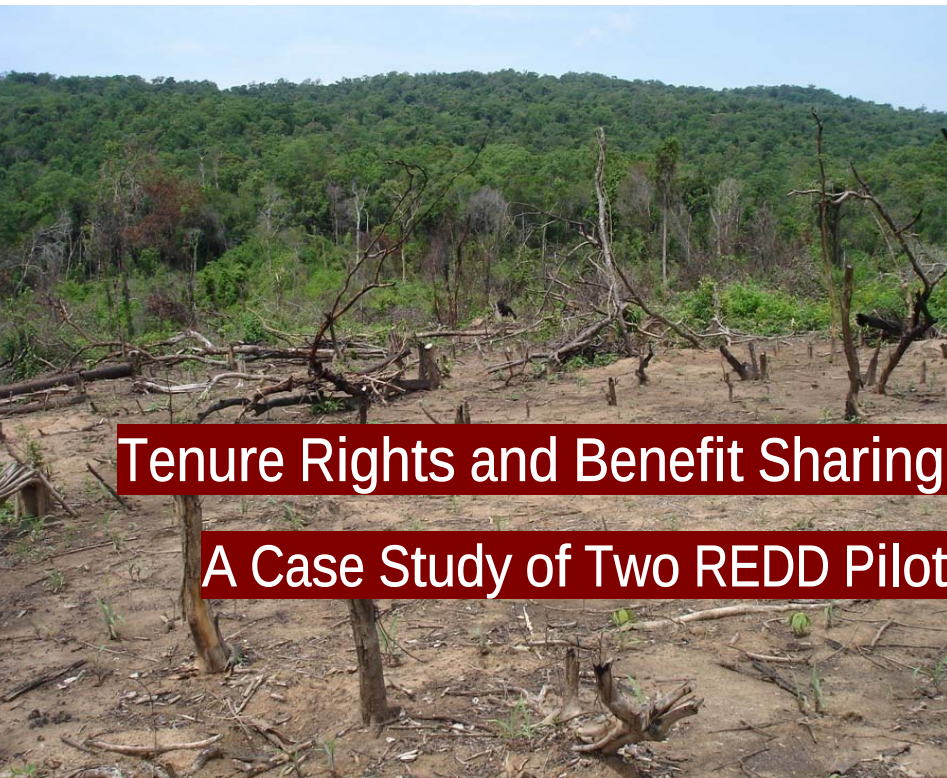




Tenure Rights and Benefit Sharing Arrangements for REDD

A Case Study of Two REDD Pilot Projects in Cambodia



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August 2010

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*Thesis submitted in partial fulfillment of the requirement for the degree of Master of
Science in European Forestry (University of Eastern Finland) and Master of Science in
Forest and Nature Conservation (Wageningen University)*

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Cover photo: Forestland clearing and forest dependent people in Cambodia by Donal Yeang

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Summary

Deforestation and forest degradation account for up to 20% of the total annual anthropogenic greenhouse gas emissions. As a result, current approaches to address climate change include strategies to reduce deforestation and forest degradation in developing countries (REDD). Even though REDD is still under discussion within the UNFCCC framework, many REDD pilot projects are being implemented across the tropics. Securing local communities' tenure rights and their equitable access to forest conservation benefits are critical in REDD because local communities could be excluded from REDD benefits if their land and forest access rights are not adequately addressed.

In Cambodia, two REDD pilot projects: Community Forestry Carbon Offset Project (CFCOP) in Oddar Meanchey province and the Seima Protection Forest Project (SPF) in Mondul Kiri province, are being implemented. This study aims to contribute to the development of an effective REDD mechanism in Cambodia by examining land and forest tenures and benefit sharing arrangements under the two REDD pilot projects in Cambodia. The paper employs concepts of discourse coalitions and rules of the game to explain tenure rights and benefit sharing arrangements in the two projects. The study is based on literature review, analysis of key text documents and interviews with 19 respondents from government, civil society, donor community, community and private sector involved in the two REDD pilot projects and from outside.

Results show that all forestlands in Cambodia belong to the state and various forest tenure regimes exist in Cambodia. These forest regimes include forest concessions, community forests, protection forests, protected areas, private forests and economic land concessions. Currently, the two REDD pilot projects are being implemented in community forests and protection forests. In both projects, local communities are granted forest access rights. In addition, the projects have legitimized tenure rights of local communities in the project areas as provided for through the Land and Forestry Law in Cambodia. The study also indicates that revenues from carbon credits generated by the projects will be shared with the local communities. According to the Government Decision No.699, more than 50% of net revenues will be channeled to local communities in the CFCOP while the sharing of the revenues in the SPF is still under consideration. The study offers lessons that could guide other REDD projects in securing local communities' forest access rights and their rights to benefits from forest conservation.

Keywords: REDD, Tenure rights, Benefit sharing, Community Forestry Carbon Offset, Seima Protection Forest

Acknowledgement

First and foremost, I am extremely grateful to my supervisor Dr. Ingrid J. Visseren Hamakers. I have had the privilege to work and learn under you. Many thanks for embracing my research idea; your patience, guidance, support and encouragement kept me going. I appreciate your mentoring and special interest in my competence.

I would like express my gratitude to Professor Paavo Pelkonen, Professor Timo Tokola, Professor Promode Kant, Dr. David Gritten, Dr. Celeste Lacuna-Richman, Dr. José Ramón González, Dr. Blas Mola Yudego and Dr. Eugene Lopatin. It was a great opportunity for me to learn under you. My appreciation goes to Pradipta Halder, Surya Bahadur Magar, Roland Hörnfeldt and Marjoriitta Möttönen for providing all the support in solving the administrative and practical problems throughout the whole two years of the Master Science of European Forestry programme (MScEF). I am indebted to European Commission (Erasmus Mundus Program)/ MScEF Consortium for providing me the scholarship for the MSc.

I would like to thank all my friends in the MScEF programme for making my academic and social life in Europe memorable and cherish every moments. My special thank to my friends who stood by me during this long drive to the completion of this thesis: Robert M. Ochieng, Buruh Abebe Tetemke and Arun Bose.

My special appreciation to Professor Gérard Buttoud at the French Institute of Forestry, Agricultural and Environmental Engineering (ENGREF) for inspiring my interest in international forest policy issues during my internship in Nancy, France.

I am grateful to all key respondents for cooperation in providing me with their valuable opinions, particularly to Dr Keo Omaliss from the Forestry Administration (Cambodia's REDD focal point), Amanda Bradely from the Pact Cambodia, and Leslie Durschinger from the Terra Global Capital for critical discussions during the interviews.

Last but not least, I would also like to express my very sincere thank to my parents, brothers and sisters for the love, care, support and encouragement. You all are my strength and inspiration in my life.

Wageningen, August 2010

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List of Acronyms

ASEAN	Association of Southeast Asia Nations
CBD	Convention on Biological Diversity
CCBA	Climate, Community and Biodiversity Alliance
CDM	Clean Development Mechanism
CF	Community Forestry
CFCOP	Community Forestry Carbon Offset Project
CFI	Community Forestry International
COP	Conference of the Parties
CCCO	Cambodia Climate Change Office
ELC	Economic Land Concession
FA	Forestry Administration
FAO	Food and Agriculture Organization
FCPF	Forest Carbon Partnership Facility
GDP	Gross Domestic Product
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
MAFF	Ministry of Agriculture, Fishery and Forestry
MOE	Ministry of Environment
NGO	Non-governmental Organization
NTFP	Non-timber Forest Product
RECOFTC	Regional Community Forestry Training Centre for Asia Pacific
REDD	Reducing Emission from Deforestation and Forest Degradation
RGC	Royal Government of Cambodia

R-PIN	Readiness Plan Idea Note
R-Plan	Readiness Plan
SBCA	Seima Biodiversity Conservation Area
SPF	Seima Protection Forest
TGC	Terra Global Capital
TgC	Teragrams of Carbon (1 TgC = 1 MtC)
TWG F&E	Technical Working Group on Forest and Environment
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
WCS	Wildlife Conservation Society

CHAPTER 1

1.0. Introduction

Deforestation and degradation of the world's forests are continuing at an alarmingly high rate (FAO, 2005). FAO (2005) estimated the current global annual rate of deforestation at 13 million ha. Asia is one the regions with the highest rates of deforestation in the world. FAO (2005) estimated that the region's forests were decimated at an annual rate of 800 000 ha in the 1990s. While the region recorded a net gain of 1 million ha per year over the 2000 - 2005 period, it is worth noting that this was mainly as a result of massive forest plantation establishment over the period in China, India and Bangladesh (see e.g., Kanninen *et al.*, 2007).

Deforestation is still high in the South and Southeast Asia region, with a rate of about one percent on average, which is significantly higher than the global average of 0.22% (FAO, 2005). The high deforestation in the region does not only have tremendous impacts on biodiversity and local livelihoods but also on carbon emissions and hence on the world's climate. The IPCC (2007) estimated that deforestation and forest degradation account for up to 20% of the total annual anthropogenic greenhouse gas (GHG) emissions and that most of this deforestation occurs in the tropics. As such, tackling deforestation in the tropics offers an opportunity for addressing climate change.

At the 13th Conference of the Parties (COP-13) of the United Nations Framework Convention on Climate Change (UNFCCC) in 2007, the Bali Action Plan highlighted the important of policy approaches and positive incentives for Reducing Emissions from Deforestation and Forest Degradation (REDD)¹ (UNFCCC, 2007). The UNFCCC introduced REDD as the financial mechanism to reduce emission from deforestation and forest degradation in developing countries (Huettnner *et al.*, 2009; Miles and Kapos, 2008). Developing countries would be paid by developed countries for the service of avoided deforestation and degradation under the REDD mechanism (Ebeling & Yasué, 2008). Peskett *et al.* (2008) believe that REDD can not only maintain carbon stock to reduce GHG emissions but also offers benefits for biodiversity and other ecosystem services and poverty reduction in developing countries.

At the COP14 of the UNFCCC in Poznań, Poland (2008), REDD was hotly debated and the concept of REDD-plus or REDD+ was introduced. At COP15 in Copenhagen, Demark REDD was heavily discussed (UNFCCC, 2009). The discussion focused mainly on the REDD+ mechanism that finances not only forest conservation, but also sustainable forest management and enhancement of carbon stocks (Ibid.). The Copenhagen Accord recognizes the crucial role of REDD, the need to enhance removals

¹ Where REDD includes also enhancement of forest carbon stocks, sustainable forest management and conservation and certainly, it is referred to REDD-plus or REDD+.

of GHG by forests and the need to establish a mechanism (including REDD+) to enable the mobilization of financial resources from developed countries.

Cambodia is one of the countries in the Southeast Asia region with the highest deforestation rates. Over the 2000 – 2005 period, Cambodia lost its forests at an annual rate of two percent (FAO, 2005). Deforestation has posed challenges for Cambodia for decades. Dealing with deforestation is not an easy assignment for the government due to the complexity of causes of deforestation. Furthermore, international pressure was put on Cambodia to control deforestation and ensure sustainable management of its forests (De Lopez, 2002). According to Sokhun *et al.* (2009), the main drivers of deforestation in Cambodia, are illegal logging, land conversion from agricultural encroachment, fuelwood consumption, lack of sustainable forest management capacity, and lack of (financial) incentives to conserve forests, as well as timber demand from other countries. The REDD mechanism can help Cambodia to achieve sustainable forest management and halt deforestation while also delivering climate change mitigation benefits (Poffenberger, 2009).

1.1. REDD in Cambodia

Cambodia ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1995 and acceded to the Kyoto Protocol in 2002. In 2003, the Cambodia Climate Change Office (CCCO) was established under the umbrella of the Ministry of Environment (MOE). The CCCO acts as the secretariat of the UNFCCC, the Kyoto Protocol and the Clean Development Mechanism (CDM) focal points for Cambodia; and it is also responsible for national GHG inventory. The CDM is one of the flexible mechanisms under the Kyoto Protocol that allows developed countries to reduce emissions by implementing an emission-reduction project in developing countries (UNFCCC, 2007). The country completed its National Greenhouse Gas Inventory for 1994 in 2001. At the time, Cambodia was a net carbon sink country with a net total carbon removal of 5,142 Gg of CO₂ equivalent (Sokhun *et al.*, 2009). The assessment showed that Land Use Change and Forestry (LULUCF) are the main source of GHG emissions (with 63%) followed by the agricultural sector (with 28%). The CCCO is currently preparing the National Greenhouse Gas Inventory for 2000. Rapid economic growth in the garment and tourism industries, electricity consumption and vehicle ownership will all have contributed to a significant change in the relative contributions of GHG emissions in Cambodia (Sokhun *et al.*, 2009). In 2006, a primary estimate of carbon emissions due to land-use change and logging in Cambodia was conducted by Sasaki (2006), which showed that between 1993 and 2003, annual carbon emissions amounted to about 13.7 TgC, owing to deforestation and logging.

The Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fishery (MAFF) is the responsible authority of REDD and acts as the national REDD focal point in Cambodia. The Technical Working Group Forest & Environment (TWGF&E) also plays a key role in REDD development in Cambodia. The body is the formal coordination mechanism and high level coordination for multi-stakeholder dialogues on forest and environmental issues among the Royal Government of Cambodia (RGC) represented by

different ministries/agencies and development partners, civil society and the private sector. It is responsible for preparing a national REDD strategy, including policies on the distribution of financial flow from REDD projects. By January 2010, the Cambodia REDD taskforce was created to develop the REDD national readiness roadmap that set out the activities to be implemented over the next few years and to establish a national REDD programme. The taskforce comprises of relevant experts from key agencies, including the Forestry Administration (FA), the Ministry of Environment (MOE), the Ministry of Land Management and Urban Planning (MLMUP), the United Nations Development Programme (UNDP), the United Nations Environmental Programme (UNEP), the Food and Agriculture Organization of the United Nations (FAO), the Wildlife Conservation Society (WCS) and the Regional Community Forestry Training Centre for Asia Pacific (RECOFTC). The national readiness roadmap is expected to be finalized in 2010 by the taskforce. In addition, the United Nations Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries or UN-REDD (see below) is going to work closely with Cambodia this year in order to assist the process by providing over US\$1 million in the next couple of years (UN-REDD, 2010). The national readiness roadmap will focus on the management of national REDD readiness, development of the REDD strategy, reference emission level for REDD, monitoring system, implementation framework, social and environmental safeguard policies and consultation and awareness raising of stakeholders (Omaliss, 2010).

The Royal Government of Cambodia (RGC) strongly supports the REDD mechanism and believes not only that REDD will help to reduce GHG emissions, but also contribute to alleviating poverty, improving forest governance, and enhancing sustainable forest management in the nation (FA, 2008). Butler (2006) estimates the potential earnings from REDD for Cambodia at between US\$ 85 – US\$875 million per year, depending on the extent of forest protected for REDD and market price of carbon credits, and that REDD can increase the country's GDP by between 1.7% - 18.5%. The large tracks of forests in Cambodia make it a suitable country for REDD. Indeed, the country is already participating in both the Forest Carbon Partnership Facility (FCPF) of the World Bank and the UN-REDD.

The World Bank was asked by developed and developing countries to create a facility for demonstrating activities for REDD in developing countries. Therefore, consultation has been made with a number of countries and organizations, including environmental NGOs. This consultation strongly focused on the value of developing the facility in partnership with a broad range of actors—an approach that can balance the interests of potential donors and buyers, recipients and sellers and other stakeholders. In June 2007, the momentum started to gain support from the G8 summit in Heiligendamm, Germany (World Bank, 2009). In addition, the summit declared to support the World Bank's endeavor to form a global forest carbon partnership. As a result, the World Bank launched the Forest Carbon Partnership Facility (FCPF) at 13th session of the Conference of the Parties (COP-13) of the United Nations Framework Convention on Climate Change (UNFCCC) in Bali. In June 2008, the FCPF came into action in order to build the capacity of developing countries in tropical and subtropical regions to reduce

emissions from deforestation and forest degradation (*Ibid.*). In March 2009, Cambodia was admitted to be a member of the FCPF. As of June 2010, the FCPF has selected 37 countries across Asia, Latin and Central America and Africa (Figure 1, 2, 3).

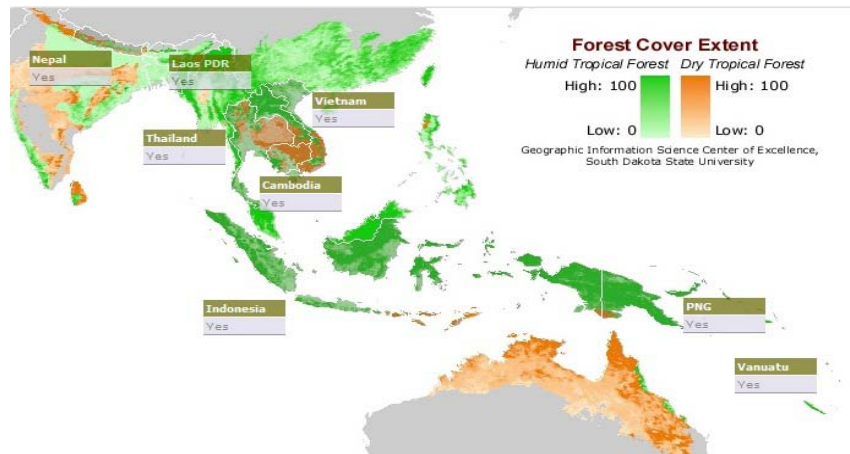


Figure 1 FCPF members in Asia (<http://www.forestsclimatechange.org>)

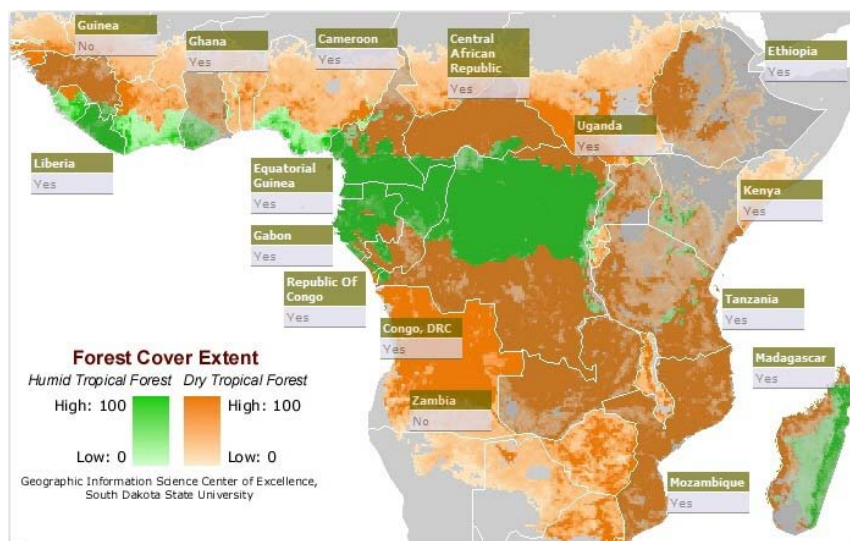


Figure 2 FCPF members in Africa (<http://www.forestsclimatechange.org>)



Figure 3 FCPF members in Latin and Central America (Ibid.)

The UN-REDD program is a collaborative partnership between the United Nations Environment Program (UNEP), the United Nations Development Program (UNDP) and the Food and Agriculture Organization of the United Nations (FAO). It is a multi-donor trust fund which was established in July 2008 for donors to pool resources and provides funding for the REDD program. It aims to assist developing countries to get ready to participate in the REDD mechanism through supporting capacity building of national government and promoting stakeholder's involvement. Furthermore, the UN-REDD Program works in close coordination with the FCPF at both the international level and national level to support processes for REDD readiness and contributes to the development of national REDD strategies. The program offers technical advices to address deforestation and also facilitates consultation among stakeholders, including indigenous peoples and other forest-dependent communities. In October 2009, the policy board of the UN-REDD program officially admitted Cambodia to participate in the UN-REDD program as the observer country with other 12 countries (UN-REDD, 2009). Currently, the UN-REDD program supports REDD readiness activities in nine pilot countries: Bolivia, Democratic Republic of Congo (DRC), Indonesia, Panama, Papua New Guinea, Paraguay, United Republic of Tanzania, Viet Nam and Zambia (Figure 4).

At the Oslo Climate and Forest Conference on 27 May 2010, distinguished delegates from governments, civil society, indigenous peoples, and private sector from more than 50 countries agreed to endorse and launch the Multilateral Interim REDD Partnership initiative. This partnership aims to serve as an interim platform for the partners to scale up REDD actions and finance REDD initiatives². Within the partnership, the developing and developed countries are able to work together to reduce deforestation while continuing the negotiation on REDD initiative under the UNFCCC.

² REDD+ Partnership Document (Adopted, May 27, 2010), Available at: <http://www.osloctf2010.no/pop.cfm?FuseAction=Doc&pAction=View&pDocumentId=25017>

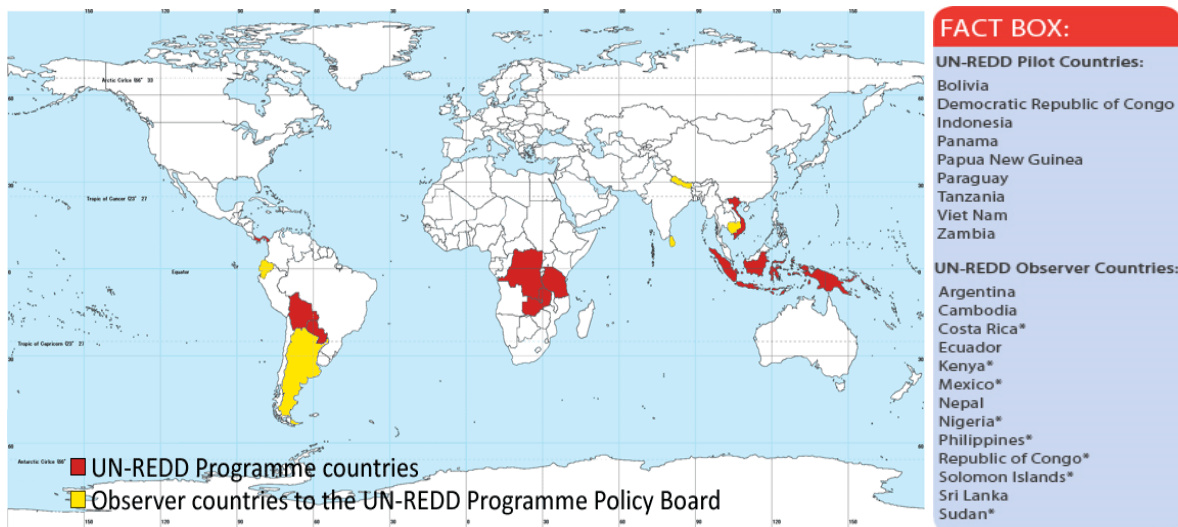


Figure 4 Map of UN-REDD Programme Members (UN-REDD Programme, 2010)

Cambodia has submitted its Readiness Plan Idea Note (R-PIN) to the FCPF. This R-PIN development has been based on the current REDD pilot project in Oddar Meanchey province while REDD Readiness or R-Plan is under preparation. In 2008, the Forestry Administration, with the support of the Community Forestry International (CFI) launched the Community Forestry Carbon Offset Project (CFCOP) in Oddar Meanchey province (Sokhun *et al.*, 2009). Furthermore, the Seima Protection Forest project was also launched with the support of the Wildlife Conservation Society (WCS) in the Seima Protected Forest in Mondulkiri province in 2009. In addition, the Wildlife Alliance has also proposed another forest areas in the Southern Cardamoms of Southwest Cambodia for a REDD pilot project (Gold, November 2009). This thesis takes a close look at the Community Forestry Carbon Offset and the Seima Protection Forest projects because they are the only two REDD pilot projects that are being carried out in Cambodia. The Community Forestry Carbon Offset is the first project that involves twelve community forestry sites located in the Northwestern part of Oddar Meanchey province. The Seima Protection Forest, the first REDD-based wildlife protection project, is the second pilot project in Cambodia.

1.2. Problem Statement

According to Scherr and Sthapit (2009), REDD implementation will generally face major methodological, institutional and governance challenges (see also Boucher, 2008; Asthon and Clairs, 2009). The success of REDD implementation will depend on the national level institutions and the design of these institutions, which are based obviously on the country's economic and legal systems, domestic policy priorities, existing institutions, and the availability of resources (Streck *et al.*, 2009). In addition, a REDD initiative could negatively affect the rights, livelihoods and land tenure of forest dependent and indigenous communities (Griffiths, 2007; Angelsen *et al.*, 2009; Cotula and Mayers, 2009; Global Forest Coalition, 2009; Phelps *et al.*, 2010). If REDD is not

well designed, the rights over land and resources of the forest dependent communities may be lost and they can be physically displaced from forests. Furthermore, many authors have argued that REDD overlooks the rights, tenure, and engagement of forest-dependent and indigenous peoples (Dooley *et al.*, 2008; Egle and Palmer 2008; Sunderlin *et al.*, 2008; Cotula and Mayers, 2009; Barry *et al.*, 2010).

Tenure rights are central to improving livelihoods of forest dependent communities (Angelsen, 2008; Cronkleton *et al.*, 2010). Tenures cover ownership and access to natural resources and are, therefore, at the heart of people's ability to benefit and derive income and subsistence from the resources (World Resource Institute *et al.*, 2005; Cronkleton *et al.*, 2010). They are considered as the key mechanism for shaping the distribution of risks, costs, and benefits arising from resources. In the context of REDD, local communities could be excluded from REDD benefits if land tenure or use and access rights are not clear (Huettnner *et al.*, 2008). As a result, tenure security plays a vital role in the structure of incentives that underpin successful forest management (Ostrom and Nagendra, 2006; Sunderlin *et al.*, 2008; Campbell, 2009).

In most countries, forest laws do not recognize the rights of local and indigenous communities to their lands and forest resources (Colchester, 2004). It is recognized that the success of REDD will depend on the support of forest communities and indigenous peoples which will happen only when their rights to their lands are respected (see e.g. Cotula and Mayers, 2009; Hatcher and Bailey, 2009). To safeguard and make local and indigenous communities benefit from carbon markets, rights over carbon need to be clarified (Smith and Scherr, 2003; Bond *et al.*, 2009). Furthermore, forest carbon rights of local communities can be protected with supportive legislations by national governments (Smith and Scherr, 2003). However, how issues of tenure and carbon rights have been addressed in the two REDD pilot projects in Cambodia have not been carefully investigated. It is also not clear how carbon rights will be allocated among the stakeholders and it is not known whether the carbon credits of the projects have been allocated to stakeholders based upon tenure rights.

For REDD scheme, revenues will be generated from selling carbon credits in the carbon markets. As a result, significant amount of money will be brought to developing countries. Developing an equitable mechanism for sharing REDD benefit (revenues) is a central challenge for REDD. Equitable benefit sharing mechanism can ensure the effective incentives to local communities and avoid conflict over individual interests. It is also likely to address deforestation and forest degradation in REDD projects (Peskett and Harkin, 2007; Coad *et al.*, 2008). However, how such benefits should be shared nationally or locally between different stakeholders has not been carefully explored. The benefit sharing mechanism is also taken into account in this study since lack of clear tenure rights and benefit sharing arrangements could undermine the development and implementation of national REDD strategy if they are not carefully addressed (Angelsen *et al.*, 2009).

A study on REDD in Cambodia by Van Beukering *et al.* (2009) did not exhaustively analyze the tenure and benefit sharing issues of the REDD scheme but acknowledged the importance of clarifying property rights and benefit sharing. There is a need to look into tenure rights over forests and lands and benefit sharing scheme in order to understand constraints and opportunities in adoption of REDD mechanism in Cambodia. Furthermore, very little research on the REDD initiative has been done in Cambodia. For instance, Svadlenak-Gomez (2009) conducted a case study on the potential impacts on the wellbeing of forest-dependent people under the REDD initiative in Cambodia and some other countries but did not offer a full picture of tenure rights and benefit sharing issues within the pilot projects under the study. This thesis analyzes tenure rights over land and forests and also examines how carbon credits will be appropriated among stakeholders in the two REDD pilot projects in Cambodia. This study contributes to the national debate on the national REDD strategy development regarding tenure rights and benefit sharing arrangements and also illustrates relevant lessons learned from the REDD pilot projects in Cambodia.

1.3. Research Objectives and Research Questions

The objective of this study is to contribute to the development of an effective REDD mechanism in Cambodia by examining land and forest tenures and benefit sharing arrangements under the two REDD pilot projects in Cambodia. To meet this objective, the following research questions are addressed:

1. What land / forest tenure arrangements exist in Cambodia? Are these tenure arrangements defined in any legislations or soft laws?
2. What land tenure arrangements are inherent in the two projects? Do these tenure arrangements recognize the rights of local and indigenous communities to their lands and are these rights reflected in legal documents?
3. What benefit sharing arrangement has been put in place for the sharing of REDD benefits under the two projects? Does the mechanism channel the resources to the local level?
4. How do discourse coalitions and rules of the game influence tenure rights and benefit sharing arrangements under the two REDD pilot projects?

1.4. Thesis Outline

This thesis report consists of six chapters. **Chapter 1** provides the overall introduction on the political history of the REDD mechanism and its evolvement in Cambodia. This chapter further elaborates upon the problem statement and the research objectives for this study. **Chapter 2** discusses the theoretical framework used for this study, namely the concepts of resource tenures, indigenous and local community rights. The Chapter further discusses the concepts of discourse coalitions and rules of the game. This chapter also explains the operational framework developed for the study by using the concepts in the theoretical framework. **Chapter 3** explains the methodology adopted for this study. It consists of research strategy adopted for this study, stakeholder analysis (SA) and different methods used for data collection. **Chapter 4** describes forestry sector in Cambodia and the national and international significant of Cambodian forests. It also

explains existing land and forest tenure regimes in Cambodia. **Chapter 5** presents the tenure rights and benefit sharing arrangements under the two REDD pilot projects in Cambodia. It explains how discourse coalitions and rules of the game influence the tenure rights and benefit sharing arrangements in the projects. **Chapter 6** discusses the results of the study, draws conclusions, and makes some recommendations. Finally, it presents my personal reflection and highlights the theoretical and societal relevance of the study.

CHAPTER 2

2.0. Theoretical and Conceptual Framework

This chapter elaborates upon the theoretical basis of the study. The chapter starts with the concepts of resource tenures, indigenous people and local community rights and benefit sharing. It further discusses the concept of discourse coalitions and rules of the game. The last section presents the conceptual framework.

2.1. Theoretical Framework

Tenure right issues have received considerable amount of attention in REDD debate (e.g. Griffiths, 2007; Dooley *et al.*, 2008; Peskett *et al.*, 2008; Cotula and Mayers, 2009). Many authors (e.g. Sunderlin *et al.*, 2008; Brown *et al.*, 2008; Cotula and Mayers, 2009) recommend that REDD projects should be designed to advance the rights of forest-dependent peoples by increasing their tenure security and creating direct livelihood benefits. To deliver these co-benefits, land/forest tenure reform, clarity over carbon ownership rights (as distinct from land tenure) and provisions to ensure equitable distribution of REDD benefits (Cotula and Mayers, 2009). In most countries, unclear tenure is a major challenge for REDD implementation (Davis *et al.*, 2009; Cotula and Mayers, 2009). Davis *et al.* (2009) have employed the governance analysis methodology to analysis REDD Readiness Plan Idea Notes (R-PIN) of 25 countries, submitted to the Forest Carbon Partnership Facility (FCPF) of the World Bank. Regarding land tenure, there are four important criteria, including a land tenure system that is non-discriminatory and provides clear rights over land and its associated values, legal recognition of indigenous peoples rights to land, mechanisms for resolving conflicts over tenure rights, and institutions and systems that uphold the rights of forest dependent people.

2.1.1. Resource Tenure: Use and Ownership Rights

Resource tenure refers to systems of rights, rules, institutions and processes regulating resource access and use (Bruce, 1998; World Resource Institute *et al.*, 2005; Cotula and Mayers 2009). According to the World Resource Institute *et al.* (2005), tenure rights are synonymous with property rights. They offer the legitimate access and use of resources to individuals as well as communities such as the right to fell timber, collect fruit from trees or fallen branches. However, tenure is not only a legal concept (see below) but also a complex social institution because it often relates to traditions, practices and customs (informal) as well as formal rules (World Resource Institution *et al.*, 2005). Tenure systems define who owns and who can use what resources for how long, and under what conditions (FAO, 2002).

Tenure systems can be subdivided into two main categories: customary tenure and statutory tenure systems. Customary tenure systems are determined at the local level and are often based on oral agreements while statutory tenure systems are applied by governments and are codified in state law (ITTO, 2009). Tenure covers ownerships and access to natural resource and is, therefore, at the heart of people's ability to benefit and derive income and subsistence from resources (World Resource Institute *et al.*, 2005). It is considered as the key mechanism for shaping the distribution of risks, costs, and

benefits arising from resources. FAO (2002) identifies the various types of tenure as follow:

- The right to use the resource (the “usufruct” right) or control how it will be used
- The right to exclude others from unauthorized use
- The right to derive income from the resource
- The right to sell all or some of these rights to others, either permanently, or for a limited time (e.g. a lease)
- The right to pass these rights down to one’s successors (the right of descendants to inherit land or resource rights)
- Protection from illegal expropriation of the resource
- An obligation not to use the land in a way that is harmful to others
- An obligation to surrender these rights through a lawful action, (e.g., in a case of insolvency, the rights are surrendered to creditors; in the case of default on tax payments, the rights are surrendered to the state).

There are many forms of resource tenures but land tenure is the most fundamental tenure because it underpins most other resource use rights (Deininger *et al.*, 2003; World Resource Institute *et al.*, 2005). Hundreds of millions of people live on forestlands with no or weak land and resource tenure security (Sunderlin *et al.*, 2008). There are various reasons for tenure insecurity. In some cases, the customary arrangements may be clear and well accepted at the local level but are contradicted / nullified by statutory laws. Because land tenures are the most fundamental tenure, they are elaborated below.

2.1.1.1. Land Tenures

According to the FAO (2002), land tenure is the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land and associated natural resources (water, trees, minerals, wildlife, etc.). Land tenure is an institution in which rules are devised by societies to regulate behavior (FAO, 2002). However, land tenure also means the right to hold land rather than the simple term of land holding and refers to the bundle of rights and responsibilities, under which land is held, used, transferred, and succeeded (Bruce, 1998; La Croix, 2002). For instance, one may have tenure on land but may not have taken possession of it and that is the so-called resource tenure.

Land tenure systems determine who can use what resources for how long, and under what conditions (FAO, 2002). Land tenure is often categorized into private, communal, open access, and state ownership (Feder and Feeny, 1991; FAO, 2002). Private land tenure is the assignation of rights to a private party such as individual, a group of people, or a corporate body such as a commercial entity or non-profit organization (FAO, 2002). Communal tenure is a right of commons and exists within a community where each member has a right to use independently the land holdings of the community (Ibid.). For example, community members can have the right to graze cattle on a common pasture. Open access means that no specific rights are assigned and no one can be excluded for

using it (Ibid.). State ownership refers to property rights that are assigned by some authority in the public sector (Ibid.). Furthermore, land tenure systems are characterized by country or type of economic system, as formal (created by statutory law) or informal (unwritten customary), and as imported or indigenous (Bruce, 1998).

In many tropical forest countries, statutory or formally recognized property rights, explicitly acknowledged by the law, coexist with informal land uses, regulated by customary rules (FAO, 2002). In many countries around the world, some national governments aimed to eliminate customary land tenure while most forest communities are seeking formal legitimacy to secure their customary rights (ITTO, 2009). Land tenure usually focuses on public interest and distinct tenure arrangements apply to forest resources as well (Lynch and Talbot, 1995).

2.1.1.2. Forest Tenures

FAO (2007) defines forest tenure as a broad concept including ownership, tenancy and other arrangements for the use of forests. It is the combination, whether legally or customarily defined, of forest ownership rights and of arrangements for the management and use of forest resources. Forest tenure is not different from other tenure systems because it determines who can use what resources for how long, and under what conditions. The necessary components of forest tenure include excludability, duration, assurance, and robustness (FAO, 2007). McCulloch *et al.* (1998) define each component as following:

- ❖ Excludability allows those with rights to a particular piece of land to exclude those without rights.
- ❖ Duration refers to the period for which the right is granted. Right holders, such as local communities or farm households, only feel secure when the time horizon is sufficient to allow them to reap the benefits of investments.
- ❖ Assurance is an institutional framework capable of enforcing rights.
- ❖ Robustness refers to the number and strength of rights that can be possessed

In Southeast Asia, for example, long-term forest dwellers such as indigenous peoples and local farmers often have *de facto* access to forests, but their tenural control over trees, timber, and the right to manage forest is often limited and unrecognized in law (Lynch and Talbott, 1995). In Indonesia, for instance, the traditional system of forest tenure (called *adat*) recognized by many forest dwellers has often been ignored by the government (World Resource Institute *et al.*, 2000). Forest tenure security is important because it is often the foundation for the social identity, personal security, and cultural survival of indigenous peoples and ethnic minorities (Sunderlin *et al.*, 2008). It also has a crucial role in determining who benefits from forest ecosystem services (World Resource Institute *et al.*, 2002; Sunderlin *et al.*, 2008). As a result, tenure security plays a strong role in the structure of incentives that motivate protection or destruction of forests.

Sunderlin *et al.* (2008) distinguish between the public domain and the private domain of forestlands in the “legal” forest estate. Moreover, the “public” and “private” domains are further subdivided into two categories, yielding four tenure categories:

Public lands administered by government typically include all forests in the legal forest estate that are owned and administered, exclusively, by the government. Community use of these forests is usually prohibited. Note that this category includes some protected areas (IUCN, 2002) and forestlands awarded as concessions for logging, agro-industrial or plantations, and mining.

Public lands designated for use by communities and indigenous peoples are lands set aside on a semi-permanent but on a conditional basis. Governments retain ownership and the entitlement to unilaterally extinguish local groups' rights over the land. In this arrangement, local groups are able to sell or alienate land through mortgages or other financial instruments. Although the distribution of rights between government and community in this category is different in almost every country, governments invariably retain strong authority to extract and manage forest resources (White and Martin, 2002).

Private lands owned by communities or indigenous peoples refer to forestlands where rights cannot be unilaterally terminated by a government "without some form of due process and compensation" (Ibid.). In theory, private landowners typically "have rights to access, sell or otherwise alienate, manage, withdraw resources and exclude outsiders" (Ibid.). However, in some situations, these rights are awarded to private landowners and others where some of these rights are conferred to people on public, designated for community use forestland. The legal right of the government to terminate a land contract without or with due process and compensation serves as the chief criterion for distinguishing public from private forest tenure.

Private lands owned by individuals or firms are the lands where the rights cannot be unilaterally terminated by a government without due process or compensation.

2.1.1.3. Carbon Rights

It is generally known trees absorb carbon dioxide through photosynthesis and as a result, attention has been paid to the storage of carbon in forests. Carbon credits are the potential source of income that will derive from REDD project. They give a right to the benefit and risk arising from carbon sequestration in a particular plot of forestland. The risk is also likely to occur when the amount of real carbon on the forestland are not represented the carbon rights (or credits). In addition, the rights can be converted into monetary value where a market exists for GHG offsets. As a result, carbon credit scheme policies to offer incentives for carbon sequestered in trees are being developed (Taylor *et al.*, 2010). Clarity of carbon rights is a key for REDD scheme, particularly the definition of carbon rights.

Several authors (Angelsen, 2009; Cotula and Mayers, 2009; Costenbader 2009) have defined carbon rights differently. Angelsen (2009) defined carbon rights as the claims on the benefit streams from carbon pools, for example, the benefit from a specific parcel of forest. Cotula and Mayers (2009) define carbon rights as a form of property right that 'commoditize' carbon and allow trading. The rights to carbon can be separated from broader rights to forest and land (Costenbader, 2009). They can also define management responsibilities and liabilities (Cotula and Mayers, 2009). In addition, they

are usually registered on the land title and should be perpetually enforceable or established over long time frames to ensure permanence for buyers. For example, Australia was one of the first countries to establish carbon rights, which are an adaptation of traditional '*profit à prendre*' rights (defined as the right to take profit from something on another person's land) (Ibid.). These exist perpetually on the land title and define liability for re-emission, and therefore ensure permanence of emissions reductions.

In contrast, there has been an issue in establishment of carbon right in New Zealand (Costenbader, 2009). In 2002, the government decided to retain ownership over credits or debits from carbon from plantation on both public and private land. This decision led to substantial decline of plantation establishment and also a net reduction of production forest area in New Zealand. Many forest industries argued that landowners should own the right to forest carbon in their forest. In 2007, the policy decision was eventually reversed, and credits and liabilities for forest carbon were devolved to forest owners as part of a new emissions trading scheme (Peskett and Harkin, 2007). Based on this experience, it is suggested that the removal of carbon right from landowners is likely to cause problem and that is important for carbon right to be defined by national regulations. The issues concerning carbon rights included how the rights are defined, how they work in place where ownership is not clear, and whether legal institutions are strong enough to protect the rights (Angelsen, 2009).

2.1.2. Indigenous People and Local Community Rights

Indigenous and local communities are key stakeholders in managing forest ecosystems (see e.g. Alcorn, 1993). According to the United Nation Permanent Forum on Indigenous People Issues (2007), indigenous people refer to those who inhabited a country or a geographical region at the time when people of different cultures or ethnic origins arrived. The new arrivals later became dominant through conquest, occupation, settlement or other means (UNPFII, 2007). The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is an important international instrument which recognizes and upholds the rights of Indigenous Peoples (UNDRIP, 2007). This declaration explicitly affirms the right to free, prior and informed consent (FPIC) and upholds state obligations in this regard in many of its provisions (Ibid.). The FPIC is a rights-based principle representing a particular expression of the right to self-determination, related rights to lands, territories and natural resources, the right to culture, and the right to be free from racial discrimination (MacKay, 2004).

The article 10 of the UNDRIP (2007) states:

'Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return. In addition, states shall give legal recognition and protection to these lands, territories and resources by respecting to the customs, traditions and land tenure systems of the indigenous peoples.'

Furthermore, the FPCI is also recognized by the International Labor Organization (ILO) Convention No.169 on Indigenous and Tribal Peoples (ILO Convention No. 169), that offers a range of rights and protections for indigenous peoples, with a particular emphasis on the right of indigenous peoples to be consulted on and participate in decisions that affect them. In addition, the FPCI is also on the agenda of the Convention on Biological Diversity (CBD) and the UN-REDD programme (see e.g. Cariño, 2005; UN-REDD, 2009).

2.1.3. Benefit Sharing

The concept of benefit sharing has remarkably been recognized in social science research. Benefit sharing concerns on what is owed to individuals, communities or even populations (Simm, 2007). For instance, it would be unfair if a rich country went into a poor country, exploited some of its natural resources such as fauna and flora, made a marketable product and earned vast revenues from it without sharing the benefits with the poor residents (Berg, 2001).

However, benefit sharing is a technical term, which was popularized by the Convention on Biological Diversity (CBD) adopted at the 1992 Earth Summit in Rio de Janeiro, Brazil. In this international convention, there are three particular means for benefit sharing: appropriate access to genetic resources, appropriate transfer of relevant technologies and appropriate funding (Glowka *et al.*, 1994). The Conference of the Parties to the CBD decided in 2004 to create an international regime on access to genetic resources and sharing of the benefits arising out of their utilization through an Access and Benefit Sharing (ABS) regime (Oli *et al.*, 2007). However, despite its prominence debate across various fields, the concept of benefit sharing has never been clearly defined (Schroeder, 2007).

According to IUCN (2009), the underlying concept of benefit sharing is financial revenues from extraction and commercialization of natural resources should not only benefit the agent who directly or indirectly exploits the resource but a wider constituency of stakeholders. There are two main reasons to share benefits: create incentive and create legitimacy. For REDD initiative, incentives are rewarded to individual or communities for achieving reduced emission from deforestation or enhancing forest carbon stock. Since forestlands are protected for carbon sink, the majority of local communities will be affected. As a result, the local communities and stakeholders need to view REDD activities and benefit sharing as legitimate to make sure that they are treated fairly and equitably. In addition, if benefit sharing from REDD scheme is not seen as legitimate and politically acceptable, the scheme will not work because of possible conflict of interests and flouting of regulation (IUCN, 2009). The legitimacy can build up the confidence of investors in the project as well as carbon credit buyers. In addition, the benefit sharing mechanism is not only an agreement between stakeholders but also the broader institutional set-up in place to deliver and to manage such monetary benefits (Ibid.).

2.1.4. Discourse Coalitions

Various authors have defined discourse and discourse coalitions differently (Arts et al., 2006; Foucault, 1970; Hajer and Versteeg, 2005;). Hajer and Versteeg (2005) defines discourse as an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices. They point out that discourse is not a synonym of discussion because it refers to a set of concepts that structures the contribution of participation to a discussion. However, the concept of discourse can also refer the views and narratives of the actors (Arts et al., 2006). For example, the sustainability discourse plays a significant role in bringing together notions such as economic, ecological and social sustainability, a belief in the possibility to integrate economy and ecology (Veenman et al., 2009) to achieve sustainable development.

Howarth (2000, cited in Buizer, 2009 and Bulkeley, 2000) conceptualizes discourses as systems of social relation. Discourses are organized into formed rules and resources allocation or the way that actors form (Buizer, 2009). Coalitions refer to a group of actors who share same normative understandings in a given policy domain. They can also be viewed as coalitions of people or organizations that join forces around a certain discourse (Leroy and Arts, 2006; Buizer, 2009).

According to Hajer and Versteeg (2005), a discourse coalition refers to a group of actors that, in the context of an identifiable set of practices, shares the usage of a particular set of story lines over a particular period of time. Hajer (2005) elaborated that the concept of practices embedded routines and mutually understood of rules and norms that provide coherence to social life. Story lines refer to a condensed form of narrative in which metaphors are used. For example, acid rain can be considered as a metaphor because one may see it as the biological phenomenon while other identifies acid rain as the environmental issues that need to be addressed (Hajer, 2005).

2.1.5. Rules of the Game

Rules or rules of the game have been defined by various authors (Ostrom, 1986; Immergut, 1992; Arts and Van Tatenhoven, 2004). "Rules" refer to generally agreed-upon and enforced prescriptions that require, forbid, or permit specific actions for more than a single individual (Ostrom, 1986). Furthermore, rules may evolve over time as people develop shared understandings of what actions or outcome must, or must not be done in particular situations (Gardner and Ostrom, 1991).

'Rules of the game' delineate a policy domain by defining the possibilities and constraints for policy actors to act within that domain (Arts and Van Tatenhoven, 2004). They specify the procedures for policy-making and allocation of tasks and competences among actors in a given policy domain. These rules determine the actors to involve or not to involve in policy formulation and the relationship between them (Arts and Van Tatenhoven, 2004). Rules of the game can be formal or informal. Formal rules of the game are those transcribed in written text documents such as the constitution, contracts, etc while informal ones refer to norms that are held by a group of people but not

captured in any legal documents. Informal rules refer to the cultural practices that shape a policy domain (Wiering and Arts, 2006). Rules of the game can be used to explain the different perception of stakeholders on policy issues (Immergut, 1992). They not only refer to laws for rule making (Arts and Buizer, 2008) but also to rules of access, interaction and policy making (Kickert *et al.*, 1997). They explain the way issues should be framed, policies formulated, and decision made (Arts and Buizer, 2008).

2.2. Conceptual Framework

Rocco and Plakhotnik (2007) defined a conceptual framework as relevant theories to advance and systematize knowledge about related concepts or issues. The following sections present the conceptual framework that was used in this study. The conceptual framework included the concepts of tenure rights of forest dependent communities, benefit sharing as detailed below. The tenure categories advanced by Sunderlin *et al.* (2008) were used to classify tenure arrangements in Cambodia as well as in the two projects. In addition, the tenure arrangements criteria for REDD mechanism developed by Cotula and Mayers (2009) and Davis *et al.* (2009) were used to assess tenure arrangement in the two projects. To explain the tenure arrangements and benefit sharing issues inherent in Cambodia, two concepts, discourse coalitions (Hajer and Versteeg, 2005) and rules of the game (Arts and Buizer, 2008) were employed in this research.

2.2.1. Tenure, Forest Dependent Communities and REDD

As already mentioned, tenure defines who own the resource, the condition for ownership and for how long. Various forms of tenure have been identified in the literature. However, to answer to the first research question: What land / forest tenure arrangements exist in Cambodia? Are these tenure arrangements defined in any legislations or soft laws? , for this thesis the forms of tenure advanced by Sunderlin *et al.*, (2008) were employed. These include: public lands administered by governments, public lands designated for use by local and indigenous communities, private lands owned by communities and indigenous communities and private lands owned by individuals or firms. These are elaborated below.

Public lands administered by government: This is a land owned by government and no use by indigenous communities or other group of society is allowed (Sunderlin *et al.*, 2008). These lands include protected areas, forestland designated for logging concession, agro-industrial, plantation development and mining.

Public lands designated for use by communities and indigenous peoples: In this category, the government retains the ownership right over land but local and indigenous peoples have use rights over the land. However, apart from use rights they have no any other rights over the land resource.

Private lands owned by communities or indigenous peoples: These are forest lands owned by private peoples or communities. These owners have the right to access, sell, manage, withdraw resources, and exclude outsiders. Government intervention on these kinds of lands is largely limited. For instance if the government has to take such lands for

whatever reason the due process must be followed and the people must be adequately compensated.

Private lands owned by individuals or firms: These are strictly private lands in the sense that they are owned by individuals. The individuals can be persons or private firms.

In Cambodia, there are numbers of forest tenure. Thus, this thesis examined the various land tenure arrangements in Cambodia and grouped them under these four tenure regimes. The thesis similarly examined the land tenure arrangements under the two REDD pilot projects with an aim of classifying them under these categories. This then aided in establishing the relation between ordinary communities and the land and what activities they will be allowed under the two projects. This analysis further helped in establishing of the tenural arrangement under the two recognizes community's access to their lands which is a key determinant of community's support for any project.

To assess how the tenure arrangements have been affected the local communities and whether they have been conferred use rights to the local communities, the following criteria developed by Cotula and Mayers (2009) and Davis *et al.* (2009) were employed.

A land tenure system that is non-discriminatory and provides clear rights over land and its associated values: Under this criterion, the thesis seeks to determine if the tenure arrangements under the two projects allow communities access to the resources therein. Additionally, it determined whether these tenural arrangements details who have the rights over the project land and resources.

Legal recognition of indigenous people rights to land: Under here, the thesis examined if the tenure under the projects include or recognize the rights of indigenous and forest dependent people to their lands. Additionally, it examined if these are captured in legal documents / framework.

Carbon right defined and addressed: It is important that carbon rights are defined and clearly appropriated among the stakeholders. The clarity of carbon right is a key for an effective and equitable benefit sharing arrangement. For Cambodia, carbon right is a new concept that has just been introduced through the REDD projects. Thus, this thesis determined how carbon right will be appropriated among the stakeholders and whether this has been captured in legal document.

Mechanisms for resolving conflicts over tenure rights: As the projects evolve, disputes will arise and there will be need for a mechanism to resolve these disputes and appeal thereof. This thesis determined if any dispute resolution mechanism has been put in place and people who will be vested the authority to resolve the disputes.

Institutions and systems that uphold the rights of forest dependent people: Institutions play an important role in supporting forest dependent peoples' right. This thesis determined what kind of institutions and systems will be established to support the rights of forest dependent people.

2.2.2. Benefit Sharing and REDD

The REDD mechanism will generate revenues for people who protect forests. A mechanism is thus needed to define how these benefits will be or have been shared among the various stakeholders in a transparent and equitable manner. This thesis examined the mechanism put in place for benefit sharing under the two projects and explore whether it allows the benefits to reach the local and indigenous forest communities. Additionally, the thesis examined if the benefit sharing arrangement has been devised with the input of the local and indigenous communities and whether it has any legal backing.

2.2.3. Discourse Coalitions

Discourse refers to the dominant interpretive schemes that give meaning to social and physical phenomena. Discourse coalitions are thus operationalized in this thesis as grouping of actors who have the same interpretation or understanding on what REDD is and on how land tenure and benefit sharing should be arranged. This thesis specifically examined if there are people within or outside the two projects who have the same interpretation on REDD and how land tenure and benefit sharing should be organized. Of primary importance is whether the presence or lack thereof of these discourse coalitions influences the way land tenure and benefit sharing are organized.

2.2.4. Rules of the Game

In this thesis, rules of the game are operationalized as the formal or informal rules that define how people relate with their natural resources, particularly land and forests. Critical for the thesis is whether these rules allow communities to access or jointly own forest with government or private developers such as architects of the two projects under the study. Additionally, the thesis examined if there are provisions for sharing of benefits from forest and allied resources between government, project developers and local communities. It examined if these provisions influence the way tenure and benefit sharing have arranged under the two REDD pilot projects.

The study conceptualizes tenure rights and benefit sharing with the two REDD pilot projects. Then the discourse coalitions and rules of the game theories are applied to explain the tenure rights and benefit sharing arrangements of the two projects (Figure 5).

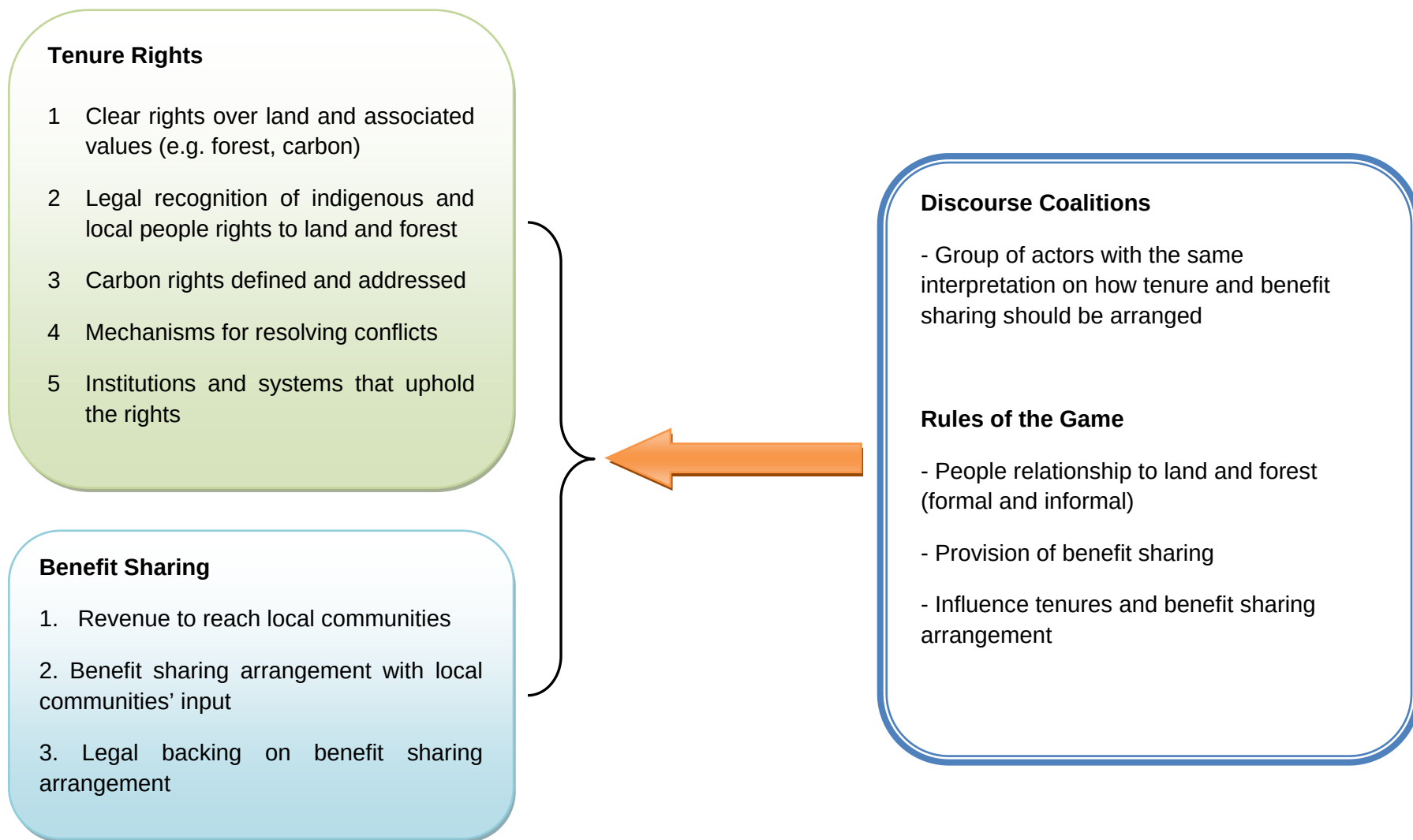


Figure 5 Conceptual Framework

CHAPTER 3

3.0. Research Methodology

This chapter presents the methodology adopted for this study. It further considers the analysis of the stakeholders considered for the data collection and the three different methods employed for data collection.

3.1. Research Strategy

The study is founded on the combination of quantitative empirical analysis with qualitative investigation. Scientific publications and grey literatures on climate change, REDD, tenure rights, benefit sharing, and so on were reviewed. Additionally, I reviewed the REDD Plan Idea Note (R-PIN) of Cambodia, submitted to the Forest Carbon Partnership Facility (FCPF). The R-PIN offered the understanding of tenure rights and benefit sharing issues of Cambodia. However, I was able to access to the Project Design Document (PDD) of the Community Forestry Carbon Offset Project in Oddar Meanchey province while the PDD of the Siema Protection Forest is still under development. The PDD provided specific information of tenure rights and benefit sharing arrangements in the project. In addition, I also analyzed the National Development Goals Paper, the National Development Strategy Paper and the National Forestry Program Paper, the Forestry/Land Law and general literatures on land and forest tenures.

3.1.1. Selection of Research Location

Besides the fact that I come from Cambodia, there are number of reasons why I chose Cambodia for this study. First, Cambodia is considered a potential country for implementing REDD initiative due to its high deforestation rate. Second, there are two REDD demonstration projects which are being implemented in Cambodia which would provide enough data for examination of the problems under the study. In addition, some more demonstration projects are being proposed in the country. Third, Cambodia has been officially admitted to join the FCPF and the UN-REDD programme. Finally, the concept of REDD is new to Cambodia and not much research has been done yet, therefore, the finding of this study may contribute to the ongoing formulation of the national REDD strategy of Cambodia.

3.1.2. Stakeholder Analysis

Stakeholder Analysis (SA) is an approach and procedure for understanding of a system by means of identifying the key actors or stakeholders in the system, and assessing their interest in that particular system (Grimble and Chan, 1995). In this study, stakeholder analysis was done in order to explore the perspectives of stakeholder about REDD, tenure rights and benefit sharing arrangements of the two projects in Cambodia. By stakeholders, the study referred to any group of people who share an interest or stake in REDD, tenure rights and benefit sharing issues. Key stakeholders were identified by using purposive sampling and snowball sampling.

The respondents are classified into five groups: government, donor community, civil society, community and private sector. By government, this study refers to the respondents from the Forestry Administration and the Ministry of Environment in

Cambodia. By donor community, this study refers to the respondents from International Nongovernmental Organizations (INGOs) and donors from in and outside the two REDD pilot projects in Cambodia. The civil society refers to the association and local NGOs (e.g. The Association of Buddhists for the Environment, the Children's Development Association and so forth). The community refers to respondents from the Community Forestry Federation that represents local communities. All together, 19 respondents (Appendix A) were interviewed. The distribution of the respondents were as shown in figure 6.

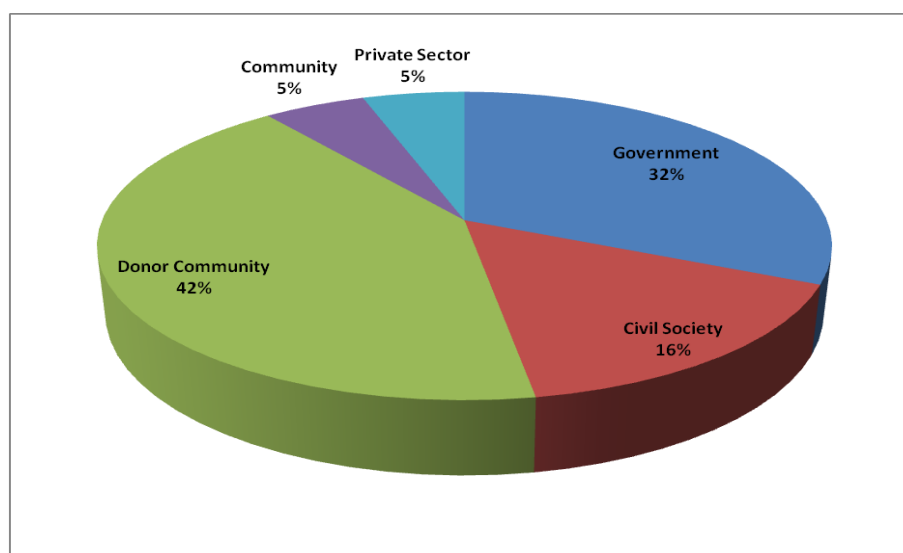


Figure 6 Distribution of Respondents by Stakeholder Groups

3.1.3. Selection of Respondents

Four organizations were strategically selected and actors within these organizations then selected for interviews. The organizations are the Forestry Administration, the Pact-Cambodia, the Wildlife Conservation Society (WCS) and the Technical Working Group on Forest and Environment (TWG F&E). The Forestry Administration were selected because it is both the lead agency in charge of forestry sector and the agency responsible for REDD in Cambodia. The Pact-Cambodia and the WCS are the international NGOs who are working on the REDD demonstration projects in Cambodia. The TWG F&E is actively involved in REDD work in Cambodia and is responsible for preparing the national REDD strategy, including policies on the distribution of financial flows from REDD projects (Sokhun *et al.*, 2009). The TWG F&E is the government-donor coordination initiative for supporting and strengthening development activities within forestry and environment, especially between the Forestry Administration (FA), the Ministry of Environment (MOE) and the donors. The key informants from these organizations were judgmentally selected and interviewed. Once interviewed these actors were asked to identify and forward requests to others within or outside their organizations who then contacted and interviewed.

Additionally, respondents from outside the two REDD pilot projects were also selected for interview. Members comprising this group were drawn from the government agencies and NGOs. These were identified through networks. Initial suggestion of actors from the

NGOs and communities were sought from government officers. The goal of interviewing this latter group was to corroborate the findings from those involved in the project and to elicit people's understanding of REDD, tenure and benefit sharing arrangement under the two projects.

3.2. Method of Data Collection

3.2.1. The Telephone Interview

Qualitative data were collected from respondents by way of in-depth semi structured interviews. In in-depth semi structure interviews, pre-determined set of questions are prepared in advance and administered to a target group (Kumar, 2005). Initial contacts were made with key informants from the four organizations via E-mail. The E-mail outlined the purposes of the study and identified myself as a university researcher. Respondents were assured of strict confidentiality of the information given. Interviews were then conducted by telephone and the conversations were also recorded during each interview. The interview questions were constructed relatively short and direct to the objectives of the study.

The interview encompassed a range of questions (Appendix C) relating to the objective of the study. These issues were classified under five themes:

Tenure arrangement under the REDD pilot projects: In this theme, the respondents were asked to describe how forest and land tenure were arranged in the projects and why they were arranged in that manner. The respondents were also asked to identify impacts of tenure arrangement over local and indigenous peoples' use and access rights. In addition, respondents were asked whether customary / traditional land rights have been legally institutionalized.

Carbon right under the REDD pilot projects: The informants were asked about how carbon rights have been distributed among stakeholders especially the local and indigenous peoples. Issues to do with how the carbon rights among the stakeholders were institutionalized were also addressed under this theme.

Benefit sharing under the REDD pilot projects: In this section, questions determined the benefit sharing mechanism put in place and how revenues will be channeled down to the local level. Opinions of respondents on the capacity of the benefit sharing mechanism to ensure equity and transparency were also sought.

Mechanisms for resolving conflicts over tenure rights: Under this theme, respondents were asked to identify and elaborate the mechanism proposed for dispute resolutions and appeals. Their opinions on the effectiveness of the mechanism were also sought.

Discourse coalitions and rules of the game: under here respondents were asked about their view and understanding of REDD. They were also asked to elaborate on their view of how land and forest tenure should be arranged, REDD benefits shared and carbon rights allocated. In addition, respondents were asked whether the manner in which land tenure and benefits sharing arranged is a common way of organizing these

issues in Cambodia. Furthermore, respondents from outside the two REDD pilot projects were also contacted for interview to corroborate the finding.

3.3. Data Analysis

The information collected was organized into themes and presented using frequencies and other descriptive statistics. Because this study is a case study design, statistical analysis was not performed. The tenure arrangement envisaged for each project was put into the four land tenure categories: public land owned by government, public lands designated for use by communities and indigenous peoples, private lands owned by communities or indigenous peoples and private lands owned by individuals or firms. The information on discourses and rules of the game were condensed and coded into themes to facilitate an enhanced understanding of the distinctions between them.

3.4. Validity and Reliability

Validity refers to the ability of an instrument to measure what it is designed to measure in the research (Kumar, 2005). In addition, it depends on the logical link between questions (to be asked in the interview) and objectives (Ibid.). As a result, questions were developed by taking into account the concepts from theoretical framework and the research objectives. In addition, two types of method: document analysis and interview were applied in this study. The interviews were conducted with various actor/experts from four stakeholder groups: government, civil society, donor community, community and private sector from inside and outside the two REDD pilot projects. Furthermore, content analysis of different texts was also done. This referred to triangulation method of sources which is a key strategy for enhancing validity of a case study (de Vaus, 2001; Yin, 2003; Silverman, 2006).

Reliability refers to the ability to get similar findings if similar study is repeated using similar research method to either the same groups of informants or another (Punch 2005; Kumar, 2005). In qualitative research, the reliability of the findings can be biased due to interviewer bias or response bias (Saunders *et al.*, 2003). These biases can be eliminated using member validation. Thus, the follow up interviews were conducted further to improve the validity of the study.

3.5. Limitation of the Study

The case study was conducted based on document analysis and telephone interviews with the key respondents. I decided to apply telephone interview because I was not able to travel to Cambodia. However, the telephone interviews probably created confidentiality environment for the respondents to express their personal opinions on political issue concerning the two REDD pilot projects in Cambodia. Based on my personal work experiences with private sectors, NGOs and government agencies in Cambodia, it gave me an advantage to understand the issues that are encountering with the REDD initiative in Cambodia.

Furthermore, I knew some of my colleagues in Cambodia who can direct me to the right respondents for this study. This may have probably reduced data gaps and biases. Since REDD initiative is quickly gaining momentum in Cambodia, I continually kept in contact with some important key respondents in order to follow the recent development

of the REDD initiative in Cambodia. By doing this, it allowed me to cross checked with multiple sources and in some cases re-interviewed relevant respondents to keep update information. However, the observation method cannot be applied because the study was conducted via telephone interview.

The information of the Community Forestry Carbon Offset Project in Oddar Meanchey province are largely dependent on the articles from Poffenberger. The biases in these articles may influence the analysis provided here and should therefore be seen in this light.

CHAPTER 4

4.0. The Forestry Sector of Cambodia and Land Tenure Systems

Cambodia's forests play an important role as biodiversity hotspots both nationally and internationally. This chapter reviews the forestry sector in Cambodia and the forest policy environment. It then proceeds to discuss the land and forest tenure systems in the country and compares these land and forest tenure regimes with Sunderlin's categorization.

4.1. National and International Significance of Cambodia's Forests

The Kingdom of Cambodia is located in Southeast Asia between latitude 10° to 15° North and longitude 102° to 108° East. The country covers an area of 181 035 km² and it is bordered by Laos to the northeast, Vietnam to the east and southeast, the Gulf of Thailand to the southwest, and Thailand to the west and north-west. In the rough form of a rectangle, it is about 500 km long by 400 km wide. The population of Cambodia stands at 14.6 million with about 80% living in rural areas (World Bank, 2010). Ethnically the population consists of about 90% Khmer, 5% of Vietnamese, 1% of Chinese, and 4% other (CIA, 2009). The rural populations are engaged in agriculture, fishing, forest harvesting for their livelihoods. Cambodia is one of the countries with the highest populations to forest area ratios (Heng and Scheyvens, 2007).

Cambodia is the country with the highest forest cover in the Mekong basin with over 10.4 million ha (FAO, 2005), of which 5.5 million ha are tropical closed forests (Chomitz, 2006). With a large number of key habitats and high species diversity, conservation of Cambodian forests is of international significance (ICEM, 2003). Various types of forests exist in Cambodia including mangroves, flooded forests, coniferous forests, dry deciduous and moist deciduous rainforests or moist evergreen forests, moist mountain forests and dwarf evergreen forests. However, evergreen and deciduous forest formations are predominant. Forests offer wide ranges of habitats for plants, animals, and microorganisms. Cambodia is considered as a biodiversity hot spot due to the richness of species in its tropical region (Sodhi *et al.*, 2010). According to the World Conservation Monitoring Centre (2000), Cambodia has 8 260 of plant species in which 10% are endemic. Cambodian coastal wetlands also form a diverse ecosystem and are reported to contain at least 74 tree species. However, the country is believed to have over 130 mammals, more than 500 bird species, and about 300 freshwater species (ADB, 2000). Cambodian government estimates that 125 species are endangered. Twenty-eight mammals, 26 birds, 15 reptiles, three amphibians and 32 plants are listed as critically endangered or vulnerable on the IUCN red list (ITTO, 2005). In addition, the marine biodiversity is an extraordinary resource of Cambodia. The Mekong River and the Tonle Sap, were designated as a UNESCO Biosphere Reserve in 1997, form a huge chunk of Cambodian's landscapes (UNDP, 2008).

Over the past decade, forest resources have been depleted due to timber mining to fuel economic growth in the country (De Lopez, 2001). Most deforestation occurred in four north-west provinces, namely: Oddar Meanchhey, Banteay Meanchhey, Siem Reap and Pailin (Sokhun *et al.*, 2009). The major causes of deforestation in Cambodia are illegal

logging, forestland conversion, heavy reliance on fuel wood for energy (84% of population rely on fuel wood), lack of capacity for sustainable forest management and financial incentive for forest conservation (Ibid.). In addition, Economic Land Concessions (ELCs) and insecure land tenure are also among the major drivers of deforestation in the country (NGO Forum, 2006; Fox et al, 2008; Poffenberger, 2009; Van Beukering, 2009).

4.2. Policies and Legislations Governing Cambodian Forestry

There are several national and international policies that governing forests in Cambodia. The national policies that guide forest management include the Cambodia United National Development Goals, the Rectangular Strategy, the National Forest Programme, the National Strategic Development Plan, the Forestry Law, the 2003 Sub Decree on Community Forestry Management, the Law on Environmental Protection and Natural Resource Management, the Law on Protected Areas, the National Constitution and the Land Law.

The Cambodia United Nation Development Goals (2001) have emphasized on the improvement of forestry and natural resource management in the country. The government committed to maintain total forest coverage at 60% of land area by combating deforestation and forestland conversion (UNDG, 2001). To achieve these goals, the Rectangular Strategy (RS), economic policy agenda, was formulated in July 2004. Concerning forestry sector reform, the RS aims to ensure sustainable forest management, to protect biodiversity through protected area systems and to promote community forestry programs in the country.

The National Forest Programme aims not only to achieve sustainable forest management (SFM) but also to alleviate poverty in the country. Specifically, it identifies objectives and goals in developing and managing forests to improve livelihoods, environmental services and overall economic development. More importantly, it provides management and exploitation of forests for the benefit of government entities, local communities, private sector, civil society, development partners and individuals (TWG F&E, 2010).

The National Strategic Development Plan supports sustainable use of all natural resources of the country, including bio-diversity, are not only to conserve the unique natural heritages but also to enhance environmental sustainability and to contribute to sustainable economic growth, poverty reduction and improvements in the lives of rural communities.

The Forestry Law, promulgated on 30 July 2002, defines the management framework, harvesting, use, development, conservation, and protection of the forest in Cambodia. It aims to ensure sustainable forest management and customary user rights of forest resources for indigenous and local communities. The Article 11 of Forestry Law states:

'The Ministry of Agriculture, Forestry and Fisheries (MAFF) shall classify, register and set boundaries for all forests within the Permanent Forest Estates. In carrying out these activities, Ministry of Agriculture, Forestry and Fisheries shall

coordinate with concerned local communities, concerned authorities and the Ministry of Land Management Urban Planning and Construction (MLMUPC) in order to assist in registration of land property of indigenous community and preparation of the national land use map' (Reference Article 11 of Forestry Law).

In addition to the Forestry Law, the National Community Forestry Framework has been developed to facilitate establishment of community forests in the country. The 2003 Sub Decree on Community Forestry Management (SCFM) is a fundamental framework for official establishment and management of community forests. The SCFM guarantees the rights of communities to apply for and manage community forests in areas classified as Production Forests. In addition, it aims to support the Cambodian government's policies of poverty reduction and decentralization through community based forest management (Sokhun *et al.*, 2006).

The Law on Environmental Protection and Natural Resource Management was approved in 1996. It aims to ensure sustainable conservation, development, management, and use of the natural resources of the country. The Law also complies with the Article 59 of the National Constitution that concern on the protection of human health, environment and natural resources.

The Law on Protected Areas was promulgated in 2008. The objects of the law are to manage and effectively implement the conservation of biological resources and the sustainable use of natural resources in the Protected Areas. In addition, it determines the responsibilities and participation of local communities, indigenous ethnic minorities, and the public. There are 82 Community Protected Areas under the jurisdiction and responsibilities of Ministry of Environment (Somaly *et al.*, 2009). The Law also takes into account the implementation of regional and international conventions, protocols, and agreements on the protection of biodiversity and ecosystems of the Protected Areas.

Article 32 of the Constitution of Cambodia states that the '*Khmer citizens³ shall be equal before the law and shall enjoy the same rights, freedom and duties, regardless of their race, color, sex, language, beliefs, religions, political tendencies, birth origin, social status, resources and any position*'. The Constitution recognizes equal legal status of all citizens, including highland indigenous minorities (Simbolon, 2009).

The 2001 Land Law recognizes the rights of indigenous ethnic minority groups to their traditional residential and agricultural lands. In addition, the Policy for Indigenous Peoples' Development was adopted in April 2009, recognizing the rights of the indigenous peoples to their cultures, land, and natural resources. The lands can be registered under communal title though the registration of these lands is still in the pilot phase. However, a few communities such as indigenous communities in Keo Seima have been registered.

³ The Khmer citizens included Cambodian ethnic minorities (International Centre for Ethnic Studies and Minority Rights Group International, 1995).

Cambodia is also a signatory to several environmental and other related international agreements including the ILO Convention, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Convention on Biological Diversity (CBD), the Convention to Combat Desertification and Drought (CCD), the RAMSAR Convention, the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) etc.

4.3. Land Tenure systems in Cambodia

Historical and political factors have influenced land tenure regime in Cambodia for the last three decades. In 1975, all people were forced to move out from the cities to the countryside for rice cultivation when the Khmer Rouge regime occupied the country (Khemro and Payne, 2004). During that period, all land and houses were taken over by the government and all kinds of private ownership were completely abolished. All types of land registration records, cadastral maps and titles were entirely destroyed (De Lopez, 2002). Until early 1979, the genocidal Khmer Rouge regime (also known as Pol Pot regime) was defeated but most property owners had been killed or had died between 1975 and 1979. This left most lands and buildings vacant so people were allowed to occupy these properties on a “first come first served” basis (Khemro and Payne, 2004). Until 1989, the government allowed people to occupy the properties and have the right to sell and buy them in the land and housing market. After the signing of the 1991 Paris Peace Agreement under the aegis of the United Nations, Cambodia started to restore the rule of law and rebuild governing institutions with the support of the international community (De Lopez, 2002). In 1992, the first general election was held in the country with the support of the United Nations. In the late 1992, the Land Law was promulgated which rejected all property rights that existed before 1979. In 2001, the government repealed the 1992 Land Law and promulgated the 2001 Land Law.

The 2001 Land Law classifies the various types of property and ownership rights of the kingdom into three types: **State Public Property, State Private Property and Private property** (Figure 7). According to the Land Law (Articles 15 & 16), State Public Property is land held by the State, which carries a public interest use. State Public Property includes properties of a natural origin, such as the permanent forest reserve, navigable or floatable waterways, lakes, seashores, etc. State Public Property cannot be sold or transferred to other legal entities, though it may be subject to rights of occupancy or use that are strictly temporary in nature, such as a logging concession in the Permanent Forest Reserve (see below).

State Private Property (Article 17) is land that is owned by the state or public entities that do not have a public interest use (i.e. owned by the state or public entity, but does not fit the definition of State Public Property as mentioned above). In addition, State Private Property can be described as excess or idle land that is held by the State or public entities. The main difference between State Private Property and State Public Property is that State Private Property may actually be sold or transferred to other (legal) entities, such as social or economic land concessions. Private property is property within the Kingdom of Cambodia that is owned by natural persons or legal entities other than the state or public entities. Ownership of private property takes various forms; they can be individually owned, communally owned or owned by business organizations or

associations. Normally, these privately owned or communally owned lands are only recognized under traditional systems. The next section will describe the forest tenure regimes in Cambodia.

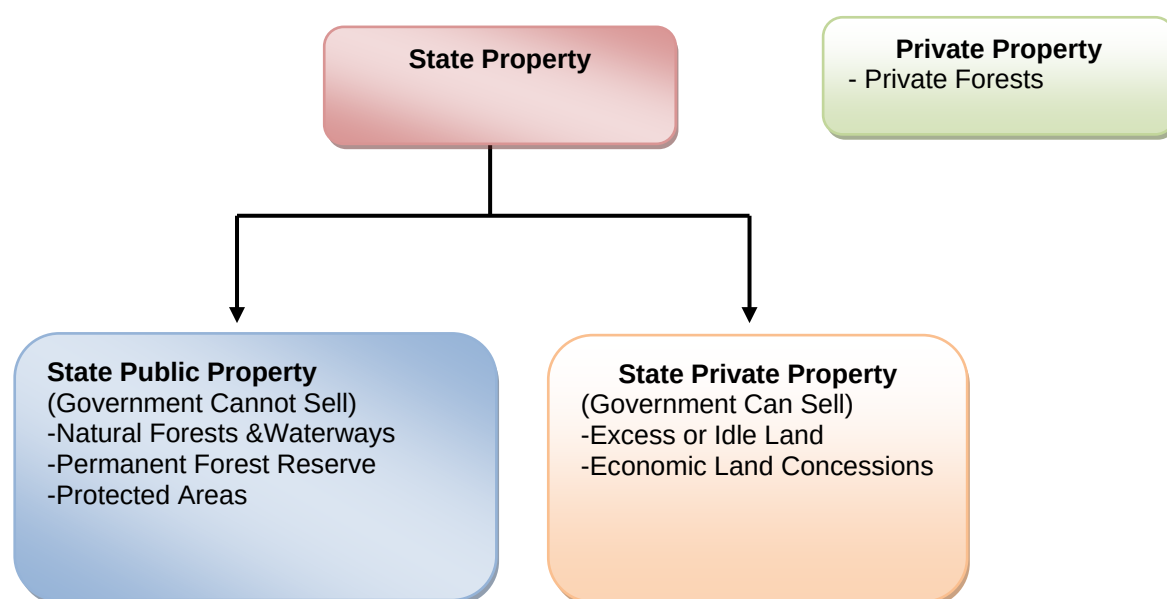


Figure 7 Property Regimes in Cambodia

4.4. Forest tenure systems in Cambodia

Cambodian forest estates are not clearly demarcated (FAO, 2005). According to the Forestry Law (2002), all forests, referred to as Permanent Forest Estate, belong to the state. Under this law, Permanent Forest Estates are divided into three categories: **Permanent Forest Reserves, Private Forests, and Protected Areas** (Figure 8).

4.4.1. Permanent Forest Reserves

Permanent Forest Reserves are state public property that fall under the jurisdiction of the Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fishery (MAFF). According to the Forestry Law, the Permanent Forest Estate is all forested land within the Kingdom of Cambodia. Generally, all categories of forests fall within the definition of Permanent Forest Reserves including forests that occur on private lands, flooded forests, wetland forests and mangrove forests. However, while all these forests are under the jurisdiction of the FA, wetland and mangrove forests are under the jurisdiction of the Department of Fishery of the MAFF. Permanent Forest Reserves consist of three sub-categories: **Production Forests, Protection Forests and Conversion Forests**.

4.4.1.1. Production Forests

Production Forests are forests that are managed primarily for the sustainable production of timber and non-timber forest products. In these forests, protection is only a secondary objective. As shown in Figure 8, Production Forests include **Forest Concessions and Community Forests**. Areas under Production Forests include those forests where harvesting is permitted (e.g. Annual Bidding Coupe for domestic wood supply), degraded forests, forests to be rehabilitated, forests reserved for regeneration or plantation

establishment, and reforested areas. Community forests are forests that are managed by the local communities. Below, a description of forest concessions and community forests is detailed.

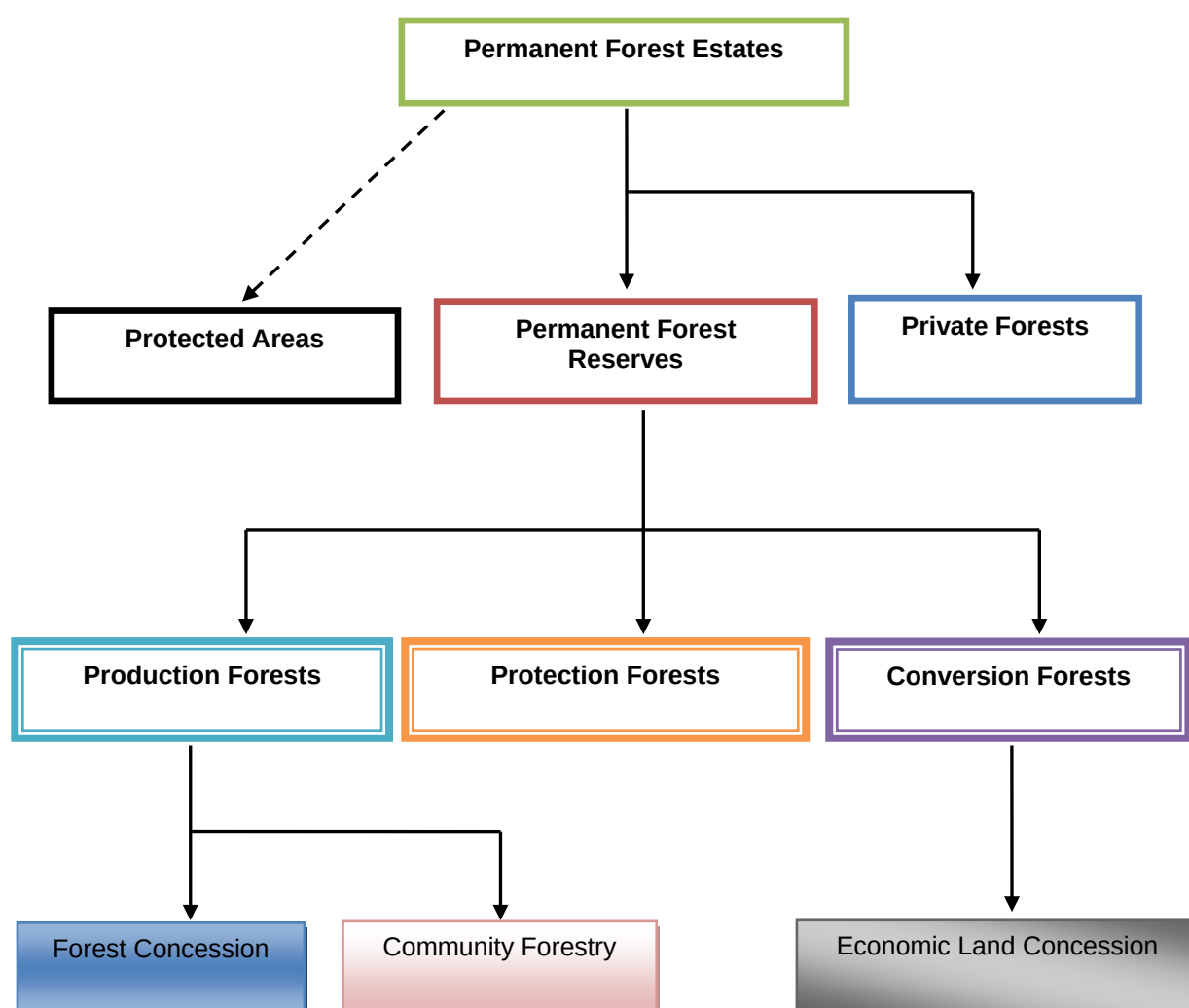


Figure 8 Forest Tenure Regimes in Cambodia

Upon the request, the Royal Government of Cambodia may grant an area of production forest, not under use, to a forest concession through public bidding consistent with the National Forest Management Plan and after consultation with concerned ministries, local authorities and communities (Forestry Law, 2002).

Community forests are forests owned by the state but have been allocated to communities under a 15-year agreement. These forests are managed by the local communities but with the technical support from the FA. The managements of these forests is also financially supported several international NGOs. The primary goal of community forests is to protect and rehabilitate forests and to enhance sustainable use of forest resources of the communities.

4.4.1.2. Protection Forests

Protection Forests are those forests that are managed primarily for the protection of forest ecosystems and the (natural) resources. Forest areas with the primary function of protecting ecosystems include catchment areas, biodiversity hotspots, wildlife habitat, fish sanctuaries, and cultural monuments which among others. Protection forests cover 25% of country and encompass the Seima Protection Forest, the Srepok Protection Forest among other areas. In addition, one of the REDD pilot projects in Cambodia is being implemented in the Seima Protection Forest. In Protection Forests, local communities have customary use rights to collect forest products and by-products provided these are carried out with minor impacts on forests.

4.4.1.3. Conversion Forests

Conversion Forests are Permanent Forest Reserves that do not fall under Production or Protection Forests. They include lands set aside for other development purposes or those that remain idle. They comprise mainly of secondary vegetation and have not yet been designated for use by any sector. These forests usually remain unutilized until when the government decides to use and or develop them for another purpose. Normally, the government uses these lands for Economic Land Concessions (see below).

Economic Land Concessions (ELCs) have recently emerged as a forest tenure system under the Conversion Forests sub-category. ELCs involve large-scale conversion of degraded forestlands to agro-industrial crops. Some 6% of country's land are allocated for ELCs throughout the country. The MAFF permits agro-industrial lands only on already degraded forestlands in order to develop country's economy and to contribute to rural poverty alleviation (FA, 2008). Economic Land Concessions are meant to encourage both domestic and international investors to gain access of state land for forestry and agro-industrial plantation. The objectives of this scheme are to increase employments in rural area, generate state revenues and develop agricultural sector (MAFF, 2007). The state incomes from economic land concession can be generated via land rental charges and taxes. The maximum period of an economic land concession is limited to 99 years (ICEM, 2003). Generally, most concession areas are used for commercial/industrial forestry and agriculture, mining, oil exploration, fishing and tourism (Guttal, 2006). According to Barney (2007), most of the land concessions are targeted for rubber, oil palm and cashew nuts growing. A single investor could be allocated an area of over 10 000 ha according to the Land Law.

4.4.2. Private Forests

Private Forests are those that are individually owned. These forests are managed by the owners for a range of benefits. The owners have the freewill to utilize these forests the way they deem fit.

4.4.3. Protected Areas

Protected Areas fall under the jurisdiction of Ministry of Environment (MOE) pursuant to the Environmental Protection and Natural Resource Management Law (EPNRML). The EPNRML states that Royal Decree shall determine the natural protected areas including Natural Parks, Wildlife Sanctuaries, Protected Landscapes Areas and Multiple Use

Management Areas. Protected areas are public state property and they are managed mainly for biodiversity conservation and cover 3 098 000 ha (Sokhun *et al.*, 2009). The protected areas have a long history in Cambodia. They were introduced to not only manage and conserve ecosystems but also to protect cultural values and landscapes.

4.5. Forest Tenure in Cambodia vs the Sunderlin Classification

The forest tenure systems in Cambodia can be classified based on the Sunderlin system: public lands administered by governments, public lands designated for use by local and indigenous communities, private lands owned by communities and indigenous communities and private lands owned by individuals or firms. Based on these forest tenure categories, the Production Forests in Cambodia fall under the public land administered by the government, except the community forestry tenure that is considered as the public lands designated for use by communities and indigenous peoples. The Protection Forests and all their sub-categories are the form of public lands administrated by the government. Similarly, the Conversion Forests are also considered as the public lands administrated by the government. In addition, the Private Forests fall under the private lands owned by individuals or firms. Finally, the Protect Areas are classified as public lands administered by the government. Table 1 classifies forest tenure systems in Cambodia based on the Sunderlin system.

In conclusion, all forestlands in Cambodia are publicly owned. However, local and indigenous communities are granted right to use forest resources because they are considered as common pool resources. Various tenure regimes exist in Cambodia, both public and private. The state confers responsibility of forestlands to different government agencies. The Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fishery governs all forestlands in Cambodia, except the Protected Areas which fall under the jurisdiction of the Ministry of Environment. This situation sometimes causes institutional conflicts.

Table 1 Tenure analysis based on Sunderlin's categories

Tenures in Cambodia		Public		Private	
		Administered by government	Designated for use by communities and indigenous peoples	Owned by communities and indigenous peoples	Owned by individuals and firms
Production Forests	Timber & NTFP Production	X			
	Degraded Forest	X			
	Regeneration Forest	X			
	State Plantation Forest	X			
	Community Forestry		X		
	Forest Concession	X			
Protection Forests	Forest Ecosystem Protection	X			
	Watershed Protection	X			
	Biodiversity	X			
	Cultural Heritage	X			
	Tourism	X			
	Religious Forest	X			
Conversion Forests	Idle State Forestland	X			
	Economic Land Concessions	X			
Private Forests					X
Protected Areas		X			

CHAPTER 5

5.0. Tenure Systems and Benefit Sharing Arrangements under the Two REDD Pilot Projects

Many REDD pilot projects have been initiated in which more than 80% of the pilot projects are in the tropical region. The main goals of establishing REDD pilot projects are to generate lessons about local governance, management, monitoring and local payment systems (Skutsch and McCall, 2010). In Cambodia, two REDD pilot projects are being implemented in order to explore the opportunities and constraints for REDD mechanism. These are the Community Forestry Carbon Offset Project and the Seima Protection Forest Project. This chapter examines tenure rights and benefit sharing arrangements under the two projects. The last part of the chapter uses existing rules governing forestry in Cambodia and discourses of the people involved in these projects to explain tenure rights and benefit sharing arrangements under the two projects.

5.1. Community Forestry Carbon Offset Project in Oddar Meanchey Province

5.1.1. Background

Oddar Meanchey province shares a 224 km border with Thailand, and within Cambodia it borders Siem Reap, Banteay Meanchey and Preah Vihear provinces (Bradley, 2009). This province is one of the remaining strongholds of the post-1979 Khmer Rouge (KR) guerilla force and was formally established in 1999. The province's 6,158 square kilometers are divided into five districts: Samraong, Banteay Ampil, Chong Kale, Anlong Veng and Trapeang Prasat. Originally, 75% of the project area was covered by evergreen, semi-evergreen and deciduous forests. However, due to high demand for timber and land for agriculture and settlement, these forests have dwindled with an annual deforestation rate of up to 2.1% (Poffenberger *et al.*, 2009). Because of the high deforestation rate, the area was selected for the Community Forestry Carbon Offset Project.

The Community Forestry Carbon Offset Project (CFCOP) involves thirteen community forestry sites located in the Northwestern part of Oddar Meanchey Province (Figure 9). Originally initiated by the Community Forestry International (CFI), the project aims to protect 60 000 ha of forest and thereby enhance storage and sequestration of carbon (Bradley, 2009). The CFI is a California-based NGO dedicated to protecting the world's forests and the rights of the people who live near and depend upon them for their livelihoods. The project has a target goal of sequestering some 7.1 million tons over the next 30 years. The primary goal of this project is to successfully enhance storage and sequestration of carbon in the natural forests of northwest Cambodia under emerging REDD initiative and to assess a climate-related payment mechanism for forest conservation. The secondary goals include supporting the implementation of the national community forestry program, securing long-term tenure rights for forest-dependent communities, responding to rural livelihood needs, conserving biodiversity, and supporting hydrological regimes (Poffenberger *et al.*, 2009).

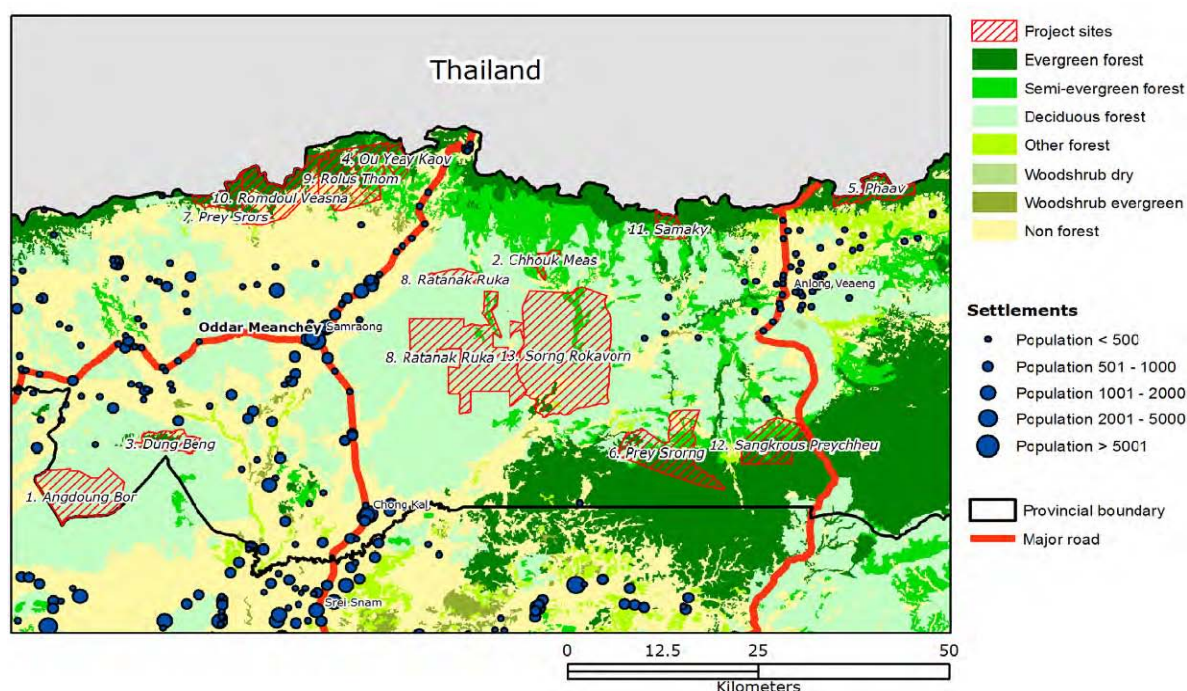


Figure 9 Map of Community Forestry Carbon project sites in Oddar Meanchey Province (Poffenberger, 2009)

The project was approved by the Forestry Administration (FA) in November 2007 (Poffenberger, 2009) and was officially endorsed by the Prime Minister of Cambodia under Decision no. 699 of May 26, 2008 (Sokhun *et al.*, 2009). Recently due to the withdrawal of the Community Forestry International (CFI) from Cambodia, the project has been transferred to the Pact (Interview, 7). The Pact is international NGO that assists local communities to empower themselves through the introduction of effective governance and responsible public and private institutions. The Pact is focusing mainly on governance improvement and natural resources management. The Danish International Development Agency (Daninda), the UK Department for International Development (DFID), the New Zealand Agency for International Development (NZAID) and the Clinton Climate Initiative (CCI) are the main funders for this project. In addition, the CCI works closely with the national government in order to support the validation process of the project. The project partners included the Terra Global Capital (TGC), a San Francisco-based carbon development company, and the local NGOs such as the Children's Development Association (CDA), the Monks Community Forestry Association (MCF), as well as the local authorities in Oddar Meanchey province. The CDA is a local NGO based in Oddar Meanchey province that has been implementing community forestry projects since 2002. The organization has also contributed to raise awareness of local communities on community forestry program, climate change, and REDD concept. The MCF has been formed by a visionary monk in Oddar Meanchey province to support the forest protection activities by coordinating closely with local communities in the project.

The project has been submitted to the Voluntary Carbon Standard (VCS) and the Climate Community Biodiversity Alliance (CCBA) for validation (Bradley, 2009). The VCS is a quality standard for voluntary carbon offset industry (projects developer, large offset buyer, verifiers, project consultation). However, the VCS does not require projects to have additional environmental or social benefits (Kollmuss *et al.*, 2008). As a result, the VCS also encourages the use of other standards to qualify co-benefits (environmental and social benefits). To qualify co-benefit of the project, the CCBA was taken into account. The CCBA is a project design standard and offers rules and guidance for project design and development. It concerns on community and biodiversity benefits and it does not verify quantified carbon offsets for projects (Kollmuss *et al.*, 2008).

5.1.2. Land and Forest Tenures under the Project

According to the interviews, forestlands belong to the Forestry Administration (FA) of the Royal Government of Cambodia (RGC) but the communities are legally granted use and management rights in the project areas. Respondents from government agencies and donor communities stressed that the state ensures customary user rights of forest products and by-products for local communities and additionally, it does not required permit according to the Forestry Law of Cambodia. The traditional user rights include collection of dead wood, picking wild fruit, collecting bees' honeys, taking resin, and collecting other forest by-products. The local communities can also use timbers to build houses, stables for animals, fences and to make agricultural instruments. Respondents from the projects mentioned that to legitimize management rights of local communities, an agreement between the Communities and the FA has been made. The community access and use rights of forest resource in the project areas are allowed according to the 15-year agreement between the FA and the local Community Forestry Management Committee (CFMC) (Interview 2, 3, 5, 7, 10).

The CFMC is considered as the key local institution for upholding the rights of forest dependent people in the project. Community forestry members always elect the CFMC every 5 years and the formulation of the CFMC is facilitated by local authorities or commune councils as well as local FA. The forest resources in the project areas are granted for only household. Commercial uses are strictly forbidden. For example, local communities can collect fire, wild fruits and other non-timber forest products from these areas. The timber harvesting in the project areas is not forbidden but must be approved by the CFMC beforehand. However, the communities will maintain its customary rights to harvest timber for house building, fence construction and so on at a minimum level.

5.1.3. Carbon Rights

Like most countries, Cambodia did not have any policy or law to recognize ownership over forest carbon credits. In the Community Forestry Carbon Offset Project (CFCOP), carbon rights is not specifically defined but the Government Decision No. 699 seems to illustrate that the Forestry Administration of the Royal Government of Cambodia retains ownership on forest carbon credits and it also plays a role as the carbon credit seller for the project. The interviews with the respondents showed that carbon credits in the project are the government property. In addition, due to the government ownership over the land, it can be inferred that the government has the ownership over carbon credits of

the project (Interview 1, 7, 8, 10). However, in Cambodia there is not any legal document to specifically clarify the carbon credit ownership. To meet the international standards, it is important to ensure rights to carbon credits which generated from respective participants in the project. As a result, the Terra Global Capital (TGC) jointly developed forest carbon agreement with the Forestry Administration. According to Poffenberger *et al.* (2009), the agreement served four purposes:

- ❖ Establish the FA (as directed by the Prime Minister) as the legal seller of the credits under the Emission Reduction Purchase Agreement (ERPA)
- ❖ Define the responsibilities that the FA had to support the project and complete legal agreements with the communities and the implementing partners to ensure rights to carbon were secured and the responsibilities were enforceable
- ❖ Recognize the TGC as the carbon developer and marketer and define deliverables and terms for compensation
- ❖ Require the FA to share carbon benefits as defined in the Sar Chor Nor No. 699 or Government Decision No. 699 (Appendix B) and to create a mechanism to administer these benefits.

The Government Decision No. 699 states that revenues from carbon credit selling from the project will be used to maximize the benefits flow to local communities who are participating in the project. The Pact will responsible for identifying potential buyers and deal with the market issues. It should be noticed that due to the withdrawal of the CFI from Cambodia, all the responsible for the project has been transferred to the Pact. The interview with the stakeholders in the projects confirmed that Cambodia is expected to sell its carbon credits on the voluntary carbon market in 2010.

5.1.4. Benefit Sharing Arrangements

Because REDD implementation involved the protection of forest areas, it can offer many co-benefits including the protection of biodiversity, forest livelihoods, and forest derived ecosystem services (Dudley, 2010). For the Community Forestry Carbon Offset Project, the Community Forestry International (CFI), the Forestry Administration (FA) and the Technical Working Group (TWG) agreed that maximum benefits should reach the local communities. The benefits from the project could include: (1) secured land and forest tenures of local communities under national legal recognition and international agreement, (2) generated revenues that support community based forest management and rural community development, (3) empowered local communities to engage in multitiered agreements among forest dependent communities, national governments and international carbon market (Poffenberger and Smith-Hanssen, 2009).

As mentioned above in the section 5.1.2, tenure rights of local communities have been secured through 15-year stewardship rights. According to the interviews, the revenues from the project will be used for forest protection and restoration activities such as forest fire control, forest patrolling and project monitoring. These activities will also generate employment for the local communities. In addition, the communities want the revenues to be utilized for the community development including infrastructure development (e.g. road, health care center and school construction) and alternative livelihood projects (e.g. bee keeping project, microfinance etc). The development of processing and marketing

NTFPs and eco-tourism plan in the project will improve livelihood of the local communities. Due to the uncertainty of the global carbon market, the project intends to avoid raising high expectation among stakeholders on potential revenue to be flowed from the project (Interview 7, 10). The price of carbon credits on the voluntary market falls down dramatically because of the economic downturn. When the project was started, the price of carbon on the voluntary market was US\$5-US\$7 per ton (Bradley, 2009).

The Government Decision No. 699 states that the revenues from the project will be channeled through the TWG-F&E during the first five years. Based on the project design document, the Royal Government of Cambodia will officially recognize the Community Forestry Management Committees (CFMCs) in the project area under the national community forestry program, providing them with a 15-year renewable lease and a minimum 50% share of carbon net revenues to the local communities. The 50% share of net revenues was the agreement between the Forestry Administration and the Terra Global Capital (TGC) (Interview 4, 7, 9, 10). In Cambodia, there are many forest communities which have not been legalized so the REDD initiative is seen as the opportunity to legitimate and to secure tenure rights of these existing community forestry initiatives. The project intends to create a 30-year income stream that will enhance livelihoods of 10 000 households participating in the project and will also build their natural resource management capacity (Poffenberger, 2009).

However, the exact amount of incomes to be channeled down to the local communities remains unclear until the carbon credits are being sold in the voluntary carbon market. Furthermore, the communities have not demanded to know the specific payout from the project since their strong motivation is the ability to safeguard their forest as well as securing their tenure rights (Interview 2, 3, 7). The interview also indicated that the first priority for the communities is to secure their tenure rights over forests with legal support. Secondly, the communities are expecting to gain technical and financial support to carry out key protection and resource development activities.

According to the key informants in the projects, the operational mechanism of REDD benefit distribution is still in an early stage of development. The significant amount of revenues from the project will likely to flow in 2013 so the project design team and participating communities have enough time to develop the benefit-sharing strategy (Interview 7, 9). However, the proposed revenues flows of the project have been made (Figure 10) and more concrete plan for the revenue distribution will require broad consensus and approval by the project working group and possibly higher level of government. A reserve of 10-30% of revenues is set aside after each verification to reduce the possibility for under-delivery credits (Interview 9). The under-delivery may occur when the carbon credits in the project are over estimated. This reserve rate is assigned by the VCS validation officer that based on an assessment of under-delivery risk. The TGC estimates that a 20% rate will be set for the project and the credits will be deposited in the TZ1 registry in the New Zealand. The TZ1 registry is a key mechanism for tracking voluntary carbon transactions. It is one of the four registry service providers for the VCS that records the lifecycle of the credit and certificate from issuance to transfer to retirement (www.tz1market.com, accessed 04 June, 2010).

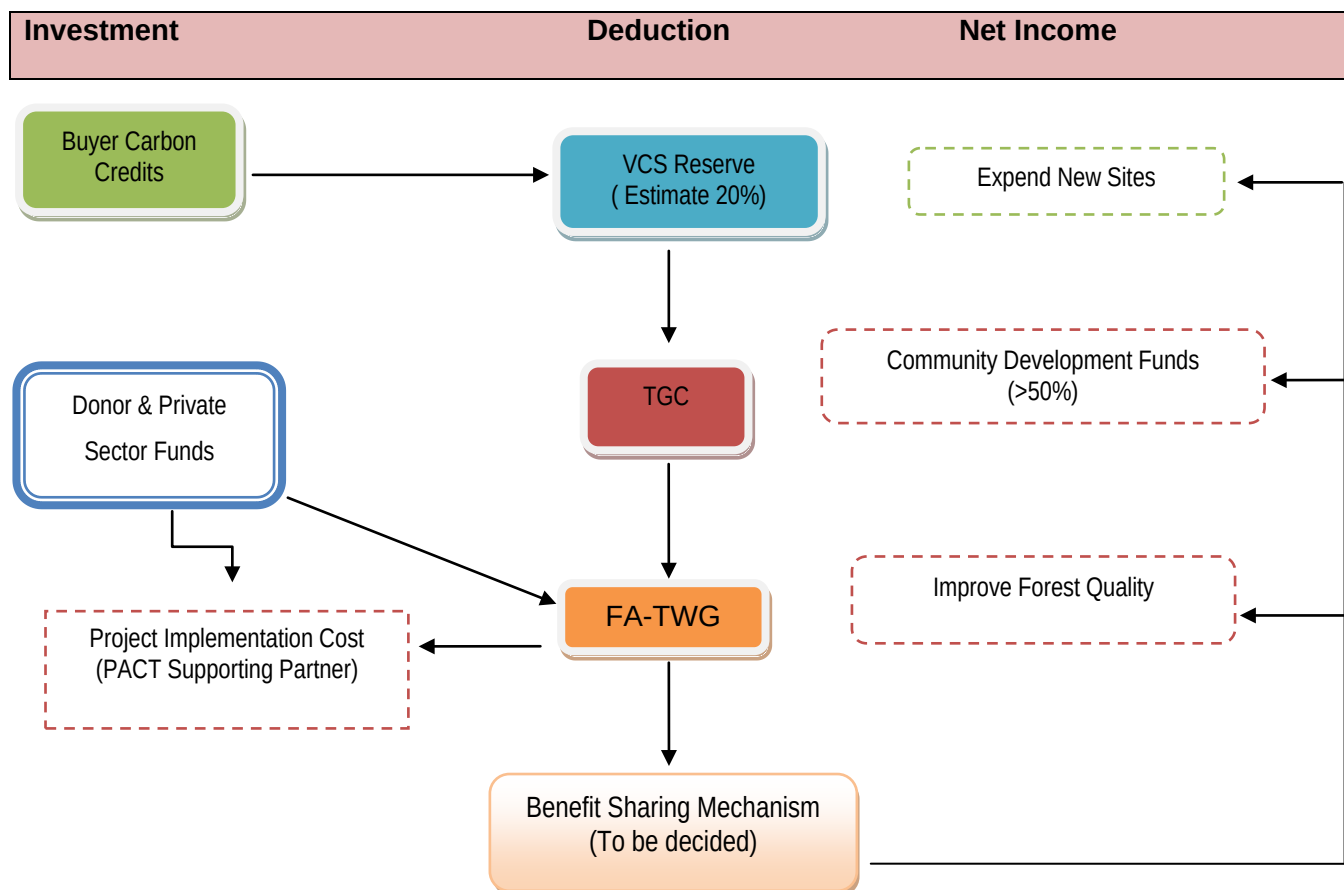


Figure 10 Proposed revenue flow of the project (Bradley, 2009)

In addition, the benefits from the project are not only for the local communities but also for the other stakeholders in the project. For instance, the Forestry Administration can increase its operation budget, improve forest protection and timber stocks, conserve biodiversity as well as reduce conflict in Oddar Meanchey province. The local government and NGOs can access to financial resources to implement provincial and district resource management plans. The Pact can increase experience in REDD project development and build up capacity of Community Forestry Groups and NGO partners. Furthermore, the revenues from this project allow the Pact to expand further REDD projects in Cambodia. Beside financial benefit, the Terra Global Capital (TGC) will be able to promote REDD projects with credible carbon accounting by establishing a new REDD methodology under the Voluntary Carbon Standard (VCS). The TGC was tasked to develop an accurate carbon stock estimation by applying remote sensing, geo statistic and Geographical Information System (GIS) technique. These measurement techniques fulfill the requirements of international standards by providing high degree of transparency and accuracy. Therefore, it allows buyers of land-based carbon offsets to monitor these assets efficiently. The project also demonstrated that the Pact and the government can work together to bring community based REDD project to the international market (Table 2).

Table 2 Stakeholder roles and benefits (www.pactcambodia.org)

Stakeholder	Tasks and Responsibilities	Benefits
Community Forestry Groups	Forest patrols, assisted natural regeneration (ANR), replanting, fire protection, forest management and livelihood plan development and implementation.	Employment – Forest restoration contracts, micro-finance institutions, water resource development, NTFP processing and marketing support, community-based ecotourism plan and activities.
Forestry Administration	Through the Government Decision No. 699 the FA has been appointed as the agency to sell forest carbon credits in Cambodia. The FA plays a leading role as the implementing agency in the development and management of the project.	Increased budget for FA operations in Oddar Meanchey, improved forest protection and timber stocks, better Biodiversity conservation, reduced conflict.
Local Government & NGOs	Guarantee tenure security of CF areas, law enforcement, coordinate concessions to avoid conflicts, coordinate meetings, development planning.	Development of provincial and district resource management plans with implementation budgets, funds for workshops and meetings.
Pact	Support to project implementation and oversight; building local capacity, initial management of programs, support for carbon development.	Increased experience in REDD project development, funds to expand REDD projects in Cambodia. Building capacity of CF groups and NGO partners.
Terra Global Capital	Carbon assessment, stakeholder benefit sharing facilitation, methodology development, design Project Document, negotiate with buyers, coordinate monitoring and verification.	Promote REDD projects with credible carbon accounting by establishing a new REDD methodology under the VCS (likely the first). Demonstrate by working with the government and Pact that highly valuable community based REDD projects can be successfully brought to market.

5.1.5. Conflict Resolution Mechanism

In Cambodia, many forestland areas have not been officially demarcated, leading to land conflicts all over the country. As a result, the project areas have been formally demarcated with the involvement of relevant stakeholders in order to avoid future conflicts. The study found that sometime conflicts arose among stakeholders within communities as well as the external groups, such as the military or economic land concessionaires. Under the collaboration between NGOs, local communities and the FA, many conflicts have been addressed at the local level while some serious disputes have been sent to the provincial court (Interview 2, 3, 7, 9, 10). For example, the case of forestland encroachment by military families has been brought to the provincial court. The conflict has been flared in the Community Forestry Carbon Offset Project sites due to the land encroachment of the military families. At least, there was five FA officials were injured in this land dispute. As a consequence, the military families were ordered to move to the new villages outside the project areas. The project areas have been ensured for this REDD project due to its high political support from the top that enable to solve conflict with the military. The interview with the key informants revealed that the project areas are situated close to the Cambodian-Thai border and the tension between

the two countries over the land surrounded the Preah Vihear temple has lead the Cambodian government to mobilize military personals to position along the border line near the project area.

5.2. Seima Protection Forest REDD Pilot Project in Mundulkiri province

5.2.1. Background

The Seima Biodiversity Conservation Areas (SBCA) was created in 2002 on the site of suspended logging concessions which covers over 305 000 ha in Mundulkiri province (Figure 11) but the core area for this REDD pilot project only accounted for 180 000 ha (Gately, 2009). The area is reported to experience deforestation of 0.5% per year that is lower than the national average (Ratanakoma, 2009). According to Pearson *et al.* (2008), the SBCA was previously classified as the production forest area which granted to the Sampling International, the Malaysian logging company, under a 25-year agreement in the mid 1990s. In 2002, the Royal Government of Cambodia (RGC) suspended all the logging operation in the kingdom (see e.g. Independent Forest Sector Review, 2004; ITTO, 2005; Forestry Administration, 2009) and some of the concession forest or production forest with high biological values can be transferred into protection forest according to the forestry law (FA, 2009).

In 2002, the SBCA was declared by the decree (Ministerial order) of the Ministry of Agriculture, Fishery and Forestry (MAFF) of the Royal Government of Cambodia (Pearson *et al.*, 2008; Pollard *et al.*, 2008). The Forestry Administration (FA) of the MAFF in the partnership with the Wildlife Conservation Society (WCS) manages the areas. This partnership aims to establish effective management for the SBCA and to conserve the biodiversity values of the site whilst ensuring protection for the livelihoods of local people (Pearson *et al.*, 2008). Technically, the SBCA is still classified as production forest not protection forest. According to the Forestry Law, the production forest can be commercially exploited and converted into other land use. After a three years lobbying of the WCS to gain additional legal support from the government, the SBCA was designated as the Seima Protection Forest (SPF) under the Sub-decree dated 7th August 2009 of the Council Minister. This is the highest level of political support that makes the project area secure for REDD implementation.

The SPF was identified as the most important wildlife conservation in Cambodia because of its outstanding biodiversity values (see e.g. Stuart, 2006; Bates *et al.*, 2007). The site provides habitats for more than 40 species on the IUCN Red List, including at least four critically endangered bird species: giant ibis, white-shouldered ibis, redheaded vulture and white-rumped vulture and plus the restricted-range and endangered orange-necked partridge (Pearson *et al.*, 2008; Rawson *et al.*, 2009). It homes to 25 different carnivore species, including tiger and seven other species of wild cat. The SPF is internationally important to accommodate the largest populations in the world of Yellow-cheeked Crested Gibbon (at least 4,000 animals) and Black-shanked Douc (probably over 50 000 individuals). Additionally, it has regionally or globally important populations of Asian Elephant (recently estimated at about 115 animals), wild cattle, and many other species (Pearson *et al.*, 2008).

About 10 000 people live in or bordering the SPF and around 70 % of the population are Phnong (or Bunong) and Stieng ethnic minority group (Pollard *et al.*, 2008). They have depended on the forest economically, culturally, and spiritually for many generations (Rawson *et al.*, 2009). These communities mostly practice low-impact shifting agriculture and depend largely on forest products for their livelihood (Pearson *et al.*, 2008; Pollard *et al.*, 2008).

The SPF REDD pilot project is the second project that was officially declared by the Council of Ministers in Cambodia (WCS, 2009). This REDD pilot project was launched in mid 2008 with the collaboration between the Forestry Administration (FA) and the Wildlife Conservation Society (WCS). The project aims to expand and improve law enforcement activities, to register existing communities land claim, and to provide incentive for communities to protect forests (Evans, 2010). According to the feasibility study by the Winrock International (2009), the project was highly feasible and under a conservative scenario, it would avoid millions of tons of carbon emissions. It is estimated that 1.5 tone of CO₂ will be sequestered over the five years period 2008-2012 if 50 % of deforestation is decreased in the project area (Clements and Evans, 2008). Even thought at a low carbon price of US\$5 per ton in the voluntary market, it is conservatively estimated US\$5.4 million of revenues (Evans, 2010). However, the Project Design Document (PDD) is under preparation and it is hoped to be finalized later this year after some further survey, analysis and consultation with the stakeholders (Interview 1, 11). The project is expected to submit for verification by the Voluntary Carbon Standard (VCS) and the Climate, Community and Biodiversity Alliance (CCBA) in 2010.

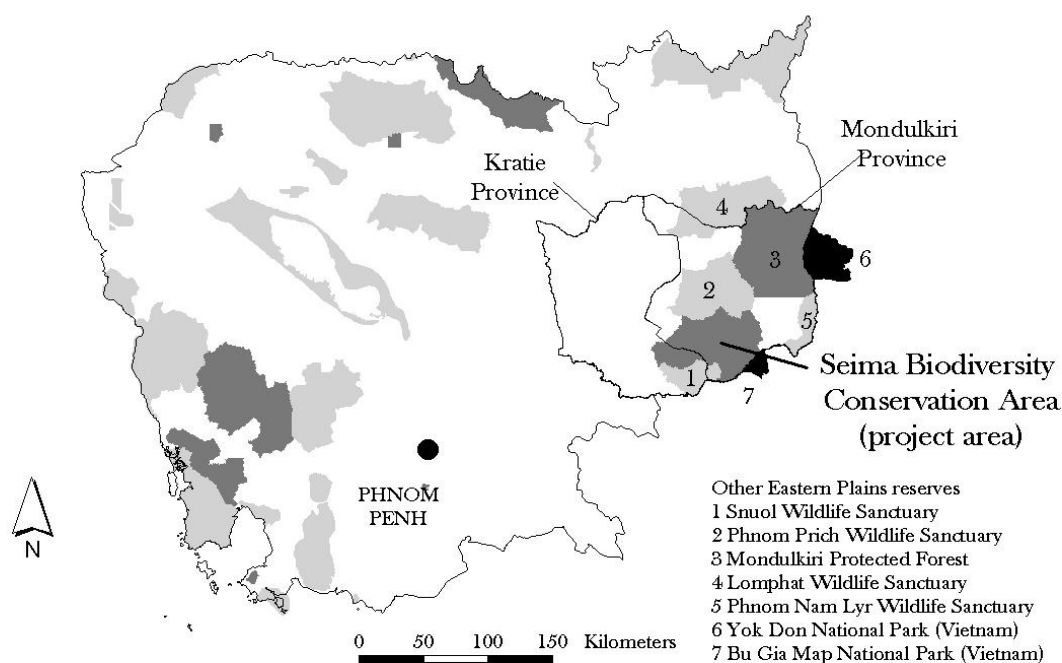


Figure 11 Map of Siema Biodiversity Conservation Area or Siema Protection Forest (Evans, 2010)

5.2.2. Land and Forest Tenures under the Project

The SPF land is a state property that fall under the jurisdiction of the Forestry Administration (FA). The Wildlife Conservation Society (WCS) has been collaborating with the FA to implement conservation initiative for years before the implementation of the REDD pilot project (Interview 1). There are about 5 000 peoples who are living in eight villages in the project site. The WCS and the FA are working closely with local communities to offer formal tenure to their traditional lands for years. By doing so the local communities can gain economic benefits from the REDD initiative. The communities will be legally granted rights to resources and land tenure. For Khmer communities, agricultural plots will be offered while shifting cultivation plots will be designated for indigenous communities (<http://www.wcscambodia.org>, accessed 04 June 2010).

The Ministry of Land Management and Urban Planning and Construction (MLUPC) is currently working on the detailed map of the villages in the SPF. With the collaboration with representative of the village Indigenous Tenure Commission, the Forestry Administration, the provincial Department of Land and the WCS, the MLUPC team successfully placed hundred demarcation posts on the ground to mark areas officially recognized as farm land, residential land, spirit forest or grave forest (Ibid.). These areas have been identified through a participatory land-use planning (PLUP) process since 2005 before the REDD pilot project is being implemented. The PLUP is a planning process, initiated at village level, in which all villagers and other stakeholders jointly plan the use, protection and allocation of all land and natural resources within their village boundaries. They are assisted in this process by neutral facilitators from outside the villages. In this process, management responsibilities are also clarified, as well as access rights to natural resources. The process often results in villagers receiving official tenure over their land and natural resources, and reduces the risk and conflict in the future.

Until now, there is only one village out of eight villages in the project site has recently become the first village in Cambodia as well as mainland South-East Asia to obtain legal, communal tenure rights over its residential and farm land. The rest of the villages are engaging in the same registration process and all the 20 villages in the SPF are expected to be registered. In addition, the WCS has been working with the FA and the MOE to demarcate the area to make uncontrolled clearance and the issuance of illegal land concessions more difficult. Securing of tenure provides local people with an incentive from the REDD initiative to engage in forest conservation and reduce deforestation in the project site. Even though, the land registration is going on, the communities are expected to participate in benefit sharing from the project as long as they participate in activities to reduce deforestation (Interview 11, 12).

5.2.3. Carbon Rights

It is very vital to clarify ownership rights over carbon credits under the REDD project. According to the interview with respondents in the project, the carbon credits will be the state assets. Certainly, the government owns the land in the project area so all the associated resources are also belonged to the government. However, like other many developing countries in the world, Cambodia does not have any regulation to specifically

define carbon credit rights (see section 5.1.3). In addition, the concept of carbon rights has just emerged when the REDD initiative being introduced in Cambodia. Obviously, the Government Decision (GD) No. 699 (Sor Chor Nor 699) illustrates that the Forestry Administration (FA) is the authority to manage and sale carbon credits on behalf of the government. The GD 699 was issued in 2008 for supporting the Community Forestry Carbon Offset Project in Oddar Meanchey province. It is the only basic legal reference that can clarify the government ownership over carbon credits in the REDD projects in Cambodia. The respondents have also confirmed that the implementation of the project in the SPF have to comply with the GD No. 699 which is the only legal support for defining carbon rights as well as benefit sharing of REDD project implementation in Cambodia.

5.2.4. Benefit Sharing Arrangements

The REDD initiative generate benefits derived from sustainable forest management and use such as NTFP commercialization, ecotourism and employment to local communities. Certainly, securing tenures over land and forest of local communities were already seen as one of the benefits from the REDD project. However, the distribution of monetary benefit from the project is still under consultation with the stakeholders (Interview 1, 11, 12). The benefit sharing arrangement of the SPF project may be finished in 2010. The structure of benefit sharing will be arranged at national level but key respondents confirmed that the benefits will be divided among the central government, site management and participating communities. The Royal Government of Cambodia aims to set up national REDD infrastructures by scaling up sub-national efforts, particularly lesson learned from the pilot projects. This will help to address leakage or displacement (movement of deforestation activities to another location within the same country) issues of the REDD projects in Cambodia. The benefits for communities will accrue to village groups and individual incentives for forest patrolling and possible commune investment funds. The WCS has proposed trust fund as a form of benefit sharing arrangement because it offers advantages, in particular transparent linkage of payments to the project site that ensure permanence of the credits and confidence of investors. However, some other approaches such as development project grant are certainly possible for this project and the clear benefit sharing mechanism remains to be seen.

5.3. Tenure Right Arrangement Analysis

As introduced in the conceptual framework, Davis et al (2009) have employed tenure rights criteria to analysis REDD Readiness Plan Idea Notes (R-PIN) of 25 countries, submitted to the Forest Carbon Partnership Facility (FCPF). Concerning tenure rights, there are four important criteria including a land tenure system that is non-discriminatory and provides clear rights over land and its associated values, legal recognition of indigenous people rights to land, mechanisms for resolving conflicts over tenure rights, and institutions and systems that uphold the rights of forest dependent people. Additionally, carbon rights criteria advanced by Cotula and Mayers (2009) has also been integrated into the above four criteria. Based on these criteria, the following analysis can be made for the two REDD pilot projects in Cambodia.

The Community Forestry Carbon Offset Project (CFCOP) is being implemented in the exiting Community Forestry initiative in Oddar Meanchhay province while the Seima Protection Forest (SPF) project is being implemented in the Protection Forest in Mundulkiri province. Both the CFCOP and the SPF offer clear rights over land and forest resources. The lands are owned by the government but the local and indigenous communities are granted use and access rights over land and forest resources in the projects. In addition, the communities' rights to forest resources have been legally recognized by the government through exiting Land and Forestry Law. The issue of carbon rights has been addressed by the government and the Government Decision No. 699 or Sar Chor Nor No. 699 has been created to clarify the government ownership over carbon credits in the projects. Furthermore, an additional agreement to clarify the carbon rights has been made between the project partners with the government, particularly in the CFCOP. Even though there is no specific mechanism to resolve tenure conflicts, the existing local authorities such as village /commune councils and the local FA have been utilized to sort out the tenure conflicts in the project. In case of the serious conflict that can't be addressed at the local level, the provincial court will be used (e.g. the CFCOP). For the SPF, the Participatory Land Use Planning (PLUP) has been used as a platform to address tenure issues in the project. In the CFCOP, the Forestry Administration (FA) and Community Forestry Committee play an important role in upholding the rights of local communities by providing legal and technical supports. For the SPF, the Ministry of Land Management and Urban Planning and Construction, Indigenous Tenure Commission, and the Forestry Administration are responsible for offering and protecting tenure rights of the local communities in the project. Table 3 presents the tenure arrangement analysis of the two REDD pilot projects in Cambodia.

Table 3 Tenure arrangement analysis of the projects

REDD Pilot Projects		Community Forestry Carbon Offset Project	Seima Protection Forest Project
Tenure Category		Community Forestry	Protection Forest
Davis et al (2009) and Cotula & Mayers (2009)	Tenure system that is non-discriminatory and provide clear rights over land and its associated resources	Provision use and access rights over land and forest resources to local communities in the projects. Timber and NTFPs are permitted for household use.	
	Legal recognition of indigenous and local people rights to lands	- Forestry Law and Land Law	
	Carbon rights defined and addressed	- Carbon credits from the projects are the state property - Government Decision No. 699 or Sar Chor Nor No. 699 (2008)	
	Mechanism for resolving conflicts over tenure rights	No specific mechanism existed but conflicts are sorted out through existing local authorities such as village /commune councils, FA officials and community forestry and other stakeholders. For serious conflict, provincial court will be used to resolve conflicts.	Participatory Land Use Planning (PLUP)
	Institution and systems that uphold the rights of forest dependent people	The Forestry Administration (FA), Community Forestry Committee	The Ministry of Land Management and Urban Planning and Construction, Indigenous Tenure Commission, the Forestry Administration

5.4. Explaining Tenure Rights and Benefit Sharing Arrangements under the Two REDD Pilot Projects

This section employs discourses of the actors involved in the two projects and ‘rules of the game’ to explain tenure arrangements and benefit sharing arrangement under the two REDD pilot projects.

5.4.1. Discourse Coalitions

As mentioned in Chapter 2 (section 2.1.4.), discourse coalitions refer to groups of actors who have the same interpretation or understanding on how land tenure and benefit sharing should be arranged in the two REDD pilot projects. Concerning tenure rights in the projects, although the government officially owned the land in both projects, all the respondents acknowledged the important of securing land and resource tenures for local communities in the projects and this explain why rights of local communities to forest are allowed under the two projects. Some argued that allowing local communities access to forest would give them a strong sense of ownership over land and resources and thereby promote sustainable forest management (Interview 1, 2, 3, 7, and 10). Others considered that allowing access rights would safeguard local and indigenous community rights to their land and forest resources (Interview 1, 2, 3, 6, 7, 9, 10, 11, 16, 17, 19).

The respondents from the government, the civil society and the donor community in both the Community Forestry Carbon Offset Project (CFCOP) and the Seima Protection Forest (SPF) considered that the current tenure arrangements are suitable for local communities. They posited that even though the government retains ownership over the land, the provisions for use and management of forests by local and indigenous communities under the law (see section below) secures their rights. This is also explain why there was no need to formulate any new rules or policies to guarantee local and indigenous communities rights under the two projects. The respondents from the government, civil society, donor community, community and private sector did view tenure arrangement as an important starting point for REDD implementation in Cambodia. As a result, clarification of tenure rights over land and forests have been prioritized for the projects. These discourses of the actors therefore explain the way of tenure arrangements have been organized in the two REDD pilot projects.

Common discourses among the stakeholders can also explain benefit sharing arrangement under the two projects. The interviews indicated that both projects should benefit the local communities so they can be motivated to reduce deforestation in the project areas. This will also motivate them to participate in forest conservation activities such as forest patrolling, fire break, and other conservation activities that contribute to address deforestation in the project areas. The government and donor communities contended that if incentives are provided to local communities, the project will be more effective and successful. The REDD projects will also contribute to reduce poverty reduction of the local communities (Interview 1, 2, 3, 9, 15, 16, 13). The respondents from the government emphasized on the implication of REDD to the National Forestry Program and Poverty Reduction Strategy Policy. The government, civil society, community and donor community therefore shared the discourse that the two REDD projects should contribute to poverty alleviation and this explain why a REDD benefit sharing mechanism was designed by each project. Like what interviewees from the government, civil society, community and donor community said:

“...To make the REDD project implementation successfully, it is necessary to engage and to offer the benefits to the local communities in the project...”
(Interview 1, 3, 4, 5, 7, 9, 10, 13, 19)

5.4.2. Rules of the Game

Rules of the game here refer to formal or informal rules that define and influence the way that tenure right and benefit sharing are arranged in the two REDD pilot projects. As stated in chapter 4, Cambodia has various types of tenure regimes which are defined in the Forestry Law. The two REDD pilot projects are being implemented on lands under two different kinds of tenure: community forestry for the Community Forestry Carbon Offset Project (CFCOP) and protection forests for the Seima Protection Forest (SPF) project. In both regimes, the customary rights of local and indigenous communities are fully recognized by the government as provided under the Land and Forestry Law of Cambodia. These explains why tenure rights of the local communities were considered in the two projects. The Sub-Decree on Community Forestry Management of Cambodia also provide guidelines for establishment of community forestry which also explain the

need to allow access rights for the local and indigenous communities as provided under the two projects.

In addition, Cambodia is also a signatory of the Convention on Biological Diversity (CBD), UN Declaration on the Rights of Indigenous Peoples (UNDRIP), ILO convention and so forth. These international instruments provide a strong framework for ensuring proper respect and recognition of indigenous and forest-dependent peoples' rights in REDD initiatives and additionally explains why tenure rights of the local communities have been addressed in the two projects. As stated in Chapter 5, the two REDD pilot projects will be validated by the Voluntary Carbon Standard (VCS) and the Climate, Community and Biodiversity Alliance (CCBA). The CCBA required the project to clarify customary and legal tenure rights of indigenous and local communities in the projects, particularly how the projects will contribute to address tenure right issues. These also explain why tenure rights of the local and indigenous communities have been addressed under the two projects.

As mentioned in chapter 4, existing policies governing Cambodian's forests such as the National Forestry Programme, the National Development Plan, and the Forestry Law provide for poverty reduction. For example, the community forestry program under the National Forestry Programme aims to improve livelihood of forest dependent communities in the country (Braeutigam, 2003; Hansen and Top 2006; Sunderlin, 2006). The government intends to use the forest sector as one of the poverty reduction tools since the majority of the Cambodian population still depends on forests for their livelihood. Therefore, any income from forests such as those generated from forest conservation must trickle down to the local communities and these explains why a mechanism for sharing income for REDD under the two projects have been designed.

However, neither the Forest Law nor the Sub-Decree on Community Forestry states clearly how benefits should be shared between the government and the local communities (Heng and Scheyvens, 2009). This explains why the decision on how much of revenues are channeled to the local communities depends on the negotiation between communities, NGOs and government agencies. Most of the stakeholders in the two REDD pilot projects would prefer to see the majority of financial benefits flow into the local communities. In addition, the majority of the respondent also agreed with maximum financial benefits to the local communities in the two projects. Therefore, the Government Decision No. 699 has been formulated to guarantee the maximum benefits to the local communities. As mentioned in chapter 5, both REDD pilot projects will be validated by the Climate, Community and Biodiversity Alliance (CCBA) standard so the project designs have to adhere to the certain rules. According to the CCBA rules, the project developers have to prove that the implementation of the projects will contribute to both poverty reduction and livelihood improvement of the local and indigenous communities which further explain the need to elaborate a benefit sharing mechanism as elaborated under the two projects.

In conclusion, the discourse coalitions and existing national and international rules played a powerful role in explaining the tenure rights and benefit sharing arrangements in the two REDD pilot projects in Cambodia. Sometime, these discourses and existing rules did interact and complement each other. According to Hajer (1995), discourses also contain rules that guide social actions. The discourses may be institutionalized when most of the actors reach the common views, for instance the adoption of the Government Decision No. 699 for maximizing benefits to the local communities. However, in the case of the two projects, these discourses have not fully institutionalized and this explains why no overarching rules for benefit sharing have been designed yet.

CHAPTER 6

6.0. Discussion, Conclusions and Recommendations

This chapter discusses the results of the study. It then draws conclusions and makes some recommendations. It concludes by giving my personal reflection on the study and then its theoretical and societal relevance.

6.1. Discussion

6.1.1. Tenure Rights and REDD

The results showed that, generally, forestlands in Cambodia are entirely owned by the state but that Permanent Forest Estates are managed by different government agencies. This, however, creates overlapping management responsibility on forestlands in the country. The Ministry of Agriculture, Forestry and Fishery (MAFF), and specifically the Forestry Administration (FA), is responsible for Permanent Forest Estates (such as Permanent Forest Reserves, Private Forests), except the Protected Areas which are managed by the Ministry of Environment (MOE). In Cambodia, insufficient institutional coordination is common, particularly poor delineation of responsibility between the MOE and the MAFF in combating illegal forest activities (ADB, 2003).

The major finding of this study showed that all forestlands in Cambodia is owned by the government but there is a trend of transferring some of the remaining forest areas into community and protection forests. The trend is also in line with the government commitment to put the remaining forests under the community forestry program and protection status. In addition, if some more REDD projects are being carried out in the country, this will help to speed up this trend. However, the government, civil society, donor communities and community believed that REDD initiatives in Cambodia might contest with other land use schemes, especially the Economic Land Concessions. This Economic Land Concession scheme has a large impact on local communities by reducing access rights to both forest resources and forestlands (Davis, 2005; USAID 2006; Barney, 2007; Engvall and Kokko; 2007). Recently, some parts of Protected Areas have also been granted under the ECLs that lead to some concerns of civil society and donor community. The ELC scheme is one of the most critical issue for REDD implementation in Cambodia. The ELCs is the most dominant tenure regime in Cambodia and they obviously contest the REDD initiative. The ELCs have also been considered as the most powerful driver of deforestation in the country. Currently, one area proposed for REDD has been allocated for Titanium mining concession under the ELC scheme by the government which disqualifies the area from REDD. The issue of ELCs cannot be addressed at local level since the scheme has been built up at the higher echelons of government. Therefore, it can be addressed only at the higher levels of government (e.g. decision or policy makers). Therefore, to secure the project areas from converting into ELC, the REDD project developers should impress upon the political leadership for the area to be put under protection status. In addition, the REDD initiative may offer more economic benefit than the Economic Land Concession scheme. A recent study in Cambodia by Sasaki and Yoshimoto (2010) showed that the REDD initiative offers high economic return compared to other land use options, particularly the

Economic Land Concessions. Furthermore, the REDD initiative will help the Cambodian government to achieve the national target of retaining 60% of the total land area under forest cover. For this reason, the Cambodian government should designate more forest areas for REDD projects and two main types of tenure regimes can be seen: Community Forestry and Protection Forests. Additionally, since all the Protected Areas in Cambodia are covered with tropical rain forests, they are offer suitable sites for future REDD initiatives. Effort has already been made to put the Protected Areas in Cambodia for the REDD initiative. Furthermore, implementing REDD projects in community forestry areas will enable local communities gain more benefits as compared to implementation of the same in protected forests / areas where only small numbers of local communities live. A study by Bray *et al.* (2008) showed that community forest might generate more incomes for local people than protected areas.

In addition, most Community Forestry initiatives in Cambodia focus on restoration of degraded forests (Poffenberger, 2006). This also fulfills the main objective of the REDD mechanism of enhancing of forest carbon stocks in project areas through reforestation and sustainable forest management. Moreover, Community Forestry has been proven to reduce deforestation (Krishnaswamy, 1995; Klooster and Masera, 2000; Acharay, 2002; Coad *et al.*, 2008; Karky and Skutsch, 2010). Therefore, community forest management (such as community forestry initiative) could be used to encourage participation in REDD scheme by tropical countries.

6.1.2. Tenure Right Arrangements under the Two REDD Pilot Projects

The project developers gave the first priority on securing land and resource tenures of indigenous and local communities in the two REDD pilot projects. The indigenous and local communities have been provided tenures over lands and forests in the projects according to their customary rights that are also recognized in the Land and Forestry Law. This is in line with Coad *et al.* (2008), Brown *et al.* (2008), Kaimowitz (2008) and Phelps *et al.* (2010) who claimed that the REDD initiative helps to secure land tenures of local communities. Like many developing countries in the world, land tenure is the critical issue in Cambodia now and most communities as well as individuals feel insecure with their land and resource use rights because they do not have any official documents to prove ownership of their lands and forests. However, Cambodia is working hard to grant land titles to its peoples under the support of the donor communities. The process of land registration is still slow so the REDD initiative would be an additional force to speed up land registration for local and indigenous people in Cambodia.

The REDD scheme will enable the government to legally transfer tenure rights to forest peoples in Cambodia. This result also supported the Sunderlin *et al.* (2008) claim that the transfer of tenure to forest people has now gained significant momentum in many parts of the world, particularly in Asia. Sikor (2010) also emphasized that the transfer of tenure rights to forest people is the first priority for REDD implementation. Securing tenure rights of forest dependent communities are necessary component to reduce deforestation (Southgate *et al.*, 1991; Pichón, 1997; Acharay, 2002). The result of the study made a contribution to the ongoing debates about tenure rights of local and indigenous communities in relation to the REDD initiative. Many authors (e.g. Dooley *et al.*, 2008; Egle and Palmer 2008; Sunderlin *et al.*, 2008; Cotula and Mayers, 2009; Barry

et al., 2010) are concerned that REDD initiatives may overlook tenure rights of forest dependent communities. In contrast, the REDD project implementations in Cambodia did illustrate that the REDD projects have not ignored the tenure rights of the local and indigenous communities but the projects contribute to legalize tenure rights of the communities to their lands and forest resources. Indeed, the Cambodian government has adopted customary rights of local and indigenous communities into legal systems through the Land and Forestry Law.

6.1.3. Benefit Sharing Arrangements under the Two REDD Pilot Projects

Carbon rights have been nationalized in the two REDD projects due to the state ownership on the lands. In this respect, Angelsen (2008) warned that the nationalization carbon rights may result in inequitable sharing of benefits, state capture and corruption which prevent benefits to reach the local communities. However, sometime the question of who own forest carbon credits become less important than how the local communities are compensated for sequestering carbon. According to Transparency International⁴ (2009), Cambodia was ranked 158 out of 180 and it showed that the corruption level in the country is still high. Therefore, an ongoing effort have been made to fight corruption in Cambodia, for instance the national assembly has recently enact the Anti-Corruption Law. The new Law may give legal support to prevent corruption in benefit sharing scheme of the projects but the enforcement of this law remains to be seen. Furthermore, the revenues from the REDD projects will be channeled through the Technical Working Group on Forestry and Environment (TWG F&E). The TWG F&E is a mechanism for government-donor coordination that is financially audited by external agencies. As a result, the transparency of benefit sharing is likely to be ensured in the project but it may be too early to make this claim since the projects are still in the early stage and the flow of the revenues is not started yet.

The result of the study showed that the revenues from carbon credit selling of the two REDD pilot projects will be distributed to the local communities. In the Community Forestry Carbon Offset Project (CFCOP), 50% of net incomes from the project will accrue to the local communities. In addition, the Cambodia government has institutionalized benefit sharing distribution through the Government Decision No.699 to ensure the maximum benefits will flow to the communities who are participating in the project. This meant that the carbon based revenues from the REDD project are depended on the stakeholders' involvement in reducing deforestation or in another word performance based payments. Even though the performance base payment scheme is the core concept of REDD payment, Wertz-Kanounnikoff and Kongphan-apirak (2009) emphasized that governance improvement and broader policy reform need to be addressed. Poor forest governance is not a new issue for Cambodia since the forestry reform has been taking place for years. It is a long term process that the government needs to take a leading role. Likewise, Visseren-Hamakers and Glasbergen (2007) pointed out that it is difficult to make a rapid forestry reform due to weak law enforcement, insufficient land use planning and so forth. As mentioned in section 5.1,

⁴ <http://www.transparency.org>

Cambodia has addressed some of the policy issues related to tenure rights and benefit sharing in the projects but broader reform need to be done to accommodate the implementation of REDD.

The finding of this study was also related to policy implication of poverty reduction in Cambodia. The government intends to enable forestry sector in poverty reduction of the rural communities in the country. For the REDD initiative, the Cambodian government believes that it will potentially influence not only on forest protection and biodiversity conservation but also on poverty alleviation by means of job-creation and income from sales of carbon credits. Because the Community Forestry Carbon Offset Project is being implemented on the existing community forestry initiatives, it is likely to contribute to the success of these initiatives. In addition, it was evident that the benefits from successful community forestry can contributed to poverty alleviation (Ostrom, 1990; Poffenberger, 1999; Dupar & Badenoch, 2002). In addition, in the design stage of benefit sharing mechanism, local and indigenous communities should be fully involved in the process that may help to meet their need and increase the likelihood of the success of REDD (Ogonowski, 2009; IUCN, 2009). However, due to the early stage of the project implementations, how the benefits will accrue to the local communities remain a major question.

6.2. Conclusions and Recommendations

Based on the findings of the study, the following conclusions and recommendations can be made:

1. The government owns all forestlands in Cambodia. There are several tenure regimes existing in Cambodia namely, Concession Forests, Economic Land Concessions Community Forestry, Protection Forests, Protected Areas and Private Forests. In addition, these tenure categories are defined in the Forestry Law of the country. However, there are two separated government agencies that responsible for management of these forestlands. The Ministry of Agriculture, Forestry and Fishery (MAFF), particularly the Forestry Administration (FA), is responsible for Permanent Forest Estate in accordance to the Forestry Law except the Protected Areas that fall under the jurisdiction of Ministry of Environment (MOE) pursuant to the Environmental Protection and Natural Resource Management.

Recommendation:

- ❖ Even though the Forestry Law and the Law on Environmental Protection and Natural Resource Management have already clarified some of the responsibilities, for national REDD strategy development further clarification between these two government agencies has to be taken into account carefully. This will address the overlapping responsibilities, improvement of inter-ministry coordination and facilitation of REDD implementation in the country. In addition, the government has designated the MOE as the National Focal Point of Cambodia for the UNFCCC while the FA of the MAFF has been designated as the National Focal Point of REDD in Cambodia. Because of the current inclusion

of the REDD initiative in the climate change negotiation under the UNFCCC, the future climate change agreement is likely to include the REDD initiative so the design of national REDD strategy of Cambodia need to justify this challenge which might emerge in the future.

- ❖ There are three main tenure regime namely Community Forestry, Protection Forests and Protected Areas which seem to be suitable for REDD implementation in Cambodia. These areas always comprise with big plots of forestlands that make them feasible for large-scale project like REDD. In addition, most of the areas have been secured with high political and legal supports for long-term project implementation. The areas are potential for carbon sequestration to mitigate climate change and also provide livelihood benefits as well as biodiversity conservation.
 - ❖ The Economic Land Concession (ELC) scheme is considered as the most challenging issue for REDD implementation in Cambodia. As a result, the new proposed ELC projects should be scrutinized by all the relevant government agencies to avoid overlapping project sites with REDD projects. Since all the ELC projects in Cambodia have to conduct Environmental Impact Assessment (EIA) and submit EIA reports to the Ministry of Environment (MOE), this will give the Forestry Administration the opportunity to collaborate with the MOE to investigate those projects carefully to avoid overlapping sites for further REDD projects in Cambodia.
2. The study showed that the two REDD pilot projects are being implemented in Community Forestry and Protection Forest that are considered as the potential sites for REDD implementation. In these two tenure arrangements, the customary rights of local and indigenous communities to their lands and forests are formally recognized. The existing laws and policies governing forestry sector in Cambodia facilitate the tenure arrangements for the projects. However, clarifying tenure rights over land and forest of the local communities are the essential steps but for REDD, carbon rights have to be taken into account. As can be seen from the study, the carbon credits are possessed by the government under the provision of the Government Decision No.699 that is the only legal reference for carbon right clarification.

Recommendation:

- ❖ To be able to facilitate further REDD implementation in Cambodia, the government need to consider the inclusion of carbon rights into existing land/forest tenure laws. By doing so, the gap of tenure rights for REDD initiative will be fulfilled and it is also the initial step toward benefit sharing arrangement. However, it is also possible to establish the agreement between stakeholders within the project to clarify carbon rights in order to build up carbon credit buyer confidence while legal framework on carbon rights is still under preparation.

3. The study indicated that it is not easy for the project to set up benefit sharing mechanism while the revenues from carbon credit selling have not been generated yet. As a result, the benefit sharing mechanism is still under discussion but some clarification from the project stakeholders indicated that the benefits from the project will be channeled down to the local communities. Furthermore, the project developers agreed that maximum benefits would accrue to the local communities. More than 50% of the net revenues are expected to reach the local communities in the Community Forestry Carbon Offset Project while the benefit sharing arrangement of the Seima Protection Forest project is under negotiation. To be able to achieve this, equitable benefit sharing mechanism need to be put in place and for REDD, it is a key to implement projects effectively.

Recommendation:

- ❖ To facilitate benefit sharing mechanism design for REDD in Cambodia, some lessons learned from the existing initiatives such as Community Based Ecotourism (e.g. Chombok in Kirrirom National Park and Yak Loam Lake Eco-tourism), Wildlife Conservation Initiative (e.g. payments for crocodiles protection) and some other initiatives should be take into account. The benefit sharing mechanism should be built on the existing experiences rather than establish a brand new mechanism that will take time to design and implement. It is also worthy to look at the existing experiences from Clean Mechanism Development (CDM) projects that may aid to benefit sharing design for REDD scheme. In addition, the current two REDD pilots projects also offer an opportunities to demonstrate benefit sharing mechanisms. Therefore, experiences from existing benefit sharing mechanisms will judge the best options for REDD implementation in Cambodia. Further study on benefit sharing on existing initiatives and in the two REDD pilot projects should be conducted to understand the best approaches.

6.3. Personal Reflection

The study intended to understand and assess the tenure rights and benefit sharing arrangement under the REDD projects in Cambodia. As already mentioned, many authors and organizations have given very much attention on the impact on the REDD scheme on the rights of local and indigenous communities in the tropics. Therefore, it is very important to look at how REDD projects work on the ground. This will give the development of REDD scheme more effectiveness and avoid doing harm to local and indigenous communities. The case study indicated that both REDD pilot projects in Cambodia do take into account the tenure right of local and indigenous communities who depend on forests for livelihoods. Clarification of tenure rights of local and indigenous people will empower them to management and use forest resource sustainably. It also contributes to decentralization of forest management in the country. In addition, forest can be protected if incentives are forwarded to local communities.

6.4. Theoretical and Societal Relevance

The study employed four key concepts: tenure rights (land, forest, and carbon), benefit sharing, discourse coalitions and rules of the game. The concepts of tenure rights and benefit sharing played a fundamental role in examining how the forest access rights of local communities and their rights to benefits from forests have been taken into account in the two projects which have not been done before for REDD pilot projects in Cambodia. The concepts of discourses and rules of the game have proven powerful tools for explaining tenure and benefit sharing arrangements under the two projects. The study offers useful lessons on how to better organize tenure and benefit sharing under the two REDD pilot projects and provides useful insights for project developers concerned with forest access rights of local communities and their access to benefits from forest conservation.

BIBLIOGRAPHY

- ADB (Asian Development Bank). (2000). *Environments in Transition Cambodia, Lao PDR, Thailand, Viet Nam*. Manila, Philippine.
- Alcorn, J.B. (1993). Indigenous Peoples and Conservation. *Conservation Biology*, 7:2, 424-426.
- Angelsen, A. (ed.). (2008). *Moving Ahead with REDD: Issues, Options and Implications*. Center for International Forestry Research (CIFOR). Bogor, Indonesia.
- Angelsen, A. with Brockhaus, M., Kanninen, M., Sills, E., Sunderlin, W. D. and Wertz-Kanounnikoff, S. (eds). (2009). *Realising REDD+: National strategy and policy options*. CIFOR, Bogor, Indonesia.
- Arts, B. and Buizer, M. (2008). Forests, discourses, institutions: A discursive institutional analysis of global forest governance. *Forest Policy and Economics*, 11, 340–347.
- Arts, B., Leroy, P. and van Tatenhove, J. (2006). Political Modernisation and Policy Arrangements: A Framework for Understanding Environmental Policy Change. *Public Organization Review*, 6, 93–106.
- Arts, B. and Van Tatenhoven, J. (2004). Policy and power: A conceptual framework between the 'old' and 'new' policy idioms. *Policy Sciences*, 37, 339–356.
- ASEAN .(2008). ASEAN Common Position Paper On Reducing Emission from Deforestation and Forest Degradation (REDD) in Developing Countries. http://www.aseanforest-chm.org/document_center/asof_fora/international_positioning/asean_2008_asean_common_position_paper.pdf
- Asthor, R. and Clairs, T. (2009). *Legal and Institutional Foundations for the National Implementation of REDD: Lessons from Early Experience in Developing and Developed Countries*. Policy Briefs 4, The Terrestrial Carbon Group Project.
- Bates, P.J.J. *et al.* (2007). A new species of *Kerivoula* (Chiroptera: Vespertilionidae) from Southeast Asia. *Acta Chiropterologica*, 9, (2), 323-337.
- Barney, K. (2007). *A Note on Forest Land Concessions, Social Conflicts, and Poverty in the Mekong Region*. Proceedings: International Conference on Poverty Reduction and Forests, Bangkok, Thailand.
- Berg, K. (2001). The ethics of benefit sharing. *Clinical Genetics*, 59, 240–243.
- Bond, *et al.* (2009). *Incentives to sustain forest ecosystem services: A review and lessons for REDD*. Natural Resource Issues No. 16. International Institute for Environment and Development, London, UK, with CIFOR, Bogor, Indonesia, and World Resources Institute, Washington D.C., USA.
- Boucher, D. (2008). *Out of the woods: A realistic role for tropical forests in curbing global warming*. Union of Concerned Scientists. Cambridge, Massachusetts.

- Bradley, A. (2009).** *Communities and Carbon: Establishing a community forestry REDD project in Cambodia*. Pact Cambodia. Phnom Penh, Cambodia.
- Braeutigam, D. (2003).** *Community based forest management in Cambodia and Laos: frame conditions, selected examples and implications*. Phnom Penh: MRC-GTZ Cooperation Programme; Agriculture, Irrigation and Forestry Programme; Watershed Management Component.
- Bray, D. B., E. Duran, V. H. Ramos, J.-F. Mas, A. Velazquez, R. B. McNab, D. Barry, and J. Radachowsky. (2008).** Tropical deforestation, community forests, and protected areas in the Maya Forest. *Ecology and Society* 13(2): 56. [online] URL: <http://www.ecologyandsociety.org/vol13/iss2/art56/>
- Buizer, I.M. (2009).** Bridging a divide? Local initiatives in a multi-level policy context. De Jong, W. (Ed.). *Forest Policies for a Sustainable Humanosphere* (pp.41-48). CIAS Discussion Paper 8. Center for Integrated Area Studies, Kyoto University.
- Bulkeley, H. (2000).** Discourse coalitions and the Australian climate change policy network. *Environmental and Planning C: Government and Policy*, 18, 6, 727 – 748.
- Butler, R. (2006).** Calculating the value of avoided deforestation. Retrieved from: <http://news.mongabay.com/2006/1031-deforestation.html>
- Cariño, J. (2005).** Indigenous peoples' right to free, prior, informed consent: reflections on concepts and practice. *Arizona Journal of International & Comparative Law*, 22: 120
- Carlson, K.M. and Curran, L.M. (2009).** REDD pilot project scenarios: are costs and benefits altered by spatial scale? *Environmental Research Letters*, 4, 031003 (3pp), [doi:10.1088/1748-9326/4/3/031003](https://doi.org/10.1088/1748-9326/4/3/031003)
- Campbell, B.M. (2009).** Beyond Copenhagen: REDD+, agriculture, adaptation strategies and poverty. *Global Environmental Change*, 19:4, 397-399.
- CBD (Convention on Biological Diversity). (2008).** *Access and Benefit-Sharing in Practice: Trends in Partnerships Across Sectors*. Montreal, Technical Series No. 38, 140.
- CCBA. (2008).** *Climate, Community & Biodiversity Project Design Standards Second Edition*. CCBA, Arlington, VA. December, 2008. At: www.climate-standards.org.
- Chaudhury, M. (2009).** *Assessing the protection of forest based environmental services in the Greater Mekong Sub-region*. Asia-Pacific Forestry Sector Outlook Study II. Working Paper No. APFSOS II/WP/2009/14. Food and Agricultural Organization for United Nation. Bangkok, Thailand.
- Chomitz, K.M. (2006).** *At loggerheads? Agricultural expansion, poverty reduction, and environment in the tropical forests*. Washington, DC, The World Bank.

- CIA (Central Intelligence Agency). (2009). The CIA World Factbook. Washington DC. Retrieved from May 8, 2010, from: <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
- Clements, T. and Evans, T.(2008). *Forest Conservation in Cambodia: Financing Climate Benefits, Biodiversity Conservation and Community Development through the Market for Emission Reductions*. Presentation at Developing a Forest Carbon Project Workshop (WCS Translinks Project), Lima, Peru, 10-12 September 2008. Available:<http://www.translinks.org/WorkshopsandMeetings/DevelopingaForestCarbonProjectWorkshop/tabid/2081/language/en-US/Default.aspx>
- Coad, L., Campbell, A., Clark, S., Bolt, K., Roe, D., Miles, L. (2008). *Protecting the future: Carbon, forests, protected areas and local livelihoods*. Revised May 2008. UNEP World Conservation Monitoring Centre, Cambridge, U.K.
- Colchester, M. (2004). *Justice in the Forest: Rural Livelihoods and Forest Law Enforcement*. CIFOR. Bogor, Indonesia.
- Costenbader, J. (Ed.) (2009). *Legal Frameworks for REDD. Design and Implementation at the National Level*. IUCN, Gland, Switzerland. xiv + 200 pp.
- Cotula, L. and Mayers, J. (2009). *Tenure in REDD – Start-point or afterthought?*. Natural Resource Issues No. 15. International Institute for Environment and Development. London, UK.
- Cronkleton et al, (2010). The devolution of management rights and the co-management of community forests. In Larson et al., *Forest for people: Community rights and forest tenure reform*. London: Earthscan.
- Dasgupta, S., Deichmann, U., Meisner, C., and Wheeler, D. (2005). Where is the Poverty–Environment Nexus? Evidence from Cambodia, Lao PDR, and Vietnam. *World Development*, 33: 4, 617–638.
- Davis et al. (2009). *Getting Ready. A Review of the World Bank Forest Carbon Partnership Facility Readiness Preparation Proposals*. WRI Working Paper. World Resources Institute, Washington DC. Retrieved from: <http://www.wri.org/gfi>
- Davis, M.(2005). Forests and conflict in Cambodia. *International Forestry Review*. 7:2, 161-164.
- Deininger, K., G. Feder, G. Gordillo de Anda, and P. Munro-Faure. (2003). *Land Policy to Facilitate Growth and Poverty Reduction*. Land Reform, Land Settlement and Cooperatives, 3, 5-18.
- De Lopez, T.T. (2001). Deforestation in Cambodia: a stakeholder management approach. *International Journal of Sustainable Development & World Ecology*, 8: 4, 380 — 394.

- De Lopez, T.T. (2002). Natural Resource Exploitation in Cambodia: An Examination of Use, Appropriation, and Exclusion. *The Journal of Environment & Development*, 11, 4, 355-379. DOI: 10.1177/1070496502238662
- De Vaus, D. 2001. Research Design in Social Research. Sage Publishers.
- Deweese, Peter A. , Campbell, Bruce M. , Katerere, Yemi , Siteo, Almeida , Cunningham, Anthony B. , Angelsen, Arild and Wunder, Sven.(2010). Managing the Miombo Woodlands of Southern Africa: Policies, Incentives and Options for the Rural Poor. *Journal of Natural Resources Policy Research*, 2, (1), 57 — 73
- Dudley, R.G. (2010). A little REDD model to quickly compare possible baseline and policy scenarios for reducing emissions from deforestation and forest degradation. *Mitigation and Adaptation Strategies for Global Change*, 15, 53-69.
- Dupar, M., & Badenoch, N. (2002). *Environment, livelihood and local institutions: Decentralization in mainland Southeast Asia*. Washington, DC: World Resources Institute.
- Ebeling, J. and Yasué, M. (2008). Generating carbon finance through avoided deforestation and its potential to create climatic, conservation and human development benefits. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 363:1498,1917-1924.
- Egle, S. and Palmer, C. (2008). *Painting the forest REDD? Prospects for mitigating climate change through reducing emission from deforestation and degradation*. Working paper 3. Institute for Environmental Decision. Zurich, Switzerland.
- Engvall, A. and Kokko, A. (2007). *Poverty and Land Policy in Cambodia*. Working Paper 233.
- Evans, T. (2010, March 11). *Carbon credits from avoided deforestation a pilot project in the Seima Protection Forest, Cambodia*. Presentation at IGES-RECOFTC-INA capacity building workshops on REDD. Phnom Penh, Cambodia. Retrieved from: [http://www.iges.or.jp/en/fc/pdf/activity_201003/Cambodia/1_\(E\)2-Mondulkiri_Carbon_Project_RECOFTC_Meeting_Feb_2010.pdf](http://www.iges.or.jp/en/fc/pdf/activity_201003/Cambodia/1_(E)2-Mondulkiri_Carbon_Project_RECOFTC_Meeting_Feb_2010.pdf)
- FA (Forestry Administration). (2004) .Forest Cover and Forestland Categories: Cambodia. Available at: <http://forestry.gov.kh/Statistic/Forestcover.htm>
- FA (Forestry Administration). (2008). *Country Paper on Forestry Outlook 2020*. Forestry Administration, Royal Government of Cambodia, Phnom Penh, Cambodia.
- FAO. (2002). *Land Tenure and Rural Development*. FAO Land Tenure Studies 3. Rome, Italy.
- FAO. (2005). *Global Forest Resource Assessment 2005: Progress toward sustainable forest management*. FAO Forestry Paper 147, Rome, Italy. 320p.

- FAO. (2007). *Tenure Security for Better Forestry: Understanding Forest Tenure in South and Southeast Asia*. Rome, Italy.
- Foucault, M. (1970). *The order of things: an archaeology of the human sciences*. Tavistock Publication: London, UK.
- Fox, J.M., McMahon, D., Poffenberger, M. And Vogler, J. (2008). *Land for My Grandchildren: Land Use and Tenure Change in Ratanakiri: 1989-2006*. Community Forestry International and the East West Center.
- Gardner, R. and Ostrom, E. (1991). Rules and games. *Public Choice*. 70, 121-149.
- Ghazoul, J., Butler, R., Mateo-Vega, J., Koh, L.P. (2010). REDD: a reckoning of environment and development implications. *Trends in Ecology and Evolution*. doi:10.1016/j.tree.2010.03.005
- Global Forest Coalition. (2009). *REDD Realities: How strategies to reduce emissions from deforestation and forest degradation could impact on biodiversity and Indigenous Peoples in developing countries*. Asunción, Paraguay.
- Glowka, L., Burhenne-Guilmin, F. and Synge, H. (1994). *A guide to the Convention on Biological Diversity*. IUCN. Gland and Cambridge.
- Gold, J. (November 2009): Fresh bid to protect forest. Phnom Penh Post, Para.24.
- Griffiths, T. (2007). *Seeing 'RED'? : Avoided deforestation' and the rights of Indigenous Peoples and local communities*. Forest Peoples Programme. Moreton-in-Marsh, UK.
- Grimble, R. and Chan, M.K. (1995). Stakeholder analysis for natural resource management in developing countries: Some practical guidelines for making management more participatory and effective. *Natural Resource Forum*, 19: 2, 113-124
- Guttal, S. (2006). Land and Natural Resource Alienation in Cambodia. *Focus on the Global South*. http://www.rightsandresources.org/documents/files/doc_414.pdf
- Hajer, M. (1995). *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Clarendon Press, Oxford
- Hajer, M.A. (2005). Coalitions, Practices, and Meaning in Environmental Politics: From Acid Rain to BSE. Howarth, D. and Torfing, J. (Ed.). *Discourse Theory in European Politics: Identity, Policy and Governance*. Palgrave Macmillan Ltd: New York, USA.
- Hajer, M.A. and Versteeg, W. (2005). A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives. *Journal of Environmental Policy & Planning*, 7:3, 175 — 184.
- Hannah, L. (2009). A Global Conservation System for Climate-Change Adaptation. *Conservation Biology*, 24:1, 70–77.

- Hatcher, J. (2009). *Securing Tenure Rights and Reducing Emissions from Deforestation and Degradation (REDD): Costs and Lessons Learned*. Social Development Working Papers. Paper No. 120, Washington, DC: World Bank.
- Heng, S. and Scheyvens, H. (2007). Forest governance in Cambodia: The Emergence of Community Forestry. Scheyvens, H., Hyakumura, H., and Seki, Y. (Eds.). *Decentralisation and state-sponsored community forestry in Asia: Seven country studies of transitions in forest governance, contemporary forest management and the prospects for communities to contribute to and benefit from sustainable forest management*. Kanagawa (Japan): Institute for Global Environmental Strategies (IGES).
- ICEM. (2003). *Cambodia National Report on Protected Areas and Development*. Review of Protected Areas and Development in the Lower Mekong River Region, Indooroopilly, Queensland, Australia. 148 pp.
- ILO. Convention (No. 169) Concerning Indigenous and Tribal Peoples in Independent Countries, opened for signature 27 June 1989 1650 UNTS 383 (entered into force 5 September 1991).
- Immergut, E.M. (1992). The rules of the game: the logic of health policy-making in France, Switzerland, and Sweden. Steinmo, S., Thelen, K. and Longstreth, F. (ed.), *Structuring Politics : Historical Institutionalism in Comparative Analysis*. Cambridge, UK: University of Cambridge Press.
- International Centre for Ethnic Studies and Minority Rights Group International. (1995). *Minorities in Cambodia*. London: International Centre for Ethnic Studies.
- Independent Forest Sector Review. (2004). The Forest Sector in Cambodia. Available at: <http://www.forestry.gov.kh/Documents/Forest-Sector-Review.pdf>
- IPCC. (2007). *Summary for Policymakers Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge and New York.
- ITTO (International Tropical Timber Organization). (2005). *Status of Tropical Forest Management 2005: Cambodia*. Yokohama, Japan.
- IUCN. (2002). *The IUCN Protected Area Management Categories*. Information Sheet 3.
- IUCN. (2008). *REDD Opportunities: Integrating Sustainable Forest Management Approach*. Gland, Switzerland.
- IUCN. (2009). *REDD-plus and Benefit sharing : Experiences in forest conservation and other resource management sectors*. Gland, Switzerland.
- Kaimowitz, D. (2008). The prospects for Reduced Emissions from Deforestation and Degradation (REDD) in Mesoamerica. *International Forestry Review*, 10:3, 485-495

- Kanninen, M., Murdiyarso, D., Seymour, F., Angelsen, A., Wunder, S., German, L. (2007). *Do trees grow on money? The implications of deforestation research for policies to promote REDD*. CIFOR, Bogor, Indonesia.
- Karky, B.S. and Skutsch, M. (2010). The cost of carbon abatement through community forest management in Nepal Himalaya. *Ecological Economics*, 69, 666–672.
- Khemro, B. H. S. and Payne, G. (2004). Improving tenure security for the urban poor in Phnom Penh, Cambodia: an analytical case study, *Habitat International*, 28, 181–201.
- Kickert, W.J.M., Klijn, E.H., Koppenjan, J.F.M. (1997). *Managing complex networks: strategies for the public sector*. London: SAGE Publication Ltd.
- Klooster, D. and Masera, O. (2000). Community forest management in Mexico: carbon mitigation and biodiversity conservation through rural development. *Global Environmental Change*, 10, 259–272.
- Krishnaswamy, A. (1995). Sustainable development and community forest management in Bihar, India. *Society & Natural Resources*, 8:4, 339 – 350.
- Kumar, R. (2005). *Research Methodology: A step-by- step guide for beginners*.
- Laurance, W.F. (1999). Reflections on the tropical deforestation crisis. *Biological Conservation* 91: 109–117.
- Lawlor, D. and Huberman, D. (2009). *Reduced Emissions from Deforestation and Forest Degradation (REDD) and Human Rights*. In rights-based approaches: Exploring issues and opportunities for conservation, Campese, J., Sunderland, T., Greiber, T. and Oviedo, G. (eds.), pp 269–286. CIFOR and IUCN, Bogor, Indonesia.
- MacKay, F. (2004). *Indigenous Peoples' Right to Free, Prior and Informed Consent and the World Bank's Extractive Industries Review*. Forest Peoples Programme.
- MAFF (Ministry of Agriculture, Forestry and Fisheries). (2007). Economic Land Concession. Available at: <http://www.elc.maff.gov.kh/index.html>
- McCulloch, A.K., Dick, R.M., & Hazell, P. (1998). *Property rights, collective action and technologies for natural resource management: a conceptual framework*. SP-PRCA Working Paper No. 1. Washington, DC, International Food Policy Research Institute.
- McKenney, B. 2002. *Cambodia Development Review: Questioning Sustainable Concession Forestry in Cambodia*. Cambodian Development Research Institute (CDRI). Available at: <http://www.cdri.org.kh/webdata/cdr/2002/cdr03-1.pdf>
- NGO Forum on Cambodia. (2006). *Land Alienation in Indigenous Minority Communities – Ratanakiri Province, Cambodia*. Phnom Penh.

- Ogonowski, M., Guimaraes, L., Ma, H., Movius, D., Schmidt, J. (2009). *Utilizing Payments for Environmental Services for Reducing Emissions from Deforestation and Forest Degradation (REDD) in Developing Countries: Challenges and Policy Options*. Developing Country Analysis and Dialogue. Center for Clean Air Policy. Washington, US.
- Oli, K.P., Dasgupta, J., Dhakal, T.D., Kollmair, M. (2007). *Glossary of Access and Benefit Sharing Terms*. International Centre for Integrated Mountain Development Kathmandu, Nepal.
- Omaliss, K. (2010, March 10). REDD Development in Cambodia. Powerpoint Presentation. Tokyo, Japan.
- Ostrom, E. (1986). An agenda for the study of institutions. *Public Choice*. 48, 3-25.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. New York: Cambridge University Press.
- Pearson, T., Petrova, S., Harris, N. and Brown, S. (2008). *Assessing the potential for generating carbon offsets in the Seima Biodiversity Conservation Area, Cambodia*. Report submitted to WCS.
- Peskett, L. and Harkin, Z. (2007). *Risk and Responsibility in Reduced Emissions from Deforestation and Degradation*. Forestry Briefing 15. Overseas Development Institute, London.
- Peskett, L., Huberman, D., Bowen-Jones, E., Edwards, G. & Brown, J. (2008). *Making REDD work for the Poor*. Report prepared for the Poverty Environment Partnership. Poverty Environment Partnership (PEP).
- Pichón, F. J. (1997). Colonist Land-Allocation Decisions, Land Use, and Deforestation in the Ecuadorian Amazon Frontier. *Economic Development and Cultural Change* 44:4, 127-64.
- Phelps, J., Webb, E.L. and Agrawal, A. (2010). Does REDD+ Threaten to Recentralize Forest Governance?. *Science*, 328, 312-313.
- Poffenberger, M. (2006). People in the forest: community forestry experiences from Southeast Asia. *Int. J. Environment and Sustainable Development*, 5, 1.
- Poffenberger, M. (2009). Cambodia's forests and climate change: Mitigating drivers of deforestation. *Natural Resources Forum*, 33, 285–296.
- Poffenberger, M. and Smith-Hanssen, K. (2009). *Forest communities and REDD climate initiatives*. Asia Pacific issues ; no.91 Honolulu : East-West Center.
- Poffenberger, M., De Gryze, S., and Durschinger, L. (2009). *Designing Collaborative REDD projects: A case study from Oddar Meanchey Province, Cambodia*. Community Forestry International and Terra Global Capital. Retrieved from: <http://www.terraglobalcapital.com/press/ReddProjects.pdf>

- Pollard, E., Eggert, L., Chanvibol, C. and Hedges, S. (2008). *The Status and Conservation Asian Elephants in the Seima Biodiversity Conservation Area, Cambodia*. Wildlife Conservation Society (WCS), New York.
- Punch, K. F. (2005). *Introduction to Social Research: Quantitative and Qualitative Approaches*. London: Sage Publication Ltd.
- Ratanakoma, L. (2009). REDD Activities in Cambodia. Retrieved from: http://www.iddri.org/Activites/Interventions/090525_ASEAN_REDD_Cambodia.pdf
- Rawson, B.M., Clements, T., and Hor, N.M.(2009). Status and Conservation of Yellow-Cheeked Crested Gibbons (*Nomascus gabriellae*) in the Seima Biodiversity Conservation Area, Monduliri Province, Cambodia. In Lappan, S., Whittaker, D.J. (Eds.), *The Gibbons: New Perspectives on Small Ape Socioecology and Population Biology* (pp.387-408). New York: Springer.
- Rocco, T.S., and Plakhotnik, M.S. (2007). Literature Reviews, Conceptual Frameworks, and Theoretical Frameworks: Terms, Functions, and Distinctions. *Human Resource Development Review* 2009. 8; 120. DOI: 10.1177/1534484309332617
- Sasaki, N. (2006). Carbon emissions due to land-use change and logging in Cambodia: a modeling approach. *Journal of Forest Research*, 397-403.
- Saunders, M., Lewis, P., Thornhill A. (2003). *Research Methods for Business Students*. England: Pearson Education Limited.
- Scherr, S.J. and Sthapit,S. (2009). *Farming and Land Use to Cool the Planet*. State of World 2009: into a Warming World. The Worldwatch Institute. Washington DC, United State of America.
- Schmidt, V. and Radaelli, C. (2004). Policy Change and Discourse in Europe: Conceptual and Methodological Issues. *West European Politics*, 27, 2, 183–210.
- Schroeder, D. (2007). Benefit sharing: it's time for a definition. *Journal of Medical Ethics*, 33, 205-209.
- Sikor, T. (2010). REDD-plus, forest people's rights and nested climate governance. *Global Environmental Change*, doi:10.1016/j.gloenvcha.2010.04.007.
- Silverman, D. 2006. *Interpreting Qualitative Data*, 3rd Edition. Sage London.
- Simm, K.(2007). Benefit-sharing: a look at the history of an ethics concern. *Nature Reviews Genetics* 8, 496.doi:10.1038/nrg2145.
- Skutsch, M.M. and McCall, M.K. (2010). Reassessing REDD: governance, markets and the hype cycle. *Climatic Change*,100, 395–402,DOI 10.1007/s10584-009-9768-y.

- Smith, J. and Scherr, S. J. (2003). Capturing the Value of Forest Carbon for Local Livelihoods. *World Development*, 31, 12, 2143–2160. doi:10.1016/j.worlddev.2003.06.011
- Sodhi, et al. (2010). The state and conservation of Southeast Asian biodiversity. *Biodiversity and Conservation*, 19, 317–328.
- Sokhun, T., Heng, S. and Sethaphal, L. (2006). *Institutional arrangements for community forestry in Cambodia*. RECOFTC. Bangkok, Thailand.
- Sokhun, T., Sam Ath, U., Kim Sun, C., Vathana, K., Nareth, C., Wardell, A., Routier, J., Brun, S. & Clements, T. (2009). *The Forest Carbon Partnership Facility (FCPF) Readiness Plan Idea Note (R-PIN) Template*. Revised Cambodia submission.
- Somaly, C., Ramony, S. and Thoeun, H.C. (2009, September 2-5). *Current Status of Forest Biodiversity and Climate Change in Cambodia*. Forest Biodiversity and Climate Change Workshop, Singapore.
- Southgate, D., Rodrigo, S. and Laurence B. (1991). The Causes of Tropical Deforestation in Ecuador: A Statistical Analysis. *World Development*, 19:9, 1145–51.
- Streck, C., Gomez-Echeverri, L., Gutman, P., Loisel, C., and Werksman, J. (2009). *REDD+ Institutional Options Assessment: Developing an Efficient, Effective, and Equitable Institutional Framework for REDD+ under the UNFCCC*. Meridian Institute. Washington DC, United State of America.
- Stuart, B.L., Sok, K. and Neang, T. (2006). A collection of amphibians and reptiles from hilly Eastern Cambodia. *The Raffles Bulletin of Zoology*, 54 (1), 129-155.
- Sunderlin, W.D. (2006). Poverty alleviation through community forestry in Cambodia, Laos, and Vietnam: An assessment of the potential. *Forest Policy and Economics* 8: 386– 396
- Sunderlin, W., Hatcher, J., and M. Liddle. (2008). *From Exclusion to Ownership? Challenges and Opportunities in Advancing Forest Tenure Reform*. Rights and Resources Initiative. Washington DC.
- Suntra, H. (2007). *Review of International Forest Policy Development and Cambodia's Role, Involvement and Potential Benefit*. Forestry Administration, Ministry of Agriculture, Forestry and Fisheries. Phnom Penh, Cambodia.
- Svadlenak-Gomez, K. (2009). *Co-benefits or collateral damage? The potential impacts on the wellbeing of forest-dependent people under different shades of REDD (Country case studies)*. Master Thesis. Centre for Development, Environment and Policy (CeDEP), School of Oriental and African Studies (SOAS), University of London.

- Szaka, J. (2004). Wind power, discourse coalitions and climate change: Breaking the stalemate?. *European Environment*, 14, 317-330.
- Taylor, A., Lippke, B. and Park, W. (2010). Carbon credit schemes for forest landowners are counterproductive. *Environmental Science & Policy*, 13, 150–153
- Tong, K.(2010). The social impact of the global recession on Cambodia: How the crisis impacts on poverty. Bauer, A. and Thant, M. (Eds.). *Poverty and Sustainable Development in Asia: Impacts and Responses to the Global Economic Crisis*. Asian Development Bank (ADB). Manila, Philippines.
- TWG F&E. (2010). *National Forest Programme*, Phnom Penh Cambodia, Available at: <http://www.twgfe.org/nfp/Docs/Publication/Living%20NFP%20document/NFP%20Document%20in%20English.pdf>
- UNDG (United Nations Development Group). (2001). *Cambodia United Nations Development Goals*. Retrieved from: http://www.undg.org/archive_docs/162-Cambodia_MDG_Report_-_International_Development.pdf
- UNDP (United Nation Development Programme). (2008). *UNDP Annual Report 2008*. Phnom Penh, Cambodia.
- United Nations Declarations on the Rights of Indigenous Peoples (UNDRIP). (2007). General Assembly Resolution 61/295, sixtyfirst session, A/RES/61/295 (2007).
- UNFCCC. (2007). *Bali Action Plan*. Accessed date: November 11, 2009, Retrieved from: <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=3>
- UNHCR (United Nations High Commissioner for Refugees). (2004). *Land concessions for economic purposes in Cambodia: A human rights perspective*. Available at: http://cambodia.ohchr.org/download.aspx?ep_id=237
- UN News Centre. (2009). *Five nations sign up to UN initiative to tackle*. November 2, 2009. Accessed date: November 3, 2009, Retrieved from: <http://www.update.un.org/apps/news/story.asp?NewsID=32811&Cr=forest&Cr1>
- United Nation Permanent Forum on Indigenous People Issues (UNPFII). (2007). *Indigenous People, Indigenous Voice Factsheet: Who are indigenous peoples?*. Retrieved from: http://www.wipce2008.com/enews/pdf/wipce_fact_sheet_21-10-07.pdf
- UN-REDD. (2009). *Operational Guidance: Engagement of Indigenous Peoples and Other Forest Dependent Communities*. Working document.
- UN-REDD. (2010). *Supporting REDD+ Readiness in UN-REDD Partner Countries*. July 15, 2010. Accessed date: July 16, 2010, Retrieved from: http://www.un-redd.org/NewsCentre/Supporting_REDD_Readiness/tabid/4826/language/en-US/Default.aspx

- USAID (United States Agency for International Development). (2006). *Forest Conflict in Asia: Undermining Development, Security, and Human Rights*.
- Van Beukering, P. J.H., Leeuw, K. van der, Grogan, K., Hansfort, S.L. (2009). *Reduced Emission from Deforestation and Degradation in the Southern Cardamom Ecosystem, Cambodia*. IVM Report (R-09/13). Institute for Environmental Studies, VU University, Amsterdam.
- Veenman, S., Liefferink, D., Arts, B. (2009). A short history of Dutch forest policy: The 'de-institutionalisation' of a policy arrangement. *Forest Policy and Economics*, 11, 202–208.
- Visseren-Hamakers, I. J., and Glasbergen, P. (2007). Partnerships in forest governance. *Global Environmental Change*, 17: 3-4, 408-41
- Wiering, M.A. and Arts, B.J.M. (2006). Discursive shifts in Dutch river management: 'deep' institutional change or adaptation strategy? *Hydrobiologia* 565: 327 – 338.
- World Bank. (2004). *Sustaining Forests: a Development Strategy*. Washington DC: World Bank.
- World Bank. (2010). *World Development Indicators 2010*. Washington DC: World Bank.
- WCS. (n.d.). REDD Demonstration Sites. Retrieved March 18, 2010, from: <http://www.wcscambodia.org/conservation-challenges/climate-change/redd-demonstration-sites.html>
- WCS (Wildlife Conservation Society). (2009). *Cambodia Creates First Park to Protect Carbon and Wildlife*. Press release. New York, United State of America. Retrieved from <http://www.wcs.org/press/press-releases/seima%20cambodia.aspx>
- White, A. and Martin, A. (2002). *Who owns the world's forests? : Forest tenure and public forest in transition*. Forest Trend, Washington DC. Retrieved from: http://www.cbnrm.net/pdf/white_a_001_foresttenure.pdf
- World Bank. (1996). *Cambodia Forest Policy Assessment*. Report No. 1 5777-KH1-. Document of the World Bank, United Nations Development Program, and Food and Agriculture Organization.
- World Bank. (2006). *Investigation Report Cambodia: Forest Concession Management and Control Pilot Project*. Report No. 35556. Available at: http://siteresources.worldbank.org/EXTINSPECTIONPANEL/Resources/CAMBO_DIAFINAL.pdf
- World Bank. (2009). Forest Carbon Partnership Facility. Retrieved from: <http://wbcarbonfinance.org/Router.cfm?Page=FCPF&ItemID=34267&FID=34267>
- World Conservation Monitoring Centre. (2002). *Red List for Cambodia*. United Nations Environmental Programme.

- World Resources Institute (WRI), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), and World Bank. (2005). *World Resources 2005: The Wealth of the Poor—Managing Ecosystems to Fight Poverty*. Washington, DC: WRI.
- Yin, R.K. (2003). *Case Study Research – Design and Methods*, 3rd Edition. Sage, London.
- Yu, S. and Sophorn, S. (2010). *Indigenous Cambodians' long wait for collective land ownership*. International Labour Organization (ILO), Bangkok, Thailand.

APPENDIX A: LIST OF KEY RESPONDENTS

Name	Organization	Position/Office	Stakeholder Group
Keo Omaliss	Forestry Administration	Deputy Director of Department of Wildlife and Biodiversity /National REDD Focal Point	Government
Long Ratanakoma	Forestry Administration	Deputy Chief of Community Forestry Office	Government
Sum Thy	Ministry of Environment	Director of Department of Climate Change	Government
Khun Vathana	Forestry Administration	Assistant Chief of Forestry Administration	Government
Heng Namyi	Forestry Administration	Forestry Administration Officer /Conservation International-Cambodia (CI)	Government
Vun Buntheon	Forestry Administration	Local Forestry Administration Official in Samrong District, Oddar Meanchey Province	Government
Vuthy Lic	Danida/TWG F&E	Program officer of Danida/TWG F&E	Donor Community
Amanda Bradley	Pact Cambodia	Program Director at Pact	Donor Community
Hour Limchhun	Clinton Climate Initiative (CCI)	CCI Coordinator	Donor Community
Annette Olsson	Conservation International (CI) Cambodia	Research and Monitoring Manager at CI	Donor Community
Men Soriyum	Wildlife Conservation Society (WCS)	Project Manager of Seima Protection Forest	Donor Community
Edwin V. Payuan	RECOFTC Cambodia	Chief Technical Advisor	Donor Community
Hou Kalyan	RECOFTC Cambodia	Training Coordinator	Donor Community
Mathieu Van Rjin	Geres Cambodia	Forestry Unit Manager	Donor Community
Chee Boreth	Children's Development Association (CDA)	Director of CDA	Civil Society
Sa Thlay	Community Forestry Federation	Chief of Community Forestry Federation	Community
Ven. Bun Salout	The Association of Buddhists for the Environment (ABE)	Director of ABE	Civil Society
Hean Bun Hieng	NGO Forum on Cambodia	Forestry Project Officer	Civil Society
Leslie Durschinger	Terra Global Capital (TGC)	Founder and Managing Director	Private

Note: The donor community refers to the International Nongovernmental Organizations (INGOs) and donors while the civil society refers to the association and local NGOs.

APPENDIX B: GOVERNMENT DECISION OR SAR CHOR NOR NO.699 (With Khmer Version)

KINGDOM OF CAMBODIA

Nation- Religion- King

COUNCIL OF MINISTERS
No. 699 Sar.Chor.Nor

Phnom Penh, 26 May 2008

DEPUTY PRIME MINISTER, MINISTER IN CHARGE OF COUNCIL OF MINISTERS

INFORM TO

- H.E Senior Minister, Minister of Ministry of Environment
- H.E Minister of Ministry of Agriculture, Forestry and Fisheries
- H.E TY SOKHUN, Adviser to Samdech Akka Moha Sena Padei Techo HUN SEN, Prime Minister of the Kingdom of Cambodia, and the Chief of Forestry Administration.

Subject: Request the support from Samdech Akka Moha Sena Padei Techo HUN SEN, Prime Minister of the Kingdom of Cambodia on Forestry Carbon Credit Project in the Kingdom of Cambodia.

Reference:

- Letter dated on 28 April 2008 of Dr. Mark Poffenberger, Executive Director of Community Forestry International (CFI)
- Letter dated on 5 May 2008 of H.E Ty Sokhun, Adviser of Samdech Akka Moha Sena Padei Techo HUN SEN, Prime Minister of the Kingdom of Cambodia.
- Decision dated 8 May 2008 of Samdech Akka Moha Sena Padei Techo HUN SEN, Prime Minister of the Kingdom of Cambodia.

As stated in the above subject and references, the Council of Ministers would like to inform Your Excellencies that the Royal Government of Cambodia (RGC) decides to support the forest carbon credit project in Cambodia as follow:

1. Designates the Forestry Administration (FA) as the seller of the forest carbon in Cambodia with the CFI.
2. The RGC, as seller of the forest carbon, is responsible for helping to fulfill the terms and conditions in the contract "selling carbon" with the buyer.
3. Have a Memorandum of Understanding (MOU) between CFI and the RGC, represented by FA that would allow CFI to identify buyers, and explore terms and carbon prices subject to the review and approval of the RGC. The Royal Government of Cambodia decides in the MOU that revenue from selling Carbon in the Carbon Credit for community forestry Project will be used to:
 - a. Improve the quality of the forest;
 - b. Maximize the benefits flows to local community who is participating in the project,
 - c. Study potential sites for the new forest carbon credit REDD project.

4. Revenue from forest carbon REDD project will be channeled through the Technical Working Group on Forestry and Environment (TWG-F&E) during the first five years of the project
5. Delegates the Forestry Administration as the representative of RGC to execute the sale of Cambodia forest carbon with consultation within the Technical Working Group on Forestry & Environment (TWG-F&E), if necessary.

As stated above, may Your Excellencies understand and follow the instructions.

Please accept, Your Excellencies, the assurance of my sincere consideration.

Minister of Council

Secretary of State

Signature and Stamp: Prak Sokhon

Copy to:

- Cabinet of Prime Minister
- Council for Development of Cambodia
- Forestry Administration
- Community Forestry International
- TWG-F&E
- Documentation.



ព្រះរាជាណាចក្រកម្ពុជា

ទីស្តីការគណៈរដ្ឋមន្ត្រី
លេខ: ២៧៧.៧.៧.៧.៧.៧

ជាតិ សាសនា ព្រះមហាក្សត្រ
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រាជធានីភ្នំពេញ, ថ្ងៃទី ១៧ ខែ ឧសភា ឆ្នាំ ២០០៨

ឧបនាយករដ្ឋមន្ត្រី រដ្ឋមន្ត្រីទទួលបន្ទុកទីស្តីការគណៈរដ្ឋមន្ត្រី
ជំរាបមក

- ~ ឯកឧត្តម លោករដ្ឋមន្ត្រី រដ្ឋមន្ត្រីក្រសួងបរិស្ថាន
- ~ ឯកឧត្តម រដ្ឋមន្ត្រីក្រសួងកសិកម្ម រុក្ខាប្រមាញ់ និងនេសាទ
- ~ ឯកឧត្តម ឆី សុគន្ធិ ទីប្រឹក្សាផ្ទាល់សម្តេចអគ្គមហាសេនាបតីតេជោ ហ៊ុន សែន នាយករដ្ឋមន្ត្រី នៃព្រះរាជាណាចក្រកម្ពុជា និងជាប្រធានរដ្ឋបាល ព្រៃឈើ

កម្មវត្ថុ : ករណីសំណើសុំការគាំទ្រដីខ្ពង់ខ្ពស់ពិសម្តេចអគ្គមហាសេនាបតីតេជោ ហ៊ុន សែន នាយករដ្ឋមន្ត្រី នៃព្រះរាជាណាចក្រកម្ពុជា សំរាប់តំបន់ធនធានការពារព្រៃឈើនៅព្រះរាជាណាចក្រកម្ពុជា ។

យោង : -លិខិតចុះថ្ងៃទី២៨ ខែមេសា ឆ្នាំ ២០០៨ របស់លោកបណ្ឌិត Mark Poffenberger

នាយកប្រតិបត្តិនៃអង្គការសហគមន៍ ព្រៃឈើអន្តរជាតិ (CFI)

-លិខិតចុះថ្ងៃទី ០៥ ខែឧសភា ឆ្នាំ២០០៨ របស់ឯកឧត្តម ឆី សុគន្ធិ ទីប្រឹក្សាផ្ទាល់សម្តេចអគ្គ

មហាសេនាបតីតេជោ ហ៊ុន សែន នាយករដ្ឋមន្ត្រី នៃព្រះរាជាណាចក្រកម្ពុជា ។

-ចំណាត់ការរបស់សម្តេចអគ្គមហាសេនាបតីតេជោ ហ៊ុន សែន នាយករដ្ឋមន្ត្រីនៃព្រះរាជាណាចក្រកម្ពុជា ចុះថ្ងៃទី ០៨ ខែឧសភា ឆ្នាំ ២០០៨ ។

សេចក្តីដូចមានចែងក្នុងកម្មវត្ថុ និងយោងខាងលើ ទីស្តីការគណៈរដ្ឋមន្ត្រីមានកិត្តិយស សូមជំរាបជូន

ឯកឧត្តមមេត្តាជ្រាបថា : ចំពោះករណីនេះរាជរដ្ឋាភិបាល បានសម្រេចយល់ព្រមតាមសំណើដូចខាងក្រោម :

១-ចាត់តាំងរដ្ឋបាលព្រៃឈើ ជាភ្នាក់ងារលក់ការពារព្រៃឈើកម្ពុជា ជាមួយអង្គការសហគមន៍ ព្រៃឈើអន្តរជាតិ CFI ។

២-រាជរដ្ឋាភិបាលកម្ពុជា ដែលជាអ្នកលក់ការពារព្រៃឈើទទួលខុសត្រូវជួយ ធ្វើឱ្យសម្រេចបាន លក្ខខណ្ឌក្នុងកិច្ចសន្យា " លក់ការពារ " ជាមួយអ្នកទិញ ។

៣-មានអនុស្សាវរណៈយោគយល់(MOU) រវាងអង្គការសហគមន៍ព្រៃឈើអន្តរជាតិនិងរាជរដ្ឋាភិបាលកម្ពុជា

BSSD 3/16/2008

ដែលតំណាងដោយរដ្ឋបាលព្រៃឈើដែលនឹងអាចអនុញ្ញាតឱ្យអង្គការ សហគមន៍ ព្រៃឈើអន្តរជាតិ CFI កំណត់ ស្វែងរកអ្នកទិញ និងសិក្សាពីលក្ខខណ្ឌ និងតម្លៃ ការបោន ដែលនឹងត្រូវពិនិត្យ និងអនុម័តពីរាជរដ្ឋាភិបាលកម្ពុជា ។ រាជរដ្ឋាភិបាលកម្ពុជាសំរេចនៅក្នុង អនុស្សាវរណៈយោគយល់ MOU ថា ចំណូលដែលបានពីការលក់សារជាតិ ការបោននៃគំរោងឥណទានការបោនសំរាប់ សហគមន៍ព្រៃឈើ និងត្រូវប្រើប្រាស់ដើម្បី :

ក-កែលម្អអរគុណភាពព្រៃឈើ

ខ-ផ្តល់ផលប្រយោជន៍ជាអតិបរិមាដល់សហគមន៍មូលដ្ឋានដែលបានចូលរួមក្នុងសកម្មភាពគំរោង

គ-សិក្សាកំណត់សក្តានុពលនៃ ទីតាំងគំរោងឥណទានការបោនព្រៃឈើ REDD ថ្មី

៤-ចំណូលពីគំរោងការបោនព្រៃឈើ REDD នឹងចូលតាមរយៈក្រុមការងារបច្ចេកទេស កំណែទម្រង់ ព្រៃឈើ ក្នុងរយៈពេល៥ ឆ្នាំដំបូងរបស់គំរោង ។

៥-ប្រគល់ភារកិច្ចឱ្យ រដ្ឋបាលព្រៃឈើធ្វើជាតំណាង រាជរដ្ឋាភិបាលកម្ពុជា ក្នុងការងាររៀបចំ ចាត់ចែងលក់ការបោនព្រៃឈើកម្ពុជា ដោយត្រូវមានការពិគ្រោះយោបល់ ក្នុងក្រុមការងារបច្ចេកទេសកំណែទម្រង់ ព្រៃឈើ តាមការចាំបាច់ ។

អាស្រ័យដូចបានជំរាបជូនខាងលើ សូមឯកឧត្តម មេត្តាជ្រាប និងចាត់ចែងអនុវត្តតាមការគួរ ។

សូមឯកឧត្តម ទទួលនូវសេចក្តីគោរពរាប់អានដ៏ស្មោះពីខ្ញុំ ។

ចម្លងជូន :

- ខុទ្ទកាល័យសម្តេចនាយករដ្ឋមន្ត្រី
- ក្រុមប្រឹក្សាអភិវឌ្ឍន៍កម្ពុជា
- រដ្ឋបាលព្រៃឈើ
- អង្គការសហគមន៍ព្រៃឈើអន្តរជាតិ CFI
- ក្រុមការងារបច្ចេកទេសកែទម្រង់ព្រៃឈើ (TWGFE)
- ឯកសារ-កាលប្បវត្តិ

ជ. រដ្ឋមន្ត្រីទទួលបន្ទុកទីស្តីការគណៈរដ្ឋមន្ត្រី
 រដ្ឋមន្ត្រីទទួលបន្ទុក

 ប្រាក់ សុខុម

APPENDIX C: INTERVIEW PROTOCOL

Tenure arrangement under REDD pilot projects:

1. Who has been involved in tenure arrangement under the REDD pilot projects?
2. How are forests and land tenure arranged in the projects?
3. Who will own forest and land in the project area?
4. How long can the land and forest be owned?
5. In your opinion, do you think the proposed tenure arrangement is appropriated for REDD? Why?
6. To what extent, do you think that current tenure arrangement safeguards local and indigenous people rights?
7. In your opinion, how will land and forest tenure reform affect local people, and forest use and access right?
8. Are customary or traditional right recognized in the land tenure system under the two projects?

Carbon Right under REDD pilot projects:

1. How will ownership of forest carbon credits be arranged among project participants / beneficiaries?
2. Will carbon rights credit be defined based on tenure right under the REDD mechanism? Why were it defined in such manner?
3. Is there any legal mechanism or framework to ensure ownership over forest carbon credits?
4. Have the local forest communities been involved in the design of the tenure and benefit sharing mechanism?

Benefit Sharing:

1. How will benefit sharing arrangements be arranged?
2. How will benefits be distributed at the national and local level among different forest users?
3. How will revenue from carbon credits selling be channeled down to local communities?
4. Is there any system to ensure equitability and transparency of benefit sharing among stakeholders?
5. Concerning benefit sharing mechanism, do you think the mechanism is suitable for REDD? Why?

Mechanisms for solving conflict over tenure rights and benefit sharing:

1. Are there mechanisms for resolving land tenure disputes and conflicts over benefit sharing?
2. Who will be vested with the authority to arbitrate and resolve land tenure and related disputes?

Discourse coalition

1. It is believed that REDD will deliver several benefits, including mitigation of climate change, conservation of biodiversity and poverty reduction. In your view, which of these benefit (s) do you associate with REDD?

2. Two REDD projects (Community Forestry in Oddar Meanchay and Seima Protection Forest in Mondulkiri Province) are being implemented in Cambodia. In your view, do you think local communities will benefit from these projects?
3. Would you say there different groups of people who have different views on how land tenure / benefit sharing should be arranged under the two projects?
4. Which organizations have the same views on REDD?
5. According to the government decision, at least 50% of the net revenues from REDD will dedicate to local communities. Are you aware of this mechanism of sharing REDD benefits?
6. If yes, do you think this mechanism of sharing REDD benefits is an equitable means of sharing benefits?
7. There are various groups of people involved in the two projects. In your view, would you say there are some groups that have more say in the way REDD benefits will be shared among them?
8. If so, who are these groups and how do they differ from the others?
9. It is apparent that land and tree tenure rights and benefit sharing issues are critical for effective implementation of REDD in Cambodia. Do you think if these issues are not adequately addressed, REDD in Cambodia will fail?

Rules of the game

1. There are various forms of land tenure in Cambodia. Is it common for local communities to access products from the forests under these tenure arrangements?
2. Are there rules, whether formal or informal, to ensure that local communities access products and services from the forests?
3. The government has proposed to share at least 50% of the net revenues from the REDD projects with the local communities. Is it common in Cambodia for the government to share forest revenues with the local communities?
4. If yes, would you give examples on where the government has shared or is sharing forest or other natural resource benefits with local communities?
5. Is it common practice to involve stakeholders, including forest communities in forest policy formulation in Cambodia?
6. Are you as an individual satisfied with the proposed mechanism for sharing REDD benefits?