats, such as bombings and shootings, occurred throughout Aceh, some of which targeted Irwandi's supporters. After a series of negotiations involving the central government, Irwandi was eventually allowed to participate in the election. However, after somewhat tumultuous election processes, Zaini won a landslide victory garnering more than 55 percent of voters (Simanjuntak, 2012).

How has this changing of political landscape in Aceh affected the Ulu Masen REDD+ project and the province's broader vision for green development? I returned to Banda Aceh in mid-June of 2013 to get updates and clarification from some key informants on the initial findings of my dissertation. As described in Chapter 3, after Carbon Conservation decided to sign an agreement with the East Asia Mineral Company in 2011, no significant progress had been made with regard to Ulu Masen REDD+. By 2013, the project was at a complete standstill and at risk of being closed down by the new government.

Dorjee Sun, the CEO of Carbon Conservation (CC), admitted that he is increasingly cognizant of the complexity of realizing carbon markets and REDD+ implementation in a place where the local politics are so intricate and contractual negotiations are arduous (Bachelard, 2012a). This situation is complicated by continued climate change negotiations at the international level that have not produced meaningful decisions, particularly with regard to emissions reduction targets. Despite the difficulties, Sun is still hopeful and continues his effort in brokering REDD+ projects. He has shifted his focus to what he calls REDD 2.0, which deals only with big companies to protect the remaining forests in their concession areas (Bachelard, 2012a). In regards to the Ulu Masen REDD+, this new strategy was manifested in CC's deal with the East Asia Mineral Company, which led to its proposal to the Government of Aceh to sacrifice 6000 ha of the Ulu Masen Ecosystem for open cut gold mining to save the remaining area. As described by Sun,

In Indonesia...do you think \$5 billion of gold would end up never being extracted? Honestly? I knew whether it was them, or a tycoon, or the new governor's brother, or some minister's cousin...someone is going to get that gold...I'm probably not going to go to environmentalist heaven any more...I mean, five, six years in Indonesia, you realize that you've got to play the game smarter (Bachelard, 2012a).

Sun's decision led the government of Aceh to decide not to renew its agreement with CC, which concluded at the end of 2011.

During the last several months of his administration, Irwandi, who was once known as a green governor, increasingly doubted that REDD+ could live up to its promise to deliver "triple win solutions." In 2011, he issued a palm oil plantation

concession covering 1600 ha on Tripa peat swamp. He argued that such a decision was necessary to remind the international communities that Aceh's forest was not a "free toilet" for their carbon. As described by Governor Irwandi,

Every day they are saying they want clean air and to protect forests ... but they want to inhale our clean air without paying anything. That concession, 1600 hectares, was like a pinch to the international community. Maybe I will make a threat to lift the moratorium [entirely] to make them look at Aceh (Bachelard, 2012b).

This decision was widely opposed by environmental activists and later wounded his political career.⁵⁶ His political opponents strategically used this issue to point out his inconsistency in supporting the province's green vision.

Another project proponent, Fauna and Flora International (FFI), has increasingly distanced itself from Carbon Conservation and currently implements a continuation of the AFEP project, funded by the World Bank, with its main activities focused on the recruitment and training of community forest rangers throughout Aceh as a strategy to conserve forests and further reconciliation efforts. During a follow up interview, an FFI senior staff member reflected on the lessons learned from the Ulu Masen Project:

This is just my personal opinion. It is going to be hard to start [REDD+] project using such a top down approach and implement it in the area where tenure arrangement is unclear. It also does not make any sense if the government becomes a project proponent. It would be difficult to prioritize what should be done especially with regard to participation and safeguards issues. If the project is implemented in the state's forest areas and one of the proponents is the state, there will be no room to negotiate [tenure claims]. Therefore, I suggest that the

⁵⁶ Tripa peat swamp (*Rawa Tripa*), located inside the Leuser Ecosystem, covers 61,803 ha. The area is considered the largest carbon storage in the province and is home to a substantial population of orangutan. In response to the issuance of the oil palm plantation permit, a law suit was filed by Friends of the Earth Indonesia (Walhi) to have the license revoked. Walhi won the lawsuit and the permit was revoked at the end of 2012.

government's role in the REDD+ project should be limited as a regulatory maker and facilitator and make sure that the project benefits the local populations. Private sectors, communities, and NGOs could be the project proponents to implement the project (Krisna, interview, June 30, 2013).

The FFI staff member realizes that having clear tenure arrangements and a bottom up approach is the key for successful REDD+ implementation. Furthermore, he echoes those who believe that reducing the state's role is necessary to achieve the effectiveness of marketing forest carbon through REDD+.

Despite Zaini's earlier election campaign that highlighted his commitment to forest conservation in Aceh, the current provincial administration has clearly shifted its priority to regional economic development. As described by a technical adviser to the new government,

This is the current provincial government's vision [on regional development plan]. Aceh has been a conflict zone and one of the reasons for the conflict was a poor economic condition, so the current government strives to improve regional development. When many NGOs and international organizations were still around, it was easier for the government to achieve its target. But now, the government should prove that it is able to improve local wellbeing if we want to maintain our power. Therefore, all efforts should be directed toward that goal; this includes the environment sector. We should find ways ensure local population's wellbeing. It will be useless if we protect the forest areas while we let communities suffer in poverty (Darius, interview, January 16, 2013).

Some key informants in Aceh suggest that the new government is attempting to start the government on a "clean slate" by not only removing Irwandi's people from the administration but also aborting many policies initiated by the former governor, which include the 'environmental initiatives' such as the Aceh Green Vision (informal discussion, June 29, 2013).

Accordingly, the new government also uses a spatial strategy to realize its vision for economic growth. It has abandoned the land use plan launched during Irwandi's administration that aimed to enlarge an area classified as forest and protected area. Instead, the new governor proposed a new land use plan in the beginning of 2013 that changed the zoning systems over 1.2 million hectares to allow forest conversion to other land uses such as mining and plantations (Saturi, 2013). This plan was heavily resisted by environmental activists around the globe and was later revised at the end of 2013.

In spite of continuous opposition from civil society groups, the provincial parliaments of Aceh finally approved a new local regulation on the land use plan (Rini, 2013). The new plan included the change of forest status covering 145,982 hectares allowing areas initially protected as conservation areas to be converted into Areas for Other Uses (*Area Penggunaan Lain/APL*). Indarto, et al. (2012) argues that changing land into APL is a common *modus operandi* used by local government administrators to ease the issuance of various forest conversion permits such as those utilized by oil palm plantations. Based on an MoF decree, the local governments have the right to submit proposals to change the status of production forest areas to APL in order to allow the conversion of area into oil palm plantations (Indarto, et al., 2012).⁵⁷ In addition, the proposed designation of the Ulu Masen ecosystem and the existing designation of the Leuser Ecosystem were removed from the plan. To date, this removal has triggered continuous opposition from civil society and indigenous groups in the province.

⁵⁷ Ministry of Forestry Decree No. 70/Kpts-II/2001 on the Designation of Forested Areas and Status and Function Changes, as amended by Ministry of Forestry Decree No. 48/Kpts-II/2004.

Those events suggest that the intricate politics and social relations in the place where this particular REDD+ project was implemented have meant that the governmental interventions could not be carried out as planned. Various local actors have utilized any possible means to negotiate and contest REDD+ interventions. Thus, while the Ulu Masen project failed to achieve conservation and development goals as prescribed in the plan, it has indeed opened up new political possibilities for a variety of local actors.

7.2 Political Ecology of REDD+

As described in Chapter 1, a political ecology framework has been deployed to understand environmental changes at the local level, which are strongly linked to larger political economic processes (Bryant and Bailey, 1997; Bryant, 1998; Peet and Watts, 2004; Robbins, 2004). While earlier studies have paid particular attention to issues on access to and control over resources and justice concerns, a post-structuralist turn has led the discipline to move in a new direction, by paying particular attention to a set of key issues and inquiries such as questions of power, forms of governance/rule, environmental discourses, and scientific practice as understood through the lens of science and technology studies (Peet, et al., 2011).

This dissertation contributes to this new direction in the field of political ecology, by interrogating a key emerging issue in the field: global climate change. It examines the global climate mitigation initiative, REDD+, by situating it in the growing literature on the neoliberalization of nature and positioning it as a new form of environmental rule. Specifically, this dissertation explores the translation of REDD+ into policies and

practices and investigates how different actors interpret, negotiate and contest the initiative. It demonstrates that the critical analytical framework of political ecology could be productively used to illuminate the intricacies of such processes.

This study is among the first detailed ethnographic studies that provide a thorough analysis on the early impacts of REDD+ implementation in a particular area. Using multi-sited ethnography, it has shed light on the interconnectedness of various actors at multiple scales in the implementation of a transnational initiative and has considered how it affects specific communities. While local communities in the global south are often portrayed as passive recipients or victims of such a global initiative, this dissertation provides a more nuanced understanding on how the initiative unfolds and how differently positioned actors have actively responded to it. Moreover, this study also questions some assumptions used to justify market triumphalism that penetrate REDD+ policies. To conclude, the findings of dissertation research are organized based on the research questions as described below.

1) To what extent and how has the neoliberalization of nature been articulated in REDD+?

In many respects, the discourse of REDD+ resonates with the neoliberal rhetoric that permeates contemporary climate change policies (Chapter 2). The initiative emphasizes the importance of integrating the environment fully into the market system through the commodification and marketization of forest carbon and minimizing the state's role in forest governance. With the requirement of clear property arrangements to

make the initiative successful, REDD+ could also lead either to the privatization of forests or to increasing the state's claim over forest areas.

Nevertheless, despite the claims that REDD+ could deepen market-based instruments in governing the forests, in reality its implementation has been marked by the crucial roles played by state institutions. Interestingly, REDD+ has been utilized by state institutions both at the national and provincial levels to strengthen centralized control over forest territories. At the national level, the creation of a “super power” REDD+ Agency suggests that the initiative could enhance the state's authority over forest areas, which have been weakened by decentralization policies. At the provincial level, REDD+ has been strategically used by the Government of Aceh to enhance government control over the state's forests through its attempt to enlarge areas classified as forests (Chapter 3 and 5). If the enlargement of the state forest area succeeded, it could increase the risks to indigenous and local communities of losing access to, or even being displaced from the forest area. Furthermore, the dynamics of REDD+ implementation in the context of decentralization highlights the power struggle between the central and local government in governing access to forests.

This dissertation has also revealed the geographical and political contingency of neoliberal environmental policies (McCarthy and Prudham, 2004; Castree, 2008a, 2008b). It has demonstrated that a global environmental initiative, like REDD+, is not implemented on an empty slate but has become entangled with complex political situations, existing social institutions and power relations, thereby producing particular social and ecological outcomes. It is also not simply an initiative that is ‘imposed’ by an

outside force. In the Aceh case, the initiative was partially internally driven by a provincial government bent on using the initiative to enhance its claim over forest governance legitimized under the province's special autonomy status.

REDD+ has produced an assemblage of actors and non-state actors, such as private companies, international NGOs, and donor agencies, among others, in an effort to govern forests, particularly in the tropical countries. Similarly, in the Ulu Masen project, state and non-state actors, with different views and motives, have been engaged in project development and implementation (Chapter 3). These actors have actively negotiated the project to pursue their ends, such as capital accumulation, sustainable financing for conservation, and regional development.

As described above, the Ulu Masen project is currently at risk of being shut down by the new administrator due to the shift of development priorities within the province. Such a situation has also been observed elsewhere in Indonesia in which projects have been terminated due to a shift in political situation and donor priorities. The fact that the REDD+ project has been overtaken by political dynamics suggests that its shape and outcomes are very prone to changing political-economic circumstances.

In Indonesia, REDD+ has opened up spaces for civil society participation in the decision-making processes. Despite diverse positions toward the initiative, some Indonesian activists have utilized those spaces to push forward an environmental movement agenda, particularly with regards to land tenure reform and ensuring the inclusion of Free, Prior and Informed Consent (FPIC) principles and recognition of indigenous rights over forestland and resources. They have attempted to reshape the

REDD+ initiative by positioning it as an entry point for broader reforms needed to realize climate justice and good forest governance.

2) *What rationales and goals are subsumed under the “plus” in REDD+ project and governmental technologies employed to pursue those goals?*

This dissertation positions REDD+ as a form of government *through* forest management (Bridge and Pereault, 2009), which would transform the ways forest resources are allocated and used thereby impacting local livelihoods. It accordingly brings several insights to the study of REDD+. The production of knowledge about people and nature is central to legitimizing REDD+ as a potential solution to conservation and development goals in a particular region. The governing entities produce knowledge about objects to be governed, identify problems to be solved and formulate interventions to rectify them. However, in so doing, boundaries are drawn around what is knowable and manageable while leaving out other problems deemed unmanageable. This discourse not only justifies interventions but also works to “depoliticize” them (Ferguson, 1994). In this dissertation, I have examined particular historical conjunctures that make the initiative become such an attractive solution to Aceh’s problems and how Aceh problems are being articulated to justify the REDD+ project. The problem framings and proposed solutions continue to exclude crucial factors that underlie forest degradation from their technical domain, such as land tenure issues and patron client relations that mediate forest access and land use, among others.

To make forest carbon tradeable, for example, a series of discursive maneuvers need to first take place. Unlike trees that can easily be measured, allocated and traded, the abstract nature of forest carbon requires more meticulous calculation and measurement technologies to make it intelligible. The project proponents need to prove that the proposed REDD+ project will have additionality (i.e. it should be able to generate emissions reduction that are additional to what would happen without any intervention) and be able avoid leakage (i.e. the displacement of activities that cause deforestation and/or degradation in the project site to another site). In addition, they also need to prove that the carbon reduction is verifiable, true, and permanent⁵⁸ (Bumpus and Liverman, 2011). As the duration of Ulu Masen REDD+ project is designed for 30 years, the project proponents need to ensure the project permanence by predicting land use patterns and creating land use assumptions during that period. In doing so, the project proponents examine local patterns of forest access and use and formulate interventions to modify the patterns by transforming communities' behavior so that it conforms to the goal for reducing carbon emissions. The Ulu Masen PDD (Project Design Document) also highlights the importance of communities' engagement in forest monitoring and enforcement of conservation regulations to not only increase surveillance over forest areas but also allow the production of specific and intimate knowledge about the forest resources and local population. However, those practices have not been able to produce

⁵⁸ This is a technical term used in carbon offset or REDD+ projects, which refers to the propensity of the reduced emissions not to re-enter the atmosphere. In the context of REDD+, it means that the forest areas designated for REDD+ project must remain forested or un-degraded permanently, or at least for the duration of the REDD+ agreement.

more accurate knowledge about the object to be governed. The calculation about nature and people that is supposed to enable a more ‘intimate government’ (see Agrawal, 2004) has not been quite possible.

In this dissertation, I investigate two main governmental technologies implemented by the project proponents: 1) a spatial strategy involving the ‘participatory’ creation of maps and the revision of land use plan; 2) the process of environmental subject-making. I argue that territorialization of forest areas through the revision of the forest zoning system, a related enlargement of area classified as forest, and boundary making around the Ulu Masen area are all ways to enable the project proponents to exercise their political power in governing forest carbon. These techniques allow the governing entities to define an area of intervention, measure and quantify potential carbon credits, and maintain carbon storage for monitoring purposes, as well as control people’s movement and activities across forest space. In this sense, the creation of forest and project maps is crucial as a means for making the space representable, hence governable. Through participatory mapping, people are enrolled in the mapping process to avoid conflicts over the designation of the state’s forest area. As described in Chapter 5, while participatory mapping could enable the community to claim rights over their *adat* territories, it could also allow the project proponents to subtly legitimize the state’s claim over forest areas.

However, as this dissertation has shown, attempts to fix forest territory face multiple obstacles because of complex tenure arrangements and local politics as well as different conceptions of spatiality between the project proponents and local communities.

In Aceh, many *mukim* have a rather fluid conception of *mukim* territories. Therefore, they negotiated such a conception during the participatory mapping exercise to allow them to maintain access to forest. In addition, the study also documents the heterogeneity of state administrators' vision toward forest space. For instance, while the planners who produce land use maps imagine building upon space that is not just physically but socially 'empty', forest administrators at the field level are better versed in complex tenure arrangements and better understand how the change of forest zoning system could impact local livelihoods (Chapter 5). Their interaction with local communities has made forest administrators at the field level more sympathetic toward villagers' livelihood needs and practices.

This dissertation also adds nuance in understanding the processes of environmental subject formation. As described in the previous chapters, the success of REDD+ implementation also depends on the formation of REDD+ subjects: those who could conduct their own behaviors in accordance with efforts aimed at reducing carbon emissions, and act as 'rational ecosystem service providers' who understand the monetary value of their services and are willing to give up forest based livelihoods in exchange for performance based payments. In this manner, access to benefits, particularly financial benefit, from REDD+ would be conditional upon communities' performance to support efforts to reduce carbon emissions. By forming communities as rational ecosystem providers, it allows the neoliberal interventions to "harness and direct existing community dynamics", including their 'willingness' to participate in markets (Milne and Adams, 2011, p. 153). Such an approach disguises the responsibilities of the

‘government’ by transforming its role from planning and controlling to ‘enabling and facilitating’ communities’ actions (Li, 2007; see Chapter 3).

In the example from the Ulu Masen project, the project proponents have implemented various technologies of government to form REDD+ subjects. They hired and trained forest rangers and community forest rangers to enhance forest monitoring, enforce forest conservation regulations and allow self-surveillance over Ulu Masen areas. They conducted “socialization” events to educate communities about REDD+, led conservation campaigns to instill new beliefs about the importance of conserving forest, and implemented participatory approaches in developing local regulations and monitoring protocols for forest areas.

However, attempts to produce new subjectivities are carried out in complex conjunctures. As described in Chapter 6, different social, economic, and ecological contexts and different experiences with development encounters produce different outcomes for subject-making efforts. The study findings suggest several conditions that could make the production of environmental subjects easier, such as clear and secure tenure over forestlands, low opportunity costs, low commercial interests toward forest resources, less access to markets, local social cohesiveness, among others. Nevertheless, such ideal conditions are rarely found. Interestingly, this study also finds that local communities, particularly in Jalin Village, are aware of their crucial roles as ‘ecosystem service providers’ and understand what they have to offer. Thus, they have actively negotiated the project terms to serve their interests (see question 5 below).

3) *How are REDD+ policies translated into project practices?*

I have extended the investigation of what happens when these interventions intertwine with the conditions on the ground that they try to regulate and change. I argue that investigating the simplified translation of policy into practices is crucial to illuminate how certain elements of REDD+ could shape outcomes and potentially produce particular political and material consequences (Chapter 4). In this dissertation, I have focused on attempts made by the project proponents to translate some elements of REDD+ into project practices, how they cope with local complexities, and how the local communities react to those interventions. In the case of Ulu Masen, the project proponents construct simplified translations of aspects of REDD+, communities, FPIC (Free, Prior, and Informed Consent), and benefit-sharing mechanisms.

In disseminating information on REDD+ to communities, the study found that the project proponents have disguised not only the potential financial streams of REDD+ to avoid communities' high expectation toward the initiative, but also risks that communities might bear with its implementation. Instead, they emphasize the importance of ecological benefits that communities might gain by supporting the project. Oftentimes, those who are responsible to disseminate information do not have a comprehensive understanding of REDD+, hence providing counterproductive information on the initiative to communities.

In addition, the adoption of FPIC principles would require the project proponents to respect communities' rights and allow them to give or withhold their consent on the project implementation in their area after they obtain full information about the scope and

impacts of the project. In the Ulu Masen REDD+ project, FPIC has been considered a burden to the project, and it was only implemented belatedly after the project design had been completed. Furthermore, the notion of participation was translated by inviting *mukim* leaders, who were mostly men, to disseminate information about REDD+. This practice is based on a rather simplistic assumption about the community as a homogeneous entity. In this regard, the project proponents have been unable to take into account the power relation dynamics in the community. The simplified translation of community and FPIC have prevented communities from effectively negotiating over the project's implementation and led to further exclusion and marginalization of certain social groups, particularly women.

Despite the strong emphasis in the Ulu Masen PDD on the importance of participatory approach in developing equitable benefit-sharing mechanisms, the findings of my research also suggest the limited involvement of communities in the process. Such a situation could potentially lead to elite capture of future project benefits. In addition, placing a heavy emphasis on the potential financial benefits of ecosystem services could undermine other motivations to conserve the forests out of moral, aesthetic, or ethical concerns (Kosoy and Corbera, 2010). Regardless the project proponents' claims of employing participatory and community based approaches in implementing the REDD+ related interventions, they still position themselves as experts who know what is best for communities.

4) *How are the conservation and development goals of REDD+ coordinated - to what extent are they compatible with each other, and with the original REDD goal of carbon marketing?*

As described in Chapter 1, conservation-development debates continue to be played out in the design and implementation of REDD+ initiatives. Despite increasing advocacy to include social benefits among the goals of REDD+, the dominant policy discourse in the international climate negotiations still positions the enhancement of forest carbon stocks, forest conservation, and sustainable forest management as its main goals and places social benefits as ‘co-benefits’.

In Aceh, the Ulu Masen REDD+ project is a part of a broader vision of greening Aceh development that emphasizes the importance of achieving both ecological and social benefits. Nevertheless, coordinating conservation and development goals under this initiative is not an easy task. Such an effort is especially challenging as the province needs to quickly find resources to support regional development, particularly after the departure of most of the post-tsunami international aid agencies in 2009 (Chapter 3). As this dissertation has shown, despite the project proponents’ endeavors to implement conservation measures and activities and mainstream “green development” through REDD+, mobilizing support from agencies at the provincial and district levels that have different development priorities is challenging. Different government agencies involved with REDD+ are pursuing different agendas that are not always consistent with efforts to reduce carbon emissions.

Moreover, although the Ulu Masen PDD comprehensively elaborates the ways the project could serve as triple win solutions for Aceh problems, the measurement of project was only based on the enhancement of carbon stocks and forest conservation indicators. Hence, the project implementation has been primarily focused on conservation activities. Additionally, the Ulu Masen REDD+ project has little to do with development goals per se beyond distributing livelihood grants to community forest rangers and a monthly salary for forest rangers. The development goal is manifested in the creation of alternative livelihood activities, which is simply positioned as an entry point to achieve the broader conservation agenda. Moreover, the targeted beneficiaries are limited to those who help patrol and protect the forest resources (Chapter 4).

One of the potential avenues to realize the development goal of REDD+ is through benefit distribution. The dissertation also finds that there are diverse views among local actors toward the forms of REDD+ benefits that they expect to receive and the mechanisms to distribute them. In addition to improved public services (such as roads, education, and health facilities), community representatives express their wishes to receive cash benefits from REDD+. In contrast, most of the government administrators are in favor of distributing the benefits in form of development projects, particularly to improve village infrastructures.

5) *How has Aceh's REDD+ project been received by Acehnese - to what extent does it provide an arena to strengthen, negotiate and contest claims to forest resources at the local level?*

In this dissertation, I have also investigated those at the receiving end of governmental interventions. I examine how Acehnese have responded to the institutional rules and structures related to REDD+. In doing this, I have employed an analytical framework based on local practice known as *muslihat* (Siapno, 2002) in order to understand local communities' different positionings to react to different fields of power. I have argued that Acehnese political agency can not be understood by simply examining their resistance toward the initiative. Indeed, in the two case studies described in Chapter 6, Acehnese have been quite skillful in playing multiple roles depending on the situations that they encounter.

I have suggested that the agency of the local population in engaging, negotiating, and even contesting these interventions cannot be separated from their long interaction with development and conservation agents. Their participation in various development and conservation activities did, in fact, empower the communities, although not always in the ways expected by the development agents. In the case of the Ulu Masen REDD+ project, communities' engagement in a variety of capacity building activities has increased the communities' abilities to undertake critical practices, which oftentimes has challenged REDD+ related activities. In Jalin Village, for instance, the participatory mapping exercise and awareness raising activities on *adat* rights have increased communities' awareness of their territorial boundaries and the importance of having their rights recognized by the state. Furthermore, their participation in REDD+ is strongly motivated by their desire to get state recognition of communities' rights over a local watershed protected area. In Turue Cut Village, the idea of FPIC has inspired the *mukim*

head to initiate the development of local regulations that require the implementation of FPIC for *all* development plans to be implemented in the area.

This dissertation has also revealed the different positionings of the governing entities and the fact that they do not have a single vision toward REDD+. I have shown that the state is not a homogeneous entity with one simple view and aspiration concerning REDD+. Moreover, resistance toward REDD+ sometimes comes from somewhat surprising directions, i.e. not only from non-state actors but also from the heart of bureaucracy. In Aceh, resistance to REDD+ related interventions also comes from politicians whose business interests might be endangered by the planned green interventions. These politicians, who are mostly provincial parliament members from Partai Aceh who dominate the economy, have strongly opposed the revision of land use plans that would potentially hamper forest extractive business in the province.

Through revealing diverse local responses to REDD+, I have elucidated that the neoliberalization of nature is an incomplete and far from smooth process. Rather than creating mindless environmental subjects, REDD+ has opened up spaces for contestation and creative accommodation. Viewing the process this way opens up possibilities for “knowing and performing differently” (Lewis, 2009, p. 113). This area has not been explored in depth in this dissertation and has much potential for future research endeavors.

7.3 Future Research

Drawing from the findings of this dissertation, I offer several potential avenues for future studies on REDD+. In many respects, this dissertation has answered the call from critical geographers to analyze ‘progressive spaces’ in which neoliberal policies could be reworked (Lewis, 2009; Bargh and Otter, 2009). It elucidates how the REDD+ initiative has opened spaces for new political possibilities for numerous actors. For civil society groups in Indonesia, REDD+ has opened up room to participate in the decision making process. Certain groups have utilized the formal political channels that are available to advocate forest tenure reform and indigenous rights over forest resources. For local communities, it has been used as a tool to renegotiate rights over areas and resources that they consider their own, and for the provincial government, REDD+ has been utilized as an avenue to strengthen claims over their authority to govern forests in the Aceh Province. However, further studies are needed to understand how the emerging spaces for political possibilities could transform state-society relation in forest governance and investigate how these spaces have been used for co-learning that allows more reflective engagement. Furthermore, Castree (2007) argues that most studies about neoliberalization of nature are still implicit in providing policy alternatives. Based on this suggestion, future studies can be conducted to identify possible policy alternatives for mitigating climate change.

This dissertation has contributed to the debate on conservation versus development by interrogating conservation and development discourses that play out in the REDD+ project development and implementation. As many REDD+ projects in

Indonesia and other countries progress, future studies can also be conducted to gauge environment and development outcomes of the REDD+ initiative. The REDD+ initiative provides a space for analysis to understand the extent to which it can attend to particular forms of development (such as what kind of benefits, how they are actually being distributed, and how it transforms access to forestlands and resources) and the extent to which market-based mitigation mechanisms could govern emissions reduction more broadly.

As described in several chapters of this dissertation, knowledge production is central in the creation of REDD+ projects and the production of tradeable forest carbon credits. It has allowed the emergence of new experts and institutions, which are usually dominated by intermediary of forest carbon projects that have substantial technical knowledge, capital resources and connection to markets. Some scholars have argued that such a situation might possibly lead to the increasing state and ‘expert’ control over forests (Griffith, 2007; Lawlor and Huberman, 2008; Beyner-Farris and Bassett, 2012). However, studies conducted to illuminate power relations in the processes of knowledge production related to REDD+ project development and implementation are still lacking.

While acknowledging the important role played by the ‘expert’, recent studies in science and technology emphasize the concept of co-production where scientific, political, and social orders are mutually constituted (Jasanof, 2004; Chilvers & Evans, 2009). This approach provides a more nuanced understanding of the interaction of various knowledge claims and emphasizes the idea that science and policy are quintessentially local, messy and contingent (Jasanoff, 2004). In this regard, some studies

have been conducted to understand the politics of knowledge production in forest and climate governance (Fairhead and Leach, 2003; Lemos and Morehouse, 2005; Rice, 2009; Lovell and Liverman, 2010). While this study has explored tensions between various knowledge claims in REDD+ policy development and illuminated the role of political relationships in shaping and determining policy ideas and practices, further studies are needed to investigate the process of knowledge production and the formation of REDD+ expertise, especially with regard to the emergence of institutions that validate and certify the REDD+ projects.

APPENDIX 1. List of Interviews Cited⁵⁹

Jakarta and Non-Aceh Based Key Informants

Ahmad	Interview, October 1, 2011
Budi	Interview, July 4, 2013
Daryanto	Interview, June 2, 2009
Hasan	Interview, September 17, 2012
Nurlela	Interview, September 28, 2012
Raka	Interview, July 4, 2013
Rani and Suryanto	Group interview, September 17, 2012
Sri	Interview, September 12, 2012
Stevanus	Interview, September 12, 2012
Veni	Interview, July 5, 2013
Wati	Interview, September 12, 2012

Banda Aceh and Village Sites

Aisyah	Interview, September 20, 2011
Amien	Interview, November 8, 2011
Arif	Interview, October 22, 2011
Atmojo	Interview, September 10, 2011
Barnawi	Interview, September 26, 2011
Barnawi, Mahmud and Lukman	Group interview, October 2, 2011
Ferizal	Interview, September 20, 2011
	Interview, November 8, 2011
Hamzah	Interview, October 19, 2011
Hidayat	Interview, July 12, 2011
	Interview, October 19, 2011
Idham	Interview, October 26, 2011
irfan	Interview, October 13, 2011
	Interview, October 19, 2011
Joko	Interview, October 9, 2011
	Interview, November 9, 2011
	Village meeting, November 5, 2011
Khalid	Interview, September 12, 2011
Krisna	Interview, September 3, 2011
Mahmud	Interview, September 17, 2011
Razak	Interview, November 7, 2011
Ridwan and Khalid	Interview, September 12, 2011

⁵⁹ All names listed here are pseudonym.

Ronny	Interview, June 29, 2013
Rudi	Interview, September 8, 2011
Rusman	Interview, July 11, 2011
Saujana	Interview, September 11, 2011
	Interview, June 30, 2013
Syaf	Interview, September 19, 2011
	Interview, November 6, 2011
Syahalam	Interview September 17, 2011
	Interview October 13, 2011

Focus Group Discussions (FGD)

Forest Rangers FGD, Jalin	October 19, 2011
FGD men Jalin	October 15, 2011
FGD women Jalin	October 14, 2011
FGD village elders	October 13, 2011
Forest Rangers FGD	November 7, 2011
FGD men Turue Cut	November 8, 2011
FGD women Turue cut	November 9, 2011
FGD village history	November 8, 2011

APPENDIX 2. Key Dates in the Dissertation and Ulu Masen REDD+

Date	Event
1965-1998	Under Suharto's regime, 75 percent of forest areas in Aceh were assigned to various logging and plantation companies.
1971	The discovery of Liquid Natural Gas (LNG) in North Aceh by Mobil Oil Indonesia.
2001	First logging moratorium was issued by the Governor of Aceh, Abdullah Puteh on March 7, 2001. Nonetheless, the policy did not prohibit logging activities for the holders of timber utilization permits. The issuance of this policy was motivated more by the needs to improve the administration of forest concession rights (HPH) rather than forestry reform.
2004	December 26: tsunami hit Aceh
2005	The signing of peace agreement between GAM and Government of Indonesia.
2006	Irwandi Yusuf won the election as the Governor of Aceh
	The Law of Governing Aceh (LOGA No.11/2006) was issued. It delegated a substantial authority to the Aceh government and allowed the provincial government to manage, plan, implement and supervise the exploration and exploitation of its resources, including in forestry sector
2007	February: the vice president of World Bank came to Aceh to discuss rehabilitation and reconstruction, which led to the development of Aceh Green vision and Ulu Masen REDD+ Project.
	April: a meeting organized by World Bank in Bali engaging three governors (Aceh, Papua and West Papua) and the signing of agreement between three governors and Carbon Conservation
	June 6: Governor instruction for moratorium logging issued (Governor Instruction No.05/INST/2007 on Logging Moratorium in Aceh). The aim of the moratorium is to provide an opportunity to review the current status of Aceh's forests; redesign more strategic and sustainable forest development and management strategy; and to strengthen existing and establish new mechanisms to prevent violation of the policy
	October 31: TIPIRESKA (Aceh Forest Design Team) was established to develop a strategic plan for the sustainable management of Aceh's forests
	December 2: the PDD of Ulu Masen REDD+ project was completed and the project was launched during UNFCCC COP meeting in Bali
2008	Aceh Green Secretariat was established.
	September: a governor decree was issued to establish an Integrated Team to Eradicate Illegal Logging Activities (Governor Decree No

	522.21./284/2008). Several teams were established at district and provincial levels to implement the logging moratorium.
	Recruitment of forest rangers started in the end of 2008.
2010	January 28: A provincial REDD+ Task Force was established
2011	April: Carbon conservation sold part of its share of stocks to East Asia Minerals.
	September: the government of Aceh sent a formal response on the Carbon Conservation's deal with the East Asia Minerals. The GoA also decided to put on hold all activities related to Ulu Masen REDD+.
	December: the Agreement between GoA and Carbon Conservation expired.
2012	June 25: A new governor of Aceh, Zaini Abdullah, was elected and sworn.
	December: the provincial parliament approved a new regulation that included the conversion of protected areas covering 145,982 into Areas of Other Uses (<i>Area Penggunaan Lain/APL</i>).
2013	September: National REDD+ Agency was established.
	December: The head of the National REDD+ Agency was appointed.
2014	October: A new president elect of Republic of Indonesia will be sworn.

APPENDIX 3. Study Participants

Methods	Actor	Gender		Total
		M	F	
In-depth and semi structured interview	National Forestry Administrators	1	2	3
	National Planning Agency administrators	1	1	2
	Assistant to President's Special Aide on Climate Change		2	2
	DNPI	1		1
	National NGO (indigenous and environmental activists)	3	1	
	Multilateral agencies (UN agencies and donors)	2	1	3
	Provincial Planning Agency administrator	1		1
	Provincial forestry administrators	2		
	Aceh Green	5		5
	Aceh Based NGOs and Indigenous People's Organization	12	2	14
	Villagers in Jalin	7	1	8
	Villagers in Turucut	8	1	9
Focus Group Discussions				
Jalin	Village meeting	25	5	30
	Male FGD	10		10
	Female Focus Group Discussion		10	10
Turucut	Village meeting	20		20
	Male FGD	15		15
	Female FGD		15	15
Community Forest Rangers	Jalin	5		5
	Turucut	4		4
Household Survey				
Household counts based on the gender of household heads	Jalin	29	1	30
	Turucut	39	7	45

APPENDIX 4. Summary of Household Survey

Table 1. Percentage of Main Occupation

Villages	Farmers	Traders	Civil Servant	Others
Jalin	93 %	-	7 %	-
Turue Cut	78 %	9 %	11 %	2 %

Table 2. Land Ownership (average ha/hh)

Village	Rice fields	Agroforestry	Others
Jalin	0.5 ha	0.78 ha	1.44 ha
Turue Cut	0.61 ha	0.58 ha	0.55 ha

Table 3. Other Assets (Average Ownership Percentage/ Family)

Assets	Jalin	Turue Cut
Motorcycle	83.3	44
Television	40	57.7
Car	3.3	0.0
Cellphone	86.7	73.3
Parabolic antenna	23.3	53.3
Electricity generator	13.3	2.2
Bicycle	6.7	2.2

Table 4. Average Annual Income from Farming (in USD)

Village	Jalin	Turue Cut
Average household incomes from farming	1165	581

APPENDIX 5. Household Questionnaire⁶⁰

Date of interview (DD/MM/YYYY):

Task for Research Assistant:

1. Explain about research goals;
2. Explain the guarantee of anonymity and confidentiality of participating in the research;
3. Summarize parts of interviews: basic household information, income, assets, forest access and use;
4. Ask for consent to conduct the interview.

Household Questionnaire

Village :

Mukim :

District :

Date :

Household No :

1. HOUSEHOLD INFORMATION

Head/Member	Name	Age	Sex	Relationship to the household head	Main Occupation	Other occupation

⁶⁰ It is modified from the household questionnaire developed by CIFOR for Global REDD+ Study.

2. HOUSEHOLD ASSETS

1. We will now ask you questions about the assets of the household. We begin by asking you about your land assets *within the boundaries of this village*. We want to know about the area of this land, in hectares, in the following four categories:
 - *Land controlled by and used by the household* By ‘used’ we mean lands on which there is a current activity (e.g., producing crops, harvesting forest products, preserving forest) or on which there is potential future activity (e.g., lands in fallow that might be used at a future time by the household).
 - *Land controlled by but not used by the household*. We mean land controlled by the household, but rented out or lent out for use by another household or households.
 - *Land not controlled by the household but used privately by the household*. We mean land not controlled by the household, but rented or borrowed by the household for its own use.
 - *Lands not controlled by the household but used in common with other households*. We mean lands with shared access among households and no one having exclusive use rights.
 - *Fill in the total area, in hectares, for each of these categories in Table 2A below.*

2. We will now ask questions about the specific land uses and the area of those uses in these four categories of land assets. We want to know about the area, in hectares, used for: crops, agroforestry, pasture and silvopasture. We also want to know the area of particular forest types, and of other land uses such as residential areas, infrastructure, shrubs, grasslands and wetlands.

Fill in the area, in hectares, for the land uses in the four asset categories in Table 2A below.

2.1 Land

Table 1. Areas of Household Land Assets by Land Use Categories

Land cover Type	Land use category <i>See code book: Land use classifications (definitions)</i>	Controlled by the Households		Not Controlled By the Households	
		1. Area (ha) of land used by HH	2. Area (ha) of land rented out or lent out HH	3. Area (ha) of land rented in or borrowed in and	4. Does HH use shared access land of this category? <i>1 = yes;</i>

				used by HH	<i>0 = no</i>
1. Agriculture	1. Rice-field				
	2. Crops				
	2. Agroforestry				
	3. Pasture				
	4. Silvopasture				
2. Forest	1. plantation				
	2. Early secondary forest				
	3. Int. secondary forest				
	4. Mature forest				
3. Other	<i>See definition below*</i>				
Total					

* The 'other' land cover type category is composed of: residential areas, infrastructure, shrubs, grasslands, wetlands.

Table 2. Tenure of land by control and use categories and land cover type

What are the tenure arrangements of lands your household uses – both controlled and not controlled by the household – and the degree of security of that tenure? By tenure security, we mean your confidence that your household will continue to be able to use, at least for the next 25 years, the land assets you currently have.

1. Tenure category of land	2. Land cover type	3. Area of parcel	4. Type of tenure	5. Tenure security <i>Codes: 1 = secure 0 = insecure</i>	6. Reason for insecurity if insecure <i>List up to 3 reasons.</i>
Land controlled and used by HH (Col. 1 in Table 1)					
2. Land controlled but not used by HH					

(Col. 2 in Table 2)					
3. Land not controlled but rented or borrowed by HH (Col. 3 in Table 2)					
4. Communal land shared by HH with other HHs (Col. 4 in Table 2)					

2.2. Livestock

Table 3. Livestock in the last 12 months

Livestock	Number	When did you start raising cattle	Price per animal	Total end value
Cow				
Chicken				
Duck				
Bull				
Goat				
.....				
.....				
.....				
.....				
.....				

2.3. Other assets owned by the household

Table 4. Other Assets owned by the household

1) How many houses do the household own in the village? 2) How many houses do the household own outside the village? 3) Please tell us the items you may have in the following household asset categories, including their number and current market value?			
Type of asset	Number owned	Value per unit (average)	Total value

3.5 Off farm income

Table 9. Off farm income

	Occupation	Wage/day
Husband		
Wife		
Other family members		

4. COST

4.1. Agriculture production

Table 10. Cost for agriculture production

Type	Amount	Price/unit	Transportation cost	Additional information
Seed:				
Fertilizer:				
Pesticide:				

4.2 Labor

Table 11. Labor for agriculture activities

Activities	Number of labors	Number of working day	Wage (Rupiah/day)	Additional information
Crop:.....				
Land processing				
Seedling				

Planting				
Fertilizing				
Maintenance				
Harvesting				

4.3 Animal husbandry and product in the last 12 months

What are the quantities and values of inputs used in livestock and animal production during the past 12 months? We want to record cash expenditures in this table. If it is easiest just to list the total cost, do so.

Table 12. Cost for animal husbandry and product in the last 12 months

Inputs	Unit	Quantity	Price per unit	Total cost
Feed/fodder				
Hired labor				
Rental of grazing land				
Inputs from own farm				
.....				
.....				
.....				
.....				

5. CHANGE IN FOREST COVER AND FOREST INCOME IN THE LAST TWO YEARS

I want to know how your forest-based income has changed in the last two years (24 months) and the reason for that change.

1. Has your household cleared any forest during the past two years? If yes, go to 2, if no, go to 9
2. How much forest was cleared in total in the last two years?
3. What was the main purpose of clearing the forest land?

4. What crops were grown?
5. Was the forest cleared primary (never cleared before?) or secondary (cleared before?)
6. What was the tenure status of the forest cleared?
7. How far from the house was the forest that was cleared?
8. How much land used by the household has been left fallow or abandoned (left to covert to natural re-vegetation) over the last two years?
9. If the opportunity for villagers to clear forestland has **increased or decreased**, what are the main reasons?
10. In the last two years, has your household consumption of forest product stayed the same, increased or decreased? Why?

6. FOREST TENURE AND ACCESS

1. What activities are carried out by local communities in the forest?
Men:

Women:

2. Please lists resources that you collect from the area

3. Is there any local rules/regulations pertaining natural resources management in your area?
4. Who will be responsible to enforce rules and give sanctions should the local regulations be breached?
5. Who in the community or local government is in charge of monitoring local use of the resource? How are they appointed? Who are they responsible to?
6. How do rules of forest access and use change overtime?
7. If there is any conflict related to the access to forest areas, who would you talk to or ask for help to mediate it?

7. REDD+

1. Have you heard about REDD+?
2. If so, from whom you get information about it? If not, go to question 7
3. What do you think REDD+ is? What are its goals?
4. Have you been invited in the discussion related to REDD+ project? In what events were you invited and what topics are discussed in the meeting?
5. What are your hopes toward REDD+?
6. What are your concerns toward REDD+?
7. What are your hopes and concerns on the future of your village?

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