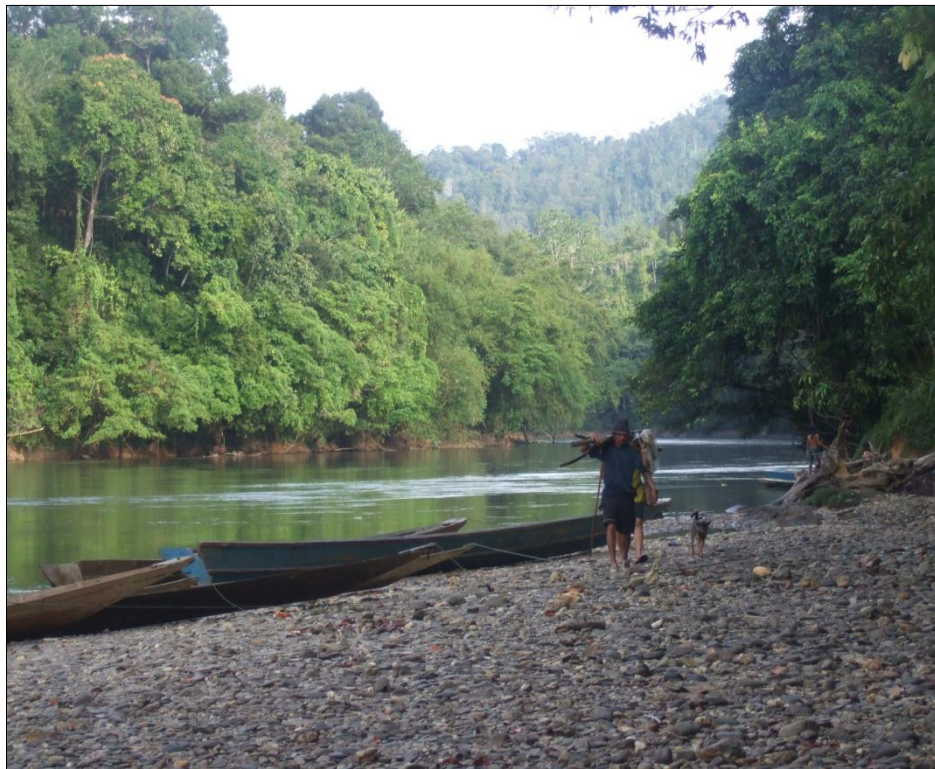


REDD under implementation; new hopes for land, resource access and livelihood security

A case study of two Dayak customary communities in Kapuas Hulu/West Kalimantan



M.Sc. Thesis by Sébastien de Royer

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June 2011

MSc program:

International Development Studies

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Thesis code:

RDS-80433

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Abstract

REDD (Reducing Emissions from Deforestation and Forest Degradation) is an important climate change mitigation alternative strategy that aims at conserving the forest, and could potentially allow both forest dwellers and larger stakeholders to benefit from the last standing forest stocks in tropical countries. Focusing on Kalimantan/Indonesia, this thesis is rooted in the context of contested rules between the state and local communities over use and protection of forest. It is looking on the way new hopes from REDD payments revitalizes issues such as land tenure and resources access security, rights to forest carbon, and livelihood security in Indonesia. Using an actor-oriented approach, it shows how two distinct Dayak customary communities in West Kalimantan appropriate a discourse about REDD and integrate it into their life-world in order to justify their claims and legitimacy over forestlands and resources access. Trying to understand local people's ideas about REDD could be used to implement REDD in a way that respect effectiveness, efficiency and equity.

Résumé

La réduction des émissions liées à la déforestation et de la dégradation forestière (REDD), est une stratégie afin de limiter le réchauffement climatique. Son principe de conservation de la forêt a le potentiel de bénéficier aux communautés locales forestière et aux acteurs locaux des derniers stocks forestier dans les pays tropicaux. Se concentrant sur Kalimantan/Indonésie, cette thèse est ancrée dans le contexte de règles contestées entre l'état et les communautés locales concernant l'utilisation et la protection des forêts. Elle analyse en profondeur la manière dont de nouveaux espoirs générés par le possible paiement de crédits REDD réaffirme l'importance de questions telles que la sécurité des régimes fonciers forestiers, l'accès aux ressources forestières, le droit du carbone contenu dans la forêt, et la sécurité des moyens de subsistance en Indonésie. Se basant sur une approche de l'acteur, cette thèse démontre comment deux communautés coutumières Dayak à Kalimantan-Ouest s'approprient un nouveau discours basé sur les intentions de REDD et l'intègrent dans leur vécu afin de justifier leurs revendications et leur légitimité sur les

terres forestières et l'accès aux ressources. Essayer de mieux comprendre les idées des populations locales en ce qui concerne REDD peut être bénéfique pour l'implémentation réussie de futures activités sous le régime REDD respectant l'efficience et l'équité.

Intisari

REDD (Pengurangan Emisi dari Deforestasi dan Degradasi Hutan) adalah skema mitigasi perubahan iklim yang merupakan strategi alternatif penting bertujuan untuk melestarikan hutan, dan berpotensi untuk memungkinkan masyarakat sekitar hutan dan pemangku kepentingan untuk mendapatkan keuntungan dari saham kekayaan hutan di negara-negara tropis. Khususnya di Kalimantan, thesis ini beakar pada konteks peraturan yang diperdebatkan antara pemerintah dan masyarakat lokal atas penggunaan dan perlindungan hutan. Melihat adanya harapan baru dari cara pembayaran REDD yang menghidupkan kembali isu-isu seperti kepemilikan tanah dan akses aman untuk sumber daya alam, hak untuk karbon hutan, dan keamanan mata pencaharian di Indonesia. Dengan menggunakan pendekatan aktor-orientasi, hal ini menunjukkan bagaimana dua kelompok masyarakat adat Dayak yang berbeda di Kalimantan Barat yang sesuai dengan wacana tentang REDD dan mengintegrasikannya ke dalam dunia kehidupan mereka dalam rangka untuk membenarkan klaim mereka dan legitimasi atas lahan hutan dan akses sumber daya alam. Dengan mencoba untuk memahami ide-ide orang lokal tentang REDD dapat digunakan untuk menerapkan REDD dengan cara menghormati efektivitas, efisiensi dan ekuitas.

Acknowledgement

This thesis project has been made possible with the kind support and assistance of many different people.

I am particularly grateful to the village and customary leaders of Pulau Manak and Menua Sadap and the community members for their warm welcome, friendliness and for sharing their knowledge and experiences through interviews, discussions, hunting trips and long evening's talks. They have made my stay within their communities in Kapuas Hulu a unique and unforgettable experience.

Special thanks also go to individuals and representatives of organizations, universities and NGOs who provided their time and opinions on various issues addressed along this thesis. Particularly to Ibu Rahmina Hamsuri from the IHSA Balikpapan for her precious support and advices.

I would like to thanks all the GTZ-FORCLIME staff members without whom my research plan wouldn't have been possible. Principally to Dr. Helmut Dotzauer who supported my project and made it possible for me to reach Kapuas Hulu. Special thanks are also dedicated to Pak Edy Marbyanto, my friend Pak Ali Mustofa, Ibu Yana Rosdiana for their support in various matters and their help during my stay in Samarinda.

My gratitude goes to people who have made it easy for me during my stay in Putussibau namely Pak Alwiss Razali, Pak Gustee Makmun and the staff from the Betung Kerihun National Park.

This thesis could not have been conducted without the coordination and supervision of Pr. Dr. Leontine Visser from the Rural Development Sociology group at Wageningen University. Many thanks for her strong devotion and supervision.

Finally I would like to thank Dr. Krystof Obidzinski from the Center for International Forestry Research (CIFOR) who accepted to assume the responsibility as a second reader for this thesis.

Sébastien de Royer

Wageningen/the Netherlands

June 2011

Table of Contents

Abstract.....	ii
Acknowledgement.....	iv
List of organisations interviewed.....	ix
List of abbreviations	x
Introduction	1
 CHAPTER 1 - An introduction to the research; background and overview.....	5
1.1. Setup of the research	5
1.2. Background on REDD	7
1.3. Background on GTZ-FORCLIME (Forest and Climate Change Programme)	9
1.4. Role of stakeholders in taking the discourse on REDD to the area	10
1.5. Selection of the research area	12
1.6. Constrains faced during research activities	13
1.7. Relevancy of the research	15
1.8. Research questions.....	16
1.9. Methodology and approach	18
1.10. Data collection techniques.....	20
1.11. Conceptualizing Tenure and Property	22
 CHAPTER 2 - Knowledge and ideas about REDD; revival of claims over land security25	
Introduction.....	25
2.1. <i>Adat</i> rights and the state's right of control over forestlands	26
<i>Hak ulayat</i> and the Agrarian and Forest Laws	26
Decentralization.....	28
REDD and <i>hutan adat</i>	29
2.2. REDD: a discourse over access right	30
Carbon rights.....	30
Enhancing tenure security of forest dependent communities through REDD.....	32
Acknowledgement of <i>Hutan Desa</i> as a necessarily step toward land legitimization and REDD implementation.....	33
Governmental lack of participation; Fears for losing land control	36
2.3. Ideas and knowledge in the village arena	37
Ideas about climate change.....	37

Ideas about REDD	38
Actors involved in channeling REDD discourse	40
Knowledge and ideas about <i>Hutan Desa</i>	40
2.4. REDD discourse at the village level; strategy for recognition of claims to place	42
Recognition of <i>adat</i> resource uses of forestlands	42
Hopes for strengthening participation	44
Fears for dispossession of land	45
Concluding remarks and reflection	47
 CHAPTER 3 - Ideas about benefit sharing based on different versions of <i>adat</i>	49
Introduction	49
3.1. Communities	50
3.2. Forest management in Menua Sadap and Pulau Manak	51
Household forest	52
Forest gardens	53
<i>Pulau, hutan simpan</i> or forest islands	54
<i>Hutan masyarakat</i>	56
<i>Hutan wilayah adat</i>	57
3.3. Reinventing a green positionality	57
3.4. Ideas about benefit sharing at local level	59
Individual payments	60
Community payments	61
3.5. Ideas about benefit sharing according to local stakeholders	63
NGOs	63
Local government	64
3.6. Claiming land through planting	66
Concluding remarks and reflection	69
 CHAPTER 4 - Ethnicity, contested land borders and forest boundaries	71
Introduction	71
4.1. Brief anthropological review of Iban and Embaloh in the Embaloh Hulu sub-district	72
Embaloh Dayak or Tamanbaloh	72
Iban Dayak: integral swidden farmers	73
4.2. Embaloh-Iban relations	76

4.3. Re-inventing history	77
4.4. Contested forest claims	78
4.5. Resource scarcity	81
4.6. The case of Kerangan Bunut	82
Concluding remarks and reflection	83
 CHAPTER 5 - Securing land tenure and access; securing livelihood	85
Introduction.....	85
5.1. Economic situation.....	86
5.2. Forest products	88
Non timber forest products	88
Timber	89
5.3. Agricultural swidden system	89
5.4. Securing property right, a discourse over livelihood security	91
5.5. Improving and securing livelihood.....	92
People's participation	93
Improving employment situation	94
Diversifying livelihood opportunities.....	94
Securing agriculture.....	95
5.6. Livelihood and sense of place	96
Concluding remarks and reflection	97
 General conclusions and discussion.....	98
References.....	102

List of organisations interviewed

- **Bioma**, local NGO, Samarinda
- **Center for Social Forestry**, Mulawarman University, Samarinda
- **CIFOR**, Center for International Forestry Research, Bogor
- **DED**, German Development Service, Putussibau
- **Dinas Kehutanan**, Forestry Service, Putussibau
- **FFI**, Fauna & Flora International, Putussibau
- **GTZ-FORCLIME**, Samarinda and Jakarta
- **IHSA**, Natural Resources Law Institute, Balikpapan
- **The Inner Women Association**, Samarinda
- **Pokja REDD Kaltim**, REDD working group East Kalimantan, Samarinda
- **TNC**, The Nature Conservancy, Balikpapan
- **Tropenbos International**, Balikpapan

List of abbreviations

BMZ	<i>Bundesministerium fuer Wirtschaftliche Zusammenarbeit und Entwicklung</i> - Federal Ministry for Economic Cooperation and Development
BPN	<i>Badan Pertanahan Nasional</i> - National Land Agency
CDM	Clean Development Mechanism
CO₂	Carbon dioxide
CPR	Common Pool Resource
DED	<i>Deutscher Entwicklungsdienst</i> - German Development Service
FFI	Flora & Fauna International
FPIC	Free Prior and Informed Consent
FORCLIME	Forest and Climate Change Programme
GHG	Greenhouse Gases
GIZ	<i>Deutsche Gesellschaft fuer Internationale Zusammenarbeit</i> - German Cooperation (under the new acronym since January 2011)
GTZ	<i>Deutsche Gesellschaft fuer Technische Zusammenarbeit</i> - German Technical Cooperation
HPH	<i>Hak Pengusahaan Hutan</i> - forest concession
ICDP	Integrated Conservation and Development Project
IPPK	<i>Izin Pemungutan dan Pemanfaatan Kayu</i> - Harvesting and Timber Utilization Permit
KfW	<i>Kreditanstalt fuer Wiederaufbau</i> - German Development Bank
MoF	Ministry of Forestry
MoU	Memorandum of Understanding
NGO	Non Governmental Organization
NTFP	Non Timber Forest Products
PES	Payment for Environmental Services
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
REDD	Reduction Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation and enhancing forest carbon stocks
SFM	Sustainable Forest Management
TNBK	<i>Taman Nasional Betung Kerihun</i> - Betung Kerihun National Park
VCS	Voluntary Carbon Standard
WWF	World Wildlife Fund

Introduction

REDD (Reducing Emissions from Deforestation and Forest Degradation) is incorporating tropical forest conservation and management in global climate change negotiations and is likely to play a major role in a post-Kyoto arrangement following 2012. Inspired from the PES concept (Payment for Environmental Service), REDD is based on the principle to reward individuals, communities, projects and countries that reduce greenhouse gas emissions from forest (deforestation and degradation). Indonesia's high rates of deforestation have made it as a strategic country for REDD development. However in most cases REDD benefits have not yet begun to flow and arrangement for sharing the benefits from REDD is still under negotiation at national levels.

The German cooperation, through its implementation agency GIZ, in its objective to provide assistance to Indonesia's effort to reduce greenhouse gas emissions from the forestry sector, supports the implementation of project-scale REDD demonstration activities in selected districts of Kalimantan in order to provide decision makers with concrete experiences on how REDD can be implemented at the sub-national level. However since REDD is still under discussion in Indonesia and in a constant renegotiation process, the take-off is still slow and interventions have not yet started optimally.

Furthermore, considering its place within global climate change agreements, little attention has so far been focused on how REDD mechanism will be implemented at village level and even less on how do people who lives in tropical forests or in rural areas close to tropical forests perceive carbon reduction projects and what they have to say about it. However, relying on forests and forest products for their subsistence strategies, they are the ones who will be first affected on the ground by such a policy and could potentially experience new risks from state's right of control through top-down processes and legal uncertainties related to land and carbon. REDD will require forest resources users to adapt their economic and subsistence activities according to a new set of carbon-related priorities. This can offer opportunities to

improve livelihoods, although it can also impose costs on communities if traditional activities are restricted and if their traditional land and territorial rights are violated.

The aim of this Master thesis is therefore to show that new hopes and ideas for payments for an environmental service consisting in preserving and enhancing carbon stocks are embedded in a broader struggle over forest ownership and access security. Today, people living in the Indonesian forests continue to claim customary rights (*adat*), although states often do not recognize such claims to vast areas of forest. Indigenous people and other traditional forest dwellers reject state control over forests they view as their own. Through this thesis I will show how a discourse about REDD in Indonesia re-emphasizes the need to reduce conflict over forest boundaries, secure access to land, resources and livelihood, and engage local communities in forest management and conservation.

Based on field research conducted during six weeks (between October and November 2010) in two villages from West Kalimantan (Pulau Manak and Menua Sadap) and on a series of interviews with stakeholders and project proponents (during the period September-December 2010), using an actor-oriented approach, this thesis is divided into five distinct chapters. Together, these chapters show that secure tenure is a key underlying issue for REDD in order to limit risk for local communities. I will also describe how people use, and reinvent a discourse in order to justify their claims over land access and land security.

Based on their community organization and traditional ways of managing forest and forest resources, I will show what their interests are in participating in such a project and what their different ideas are about a potential benefit sharing mechanism. New hopes for payment from standing forest stocks are revitalizing a debate about land ownership and the legitimacy of access to land, which result in inter- and intra-community land conflicts. I will then show that this concern about legitimacy over access to highly valued forest resources is further embedded in a struggle about livelihood security since forest people's lives depend on it.

Throughout this thesis I will also try to incorporate the views of local and international NGOs and governmental representatives at local level about issues such as benefit sharing, land security and access rights.

The assumption in this thesis is that REDD could only be efficient in its objective to climate change mitigation if local priorities, perspectives and wishes are better identified and taken into account. REDD - if implemented in a proper manner - has the potential besides GHG mitigation to include biodiversity conservation, protection of environmental services and poverty reduction.

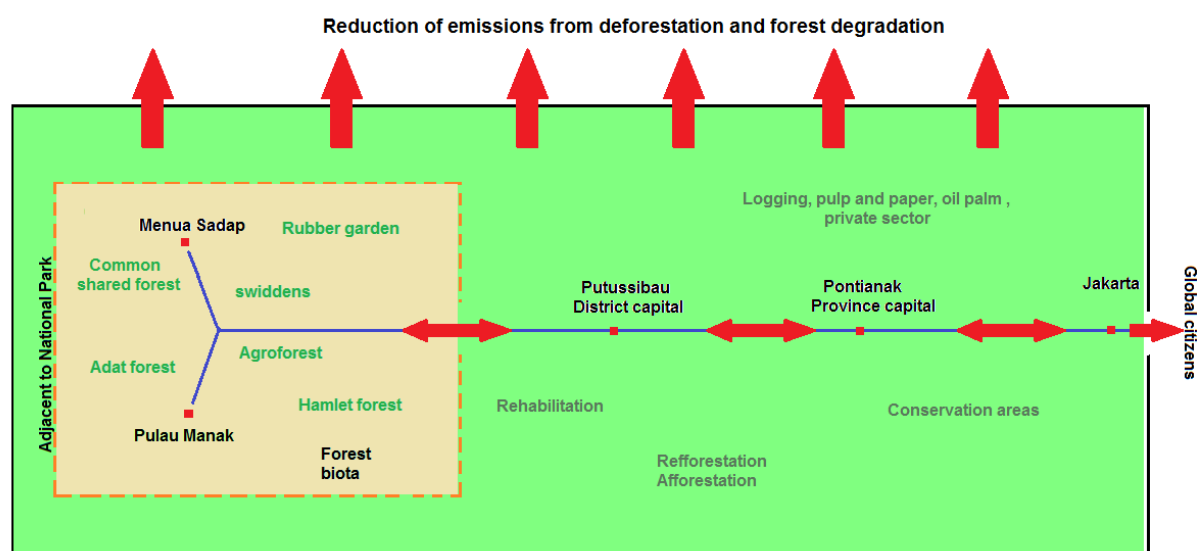


Figure 1: REDD cross scale relations between the two villages nested in a district, province, national and global network

Source: this research

The beige square is the focus of this thesis, at village scale. REDD+ will also go beyond deforestation and degradation and will include the role of conservation, sustainable management of forest and enhancement of carbon stock (UN-REDD). Unfortunately, it would be too much to cover all this in the thesis. I chose to focus on payment for environmental service to local communities for stabilizing or enhancing carbon stocks.

The necessary field research in the province of Kapuas Hulu, West Kalimantan was carried out with the help of a research permit through GIZ. Indonesian language were used which I knew from earlier experiences, having lived three years in the country.

This thesis was supervised by Prof. Dr. Leontine Visser from the Rural Development Sociology Group of Wageningen University, and will serve as the final task of my study program in International Development Studies.

CHAPTER 1 - An introduction to the research; background and overview



Photo 1.1: Sadap, the hamlet lies on the river bank of the Embaloh river. The longhouse is home for Iban Dayak largely depending on forest for the subsistence strategies

1.1. Setup of the research

This MSc thesis supervised by the Rural Development Sociology group of Wageningen University is the result of an exploratory-descriptive study. The information contained in it has been all drawn from field research activities conducted between September 2010 and December 2010 in Indonesia, in the respective provinces of East Kalimantan and West Kalimantan.

The field study area is located in the district of Kapuas Hulu which lies in the northern part of West Kalimantan province, bordering the Malaysian state of Sarawak. West Kalimantan is about 14.7 million ha in area in which 3.8 million ha are classified as protection forest, while 5 million ha are designated for timber production (Yasmi, Schanz et al. 2007). Kapuas Hulu is the most remote regency in West Kalimantan, the district capital Putussibau is located approximately 500 km inland from the provincial capital Pontianak.

On the eastern part of Kapuas Hulu lie the provinces of East Kalimantan and Central Kalimantan. In the northern part of lies the Betung Kerihun National Park, which is

the origin of most of the island's rivers such as the Kapuas, Rejang and Lupar. Betung Kerihun is a recognized hot-spot of biodiversity. It has a range of habitats, including lowland Dipterocarp forest, wet hill forest, montagne forest and swamp forest, home to thousands of different plants and animal species, many endemic to Kalimantan (Lusiana, Widodo et al. 2008).

The two villages of the study are precisely located along the upper Embaloh river, a tributary of the Kapuas river. Administratively, the two villages (*desa*) of the study namely Pulau Manak and Menua Sadap are both situated in the sub-district (*Kecamatan*) of Embaloh Hulu (Upper Embaloh) in the regency (*Kabupaten*) of Kapuas Hulu (Upper Kapuas) and are home for two Dayak customary communities known as Iban Dayak (for Menua Sadap) and Embaloh Dayak (for Pulau Manak). Administratively both villages are divided into three distinctive sub-villages or hamlets (*dusun*). Pulau Manak includes the hamlets of Talas, Pinjawan and Belimbis. Menua Sadap includes administratively Madang, Sadap, Kelayam hamlets and the resettlement plan of Kerangan Bunut hamlet. Every hamlet has its own utilization zone. The zone of a particular hamlet is usually distinguished from its neighbor by natural features such as rivers or hills. Every hamlet is home for a longhouse (*rumah betang*) besides Talas and the hamlet of Belimbis, where the longhouse burned out accidentally on February 2010. Longhouse communities hold generally exclusive customary *adat* land tittles over a geographically defined territory.

Furthermore, information contained in this thesis is also drawn from stakeholders interviews conducted in East Kalimantan, in the cities of Samarinda and Balikpapan. Further interviews were conducted in the district capital of Kapuas Hulu, Putussibau, and on Java in the cities of Jakarta and Bogor.

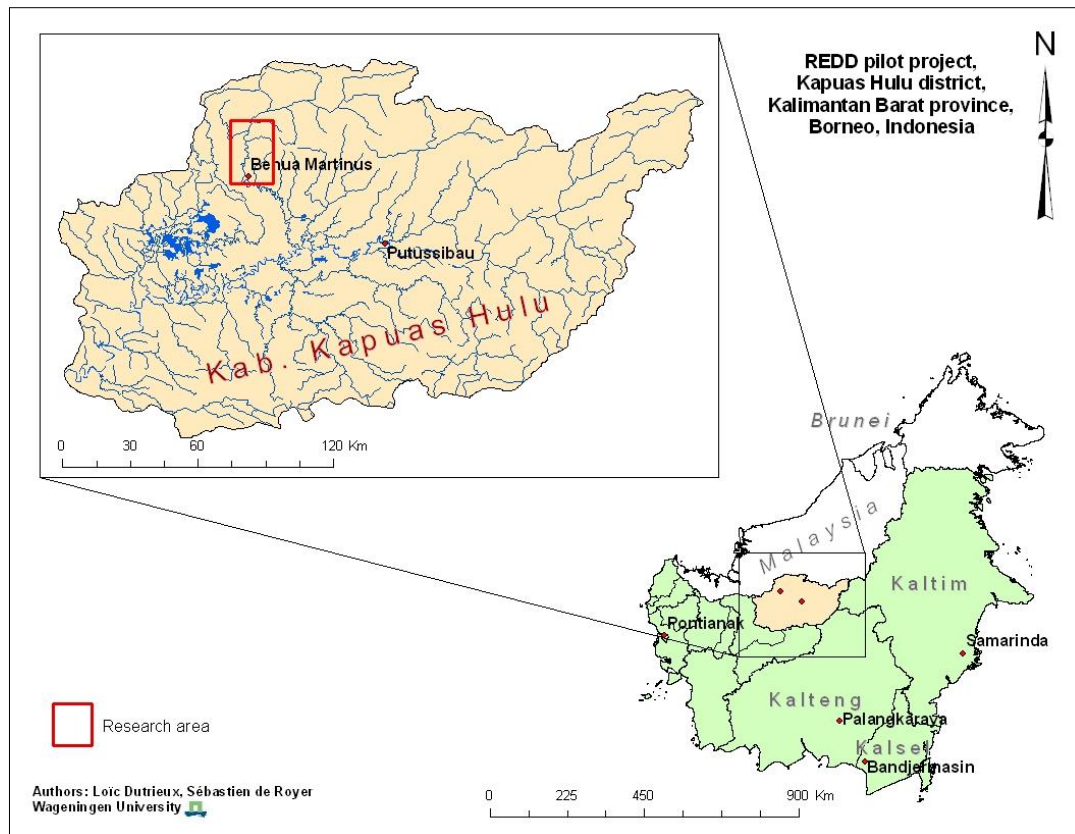


Figure 1.1: Research area, Embaloh Hulu district, Kapuas Hulu regency, West Kalimantan province

Source: this thesis

1.2. Background on REDD

Forest ecosystems contain twice as much carbon as the total amount contained in the atmosphere, and can thus be a significant source of carbon dioxide when they burn or decay (Peskett 2008). Forest loss, primarily tropical deforestation and forest degradation, accounts for approximately 17 per cent of global GHG emissions representing one fifth of the global emissions. Reducing emissions from deforestation and forest degradation (REDD) in developing countries is thus an important component of a viable global climate policy framework, and has captured international attention as a potentially effective and low-cost climate change mitigation option. REDD is a proposed performance-based mechanism under negotiation through the United Nations Framework Convention on Climate Change (UNFCCC). Under the current UNFCCC negotiations, there seems to be consensus that REDD activities should include forest conservation, sustainable forest

management as well as enhancement of carbon stocks. REDD is based on a simple idea: reward individuals, communities, projects and countries that reduce GHG emissions from forest (Angelsen 2008). It is therefore a payment for an environmental service. The size of emissions reduction is determined by comparing achieved deforestation and degradation rates against a reference scenario (called baseline). The reference scenario is a scenario of what would have happened in the absence of the policy or measure (Pesket 2008).

Forest conservation and management was not included as a carbon credit generating activity under the Kyoto protocol, and the realization of a global framework for reduced emissions from deforestation and forest degradation, only came out in 2007 at the 13th Conference of the Parties (COP-13) in Bali (Blom, Sunderland et al. 2010).

REDD was originally intended to incentive reduced carbon emissions from deforestation and forest degradation (land clearing allocating land concessions or commercial timber harvesting in community forests...). During recent international negotiations the scope of REDD has broadened to REDD+. REDD with the new acronym also provides incentives for increases in carbon stocks and allows for emission reduction credits from a wider array of forest management practices. Improvements to logging practices, forest fire prevention, afforestation/reforestation and sustainable forest management, forest conservation, and biodiversity enhancement (Blom, Sunderland et al. 2010). Now negotiation tries to broaden it further by adding a double plus becoming REDD++ focusing on high biodiversity forestlands. Hence, the original objective of paying for a forest regulatory service with regard to climate change gradually was extended by adding objectives regarding additional ecological requirements as well as social requirements on responsible management systems and proper benefit sharing (Wiersum 2009).

In this thesis I will not so much focus on the continuous redefinition of REDD and its amendments, but I will focus on the broader definition consisting at sub-national and communities project-scale aiming at maintaining and improving carbon stock by avoiding any deforestation and degradation. I will focus at the community level (community carbon pool). I will use the term REDD. This concept of REDD emerges out of the experience of Payment for Environment Service (PES), which are voluntary

transactions where environmental service buyers compensate environmental service provider. The environmental service in this case is thus reduced (or stable) carbon emissions from forests (Blom, Sunderland et al. 2010). Besides reducing emissions, REDD can also generate substantial benefits such as positive impacts on biodiversity, and sustainable development including poverty reduction and strengthening indigenous people's rights in line with the Millennium Development Goals (ibid).

Indonesia is endowed with some of the most extensive and biologically diverse tropical forests in the world. But Indonesia is also experiencing one of the highest rates of tropical forest loss in the world. While the actual rates of deforestation have long been disputed, there is general agreement that it has increased in recent years, to almost two million hectares lost per years (Engel and Palmer 2008). Indonesia is thus the third largest carbon emitter after the United States and China. As a result climate change mitigation activities including REDD are continuing to develop in a dynamic way throughout the archipelago through massive donor investments (REDD-readiness funds, pilot projects and national and sub-national policies development).

1.3. Background on GTZ-FORCLIME (Forest and Climate Change Programme)

In the frame of the bilateral cooperation between Indonesia and Germany, the Government of Germany is supporting Indonesia's effort to reduce GHG emissions from the forestry sector, conserve forest biodiversity within the regional Heart of Borneo Initiative and implement sustainable forest management. One of its main tasks is to support Indonesia to get ready for the implementation of a future REDD mechanism. The objective of this bilateral cooperation is to reduce GHG emissions from the forestry sector while at the meantime improving livelihood of poor forest communities. Through the implementation agency GTZ, (now under the new acronym GIZ since January 2011), the Federal Ministry for Economic Cooperation and Development (BMZ) is running the FORCLIME (Forest and Climate Change Programme) project. The technical cooperation strategy is to work at national, provincial and district level to design and implement legal, policy, and institutional

reforms for the conservation and sustainable management of forest. Further objective is also to support REDD demonstration activities in selected districts of Kalimantan and thus providing decision-makers with experiences on how REDD can be implemented. It also provides assistance to devise and adapt regulations for the forest administration reform and the future implementation of REDD. As a result another component focuses on the relations between national, provincial and district levels in making the necessary land and resource use decisions. The financial component through the German Development Bank (KfW) aims to implement strategies for forest conservation and sustainable forest management resulting in reduced GHG emissions and improve living conditions of the rural poor. The aim is to focus on district level in order to prepare pilot areas for national and international carbon markets.

It is in this context that I got my sponsorship through FORCLIME project to carry out my MSc research project. My initiative was also of interest for the project. Because of the recentness of the project, they only have little knowledge about field realities. Collecting data about current situation at the village level was thus very relevant for project representatives as it will provide them with a grassroots approach.

1.4. Role of stakeholders in taking the discourse on REDD to the area

REDD programs will be active in Kapuas Hulu through different forms. First a business oriented voluntary REDD schemes initiated by FFI (Flora & Fauna International), through the rehabilitation of degraded peat lands. Mercury, an Australian Bank has the ability to pay carbon offsets for 4-5 USD per Ton. Socialization, workshops and feasibility studies, identification of potential areas have already been conducted.

The second type mentioned above, is the mandatory partnership between Indonesia and Germany (through GTZ, DED and the development bank KfW). Planning to work at the community level, the approach of the German side will focus on community forestry for the potential implementation of community carbon pool.

Main actors on REDD in the province are thus IONGs, the German Cooperation and the local government through its forestry service. Because REDD is a politically volatile issue and still an ongoing discourse, concrete actions are not yet taking place on the ground, however stakeholders are active agents to channel information about the issue at the villages level in order to prepare the mental readiness for future action plans in Kapuas Hulu.

GTZ and FFI are working close together for holding workshops and socialization at the provincial and district level. At the time I was conducting field data collection, two workshops had already take place in Kapuas Hulu (including sub-district and villages representatives). At the village level, the German Cooperation through its Development Service (DED) is already working on participatory mapping with villages for the delineation of village borders and forest boundaries. The plan in the longer term is to support the institutionalization of REDD.

FFI have facilitators in villages and use them to spread information about the topic. So far they do not address sensitive topics such as benefit sharing mechanisms, but rather try to get people familiar with carbon and climate change issues using pictures and participative techniques. They also try to get people familiar with *Hutan Desa* (village forest) process, often seen as a prerequisite for the successful implementation of REDD. According to one of its representative, most important in a *Hutan Desa* or REDD scheme is the mental readiness of the people not so much the physical infrastructures. Problem emerges if people are not mentally ready.

The local government through its district forestry service is not yet playing a relevant role in channeling information on the topic. Staff is until now not reaching the communities. According to a representative of its service in Putussibau, they are lacking human resources to divulgate information and their own knowledge about the topic is too weak. Instruments for communication and socialization are urgently needed. According to the same informant, what they need, is a secretariat for REDD at the district level that will be in charge of spreading the knowledge and support the forestry service, socialization should come from one single gate. Responsible should also be the sub-district level (*Kecamatan*) in order to better reach village level.

As a result information about carbon and REDD issues are not yet optimized at the village level. People aware about the topic are often village elites having tied relations with local government or NGOs. Further information about the current knowledge will be developed in the following chapter.

1.5. Selection of the research area

For this study mainly focusing at local and community levels, it was important to conduct research in an area where the German Cooperation is active and already started to implement its action plan. Due to limited budget and time constraint, it was not feasible to conduct research in the three focus areas where the German Cooperation will be actively involved in forest management and REDD activities namely Malinau and Berau for East Kalimantan and Kapuas Hulu for West Kalimantan. The decision to focus only on Kapuas Hulu came out after discussion with FORCLIME representatives which took place at the Ministry of Forestry (MoF), in Jakarta after my arrival in Indonesia end of September. Due to the recentness of the project, activities were not yet advanced in the focus areas while in Kapuas Hulu, the German Cooperation is already involved through its Development Service (DED) since 2009 in participative land use planning activities and implementation of a GIS-supported database. Two representatives of the DED are based at the forestry service (*Departemen Kehutanan*) in Putussibau, capital city of the Kapuas Hulu district. GTZ has already conducted socialization activities on REDD at the local level, and as a result communities do have basic ideas about future plans and possible activities in their area.

The MoU signed between the MoF and the German side, stipulates that in Kapuas Hulu, focus should mainly concentrate on two villages located in the buffer zone of the Betung Kerihun National Park, namely Pulau Manak and Menua Sadap. Activities in those two villages are mandatory for GIZ through the bilateral agreement. The reason to focus mainly on those two villages was often unclear, but according to the head of the forestry service in Putussibau, they are the two last villages upstream the Embaloh river before the entrance of the National Park. As a result they have an

important function in maintaining ecological services in the buffer zone and are seen as potential providers of future ecotourism activities. Community mapping activities, with support of the DED, are already taking place in the two villages for the future implementation of a village forest plan (*Hutan Desa*, and potentially for a future community carbon pool project/REDD). The village selection was thus restricted to those two villages as they are high on the local government's agenda, and they are also the only ones having little knowledge about carbon issues and potential implementation of carbon projects.

1.6. Constrains faced during research activities

During field research I encountered some difficulties which have sometimes slowed down the process of data gathering but fortunately have never affected my intention in a negative manner.

The first step in order to reach the sub-district of Embaloh Hulu was to receive formal authorization to conduct research from the district authorities and the local police in Putussibau. These administrative formalities took some time, as I had to wait for a support letter coming from Jakarta which gave me the right to receive a second letter from the local forestry service. With those two documents in hand, I received a third authorization from the district police authorities. With all my papers, bags in hand, I took the muddy and potholed dirt road to Embaloh Hulu where I first had to register at the local police office and the sub-district office (*Kantor Camat*). I had to clarify my intentions, purpose, length of stay and area of research.

Entering the villages, it first wasn't easy for the communities to understand exactly who I was. The status of independent researcher was often not very clear to them and being unaccompanied sometimes raised several questions among villagers. Even though I was officially introduced and had to introduce myself and my intentions in both villages with a speech held by a representative of the village administration, only few people participated during these introduction meetings as most of people were busy in their swiddens. My presence has then generated all kind of interpretations from being a missionary, a tourist or even a trader. But the most problematic interpretation was to be perceived as somebody engaged by the

National Park Betung Kerihun. Knowing the problematic relation between the communities and the National Park, this has resulted in the fact that in Pulau Manak, people were reluctant to talk to me for a couple of days. Things went well again after a clarification session accompanied with palm wine. I often had to clarify who I was, and to explain that I wasn't in the position to satisfy their claims and hopes since they often perceived me as an NGO representative.

The contacts of the persons I stayed within the two villages were provided to me by FORCLIME project staff members. In Menua Sadap I stayed in the longhouse of Sadap hamlet together with a household and in Pulau Manak in the hamlet of Pinjawan in a separate individual house also together with a family. If I have to be critical about my approach I shouldn't have relied only on those contacts. Both contacts were well known by project staffs since there are playing a sort of broker function and are the two only persons in the villages having a contract with the National Park. They are the two main contacts for project staff when they come to the area. But I realized during my stay that both persons had conflicting relationships with other villagers probably due to the fact that they are contracted by the National Park. Staying at their places had the effect to reinforce the feeling of villagers that I was someone from the Park. I often had to listen to critical judgments from my informants about my hosts and it wasn't sometimes very comfortable to be in my position and to be the witness of internal conflicts.

Now, in relation to methodological constraints, as already mentioned above during my stay people were busy with field activities (mainly poison spreading and weeding). There was a high rate of absenteeism in the longhouses during day time. As a result, it wasn't possible to conduct systematic interviews during the days. I had to modify my approach and to optimize my days by following informants on their daily activities. Interviews and semi-structured discussions could only be hold after their return from the fields and diner time, around 6 pm.

In relation to the topic, some people (interestingly mainly women) had never heard about carbon issues and are not aware about the topic and potential future actions. It wasn't possible to talk directly about the topic, I then had to adjust my discussion in a broader sense and talk about their feelings related to nature conservation and biodiversity preservation and not directly about carbon.

1.7. Relevancy of the research

In many rainforest countries people use forestlands on the basis of local customary tenure systems. But in Indonesia, these local systems are not recognized by the law and forest is treated as state-owned land by the national legal system. The relation between customary and state tenure remains very unclear in Indonesia and is leading to problematic and blurred situations over land ownership.

It is well stated in the REDD literature that forestry carbon projects in developing countries are not without risk, especially knowing the often complex and problematic issues related to nature of land ownership, resource rights and often poor governance systems (Peskett and Harkin 2007). Without clear land and carbon rights, REDD projects will definitively be of high risk especially for forest communities whose access to land may be endangered, as it has been sometimes the case under CDM projects. Clear land ownership and access rights are crucial elements in order to delineate responsibilities for implementation of future REDD activities and determine who will be the beneficiaries. As a result issues related to unclear land and resource access may also lead to land conflicts arising in areas where REDD projects will be implemented, and conflicts in claims over carbon rights. If REDD increase value it may also increase conflicts as claimants stand to gain more by winning control over land.

The lack of rights and recognition of access is particularly disadvantaging for poor forest dwellers, as it will also be hard for them to be involved in negotiation about benefits as they are often less able to assert their claims (Peskett and Harkin 2007). More secure tenure may give them more leverage in negotiating with government and the private sector.

Lack of clarity may also result in little incentive of resource users if they feel they have no stake in it and as a result may conduct to further deforestation (Cotula and Mayers 2009). The insecure land tenure also makes local communities vulnerable to dispossession and is thus a major concern in a REDD scheme as it could increase forest values (Peskett, Huberman et al. 2008).

Forest people are aware about the threat that a plan such as REDD may represent for their rights and access to land and resources. Through past experiences in

relation to nature conservation they have realized that their rights are not fully secured and that they are often excluded from negotiations and project decisions. Consequently, in the new area of hopes from carbon credits, they are well decided to be major actors in the process and to raise their voices.

Recognition over customary tenurial systems is often at the center of claims for indigenous people and local communities whose livelihood depends partly on access to resources and forestlands. Tens of millions of Indonesians are depending directly on access to forestlands for their livelihoods, whether gathering forest products for their daily needs or working in the wood-processing sectors of the economy (Barder et al. 2002).

Avoided deforestation and avoided forest degradation through a REDD mechanism, can contribute to the maintenance of all forest ecosystem services and can thus contribute to securing the ecological basis for livelihoods of rural populations. Where rural communities and individuals contribute to avoid deforestation, REDD can be seen as a scheme to diversify the existing income, which may contribute to poverty alleviation. But REDD can also require forest resource users to adapt their economic and subsistence activities according to a new set of carbon-related priorities. If the sale of carbon rights prevents forest dependent communities from utilizing forest products or harvesting timber, this can impose costs on communities if traditional livelihood activities are restricted and strongly affected. Moreover, if the resource rights are not guaranteed and recognized, it may dispossess them entirely from access and jeopardize their lifestyles.

Greater forest management for maintaining carbon pools at the community level will restrict forest uses and thus will need to be supported with incentives such as agricultural intensification in non forestlands (Peskett and Harkin 2007).

1.8. Research questions

Knowing the fragile and unstable access rights to resources and the impact it could have on livelihood, the aim of this thesis, is then to understand how two different customary communities (Iban Dayak and Embaloh Dayak) in West Kalimantan use a

recent discourse about potential payment from REDD, to reinforce their claims over land and resource rights and recognition of customary tenurial systems. I will try to understand from the perspective of the local people themselves how should REDD mechanism be designed to be in line with their claims over resources access security and legitimacy and how they reshape the discourse to justify these claims.

I assume that REDD will be better off if the views of local people are better incorporated into decision making. If the providers of the ecosystem service can be fairly rewarded and if their access to land and thus livelihood can be ensured for the future there is good chance of reducing tropical deforestation and mitigating GHG production (Bond, Grieg-gran et al. 2009).

I will focus on their involvement and their current knowledge about the issues. How do they perceive the impacts of carbon emission reduction projects in their lives? And how do they integrate such a discourse in their 'life-world' to justify their legitimacy over resource and their claims in a broader sense in relation to livelihood and nature conservation.

As a result the research question for this thesis could be described as:

How do ideas about REDD payments raise new hopes for land, resource access and livelihood security?

There are two main focuses to be investigated. First is to understand the project (REDD) perceptions by local communities and secondly to understand how they use this understanding and incorporate it in their 'life-world' to support claims over land and resource right and access. As a result along this thesis besides the main question raised above, I will also try to cover sub-research questions such as:

- What is the project about according to the different actors? What is their current knowledge? How do they understand it?
- What are their visions, images and motivations to participate or not in such a mechanism? What do villagers think about it? What are local interests in being paid for it?
- What are their interactions with the forest? How do they see their forests, their trees?
- How do they value trees and land?

- How do they manage their forestlands and the natural resources and what are the local customary systems?
- How important are the customary systems to them?
- How do they use their knowledge to claim legitimacy over land and resources? And how do they integrate a discourse about REDD to justify their rights?
- How do they see a benefit sharing mechanism?
- What are the categories of resource users?
- What are internal conflicts and disputes over land and resources?
- What are the conflicts of interest between communities and state interests?
- What is the importance of the forest in their daily livelihood and food security?

1.9. Methodology and approach

For this thesis, I will try to take an actor-oriented approach rather than a structuralist approach. I will base my work on the everyday life experience and understandings of different actors. This will enable us to recognize the ‘multiple realities’ and the diverse social practices of various actors (Long 1992). Social actors will be seen as active participants who process information and reshape it according to their knowledge and everyday life. Through an ethnographic approach I will try to analyze the ways in which different social actors manage and interpret a new discourse on climate change mitigation in their ‘life-world’. In our case we are referring to a climate change mitigation option known as REDD. REDD, being a strictly centralized discourse emanating from centers of power at the international and national level and following state or international interest is firmly in line with modernization theories advocating the process of increasing involvement in commodity market through a series of interventions involving the transfer of technology, knowledge, resources and organizational forms from more ‘developed’ world to less ‘developed’ parts (Long 1992). I will try not to see REDD as the implementation of a plan for action, but rather to understand it as a potential ongoing transformational process in which different actor interests and struggles are located (Long 1992). According to Long page 20, “all forms of external intervention necessarily enter the existing life-world of the individuals and social groups affected, and in this way are mediated and transformed by these same actors and structures” (Long 1992). In this case we are not referring to

a concrete intervention program but rather to an ongoing discourse. I will clarify along this thesis how REDD discourse comes into social actor's life and support their own interests and claims. As indicated by Li, laws, regulations, plans and programs of national or international agencies that enter the local scene always interact with already existing contested domains of power and meaning (Li 1996). Long, page 53, goes in the same direction by stating that it is important to "unravel the discourses utilized in specific areas of struggles, especially where actors vie each other for control over resources in pursuit of their own livelihood" (Long 2001).

As a result my aim here is to analyze the capability of local communities and other social actors who accumulate their experiences and use their knowledge to develop ideas towards future climate change mitigation interventions. How do their struggles and claims based on their everyday life and interactions with their surrounding environment produce a potential structure for a REDD scheme? I will analyze REDD representations in the context of struggles over resources and see that different parties defend various interests and advance claims. It is possible to have different or conflicting versions of the same discourse, or incompatible discourses in relation to the same phenomena. We will see that multiple conflicting discourses about REDD arise in the context of struggles over resources and how it is used to support claims of various actors.

Actors use discourses, manipulate them and transform them (Long 2001). Social actors do not speak with one voice. There is a multiplicity of interests in the constitution of a REDD discourse at local level. To understand these interests I will have to go back to overlapping local history, shared and separated experiences about nature conservation, governmental programs, resulting in different interpretation of cultural ideas (Li 1996).

It will thus be necessary to build this thesis on social theory related to human agency in order to contrast with the conventional project structural approach. Focusing on human agency will enable us to understand the social in a climate change mitigation initiative such as REDD in West Kalimantan since it will allow us to look into the ways social actors interact with one another and towards policies, current nature conservation initiatives, and their surrounding environment.

Discourse about REDD and carbon credits payments brings new hopes and fears for the two customary communities of Pulau Manak and Menua Sadap and is embedded in a struggle over secure access to ancestral lands and livelihood security. Even though the concepts are often misunderstood and unclear to them, local communities do have an opinion, locally grounded about the current international concern for their ancestral forests. I will try to understand how it is interpreted by them and reshaped in order to support existing claims.

In order to understand those claims, we will have to draw our study in the field of ethnicity, local history, and challenges faced by the two customary communities sharing the upper Embaloh river. It will thus be necessary to discuss the local economic situation since the implementation of the National Park Betung Kerihun on their ancestral lands and the stop of illegal logging in the area following the year 2004 and the election of President Susilo Bambang Yudhoyono. The communities are located in the buffer zone of the National Park Betung Kerihun. I will describe and explain their expectations in terms of nature conservation, forest protection and their current frustration about governmental programs trying to limit their access to ancestral forests and uses of natural resources. I paid particular attention to the narratives people constructed in talking about the environment and conservation.

By using an anthropological to my work, I am convinced that it will contribute to understand the specific cultural context and thus help tailor future REDD interventions. I am convinced that an approach to REDD that only relies on economists, financiers and GIS experts will likely result in many project failures if social challenges are underestimated.

1.10. Data collection techniques

All data contained in this thesis, are the result of series of interviews, focus group discussions, informal discussions and participative approaches carried out in the two villages of Menua Sadap and Pulau Manak in the Embaloh Hulu sub-district, Kapuas Hulu regency. Using questionnaires, approximately thirty respondents have been interviewed. Additional to field research, this thesis also draws on multi-stakeholders interviews with international and local NGOs, representatives from government

agencies, international organizations, and scholars in the respective cities of Samarinda, Balikpapan, Putussibau, Jakarta and Bogor. In total twelve interviews have been conducted with stakeholders.

All activities have been carried out as an independent researcher. All data of this study have been collected using qualitative research methods.

Stakeholders' interviews have been conducted using unstructured open-ended interviews and informal discussions.

Field data has been drawn through various techniques, interviewing, participant observation and by keeping a daily journal.

The first idea was to use a structured questionnaire and apply a random sampling. But due to the length of the questionnaire and the fact that most of villagers were away during day time busy on their swiddens (*ladang*) it wasn't possible to continue in that direction. I then decided to switch to more participative approaches, using unstructured questionnaires and informal interviews without sampling. However along the study, I always tried to paid attention to cover a representative sampling of informants by conducting interviews with men and women, elders, young people and the local elites. Approximately thirty informants have been interviewed using questionnaire sheets. However, due to the fact that women were quite busy with weeding activities in their *ladang*, it proved difficult to interview female informants. Hence, the results may not adequately address gender perspective. One respondent interviewed is representing one household.

Secondly, I used every opportunity to follow people on their daily activities and to participate in major activities, such as field work, rubber taping, canoe construction, trapping, hunting expeditions, fishing, forest products gathering and of course I spend long evenings sitting on the long houses main corridor and field huts sharing Aren palm wine (locally called *saguer*) listening to their stories and claims. Secondary data are also based on maps, hand drawn sketches and archive documents.

The third source of data for this study was a daily journal I kept with me all day long in which I gathered daily records on activities and my own field observations.

Due to the difficult access of both villages from the district capital Putussibau (approximately 3 hours bus drive through the muddy road), it was compulsory for me to live with the communities. In total I shared six complete weeks in the two villages of Pulau Manak and Menua Sadap.

1.11. Conceptualizing Tenure and Property

It is often stated in literature about REDD that land tenure systems are a critical issue to ensure the legitimacy and effectiveness of REDD strategies (Streck 2009). Land tenure can be defined as the right, whether defined in customary or legal terms that determine who can hold (or not hold) and use land (including forest) and resources individually or collectively, for how long, and under which conditions (Sunderlin, Larson et al. 2009). Tenure includes property rights and informal relations which involves multiple authorities governing access, use to resources and exclusion for these same resources (Corbera, Estrada et al. 2011). In the context of this thesis, I refer to tenure the way to which people are connected to their natural environment (forestland), the way in which resources are managed and used.

Tenure can be defined differently according to the property right system which is attached to it. Types of property right regimes over natural resources comprise a large range from open access to private property.

- Open access systems (also defined as non-property regimes) are the ones in which access to a natural resource is not regulated and open to everyone, and where there are no rules of exclusion and regulations. A resource under an open access regime will belong to the party that first exercise control over it (Bromley and Cernea 1989).

These systems poorly enforced are leading to an unconstrained resource use, resulting in the depletion of resources defined by Hardin as the “tragedy of the commons” (Hardin 1993; Hanna, Folke et al. 1996).

- Private property is the most common property regime. In the case of private property individuals hold exclusive rights over land. But private property is not necessarily related to individuals, all corporate property is also private property administer by a group. Private property is the legal and socially sanctioned ability to exclude others (Bromley and Cernea 1989). This right is secured by state and legal institutions that recognize and ensure property claims. Private

property right is attached to the right of the owner to use the land, lease rights to others, exclude others from the land or sell the land (Hanna, Folke et al. 1996; Corbera, Estrada et al. 2011).

- State and public property regimes ownership and control over use rests in the hands of the state. The state may directly manage the use of the natural resources through government agencies or lease them to groups or individuals who are thus given usufruct right over resources for a specified time period (Bromley and Cernea 1989). Individuals, organizations or communities thus hold access and withdrawal rights over resources owned by the state. However the state is the only one institution that can give such right and defines strict management quotas and limits. Access rights and management are under the responsibility of a state agency responsible for decisions making (Hanna, Folke et al. 1996).
- The fourth regime can be defined as common property where a group of users is sharing collective ownership over a defined territory, and/or over natural resources (Hanna, Folke et al. 1996). Individuals have rights and duties, and behaviors of all members of the group are subject to accepted rules. The property-owning groups may vary in its nature, size and internal structure but as stated by Bromley and Cernea on page 15 of their paper, “they are social units with definite membership and boundaries with common interests, with at least some interaction among members, with some cultural norms, and often their own endogenous authority systems” (Bromley and Cernea 1989). Indigenous groups, sub-villages, kin systems are all examples of property-owning groups. Many traditional and indigenous rural communities manage their resource in common. These groups hold what is defined as customary ownership of certain natural resources (Corbera, Estrada et al. 2011).

After having defined different types of property regimes, it is important to notice that in many developing countries, some of the resources in the public domain are managed as common property and some are not managed at all but are instead open access (Bromley and Cernea 1989).

Property rights includes different bundles of rights defined by Ostrom and Schlager as such; right of access, withdrawal, management, exclusion and alienation. Access can be defined as the right to enter a defined physical area and to enjoy non-subtractive benefits such as landscape. Withdrawal in the opposite is the right to extract and obtain the resource units or products of a certain resource. But individuals holding access and withdrawal right may not necessarily hold rights over management, exclusion and alienation which are defined as collective-choice property rights. Management rights represent the right to establish the rules and sanction under which the resources can be managed. Exclusion rights determine who can enjoy access and withdrawal rights and how this right can be transferred. Finally alienation is the right to sell or lease rights to other parties (Ostrom and Schlager 1996).

Forests in Indonesia, although being largely under the property of the state, can be considered as 'common-pool resource' known under the acronym CPR. It refers to a natural or man-made resource system that generate flows of usable resource units over time and sufficiently large as to make it costly to exclude potential beneficiaries from obtaining benefits from its use (Ostrom 1990; Hanna, Folke et al. 1996). Common pools rights are usually assigned to a specified group of people who use the resource system at the same time (Ostrom 1990). 'Common pool' represents those resources which have multiple users and for which individual ownership is difficult (Hanna, Folke et al. 1996). In order to sustain a common-pool resource, it needs to be governed, usually by groups using the resources.

However the management of a CPR is often not recognized by state institutions, it is an informal arrangement between users and therefore vulnerable to state intervention.

Consequently well-established property right is the guaranty for individuals or groups that their access, withdrawal, management, exclusion, and/or alienation rights will be secured and recognized in the future from potential competitors for these rights. Having the security of such a right stimulates commitments to develop long-term plans for investing in an harvesting from a common-pool resource in a sustainable way (Ostrom and Schlager 1996).

CHAPTER 2 - Knowledge and ideas about REDD; revival of claims over land security



Photo 2.1: Bukit Mataso. The area is covered by lowland Dipterocarp forest downstream while the upstream mountainous areas are mainly covered by hill forest

Introduction

The second chapter of this thesis aims at analyzing the current knowledge that local people do have in relation to climate change and carbon issues. How information about REDD are being articulated in the discourses and practices of daily life at the local level. In the two focus villages in the Embaloh Hulu sub-district, local people at every socioeconomic level interact with organizations involved in future REDD plans. As a result some information is reaching the villages through various channels but the information is often not clear, misunderstood and reinterpreted according to current knowledge and experiences. Even though people are facing a lot of uncertainties about carbon issues, they understand very clearly that they could generate valuable profits from their standing forests and avoid its degradation. As a result, new hopes introduced by a speech for alternative income generation raise a lot of questions and revitalize discourses about land tenure security and the

importance of the recognition for their *adat* ways of managing the forest and natural resources. People have different interests which are embedded in their struggles and this is what I will try to analyze in the present chapter. This led me to theorize that certain individuals are appropriating a discourse about REDD and hopes for carbon payment into their own to achieve goals consistent with their interests. I will start with a brief analysis of the views of NGOs interested in communities empowerment followed by local government's point of view, and then finally switch to the village level to understand the grassroots motivations to participate or not in a REDD scheme.

2.1. *Adat* rights and the state's right of control over forestlands

This thesis is rooted in the context of revival for customary law known as *adat* taking place in the post New Order Indonesia since 1998 after the fall of Suharto. This movement of revival for *adat* resulted as an opposition to land appropriation by the state for industrial purposes as well as to avoid the state's corrupt and ineffective formal legal system, and to promote more democratic forms of village government. New order development and national integration priorities placed particularly heavy pressure on indigenous people. After the collapse of Suharto's regime, and during the *reformasi*, the *adat* movement demanded for compensation or restitution of land in the name of customary legitimacy. In 2001 all laws and policies on natural resource management and land tenure issues were to be revised in accordance with principles that recognize, respect and protect the right of *adat* law communities. However, despite the collapse of the New Order regime, the bureaucratic and business interest remain important and is often failing in recognizing *adat* rights (Henley and Davidson 2008).

***Hak ulayat* and the Agrarian and Forest Laws**

Official state forests cover 120.35 million ha or 60 per cent of the land mass of Indonesia. In accordance with their function they are classified into protection forests, conservation areas and production for production forests (Siagian and Komarudin 2008).

Local people and customary communities in Indonesia usually organize their control and use of forestland and forest product through *adat* customary or traditional forms. In our focus area, customary right is the main mechanisms through which rural people secure access to forestlands. They have their own systems and practices in managing the forest and have extensive knowledge of the forest environment. Common or community controlled land or customary authority over land refers in Indonesian to *hak ulayat*. *Hak ulayat* is only given weak recognition by the 1960 Basic Agrarian Law stating that land, water and space are controlled by the government. *Hak ulayat* is therefore not converted into a statutory or constitutional right that is cadastrally registered, and is consequently prone to disposition for state interests (Nanang and Inoue 2000; Dunlop 2009). Under the same law, customary land rights are legally protected only so long as customary systems still exist and their exercise is consistent with the national interest and with legislation. These conditions give government agencies ample discretionary room, which opens doors to abuses and limit the ability of local groups to exercise their land rights (Cotula and Mayers 2009).

The 1967 Basic Forestry Law goes in the same direction by stipulating that the state have exclusive authority over territories which are classified as Forest Area (*Kawasan Hutan*). The status of local customary rights to manage forest resources is further regulated in the Forestry Law stipulating that the management of state forest can be devolved to local people, but not the ownership. The right to control forest resources can be given to a community which still practices customary laws defined as *masyarakat hukum adat*, but again only if it does not contradict the national interest (Nanang 2000). *Hak ulayat* is subordinated by state's control and interest and does not secure long term access of customary communities to forest resources and their legitimacy over the land. The new Forestry Law 1999, recognizes a new category of *adat* forest (*hutan adat*), but again rights to *adat* forest do not amount to ownership and must not contradict the national interest (Dunlop 2009). The history has shown several attempts to devolve forest management to local people such as *hutan adat desa* (village customary forest), *kawasan hutan desa dan hutan adat* (village and customary forest). However practices of management of these areas should not be contradictory with the interest of the nation, the public and development. So, while to a certain degree the government has given the control of

the forest to local people, it is still reluctant to give full control over the area (Nanang 2000).

More recently, the Spatial Planning Law of 1992 and Law no 10 of 1992 on vulnerable communities both recognize community rights to participate in defining their territories, and Law no. 10 goes as far as recognizing community rights to cultural autonomy including control over their natural resource management systems. These laws also establish the rights of local communities to know what development activities are being planned and implemented in their areas and to participate fully in the social and environmental impact review of these activities. Yet, in a country where the integrity of the legal system is questionable, having these rights and actually securing them are quite different (Fay and de Foresta 1998).

Under current regulations, millions of rural people who live inside the 60 per cent of Indonesia's territory classified as State Forest Zone are considered illegal occupants on land they have farmed and lived upon for generations (Fay and de Foresta 1998).

Decentralization

The decentralization process taking place throughout the country following the fall of Suharto's regime, has been promoted by the World Bank and other donors as the means for the Indonesian government in order to achieve greater local participation in decision-making. The assumption was that local governments are more accessible and therefore decision-making more transparent and accountable than is possible under strong centralized government, that democratization will foster more direct community participation in resource management, and that as a result it will produce better long term outcomes for the communities and the environment (Warren and McCarthy 2009). Although it has sometimes resulted in greater voice for local communities and their increased power in shaping policies governing the management of forests, it has also been a cause of threats to community rights (Contreras-Hermosilla and Fay 2005).

Besides the fact that decentralization has conducted to greater autonomy to regions and greater control by local administrations of forest resources, leading in some

cases to increased equity and sometimes even more sustainable use of forest resources, it has also led to confusion. For instance within the forestry sector, national, provincial, and district offices issue overlapping and conflicting timber licenses. This is resulting in the fact that each level of government vigorously asserts its authority to make a number of decisions and simultaneously denies the authority of the other levels (Contreras-Hermosilla and Fay 2005). Furthermore, the number of presidential decrees and ministerial decisions affecting land tenure and natural resources has continued, until today to propagate in many cases with overlapping and contradictory provisions (Warren and McCarthy 2009).

Districts, responsible for development initiatives are favoring short-term, unsustainable resource extraction since they see natural assets as a quick way to gain revenues for the projects often neglecting communities' claims and needs (Eghenter 2008; Warren and McCarthy 2009).

Finally, the last Law on Forest 1999 although attempting to decentralize over natural resources, still allows the Ministry of Forestry in Jakarta to remain the effective landlord over 60 per cent of the nation's land area that was mapped as national forest estate. It assigns only limited authority to regional governments in terms of forest ownership and allocation (Warren and McCarthy 2009).

In the middle of all this the role and rights of local communities are under risk of losing to more powerful interests. Decentralization has tended to favor local elites, local politicians, all of which join forces to exploit forest resources as fast as possible (Contreras-Hermosilla and Fay 2005).

REDD and *hutan adat*

Concerning REDD, MoF regulation 30/2009 on Procedures for REDD refers to *adat* forest for the implementation of potential REDD activities in the country. It stipulates that *adat* forest is state forest which is located in the territory of an *adat* law community. But knowing Indonesia's lack of effective legal means to recognize, secure and protect indigenous peoples' rights to their lands, territories and resources there are strong doubts that REDD will be the new factor that will change the ruling habit of state ownership over land (Dunlop 2009). Consequently land tenure is seen

as one of the necessary step for the successful implementation of future REDD programs. As REDD schemes are likely to be regulated by national rather than customary law, a key issue is the extent to which customary tenure systems are recognized and protected under national legislation (Cotula and Mayers 2009). As stated by Wiersum REDD will probably bring a new recentralization of forest policy and a need to reconsider institutional arrangements for the governance of community forestry (Wiersum 2009).

2.2. REDD: a discourse over access right

Carbon rights

When talking about REDD, we can hardly avoid talking about carbon rights. It is a key issue in the design of REDD. It is a form of property right that commoditize carbon and allows its trading. It defines the carbon sequestration benefits of a forest and separate rights to carbon from the broader rights to forest and land (Peskest, Huberman et al. 2008; Dunlop 2009). Carbon rights can also delineate ongoing management responsibilities associated with a specific area of forestland (Peskest and Harkin 2007).

They are usually registered on the land title and should be perpetually enforceable or established over long time frames to ensure permanence for the buyer (Cotula and Mayers 2009). In order to sell credits, a project proponent must demonstrate that it has long-term right to the carbon. The VCS (Voluntary Carbon Standard) for instance requires that the project proponent has a proof of title that demonstrates rights to the GHG emission reductions (Madeira 2009).

Carbon has already trigger the attention of governments before the announcement of emissions target and the deal on REDD in 2009. The most popular case cited in the literature, is the case of New Zealand where the government in 2002 decided that all the carbon contained in the trees from private forest owners was government property. This was motivated by the national commitments to the Kyoto Protocol (Peskest and Harkin 2007; Wily, Rodes et al. 2009). But due to strong protests and uproar, few years later in 2007, the Government has returned the choice of taking

carbon credits to the people (Cotula and Mayers 2009). Consequently it is likely to prove that removal of carbon rights will always be inflammatory and that it will be necessary for carbon rights to be defined in national regulations (Peskest and Harkin 2007; Cotula and Mayers 2009). Conflicts could arise in claims over carbon rights.

But only few countries have legal frameworks concerning carbon. The general legal assumption is that “carbon goes with the trees, and trees go with the land”, and thus “carbon goes with the trees and land” (Wily, Rodes et al. 2009). In our situation land is unofficially owned by communities through customary *adat* system, trees are a gift of God located on their lands therefore carbon is theirs.

However, the confused and conflictive nature of forest tenure in Indonesia renders this logic naïve. Where land ownership is not clear and disputed, the question about who will benefit from REDD is a challenging one (Peskest, Huberman et al. 2008). Land could be sold for its carbon to companies as it has been ironically the case in Papua New Guinea shortly before the Copenhagen conference (Wily, Rodes et al. 2009). So how to do in the Indonesian context where almost the entire forest estate is administered by the government under statutory law?

In the case of Pulau Manak and Menua Sadap, activities are currently driven by the German bilateral aid organization (GIZ) in supporting the readiness for future REDD activities. As a result GIZ does not seek any carbon rights for itself. But once a carbon buyer will be interested to buy credit from a well implemented project in the area, who will be the legitimate claimer for carbon? The project proponents will therefore have various options. It could either acquire forest concession rights, enter into an agreement with landowner (government partnership since the government is the statutory landowner), or enter into an agreement with land users (can be concession holders or local stakeholders) (Madeira 2009).

Acquiring forest concession rights is likely to dispossess local users from their lands. Entering into an agreement with the landowner, meaning the state will likely conduct to abuses and corruption and tend to disregard local communities. As a result the option would be to enter into an agreement with land users, in our cases local communities. But this can only be made possible through official recognition of their user rights. But so far there is a lack of legal certainty as to who is the legal owner of the carbon right in Indonesia. In this case, government, nonetheless, will have to consider carbon as no different from other resources such as trees and NTFPs. In

this way, carbon would become an asset for the communities holding collective titles (Corbera, Estrada et al. 2011). As stated by the village head of Pulau Manak:

“We cannot dissociate carbon from trees. If our trees are not secured carbon will be claimed by the State, we need to be recognized as legitimate carbon owners.” (Pinjawan, 20/11/2010)

Enhancing tenure security of forest dependent communities through REDD

Talking about REDD with NGOs representatives and scholars having interests in communities' empowerment, REDD could be beneficial in delineating forest and securing traditional systems of access rights. Currently communities are facing bureaucratic constraints in order to recognize their rights, in that sense REDD might be beneficial in facilitating the process. As stated below by a scholar from the Center for Social Forestry of Mulawarman University, Samarinda, priority should be given in securing use rights:

“Regulation on customary forest does not exist (government tries to avoid it) and it is impossible to get official traditional rights recognition since the land is state owned, as a result the priority is thus to secure use rights (*hak kelola*) and access through an agreement since there is no legal recognition. Customary forests are often well managed and have potential for carbon pool projects. Responsible for delineation will be the Forestry Service at district level in consultation with the communities.” (Samarinda, 3/10/2010).

The priority in such a context is then to give communities use rights, securing and legitimizing their access. NGO representatives do not really like to talk about REDD only as a carbon or incentives tool (especially knowing that it is still often considered as a discourse), but rather see it as a broader strategy to improve the forest governance and to empower communities' rights. As stated by the same scholar:

“NGOs are sometimes reluctant to be involved in REDD since they see it as a strategy for industrial countries. Often NGOs are not invited in discussions. It is still a discourse and no concrete actions are taking place.” (Samarinda, 3/10/2010).

As indigenous lands are often Common Pool Resources (CPRs), conventional titling processes focusing on individual property are wholly inadequate to secure local land rights. Tailored arrangements are therefore needed to cater for their tenure security need (Cotula and Mayers 2009). The formal recognition of *Hutan Desa* (village forest) is thus seen by NGO representatives as the very first step for any future REDD activities at community level and stock-based accounting, for the preservation of standing carbon stocks. It will be a major issue in carbon issues especially in relation to carbon pool programs. Drawing on ideas of NGO representatives interviewed and in line with Akiefnawati et al., it can be seen as the readiness processes for any further carbon credits initiatives and a low-cost, but essential precursor for REDD schemes (Akiefnawati, Villamor et al. 2010)

Acknowledgement of *Hutan Desa* as a necessarily step toward land legitimization and REDD implementation

The recognition of *Hutan Desa* is contained in the Indonesian Forestry Law No. 41 of 1999. It became operational under the Decree from the Ministry of Forestry No.P.49/Menhut-II/2008 of August 25, 2008. *Hutan Desa* areas are considered to be part of the national forest estate managed by a village community through a local village organization that plans, manages and allocates benefits derived from the forest for a period of 35 years and is renewable for 35 years subject to approval of annual work plan (Hindra 2005; Akiefnawati, Villamor et al. 2010). Their management does not only consist of utilization of forest products but also includes the responsibilities to preserve the life-supporting functions of the forest. Areas which can become *Hutan Desa*, must be administratively part of a village and can include watershed protection forest and production forest as long as there is no existing concession rights.

According to an Indonesian representative of FFI in Putussibau, REDD should not be perceived as the priority, but the first main concern is instead to secure the resource use and rights of communities in order to legitimize them as future beneficiaries for REDD payments and empower their claims for future negotiations. REDD should only be perceived as an additional benefit which can be combined with their use right

security. He compares *Hutan Desa* in a humorous manner with a fishing operation and a wedding:

“Villages and communities who have well-prepared and have strong fishing equipments (referring to villages registered under a *Hutan Desa* scheme) will be ready to catch the ‘big fish’ (referring to REDD payments). If the tool is not strong enough for a big fish, it will cut. Whether the big fish bites or not is not important and should not be the priority, at least those well-prepared communities and villages will be ready for the fight. Those who are not prepared will gain nothing. In the context of *hutan adat* the tool is not strong enough, but in the context of *Hutan Desa* the supporting organ is the Governor, district head and the Ministry of Forestry. Initiatives should come from the communities themselves. We should not so much focus and concentrate on what is being discussed at the international or national level in relation to carbon payment and REDD, but we should rather start with activities at the grassroots level. Securing resource rights for communities is the priority. REDD should not be seen as carbon or incentive, it should be seen as part of a broader strategy to improve forest governance.” (Putussibau, 20/10/2010)

He sees *Hutan Desa* like a wedding. “In Indonesia, instead of hiding themselves and do things secretly, people need to act in public, and get married and be officially engaged to each other. People need to feel officially recognized in order to legitimize their behavior. Being engaged with *adat* is not sufficient and not recognized, it is thus important to get legal approval from the state.” (Putussibau, 20/10/2010).

In the context of a REDD, besides providing security, setting up clear boundaries and statutory rights, *Hutan Desa* is a way to exclude state claims on village lands. Providing land tenure security to local communities would enable communities to sustainably use the forest and encourage them to regenerate deforested areas. However, between the legal opportunity of such a mechanism and the full implementation program, many intermediate steps need to be taken to align forest governance agencies at district, province and national level. Consequently, until eight years after Law No. 41/1999 when the decree on their implementation came into force, no forest had been formally designated as *Hutan Desa* besides the case of the *Lubuk Beringin’s Hutan Desa* in the province of Jambi/Sumatra (Akiefnawati, Villamor et al. 2010).

NGOs are not really in favor in bringing the topic about REDD and carbon credit payments at village level in an early stage as it could generate new hopes too fast and as a result exacerbate internal conflicts and generate all kind of misunderstandings. It is felt to be most important that, while talking about REDD at the community level, one finds the proper terminology by explaining the necessary steps in order to reach the desired outcome. In our case the prerequisite step is land recognition through *Hutan Desa*. It is important to talk about steps before talking about the outcomes. Most important in a *Hutan Desa* scheme is the mental readiness of the people. According to FFI, communities are often reluctant to be involved in such a project since they believe that the commitment of the local forestry authorities is not strong enough. Through local *adat* management systems they are currently using and managing the resources, even though it is not recognized. They are often afraid that by working with local authorities they will be cheated and lose total access to resources.

According to the head of FFI in Putussibau, the process of *Hutan Desa* is facing difficulties at present because of the Forestry Service at the district level. According to him it is clear that there is currently a big lack of knowledge and understanding about the concepts and the processes among governmental representatives at the local level. The mistrust of the villagers is therefore understandable since local government representatives are still reluctant to go to villages and involve people in socialization processes. The commitment to work with communities is still low, and the understanding about concepts still very much unclear.

The slow process also comes from the fact that local authorities still have difficulties to attribute management rights to communities since they will lose control access and right over the resources and may no longer benefit from it. Same is valid for forest concessions, according to the head of FFI, use rights should be given to communities on industrial forest concessions where activities are no longer taking place, but the – often national - concessionaire tries to keep the permit. For the whole district of Kapuas Hulu, only one completed file for *Hutan Desa* recognition has been submitted to the local authorities but is still stuck since almost a year on the forest service officials' desks and not sent to review and approval to the MoF in Jakarta. The whole

procedure is therefore extremely long and local authorities seem to be reluctant to implementation.

Governmental lack of participation; Fears for losing land control

The discussion on REDD that started in Indonesia ahead the UNFCCC's 13th Conference of Parties in Bali in 2007 re-emphasized the need to reduce conflicts over forest boundaries and engage local communities in forest management and conservation (van Noordwijk, Purnomo et al. 2008). So why are local authorities still reluctant to attribute recognitions to communities? We could easily imagine that *Hutan Desa* without REDD expectations may encounter reluctances since it could potentially hinder allocation of forest to forestry industries which have more economic impact than social forestry (Akiefnawati, Villamor et al. 2010). As stated by Kusters in his case study about the formal recognition of user rights in Krui, Sumatra, at local level forestry officers are not very supportive as a decree favoring local user rights would entail a reduction of their control over the management direction and benefits from the forest area (Kusters, de Foresta et al. 2007).

But in the context of new hopes from REDD investments who benefits? The primary benefit for government agencies would seem to be that through *Hutan Desa* they can meet the preconditions for REDD investments and should therefore be in favor of such a process. But, what becomes clear while talking with representatives from the forestry service at district level is that they worry about unclear benefit sharing mechanisms. How are the benefits going to be split at all levels, especially between central, provincial and district services. How the possible benefits will be shared within the forestry sector and between the administrative levels is still not clear and therefore remains a concern for local officials. Consequently the main worries of local power holders is a loss of control over a valuable forest resources, seen in the REDD context as monetary profits. There is also an obvious lack of participation and knowledge about the topic at the district level. Perceptions of REDD at district level is very unclear. As stated by a representative of the forestry service, they need to gather most of the information about REDD themselves from internet, friends and other sources. So far they have only been involved in a passive manner in discussions and do not have a technical role yet. Worries are also expressed since

REDD seems to be extremely complicated. According to the same informant, to be effective REDD will need to be easier in its implementation than CDM, but so far they feel that REDD is like a dead end story, after all the meetings no concrete actions were taken. As a result drawing on the interviews with local government representatives and supported by Kusters et al., it seems that forest agents don't feel that they need to support something in which they are not involved; they simply see it their duty to respect the top-down concept of state land ownership and they don't see why they should give greater autonomy to communities if they don't see the benefit from it (Kusters, de Foresta et al. 2007). Usually the obligation to work with local communities tends to be found at the higher levels of the Department of Forestry (since they receive incentives from donors and have to fulfill to their commitments of community forestry) , while appreciation for the need for greater community involvement at provincial and district levels remains limited (Fay and de Foresta 1998).

The representatives of the forestry service I interviewed are willing to try REDD pilots activities but it seems that there is a constraint for the Department of Forestry to meet its objectives in terms of sustainable forest management.

2.3. Ideas and knowledge in the village arena

During data collection at the village level, I actually realized that, although the awareness about potential carbon credit payment is low, there is already all sort of information reaching the villages about the current external interest for their standing forest stocks. Concepts about climate change, forest-climate relations, carbon and oxygen are often blurred, but people do understand that they could make profit in maintaining forest stocks or even increasing it.

Ideas about climate change

Concerning questions related to climate change most of the respondents (male and female) have already heard about the term climate change. But issues related to GHG in the atmosphere are not very popular and local knowledge about it is relatively poor. The current knowledge they have about climate change is not the

scientific based international discourse we are used to hear, but is rather locally grounded and based on their own experiences. Some people have heard about it through television media but they do believe that it is an urban problem only happening in Java. According to one informant, GHG is a city problem. In Indonesian language GHG are literally called *Gas Rumah Kaca* standing for 'glass house' gases. This villager believed that climate change was happening in Jakarta due to the amount of high buildings and therefore the amount of windows.

Some people don't feel concerned about it because according to them they are living in a forest-rich environment and climate change is therefore only a concern for cities. The vision they have about climate change is in general related to the changes experienced in their environment such as increase of rain during the dry seasons, water shortage during raining seasons, delays in fruiting seasons and so on. People are experiencing changes every year but they often refer to it as God's will and have little awareness about scientific correlations. Discussion about climate change and the relations with GHG emissions and forest is not very much a concern among villagers. Ideas and experiences about climate change are pretty homogenous among gender.

Ideas about REDD

Despite the lack of knowledge about the topic, a few people have already heard about REDD or the selling of carbon credits (often called locally '*carbon REDD*'). What people know about the mechanism is also often blurred and sometimes far away from the international debate and realities. Few people have heard about the terminology but don't understand the concept behind it. Common belief is that industrialized countries do not have forest stocks anymore and are therefore ready to buy forest where the resource is still abundant. They understand that the North is ready to pay for maintaining the forest cover in their area. But what is not understood is the notion of CO₂ (known locally under the terminology *carbon*). People are often wondering what CO₂ or carbon exactly is; they sometimes think it refers to the wind, animals, rocks, trees. They therefore make an obvious relation between climate change and protecting their environment, but still don't really understand the correlation between both. Another frequent belief is that industrialized countries are planning to extract the oxygen from their villages and send it back to their own

countries due to a lack of oxygen. Questions about the tools and materials which are going to be used for this 'oxygen transfer' are frequently raised among villagers. Interestingly is that it seems that this myth about REDD as an air extraction activity is a common legend in Kalimantan as I could also read it in the summary of an indigenous representatives meeting held in Jakarta between the 2-4th of August 2010 (DKN 2010). Strong implemented myths about REDD are already common place throughout the island. These sorts of perspectives are leading to all kind of imaginations and images, but people are definitively aware that there is an international concern for their forest resources and its protection. People are therefore often asking for additional information about REDD. Even though they have an opinion about how benefits should be distributed (I will elaborate on that in the next chapter), the current information about REDD reaching the communities is not clear enough and questions about how much they will get paid, which countries will buy the carbon credits are often raised. I found interesting to observe that the discourse about REDD is not involving all villagers. People's class and gender interacts with their level of knowledge. Interestingly those people who are the most aware about REDD issues and show the greatest facility at co-opting with the concept are often the village elites and notables having tied connections with local government representatives or NGOs. As stated by Sundberg, people within communities who are using conservation vocabulary "are cultural intermediaries, people who have learned to articulate multiple cultural values and practices through their relationships with ethnographers, archeologists, NGOs, and other foreigners..." (Sundberg 1998). These people can be compared to what Olivier de Sardan defines as brokers. He describes them as those situated at the interface between a target population of a project and the development institution. They are the ones who are supposed to represent the local population (Olivier de Sardan 2005).

Most of people, especially women have never heard about the topic and often state that they are anyway never invited in consultations and that the men joining do not report what has been discussed. In terms of awareness we can split village members into two categories, those 'in' the discourse having little knowledge but interpreting it in imaginary ways, and those completely 'out', feeling that they are never consulted and aware about governmental plans and actions.

Actors involved in channeling REDD discourse

Information about REDD and so far reaching the villages is coming from various channels. Most of it comes from what villagers refer to be NGOs, which are in fact the German Cooperation organizations, GTZ and DED (now GIZ). But some information is also coming from the name of the National Park and local government representatives. The lack of understanding clearly shows that the concepts are also misunderstood at these higher governmental levels and that there is an urgent need for 'socialization' or information sharing at all levels. Most of villagers have not yet participated in seminars and discussions about the topic and the issues, and the few who were invited in the district capital for workshops did not spread the information further to the rest of the villagers. People often complain about the lack of information and the infrequent presence of GTZ representatives in their villages. When discussing with village chiefs, it gets clear that REDD is often assimilated to a myth leading to all kinds of reinterpretation and that they prefer not to spread the information since they don't know how reliable the information they receive from friends and other sources is.

In reaction to these allegations GTZ staffs accuse the fact that the area is too far from Samarinda (headquarter of the project) in East Kalimantan and that they also have to work in two others focus areas as well.

Knowledge and ideas about *Hutan Desa*

Most well-known among villagers is the concept of *Hutan Desa*. Most of the interviewed people in both focus villages have already heard about the concept of *Hutan Desa*, or do have a brief idea about it since the German Cooperation is trying to involve villagers in participative mapping activities for delineation of village borders and land uses as a preparatory process for potential future REDD implementation. Most of the information reaching the communities comes from the German partner working with the district forestry service. Common knowledge is that *Hutan Desa* is a way for them to recognize and secure their *adat* forests since they do not have property right for it (*hak milik*). They acknowledge that it is a forest which is recognized by the state but used and managed under the responsibility of the village community. They see it as a good way to secure forest stocks for future generations

and to recognize their *adat* ways of maintaining forests. They also understand that all benefits generated from the forest whether tourism, carbon credit payments, timbers and other products will be the village's property. For them it is the only way to secure their *adat* forest and get official recognition for it. So far their *adat* forest is designed administratively as watershed protection forest (*hutan lindung*). But communities were cultivating and using the land for more than a century before those lands became classified as state forestlands. They therefore have a strong and longstanding ownership claim on these lands. According to village representatives from the two focus villages, clarification of the borders and forest boundaries is a necessity for the successful implementation of *Hutan Desa* which is still under process. Unfortunately, progress is hampered by some problems due to claims and disputes between the two villages of Menua Sadap and Pulau Manak. Boundary marking should also be in accordance with their original *adat* borders. According to village leaders, there is a strong need for a friendly process and to be involved in negotiations between villages about the topic, but as we will see in a next chapter this is not the case now and disputes over land delineation are common practices between villages. Within villages, delineation between hamlets is not posing any problems but the problems arise between neighboring villages sharing common borders. When talking with village' leaders, it gets clear that delineation should also be made for all type of land uses such as gardens, *ladang* and forest. The reason behind this is that they don't know if REDD will only follow the *Hutan Desa* boundaries or if it could also include also forest types such as gardens, *hutan masyarakat*.

Many villagers don't know the limits of their forests, they only know the boundaries of the village and the limits of their *ladang* and own lands. For them there is an urgent need for a better socialization about the topic involving villagers. People do recognize that they should work hand in hand with the local government but are often complaining that they never see local representatives and feel that their commitment is not strong enough. So far there are no cadastre delineation activities taking place in the area under the National Land Agency (BPN). Fears also come from the lack of trust in local authorities. As stated by the village chief of Pulau Manak, he fears that the *Hutan Desa* management plan is only valid for a period of 35 years in which villagers can benefit from it. But, after the 35 years, government may not give

prolongation and the area could be redefined as HPH (*Hak Pengusahaan Hutan*) for a foreign concession. As a result the benefits from their efforts to enhance tree cover during 35 years will go back to the government. He is afraid that it is a strategy which actually will abuse them and at the end will only benefit government. Concerning REDD he fears that part of the *Hutan Desa* scheme is standing on former HPH land and as a result 50 per cent of the benefits from REDD will potentially go back to the HPH and that communities will only see the 10 per cent remaining.

2.4. REDD discourse at the village level; strategy for recognition of claims to place

It is clear that villagers from Menua Sadap and Pulau Manak are aware that they could generate money in preserving their forest capital. There evidently is an important information flow about REDD, carbon trade and payment for environmental services reaching the villages, although this information are mainly incorrect and are leading to a lot of misunderstanding.

Recognition of *adat* resource uses of forestlands

In the context of new hopes for land access security through *Hutan Desa* and potential benefit generation through standing forest stocks, all kinds of fears and hopes are generated among villagers. As a positive outcome, villagers often see REDD as an important means to secure the access to their ancestral lands and enjoy forest products for the sake of their community and thus improve their livelihoods. They also see the possibility for the establishment of new job opportunities. For them REDD is a good way for generating profits by enhancing forest management. They see it as an opportunity to increase trees and game stocks in their surroundings. But most important, according to them, is the opportunity to legitimize and gain recognition for their customary systems of land and resources management. My interviews reveal that people support *Hutan Desa* and REDD concepts not so much because they are interested in forestry or because they think that it will be financially rewarding, but more because it can provide them with the legal assurance that they will not be thrown off their lands. It is seen as a means to receive legal recognition

for the way their ancestors have been managing the area since generations and to secure their lands from being disposed by outsiders such as potential transmigration plans or other state interventions through timber concessions or palm oil plantations. According to them *adat* is the rule in the villages and people feel secure enough in the way their customary rules are securing their access to the land and its resources. Therefore the riskiness comes from the outside, from a lack of legal credit. Future plans are thus perceived as a means to improve the *adat* tenurial and management system, since until today their *adat* is only based on informal and mutual trusts among communities. According to them *adat* should be in accordance with the national law, since it precedes it. For them everything is ruled and based on their *adat* systems and *adat* is thus overruling the state law despite the fact that the state doesn't want to admit it. Interesting here is to realize that customary or *adat* systems usually claim legitimacy based on tradition. But in the broader context of new hopes from carbon credit payments it shows that this claims are reinvented and adapted to respond to present-day or even potential or future political and legal conditions changing the circumstances of their life. Legitimacy over land, based on tradition is reconstructed to claim the appropriation of right for potential benefits from standing trees. This goes in line with Sundberg's idea that people frequently appropriate conservation discourses to their own ends and reinvent themselves as harmonious forest dwellers and conservation heroes (this idea will be further developed in the next chapter). This strategy is supporting their long-term desire for more control over areas of traditional use to keep out immigrants and to ensure that they will benefit from conservation activities (Sundberg 1998).

The powers of *adat* in controlling access to natural resources have often been mentioned proudly to me through an anecdote which took place in the year 2008 when outsider illegal loggers were logging *Gaharu* timber (agarwood) upstream in the National Park. People were using poison to kill fishes to feed their camps. People downriver felt it as an aggression and violation. At that time the inability of the local government to stop these illegal activities pushed the local people of Menua Sadap and Pulau Manak to arrest them and to judge them according to an *adat*-set tribunal. People were forced to stop their activities and had to pay a compensation of 30 million rupiahs (€2.500) for each communities. In this case, *adat* was used to overrule the national law, and it has shown to be more efficient in stopping illegal activities in

the area. People's hopes through the German Cooperation activities, is that their *adat* will be recognized and thus get even stronger.

Hopes for strengthening participation

According to the villagers, the precondition for the successful implementation of such an intervention is the involvement of people at all steps of the project. Their main fear is to be excluded from state policies and interventions. According to a village representative, discussions and negotiations should not only take place at the governmental level because the villagers are the ones living in the forest and actions will take place on their lands. According to many village respondents, if the world cares about their forest, they will have to take into consideration the people living and depending on it. Socialization should be strong enough to make people trust the project. But so far there has not been any socialization with villagers about the topic and many questions remain unclear. As stated by Peskett, for the design of REDD projects, the effectiveness of attempts to integrate communities into substantive dialogues during the planning process will likely determine the equity, and ultimately the effectiveness and efficiency of project (Peskett, Huberman et al. 2008). By taking a bottom-up approach to REDD project planning and implementation, the needs and concerns of communities are more likely to be addressed, understood and considered (Blom, Sunderland et al. 2010).

This apprehension of local people's exclusion from negotiations is strongly linked to experiences related to the implementation of the National Park Betung Kerihun in the area. Betung Kerihun (previously Bentuang Karimun) National Park was originally established as a 600,000 ha nature reserve in 1982 by a Ministry of Agriculture decree. The size was enlarged to 800,000 ha in 1992 and the conservation status was changed to national park in 1995. TNBK (*Taman Nasional Betung Kerihun*) is one of the most important protected area and the second largest protected area in Kalimantan. WWF was involved in the initial development of Bentung Kerihun as a national park since early 1990. The main objective was to protect its unique ecosystems and the habitat of the endangered orangutan. Situated in the Heart of Borneo, it shares common borders with two other protected areas in Sarawak, Malaysia (Lanjak Entimau Wildlife Sanctuary and Batang Ai National Park) and is

thus one of the key units in Indonesia's conservation area network. In 2004 Indonesia and Malaysia submitted a proposal to the UNESCO for the recognition of the tree conservation areas as the first transboundary World Heritage Site (WWF 2009). People don't feel that they were involved in the negotiations processes and until today they feel that they are excluded from any participation in the park management. This can be referred to the failure of co-management schemes in the Kayan Mentarang National Park acknowledged by Enghenter, where mechanisms and governance structures to secure equal participation of local communities in managing conservation remained unrealized, benefit-sharing schemes were never set up and important issues such as the redrawing of boundaries and the recognition of *adat* regulations for managing natural resources in the park has remained unacknowledged. Consequently it has eroded the credibility of the National Agency for Forest Protection and Nature Conservation in the eyes of the district government and local communities, and the trust in WWF resulting in support decline from local communities and local government (Eghenter 2008).

People do not fully disagree with the park's existence, but with the overruling by the national intervention over the customary community (*masyarakat adat*).

Fears for dispossession of land

The creation of the park on their ancestral lands is also seen by villagers as a violation and a dispossession by the state of their customary lands which has drastically restricted their activities in the area. Besides the feeling of being excluded from state interventions, they also have the feeling of having been dispossessed by an overruling power which has not been successful in recognizing their claims and their rights to ancestral lands, and has 'confiscated' 800,000 ha of *adat* forest. The park is often seen as a governmental intervention from the central power, violating their rights and access to resources, and has conducted to very conflicting relations for the last past decade.

Therefore, the fear of restrictions placed on community access to forest for the sake of carbon conservation is an important component to take into consideration while negotiating with communities. In addition, customary land rights may also be violated for other public purposes which may include business activities run by private corporations (article 18 of the Basic Agrarian Law). This means that local groups

have no right to stop land acquisitions (Cotula and Mayers 2009). There is a common fear of the villagers that the REDD scheme may appear to be an expansion plan for the National Park and therefore involve future restrictions and dispossessions of forestland. These fears are not completely unreasonable since past experiences of afforestation and reforestation programs under the CDM mechanism have sometimes led to dispossession of ancestral lands such as the case of Kibale and Mt.Elgon in Uganda.

The establishment of the National Park and the fears of land grabbing from local government has strengthened the feeling of securing tenure and access to forest resources. As stressed by Li, forest dependent communities want the rights to ownership and control over their territories, the right to self-determination and the right to collective ownership on their communal territories (Li 2007). In the context of the REDD discourse, this need for future tenure security is even stronger and it is used to support their claims for legitimacy.

Consequently, past experiences and conflicting relations with the National Park authorities in the area have increased mistrust in state institutions. Therefore, according to some informants, if REDD were to be implemented it should be done through an independent organization. This notion of dispossession is extremely strong among villagers and even goes beyond land grabbing in the imaginary of some villagers. As we have discussed previously, fears about REDD are also related to the extraction of the air in their area. As a result, some informants are worried about the extraction of the air resulting in an increase of the temperature in the area and leading to suffocation of the population. Fears about dispossession are now expanding from a national threat to an international threat and people are often worried that the world wants to take their home away. When asking to villagers whether they see themselves as key actors in conserving nature and maintaining climate change, the ruling elite often sees the potential benefit behind it, but when talking with people who do not partake in the negotiations they often do not care and don't see what could be their potential role since they are not part of an institution such as the National Park. As stated in the interview extract below from an Iban villager from Sadap, a feeling of bitterness is often recurring among villagers.

“When are we going to see the benefit from it? For far with the implementation of the National Park, we don't get any benefit so why shall we save the world if we can't secure our forest use? If a national program such as the National Park is not able to secure our needs, what about an international one? All the promises so far have only had been lies! Forest is seen as a common, but we live here and we need to feel secure. We should be the only ones benefiting from future plans because so far we have never been included in states' interventions. The forest belongs to us not to Jakarta, neither Putussibau”. (Sadap, 29/10/2010)

Concluding remarks and reflection

My findings of Chapter 2 reveal that the Iban and Embaloh communities in the Embaloh Hulu sub-district utilize customary systems in managing lands which have little recognition from the state and are therefore vulnerable to government and business-led development projects. These systems will be further described in a next chapter. New knowledge concerning REDD plans, even though misunderstood and reconstructed locally sometimes reshaped into myths, is creating new hopes for recognition and security of forestland access and management. Together with Kusters et al., we can conclude that the perception of tenure security is not necessarily related to the legal status of the land. It is influenced by a range of factors such as the existence of direct threats, the strength of the traditional claim, the existence of external support (Kusters, de Foresta et al. 2007). Villagers want to benefit from REDD, but more important than financial benefit is their security of forest land.

Assessing and enforcing tenure rights of forest dweller communities in the Embaloh Hulu sub-district is important for REDD since communities might disregard protected forest boundaries if they do not accord with customary boundaries, or if they are viewed as unfairly imposed by an overruling power. Assessing and enforcing their tenure rights and recognizing their *adat* ways of managing resources, will surely increase their acceptance of REDD projects and will consequently have positive implications for REDD projects permanence in the long term (Dunlop 2009).

Land security might also prevent future conflicts between communities and the government. As we have seen, the research indicates that communities reject

projects which are perceived as violation of their rights. There is a strong risk of conflicts over land, like in the case of the boundary dispute between the two villages when the government designs and applies land use plans without the consultation of communities (Dunlop 2009). Those are critical issues for REDD to gain greater legitimacy and support from the communities.

Issues about land access right is the rhetoric of NGOs working for the empowerment of communities who see recognition of *Hutan Desa* as the prerequisite for the successful implementation of future REDD plans. But the reluctance comes from the local authorities who see in it a new threat and fear to lose control over forestlands. REDD is often still seen as an imaginary story with a lot of uncertainties around it, especially in relation to benefit sharing mechanisms between government levels.

Mistrusts of communities are also related to historical facts which happened in the regions and it will thus be necessary for local authorities to regain trust of the communities.

CHAPTER 3 - Ideas about benefit sharing based on different versions of *adat*



Photo 3.1: Sadap, some households have privilege access to certain forest patches and resources.

Introduction

As seen in the previous chapter, customary landholding systems where people claim their rights over forestlands are treated as state-owned lands in the national legal system. But customary communities in Indonesia have their own systems and practices for managing the forest. They have abundant local knowledge of the forest environment and a strong commitment and responsibility to maintain the forest because their life depends on it (Nanang and Inoue 2000). In this chapter I will try to show how the two customary communities of Pulau Manak and Menua Sadap are organizing their forests through *adat* traditional systems to justify their legitimacy as forest guardians. How do they use a new discourse about REDD payment in order to legitimize their traditional ways of managing forest resources? Iban of Menua Sadap and Embaloh of Pulau Manak, have quite similar traditional ways of managing forestlands and their natural resources (timber and non-timber products). In this chapter I will distinguish the role of local customary forms of 'private forest', *adat* forest, agroforest gardens, conservation forests, etc... I will also try to explain how people define, classify and value forests and how do they organize forest

management ruled by *adat*. I will try to classify the multiple values of trees as understood by the people. People see themselves as active agents of conservation having established strong resources management systems based on their knowledge and past experiences. REDD brings new hopes for them to be included in a conservation scheme based upon already well established customary management systems. This relates to the embeddeness of their ideas about REDD in their broader claims described in the previous chapter.

The need for management recognition is strongly linked to people's ideas about benefit sharing mechanisms from potential future carbon credits. For villagers there is no doubt that managing their ancestral lands may generate valuable benefits for individuals or the communities.

I will also elaborate further on people's idea that REDD is sometimes related to replanting activities. I will show how this idea is strongly related to land claims and land appropriation.

Finally in this chapter, I will also cover the views about benefit sharing according to NGOs and government interviewed. I will show that their concerns are often not in line with communities needs. Government representatives are more concern about internal benefit sharing between the different governmental levels, while NGOs often tend to simplify the notion of community and are not necessarily in line with field realities and local claims.

3.1. Communities

But before starting with this chapter mainly talking about visions about benefit sharing, it will be important to clarify that among and within communities visions can diverge since interest might be slightly different among actors.

Communities are often seen as being static, homogenous or entities. However they are highly heterogenic and complex and consist of social stratifications (in terms of age, sex/gender, ethnicity, socio-economic status, education, etc). Heterogeneity also exists in diverse terms such as wealth, political influence and resilience to shocks (Nanang and Inoue 2000). In this chapter, I will not use a definition of communities as a homogenous entity but rather a more dynamic, practice based

definition which takes into consideration diversity and differentiations. It will contrast with the *rendering technical* idea which tend to represent village life as a systematic simplified arena ignoring diversity of practices (Li 2005).

Past experiences in nature conservation and development projects such as ICDPs has often ignored complexity and heterogeneity of communities and has thus resulted in poor project outcomes leading to resources disputes and captures of project benefits by the elites (Blom, Sunderland et al. 2010). Assuming that communities have a single set of interests runs the danger of encouraging the capture of REDD credits by single interest groups in the name of the community as a whole, and the wealthier groups are generally best placed to achieve this (Peskest, Huberman et al. 2008). Customary chiefs in the past while supposed to manage resources on behalf and for the benefit of their communities have used their powers for private gain often to the detriment of their people (Cotula and Mayers 2009). As stated by Tsing “Tribal elders...do not represent homogenous or unified communities or grass-roots movement. Their ‘community’ representations are vulnerable and contested, even close kin and neighbors are not necessarily supporters, a few minutes hike away, no one may know a thing about their projects” (Tsing 1999). This is valid for our research area, where elites have benefited the most from illegal logging activities until the complete ban in 2004. As described in a previous chapter they are also the ones most aware about REDD. Elite capture of REDD benefits could in turn cause conflicts over compensations (Blom, Sunderland et al. 2010). Interests related to benefits from a future REDD plan are slightly different among community members according to their assets, their position and so on. This is what I will try to elaborate bellow.

3.2. Forest management in Menua Sadap and Pulau Manak

Local forest management systems in Menua Sadap and Pulau Manak are pretty similar despite the ethnic diversity. Therefore I didn’t find it necessary in this case to draw upon a comparative study between the two communities. However, it is important to keep in mind that when I am referring to forestland management, I am not referring to a western definition of ownership, but on communal agreements

based on communities' customary *adat* way of forest and land management as described in the previous chapter.

Household forest

Some Iban and Embaloh families are holding what they consider and define themselves as 'private forest'. These forest patches of approximately 2 to 5ha maximally, belongs generally to one family head and its household. Usually those plots of forest are heritage land and are passed on from generation to generation from the family head to the oldest son. They are longstanding heritages and only well established families have rights over such forested lands. New comers in village rarely hold private forest patches. The right to use the land is therefore strongly linked to ancestral relations with the land. Male members inherit rights of use to such land on the basis of their membership in a group, rather than on an individual basis. So it is not seen as the right of possession of one person to land, but rather transfers of rights of use the land defined by Visser as 'land relationship' (Visser 1989).

The family (household head, also consider as the spokesman of the land in consultation with the other family members) is the only decision maker over the areas and the only beneficiary of its resources. Nobody outside the family's holding the right is allowed to use timber and NTFPs except game (game are considered as a common property among villagers). Hunting activities of wild animals, mainly bearded pig (*Sus barbatus*) and sambar deer (*Rusa unicolor*) are thus allowed by all villagers in those forest patches. Nevertheless if there is a need for the community to gather timber or other resources they will be an *adat* consultation and the owner of the land will not be in a position to contest the final *adat* decision. However if it is a private initiative, the person willing to use a certain resource will need to ask the permission to the caretaker of the private family land. Private forest can be used by its holders for opening new agricultural fields, but this is rarely happening. Holding family usually keeps it as a timber reservoir for the future and should only be used if needed. According to the village *adat* laws, the land cannot be sold. There is a very strong will from families to protect it and to keep it as a capital for the future especially as a reservoir for building material. Great care is giving to these tree pools by its holding family. There is no legal administrative recognition over these private forest areas. People do not have a certificate that secures their ownership of forested lands.

Nevertheless, these specific areas are recognized and delimited by the respective village *adat* customary law and are thus secured by collective rules. As a result any violation of the rules is punishable by the *adat* customary institutions.

Forest gardens

Some families of Menua Sadap and Pulau Manak do have land patches, mainly planted with rubber trees (*Hevea brasiliensis*), but sometimes mixed with other trees such as *tengkawang* (*Madhuca longifolia*) and fruit trees and other perennial cash crops. They are usually planted on fallowed swidden lands where the fertility declined and provides more permanent tree gardens. They are what Padoch defines as 'managed swidden fallows' (Dove 1993). People use surplus land resources within the swidden system to cultivate rubber on land where there are no important alternative and has little value with the swidden system.

Rubber is the main source of revenue for a lot of households especially during shortage periods. Its role is to provide whatever subsistence agriculture cannot or does not provide. It also satisfies the need to purchase basic trade goods and to pay children's school fees (Dove 1993). Approximately fifty per cent of the villagers do own rubber plantations (*kebun karet*). Rubber harvesting (*nore*) is a male activity. Usually 5kg of raw rubber can be collected within a day with a price approximating Rp 11,000 (approximately 1euro). Rubber gardens are a family heritage and trees were already planted by their ancestors. Rubber gardens are also home for other natural resources that can be used only by members of the household holding rights over the garden. Most of the products are used for self consumption such as rattan, *pantu* palm, fruits but some other resources can be sold such as orchids. Rubber gardens generally belong to one family and are a heritage passed from generation to generation through patrilineal kinship relations and cannot be borrowed.

Contrary to Menua Sadap, the village of Pulau Manak have large areas of fruit trees gardens mainly composed of durian trees (*Durio zibethinus*) mixed with *tenkawang* and other fruits species such as rambutan (*Nephelium lappaceum*). They are a heritage of past generations and no trees are allowed to be removed from these large fruit gardens. Any logging activities are strictly prohibited. They are considered

as forest reservoir for the future generations. Any infraction is strongly punished by the *adat*. Forest gardens are seen by the villagers as purely conservation areas. They are attached to one hamlet and therefore one longhouse, there is thus a very strong feeling of identity attached to it, they represent the identity of the longhouse people in accordance to their ancestors who have planted these trees while they lived there. They are a testimony of their claims over land ownership and rights and represent the pride of a longhouse community seen as a clan (*keturunan*). It is the longhouse people who are the jural units that exercise the communal right of disposal over these forest patches.

Besides the value of the area for the abundance of fruits collected (usually in December), the fruit garden of Pinjawan hamlet is also home to the ruins of the very first longhouse. This specially preserved forest-old longhouse site is called *tembawai*. The old remaining foundations of the house are still visible to some extent. As a result the area has a strong spiritual value and seen as sacred. Respect for their ancestors' home plays a role in the conservation of the trees in specific areas seen as the home of spirits and ghosts. Fruit gardens belong generally to the whole community and hence fall within the communal property rights category of a hamlet. They refer to a history marker of an entire group usually defined by a longhouse. But some people are also claiming certain trees based on their relationship to their ancestors.

Although there is no data to show this, structural data sufficiently indicate that other environmental functions such as water run-off regulation and carbon storage are also provided by such man-made forests (de Jong 1999).

Pulau, hutan simpan or forest islands

The villages of Menua Sadap and Pulau Manak have designated forested areas where rules over the natural resources are strongly implemented by the village customary institutions. Usually these forest patches are defined as forest islands (*pulau*). A *pulau* is a forested area where timber uses are restricted and which is strongly ruled by the *adat* institutions. There are two different types of *pulau* in Menua Sadap.

- The first type of *pulau* is related to the recognition by the community of environmental services provided by tree cover in certain areas surrounding the village. These forest pools or tree reserves are located on certain hills, springs and riverbanks used for example by the village for water supply. Villagers' awareness about the importance of maintaining the tree cover for water catchment and to prevent soil erosion motivates them to manage these areas. Usually these forest pools represent significant fully grown tree stocks. However it does not imply that timber extraction is fully prohibited. Trees can be removed to some extent, but exploitation is strongly controlled by the *adat* regulations.

Most of these forest islands are located in a periphery of approximately 5km around the village, and are also seen as game reservoir, even though game stocks have drastically decreased during the last years in these areas.

- The second type of forest islands are related to religious and spiritual values, we can define them as sacred forests. Iban sacred forest itself comprises a variety of sites and can be generally distinguished between the sites of human deaths or burial and the sites claimed to be inhabited by nonhuman spirits (Wadley and Colfer 2004).

Some are designated as *pulau pendam* in local Iban language and are forest cemeteries, where longhouse ancestors are buried. In those specific areas no timber are allowed to be removed, they are kept in good condition since one or more tombs are located on it. Some others known as *pulau antu*, are just referring to local legends and local beliefs and are thus recognized as holy and sacred places, dwelling places of spirits and are therefore protected for use or cutting and farming.

Pulau Manak, does have the same system of forest islands conservation for environmental services. However, contrary to Menua Sadap, Pulau Manak does not have forest cemeteries. Deaths are buried in specific catholic cemeteries (*kubur kristen*) outside forested areas alongside the road. These sacred and non-sacred sites mark important historical and mythical events providing villages with meaningful connection to the local landscape. They also provide important forest products such as fruits crops, rattan, game for the communities (Wadley and Colfer 2004).

Hutan masyarakat

Forest islands are located in what is designated in a broader concept as communal forests (*hutan masyarakat*). *Hutan masyarakat* is considered as a production forest by villagers and can therefore be used by the village. Timber and NFTP's can be gathered. Timber is generally gathered for housing, village' infrastructures and for canoe construction. *Hutan masyarakat* is however divided in what is called *hutan dusun* (hamlet forest). Every hamlet and thus longhouse within the village has its own designated land and forest. Borders are well established between the different hamlets. The surrounding territory claimed by a longhouse is a patchwork of forest succession, agricultural plots, rubber smallholdings, and specially preserved forest as described above. A longhouse territory is shared and all forest within this territory on which no household have rights, come under the *hak rumah* or territorial rights of the longhouse (Dove 1985).

In terms of function *hutan masyarakat* is considered as village property. These forests are well preserved since it provides abundant resources needed by the community. Community members collect products from *hutan masyarakat* whenever needed for public interest such as village rituals or constructions of village infrastructure or also sometimes for private interest if agreed by village leaders (*kepala desa* and *kepala adat*). There is no money transaction when timber is used internally within the village. Outsiders are allowed to extract products only with authorization and by paying a fee for it to the *adat* institutions. Timber can also be sold to neighbor villages when ordered. Boards are sliced on site and sold per meter. The area where timber is going to be felled and the amount of timber to be used is then negotiated between the parties.

Nevertheless during the last years villagers are facing a shortage in timber for their own uses. Large valued trees are getting rare and need to be gathered further upstream. Besides some reforestation initiatives the demand for larger mature trees pushes villagers to look for it sometimes outside their utilization zones.

Hutan wilayah adat

Hutan adat or customary forest is a shared forest which belongs entirely to the village. The *hutan adat* are large well preserved pristine forests and located far away from the villages which makes access difficult (usually people refer to a distance of about 5 km). According to people from Menua Sadap, they are the ones who own the largest surface of *hutan adat* in the all province. The definition of *hutan adat* is sometimes blurred since all forests belonging to the village including the different types described above, are considered to be ruled by the *adat*. However besides those forestlands located close or relatively close to the villages there are also forestlands located further upstream and downstream which are considered to be owned by the communities and refer here to what I call *hutan adat*. The National Park is also seen as part of their *adat* forest which has been confiscated by the overruling state power.

3.3. Reinventing a green positionality

As I have already mentioned it in the previous chapter, *adat* way of managing forest resources is strongly related to the feeling of communal ownership based on people's identity and historical legitimacy. People have developed their norms and rules in managing the forest and have therefore historical claims on it (Nanang and Inoue 2000). Proclaiming themselves as the legitimate caretakers of the forest often implies that they should have increased rights over its management (Sundberg 1998). People often insist that REDD regimes should compensate them for their role in forest conservation (Lawlor and Huberman 2009). This is in line with the Manaus Declaration, signatories agreed that REDD regimes should, "recognize the capability of sustainable management of forests as exercised by indigenous peoples and traditional communities, as well as the historical role of these peoples and communities in the conservation and in the equilibrium of global climate and to develop compensation system" (Manaus-Declaration 2008).

People consider it as their forest since they have been managing it for so long and since they are the ones who know how to maintain nature over long term. As stated by the *adat* head of Pulau Manak:

“Our *adat* existed far before the independence of Indonesia. *Adat* is ruling our borders, our lands, the use of our soil and the trees. The Indonesian law should only come behind our *adat* law. Although the state does not want to recognize it, *adat* law is the rule here. National law should therefore be in accordance with our *adat*. It was born by itself. State administration, village administration should fit to our *adat* borders. So far our forests are not recognized by the administration. So for us the only way to secure it is to integrate it as soon as possible into the *Hutan Desa* scheme with the support of NGOs. The forest is ours because we have been managing it for so long.” (Pinjawan, 20/11/2010)

According to them, it is a precondition to secure and gain recognition for their *adat* ways of managing forest resources since so far it is only based on mutual trust and is therefore vulnerable to external threats as seen in the previous chapter. Furthermore the feeling of owning the forest and the assurance that it is not owned by other people will most likely result in motivation to protect the forest. But the hopes for recognition of their *adat* ways of managing the forestlands and trees goes beyond the simple feeling of securing their claims, it also relates to certain ideas of who should be eligible for payments under a potential environmental service provided by the community consisting of storing carbon. They see the strengthening of *adat* institutions and increased government engagement with those institutions an essential precursor to the successful implementation of REDD. The recognition of their *adat* will guard against the risk that states could take away their lands in order to capture REDD revenues.

Since they have been managing the forest for so long they see themselves as the only legitimate beneficiaries under a future REDD plan. We will now see how this relates to certain ideas of benefit sharing among communities. Indigenous people and other traditional communities have pointed out that they have helped preserve and protect tropical forests historically. Past experiences show us that indigenous are learning to speak the environmental discourses spoken by international development and conservation agencies (Zerner 1994). Village leaders have sometimes learned to define and represent the village as a formidable ethnic-environment object and a kind of community that environments and green developers might choose for co-operation and alliance in order to enforce their traditional claims. They have learned to make villages as objects of attention and respect for those interested in forest protection. They have also sometimes reshaped and reconstruct *adat* systems as instrument of

conservation and environmental management institutions by discursive appropriation. They have taken a green positionality within communities and have thus adjusted their speech accordingly (Tsing 1999; Perez 2010).

This idea is in line with the dynamic of environmental action where indigenous people are assumed to have and to perform ecologically-harmonious cultures and see in *adat* customary law a living armature for the conservation of biological diversity, sustainable development, and social equity in village communities (Zerner 1994). This notion defined by Zerner as the nature-culture imaginaire valorizes the customs of indigenous peoples as aligned with, even integral to conservation and environmental management. The interview extract below is the speech of a respected and wealthy *adat* chief (*Temenggung*), who no longer lives in the village and who has accumulated his current capital and welfare through illegal logging activities. We can clearly see that he is reshaping and appropriating a green position which is contradicted by his past involvement:

“We admit that we have done mistakes in the past and sometimes overexploited the resources. But now we are all Christians and we recognize the value of the natural resources. From 2001 until 2005, it is thanks to the people here that illegal logging activities have stopped. If the National Park management had not signed an *adat* agreement with the people the park would have been chopped out and it would no longer exist. Therefore we are working close together with the park and we should perceive benefit from it. It is a fifty/fifty agreement. But according to the people of the park management, it is a public common; this is a speech for Java. We, we are living here and we are the ones protecting the environment through our *adat*.” (Mataso, 12/10/2010)

3.4. Ideas about benefit sharing at local level

The basic REDD supply chain will transfer payments from international buyers to national and sub-national entities (e.g. local governments, companies, communities or individuals) in order to support policies and measures that will result in the reduction of CO₂ emissions. The resulting emission reductions can be sold to the international buyers in order to meet legally binding or voluntary emissions reduction targets (Peskett and Harkin 2007).

Individual payments

People claiming for benefit sharing mechanisms at individual level, are those households or individuals who are claiming locally recognized (through *adat*) property right on trees and private forms of forestlands as described above (forest gardens, agroforestry...). For them everything belongs to them from the soil, the water until the leaves of the trees. The right for disposal is claimed through ancestral relation to the land. They do not recognize it as the property of the village community even less the property of the state. According to them households should get paid in cash for compensation because it is their forests. They are generally not in favor for compensation in terms of infrastructure development or other village facilities. According to them infrastructure development is the responsibility of the state not theirs. For instance people of Sadap hamlet have already developed their own water supply system without support from the local government. They refuse to talk about community needs since they could lose their autonomy and their resources for the shake for the broader villages needs.

REDD credits are seen as a compensation for their efforts to protect their ancestral forests, and should therefore be a monetary compensation. Those people talking about individual payments are therefore well established longhouse families having assets and privilege access to resources recognized through *adat* from generations ago. The main argument is that the state has enough, it took them the National Park and didn't provide them with employments neither compensations. A distribution scheme at district or sub-district levels is also not thinkable for them since they don't understand why the higher levels should benefit for their own efforts.

The concern for them is whether certain 'non-forest' categories such as their agroforestry and forest gardens, rubber plantations, that have been shown to offer potential benefits such as increased food security, may be included in a REDD systems. This will largely depend on the definition of 'forest' according to REDD policies.

People owning forest assets are convinced that they are the only legitimate beneficiaries. They are rational, individualistic with no particular commitment to local social life. Below is an interview extract of an Iban villager I followed to his forest garden and to whom I asked if he was afraid that REDD will restrict his activities:

“No I am not afraid that REDD will restrict my rights and to continue my activities, because everything belongs to me and my family here. Nobody else can claim it. It was given to me from my father and I keep it for my own son. My land is secure through our *adat* system. If my forest is going to be included in a REDD program it will have to compensate me and my family and pay us higher price then what we could benefit by using it. Western countries should pay us directly. Money should not pass trough government hands.” (Sadap, 30/10/2010)

Community payments

The communities of Pulau Manak and Menua Sadap also include new comers. It is now common place that people are marrying outside the scope of their villages and even their ethnicity. For instance some Iban in Sadap now come from as far as Sarawak in Malaysia. Inter-ethnic marriage between the two villages and villages further downstream is also not unusual. These new comers, especially male members, through their marriage do not have assets in terms of forestlands. However being part of the village community, they are members under the village *adat* law. Having no personal claims related to benefit sharing they see themselves as part of the broader community and therefore are usually in favor for distribution at the community level. They are normally mainly relying on field labour (the only asset they usually have are *ladang*) and are usually less relying on forest and forest products since their access is limited. Those ordinary villagers may or may not get involved, and it is until now unclear to understand their interests.

When talking with village representatives and notables about benefit sharing, their ideas are supporting the overall welfare of the village's community and are therefore in favor of compensations in terms of development for the villages. They represent the community and are the mediators that make collaborations between village people and advocates of development possible (Tsing 1999). According to them REDD credits should not be distributed at the household level since it would be extremely difficult to audit.

However when discussing with hamlet representatives (*kepala dusun*), benefit should be in terms of monetary compensation and distributed at the hamlet level. As

we have seen previously in this thesis, hamlets (including generally one longhouse) and generally hold exclusive customary rights over a particular part of the village forest. As a result, hamlets claim their legitimate rights over it, and do not speak with one voice with the broader village authorities. The village (*desa*) is often only seen as a government administrative unit that operates over and within *dusun* clusters. As stated by a respected old villager from Belimbis hamlet (Pulau Manak):

“In Belimbis the forest belongs to the *dusun* and to its people. We are ready to integrate our forest into a *Hutan Desa* or ‘carbon REDD’ schema, but only if the benefit returns to Belimbis and its people and nobody else. So far it is the people of the hamlet who have kept the forest in such a good condition. I have protected this forest with my own weapons and protected it from illegal logging. If at that time I had not come back from Brunei on time (where I was working), this place would have disappear. “(Belimbis, 21/11/2010)

Concerning the elite generally in favor of community development, their interest may be vulnerable to elite capture since corruption and misuse of project funds can occur not just at intermediate levels of government but also within communities themselves. Members of a group and representing a broader group (village or hamlet), rationally seek to maximize their personal welfare and will not act to advance their common group objectives unless there is coercion to force them to do so (Dasgupta and Beard 2007). Furthermore, if carbon sequestration projects are taken up where property rights are unclear and tenure contested, it is also possible that more powerful people may take control over the land (Jindal, Swallow et al. 2008).

A lot of uncertainties also remains concerning the areas potentially legible for REDD payments. A question often asked is whether REDD will only follow the boundaries of the future *Hutan Desa* scheme or if it can be extended to their local forms of protection and production forests. According to them, if this is going to be the case, payments should be higher than what they would gain from using their forests under current situation else they will not be ready to participate in such a program.

3.5. Ideas about benefit sharing according to local stakeholders

Talking about benefit sharing, I found it important to add in this chapter the views and ideas about local stakeholders interviewed during data collection, NGOs and governmental representatives at the district level. Their ideas about the topic do not represent the claims of the local communities and are sometimes biased by a simplified definition about community which is not representative of the field reality. Local governmental representatives are not even eager to bring the issue to the table since they are busy enough with internal disagreements about the topic.

NGOs

Now, according to NGOs interviewed, the *Peraturan Menteri Kehutanan Republik Indonesia No P.36/Menhut-II/2009* trying to regulate benefit sharing for REDD is not a reliable document since it has been designed by Jakarta without any consultation at the local level and is therefore a purely top-down document designed by bureaucrats.

Based on literature review, benefit sharing at an individual level is likely to be most effective and there is less likelihood of elite capture, however the transaction costs of dealing with large numbers of individual contracts gives rise to trade-off (IFCA 2007). Payments to groups or the entire community might involve lower transaction costs for those making the payments, but are prone to elite capture and mechanisms for equitable decision-making on rules and procedures for benefits sharing within the group are likely to be required in order to avoid capture by those who handle the contract (IFCA 2007; Jindal, Swallow et al. 2008).

But according to a local NGO interviewed based in Samarinda, at individual level incentives will be too low due to high transaction costs, and would therefore not motivate communities from using the forests and change their current practices. Credit payments should therefore be accompanied with income generating activities and be made at community level.

For international NGOs such as FFI, consultations should take place between local governments, communities and NGOs on how best to distribute benefits at the village

level, but so far according to NGOs benefit sharing mechanism is a top-down design. Clear mechanism to distribute at the village level should be developed. The opinion of NGOs interviewed is that mechanisms should be developed to contribute the communities rather than individuals. According to them, it is important to clarify with communities about what they could benefit from REDD and adjust to their own perspectives. But as we have seen previously there are no common needs and claims within communities. International NGOs often tend to define communities as homogenous entities with a one single common interest which justify the NGO's intervention.

According to NGOs interviewed in order to avoid elite capture, communities will need to be supported in concrete programs. It is also important to understand how projects will look like in order to clearly define who will benefit from it. As a result transparency in project design is a prerequisite. It will thus be necessary to involve people at the beginning of the process. It will also be import to support local government in order to create the good institutions and human resources.

Local government

According to representatives from the forestry service at district level interviewed, it is not clear who will be responsible for the selling of carbon of credit. This concern is strongly related to the issue of carbon rights as stated by a representative of the forestry department in Putussibau:

"In terms of rehabilitation programs, it is clear that private investors will be the primary beneficiaries, but in other schemes such as carbon pool it is still uncertain who will be eligible for the selling of carbon credits. It is obvious that in terms of benefit sharing each level wants a piece of the cake since everybody has claimed rights. Villages are located in sub-district, sub-districts in districts, districts in provinces and provinces are under the central state. For Jakarta it is still hard to understand this notion, they often see the central government as the only legitimate power holder. It is sure but not clear that all levels should benefit. Every level should sit together and discuss about the issue but so far benefit sharing plans are designed by the center" (Putussibau, 21/10/2010)

So far the current benefit sharing plans for REDD (still as a draft and supposed to be revised) is unclear according to government representatives interviewed and is leading to a lot of queries about the responsibility of lower governmental levels such as districts.

Benefit sharing is apparently not a new concern for district government, under current conditions, districts often do not agree with distribution of shared revenue from the forestry sector. District governments sometimes perceive that there is a lack of transparency and inconsistencies in funds distribution. According to Dermawan et al. the current system of decision-making by attribution over revenue sharing mechanisms must be replaced with a decision-making process that facilitates officers at central and district levels to be open and able to listen to each other during discussions about the best mechanisms for allocating and disbursing forest revenues (Dermawan, Komarudin et al. 2006).

The unclear roles that district government will play under a REDD scheme, can be related to past experiences related to decentralization of the forestry sector in Indonesia. Decentralization has sometimes led to unclear division of authority for forest management. For instance, powers given by means of regulations to districts (e.g. for concessions permits) have sometimes been taken back by central government. In Kapuas Hulu, forestry-related revenues accounted for 89.9% of the district's own-source revenue in 2001 and 92.5% in 2002 when small-scale concessions allocation was under the responsibility of the district (Dermawan, Komarudin et al. 2006).

But responsibilities have slowly been recentralized. The arguments for the central government is that "forest by nature are a national public good, that there is a lack of capacity in local government, and that local government are too political which limits their use of technical knowledge and decision-making" (Dermawan, Komarudin et al. 2006). Central government further claimed that district governments lacked the capacity to implement and supervise permit holders adequately and failed to achieve sustainable forest management (SFM) criteria and standards (Yasmi, Schanz et al. 2007).

There is therefore a risk that REDD will tend to a recentralization over forest governance and hinder decentralization processes. Indeed, by monetizing forest carbon, REDD will significantly increase the market value of forests, therefore giving an incentive to central governments to increase control. As stated by Peluso and cited by Phelps et al. page 312, “evidence suggests that central governments affirm control over forests considered critical to national welfare for conservation, protection of ecosystem services, or national economic interests”. With billions of dollars at stake (the market value of avoided deforestation for Indonesia represent U.S\$108M per year, exceeding the entire 2005 MoF budget), governments could justify recentralization by portraying themselves as more capable and reliable than local level and communities at protecting national interest (Phelps, Webb et al. 2010).

I have demonstrated that local government is not even talking about benefit sharing at village and community level. Governmental representatives are too busy with internal conflicts and divergences about fair benefit sharing mechanisms among the various levels. Consequently, they do not even talk about communities and villages. According to government logic, villages are to be units of administration, forest are national resource and there is no legitimate connection between the two.

3.6. Claiming land through planting

Some villagers, especially in the village of Pulau Manak consider that REDD will also focus on reforestation activities and that replanting rubber, *gaharu*, durian and aren palm (*Arenga pinnata*) trees (valued by the community) could potentially generate valuable monetary credits. Apparently this information comes from local government and National Park networks, and is certainly based on past experiences and current knowledge concerning the CDM mechanism. So far there is already a governmental program planning to rehabilitate some degraded areas. One plan is to reforest what they call the *kebun bibit rakyat* which should be an area comprised of 30 per cent of mixed trees and 70 per cent of rubber trees for the sake of the community. This project is undertaken independently from REDD plan and objectives and only counts for rehabilitation. According to villagers, the project didn't start yet effectively due to a low commitment of the local government. Reforestation initiatives also comes directly

from the communities themselves, for instance, a planned activity in Pulau Manak is to rehabilitate the *Bukit Mataso* to preserve the water catchment function of the hill. People of Pulau Manak are indeed experiencing severe water shortages from upstream springs since recent years, and the longhouse of Pinjawan hamlet is almost no longer supplied with water. Replanting activities are therefore related to environmental consciousness and deteriorations experienced in their environment. But according to some villagers of Pulau Manak, there is also a strong potential for replanting trees especially on former swidden lands which are no longer used for agricultural purposes (*tanah tidur*). Intensification and the practice of *ladang gulir* (rotation systems), implies that they are no longer opening new fields in forested areas, consequently some areas are left for regeneration under fallow and not longer used for agricultural purposes. It is already a common practice that some villagers replant uncultivated *ladang* with rubber trees. Argument is that they are doing long term investment on their lands by planting trees.

But we can see this enthusiasm of replanting and the newly self-created hopes of financial benefits through reforestation as a broader strategy over land claiming. This notion follows Fortman's idea and supported by Kuster in his article about the Krui agroforests in Sumatra, that planting trees reinforce people's feeling of security over land. Planting trees traditionally functions as a sign of ownership, and may be used as a means to get maintain rights to land (Fortman 1985; Dove 1993; Kusters, de Foresta et al. 2007). Fortman reports that planting trees is a visible evidence of claims to land in Indonesia and could create inheritable rights in the trees and in practice the land shaded by it. Indeed, in many societies such as the Dayak of Kalimantan the person who plants a tree is the owner of that tree and may de facto be inherited assuring long term security (Fortman 1985). Under *adat* of most of the Dayak communities of Kalimantan, planting trees mainly rubber establishes greater rights to the land than the clearing of the forest for a swidden. According to Dove, one of the reasons and even sometimes the only reason that people plant rubber trees is to strengthen their claim to a particular plot of land especially when claim over it is contested. This strategy is often used to protect from land usurpation from other tribes but also from the government. Government perceive fallowed swidden lands as lacking evidences of property while in contrast rubber and other perennial crops generally are acknowledged as evidence of cultivation (Dove 1993). Tree

planting therefore secures the right to use the land and has been often strengthened through the influence of outside threats and in some cases the lack of legal security (Kusters, de Foresta et al. 2007). This is valid for our case, since we have seen that land is legally not recognized and vulnerable to dispossession.

The notion of land claiming and land appropriation and security through replanting activities goes even further if we take the following example.

Further upstream of Menua Sadap, there are several non cultivated swiddens or *ladang* (*tanah kosong*) which were used by the communist rebels during the war that took place in the area. Communist rebels had established their base camps and were hiding in the jungle¹. Today communities of both villages are not using those *ladang* since there are located too far upstream and under current conditions, it would be too costly to exploit them (petroleum expenses for the canoe). There is therefore all kind of uncertainties of ownership over these lands and they are sources of dispute between the two communities. Those unused lands are seen as potential for replanting activities and therefore may result in advantages for those who are undertaking the planting activities. Claims over these lands together with unclear and disputed status represent a double interest; appropriation of the areas and the hope related to a certain compensation for undertaking reforestation/afforestation activities.

¹I refer here to the so-called PGRS/Paraku (*Pasukan Gerilya Rakyat Sarawak/Pusakan Rakyat Kalimantan Utara*, Sarawak People's Guerrilla Force/North Kalimantan People's Force) rebellions designated by the literature as the least know war under the New Order regime. It broke out in 1966 in the heavily forested stretch of West Kalimantan between the Malaysian border and the Kapuas river. These rebel movements were suspected to be affiliated to the PKI (*Partai Komunis Indonesia*), and were fighting for Sarawak independence (PGRS/Paraku), while the PKI was oriented towards West Kalimantan. The Indonesian anti-communist regime viewed the armed resistance on Borneo as a single movement closely allied with China. Joined Indonesian and Malaysian military operations along the Kalimantan-Sarawak border quell the rebellions in the end of the seventeenth, Davidson, J. S. and D. Kammen (2002). "Indonesia's Unknown War and the Lineages of Violence in West Kalimantan." *Indonesia*(73): 53-87.

Concluding remarks and reflection

What I have tried to demonstrate until now in this thesis is that villager's claims for recognition over resources and land ownership are embedded in a strategy to invest in the future and to achieve long term land security. However these claims can also be seen as a broader plan to potentially benefit from future rewarding activities that will take place in their area. Villagers are aware that bio-conservation related activities can be beneficial and rewarding in terms of monetary transactions or other benefits. Consequently villagers tend to self-define and reinvent themselves as forest guardians to justify their legitimacy as the only plausible beneficiaries. The establishment of the National Park has failed to benefit them and they are now raising their voices and are resolute that they will not be deceived like they have been in the past.

In order to identify all the stakeholders that will be involved in a future REDD plan it will be necessary to clarify land and carbon ownership. Direct payments to village communities could be made where rights are clearly established and indirect benefits being delivered to establish broader development projects such as improving schools and social services (Peskest, Huberman et al. 2008). But as I have tried to demonstrate, within village communities, hamlets and among individuals, people have sometimes divergent interests and claims according to their assets and position. Ideas about benefit sharing may vary according to different actors and units, and might be a source of conflict if not clearly defined and apprehended. Communities do not necessarily represent the interest of the broader village unit, but refer more to the *dusun* as a stronger unit of appropriation based on ancestral claims and feeling of belonging to one longhouse clan. Individuals among communities have also different interests and claims in terms of benefit sharing according to their privileged accesses to land and rights to disposal over land. Consequently while talking about benefit sharing at local level, it will be important to consider village heterogeneity and divergent interests.

But personal interests and claims within communities can hinder efficient distributions and work against the welfare of the community. Village elite capture is also the main risk for legitimate beneficiaries.

With regards to the government, it is clearly not a monolith structure with one single interest. Hence the allocation of rights, clear responsibilities for the regulation and sale of REDD credits will need to be addressed among different level national, provincial and district. Recentralization of governance under a REDD scheme is the main fear at lower governmental levels.

CHAPTER 4 - Ethnicity, contested land borders and forest boundaries



Photo 4.1: Kelayam, Iban hamlet, the longhouse community hold exclusive customary land titles over a geographically define territory

Introduction

Before the introduction of regional autonomy and decentralization, the desire for communities to appropriate primary forest had little meaning. But since 1999 and decentralization under the *reformasi*, land claims are synonymous with claims for ownership of forest resources that have gained a high market value. In Indonesia, legitimacy of ownership is strongly related with the prior occupation of the territory. As a result it didn't take long, after the regional autonomy regulations, for ethnic groups and local communities to start being interested again in the history of their settlement and migration and rekindle old tribal feuds (Levang, Buyse et al. 2005). Furthermore, forest decentralization policies has also often created local conflicts among local stakeholders and communities over boundaries, benefit sharing etc (Yasmi, Anshari et al. 2007). In the past and before the regional autonomy communities were rarely fighting about boundaries (Yasmi, Schanz et al. 2007). But since decentralization and thus the possibility for communities to benefit from small logging concessions, and now with new hopes from payment for environmental services, communities continuously contest their mutual boundaries.

In this chapter I will try to demonstrate that new ideas and hopes about potential benefits from rewarding conservation activities such as REDD, are revitalizing longstanding quarrels and ideas about land ownership and legitimacy between the two Dayak communities namely the Iban of Menua Sadap and the Embaloh of Pulau Manak. In this chapter, conflicts between ethnic groups refers to what Yasmi et al. define as 'inter-settlement' conflicts (Yasmi, Schanz et al. 2007). The two communities, although having established mutual respects through various *adat* agreements, sometimes dating from the Dutch colonial time, do not always speak with one voice when it comes to customary forest boundaries and ownership over forest resources.

To understand the broader context of longstanding conflicts and contradictory or overlapping claims, I will base my field observations on existing historical facts about migration and settlement and also on anthropological works dealing with Iban and Embaloh relations in the focus area. This will help us to understand how both communities re-invent history to justify their legitimacy over land and forest resources.

4.1. Brief anthropological review of Iban and Embaloh in the Embaloh Hulu sub-district

Embaloh Dayak or Tamanbaloh

Embaloh Dayak also known as Tamanbaloh found in the village of Pulau Manak and I am referring to in this thesis, is a sub-division of a broader ethnic group known in the anthropological literature on Borneo as the Maloh Dayak, which is essentially spread on the upper Kapuas region. Embaloh Dayak are settled along the Embaloh river in the Kapuas Hulu province and live in nine communities in the Embaloh Hulu sub-district (King 1976; Wadley 2000). The Embaloh community of Pulau Manak is the most upstream settled Embaloh on the Embaloh river (see figure 4.1). According to King in his paper on Iban-Maloh contact in West Kalimantan, Embaloh Dayak have been settled along the Embaloh river for a long period of time. His genealogical

material collected from the Embaloh in 1976 suggests that people ancestral to the Maloh were already well-established along the upper Kapuas at least twenty generations ago (King 1976).

Embaloh Dayak are longhouse people practicing dry rice swidden cultivation on the flatlands of the fertile Embaloh river flood plain. Their villages are therefore usually located on flatlands bordering the river. The good quality of the soil allows them to return to the same land after a short fallow period. Since recently Embaloh have also turned to wet rice irrigated agriculture using high-yielding seeds distributed by the local government. Their agricultural practices allow them to have high rice yield and even sometimes in good years to generate surpluses. Usually Embaloh do prefer to clear secondary forest rather than virgin forest since the latter requires a longer dry period before it burns well (ibid). However although they concentrate their efforts on low-lying areas, Embaloh found in Pulau Manak do sometimes farm hill lands further upstream.

Subsidiary crops are mainly composed of roots and vegetables, fruits, maize and sugar cane. The main cash income for villagers comes from rubber tapping activities and in some years the collection of *tengkawang* nuts for the production of illipe oil. Pigs and poultry are the main domestic animals raised. Besides being skilled cultivators, Embaloh are relying on their forests for secondary occupations such as hunting, trapping, fishing and the collection of various forest products.

Iban Dayak: integral swidden farmers

The Iban are a widespread indigenous population in northwestern Borneo, inhabiting large portions of the Malaysian state of Sarawak and a smaller population along the border in the Indonesian province of West Kalimantan known to them and defined as the Emperan (Wadley 2007). Besides some uncertainties faced during field research about their exact origins, Iban found in Menua Sadap are usually known to be descendants of the Iban migrants from the upriver Iban communities of Batang Lupar river in the province of Sarawak. This massive migration of Iban population from the British ruled province of Sarawak to West Kalimantan (at that time known as Dutch Borneo) and more specifically to the upper Kapuas region, started to take place in

the nineteenth century. King (1976) describes in his paper the hostilities in which upriver Iban of Batang Lupar were engaged with downriver Iban and other Dayak peoples. Raiding Iban took advantage of the political boundary between Sarawak and Dutch Borneo to engage forays and then seek refuge on the other side of the border (King 1976). A further factor in Iban migration and described by King may have been the dislocation of their economy. Iban were subject to punitive expeditions. King also advances the theory that Iban land and vegetation resources were hard-pressed in their Batang Lupar homeland and the population needed to expand into new areas.

Like the Embaloh, Iban are also longhouse people. Contrary to the latest Embaloh, West Kalimantan Iban economy is based on the cultivation of rice in uplands usually in hill swidden cuts from long-fallow forest (Wadley 2007). They rarely farm low-lying areas, and are usually located further upriver where land is higher and more sloping (King 1976). Iban are what Conklin described in 1957 and cited by Wadley (2007: page 112) as integral swidden farmers. It means that they are engaged in integral swidden systems including pioneer (cultivating large portion of old growth forest often integrated into traditional social, economic and ritual life) and established (largely cultivating secondary forest of various stage).

The main cash income as for the Embaloh comes from the tapping of rubber and wage labor, especially on the other side of the border in the state of Sarawak. Subsidiary activities to subsistence farming are hunting, trapping, fishing and the collection of forest products as well as *tengkawang* nuts.

Iban have often been accused to deplete land due to their pioneer agriculture tied to their traditional ritual rice farming. Freeman's (1970) work on Iban pioneer agriculture concludes that they were *mangueurs de bois*, leading in massive forest degradation through their rice farming practices. Already in the past, Dutch officials designed Iban swidden farming as plunder farming due to the rapid depletion of forest and soil fertility (Wadley 2007).

To be condemned is their custom of cultivating land for two, or three years in succession, or several times a span of five years and farming bush fallow of one to

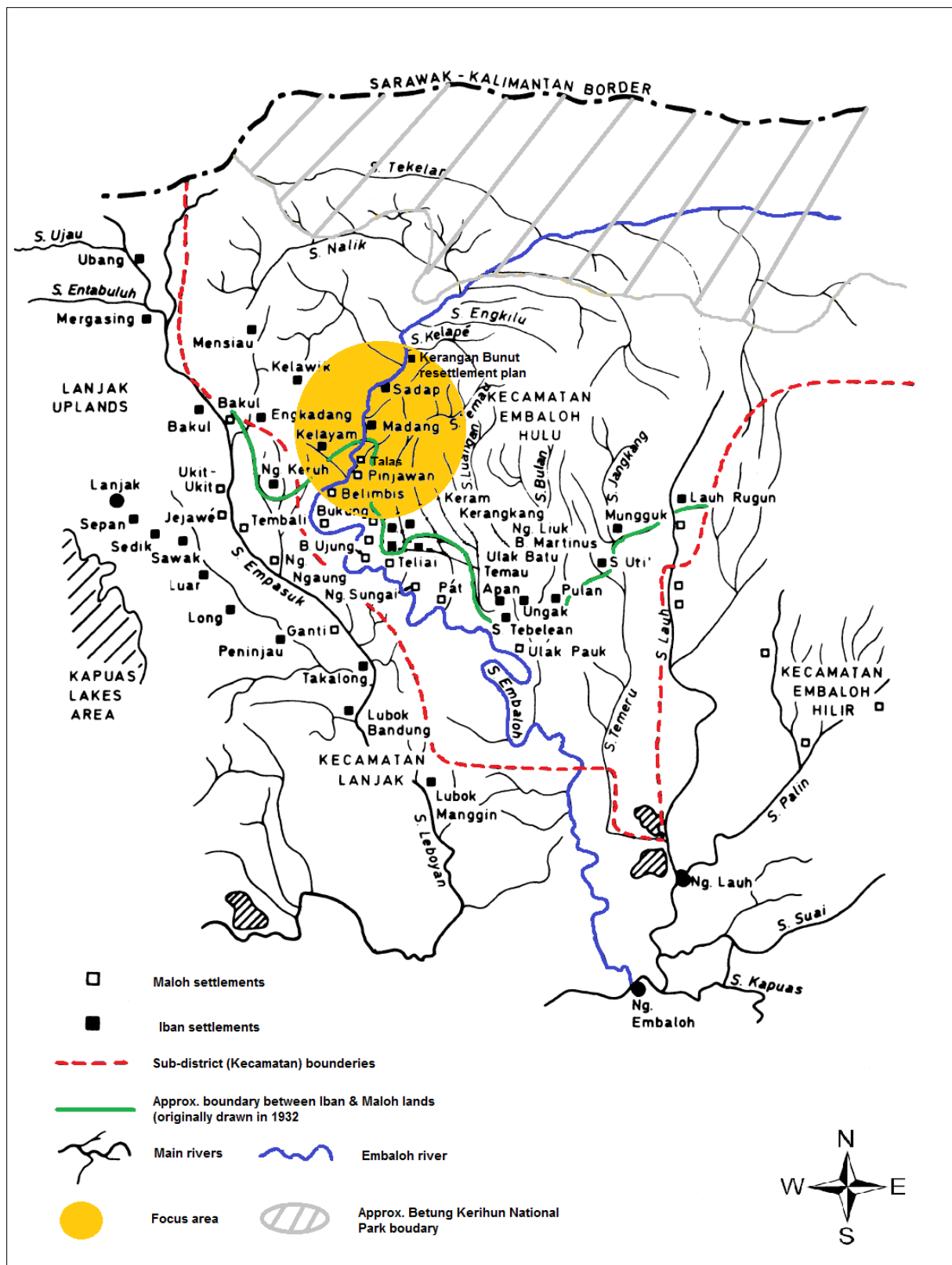


Figure 4.1: Sketch map of Maloh and Iban settlements in the Embaloh and Leboyen rivers area, Kapuas Hulu

Source: adapted from King 1976

three years (King 1976). One advantage of this, Freeman argued, is that it freed Iban from felling old growth forest every year so that they could devote their energies to other tasks such as wage labor. The overall effect of these practices on the forest however was serious degradation and often devastation (Freeman 1970).

4.2. Embaloh-Iban relations

To understand the current relations between the Iban Dayak of Menua Sadap and the Embaloh Dayak of Pulau Manak and potential land conflicts that could arise when talking about carbon issues, we have to go briefly back to the history of migration and contacts between the two communities in the region.

The end of the nineteenth century was marked by Iban migrations to and via the Embaloh and Leboyan river areas (King 1976). During the migration, Iban could hardly avoid contacts with other people such as the Maloh already settled and having developed strong agriculture systems. This was the case when Iban decided to settle on the upper course of the Embaloh river, they had to face the Embaloh who were already well established on the river banks. The Maloh who came into contact with the Iban are those described previously of the Embaloh subdivision.

Although some tensions arose related to right to forest, Iban moved to ecological niches left unoccupied by the Embaloh further upstream. Embaloh already possessed areas of the fertile alluvial lowland of the Embaloh river and Iban were more interested in exploiting uninhabited tracts of virgin forest for their swidden agriculture. Where hill was available, and especially where there was large areas of virgin forest, Iban would have opt for it. This complementary provided the possibility for developing non hostile relationships between the two communities. Besides the fact that some Embaloh found it unsafe to farm in newly settled Iban areas and moved further downriver to what is now the hamlets of Belimbis and Pinjawan (at that time considered as distinct villages), villages had established relatively peaceful relations (King 1976).

Iban and Embaloh also had good trading relationships, mainly based on the exchange of certain craft products. Trade between Iban and Embaloh villages has often conducted to intermarriage between both communities. Nowadays trade relations are based on Iban demand for Embaloh rice. The less skillful Iban

agriculture practices on hill slopes are resulting in frequent rice shortages. To obtain better rice yield Iban from Menua Sadap often work on Embaloh lands, especially those who have close relations or friends. The hamlets closest to the Iban settlements such as Belimbis and Pinjawan tend to recruit most Iban from Menua Sadap.

However, besides friendly relations between both communities, King in 1976 was already referring to commonplace disputes between Iban and Embaloh over resources especially due to the increase of population numbers on both sides. He was mentioning that Embaloh land is becoming more restricted due to the Iban and Kantu encirclement and the greater pressure on resources because of an increase in the Embaloh population. He was advancing the theory that in some parts of the Embaloh region the fallow period between farming cycles has shortened to four of five years and that would lead to soil exhaustion and falling yields. He was already suggesting that increasing pressure on the land could therefore lead to serious conflicts in the future (King 1976).

According to King and his records there are two boundary agreements between the Iban and the Maloh of the Embaloh river. The first was signed in 1923 and the second one in 1932 where boundaries were redrawn. People refer to those boundaries as *batas suku* (ethnic border).

4.3. Re-inventing history

On the one side we have a long-established community, and on the other side we have the descendents of migrants. During field research it was interesting to observe that while talking about forest rights and the possibility to generate profits from standing forest stocks, people do not speak with one voice and are claiming their legitimacy over land rights according to their origin and settlement history. Therefore, the legitimacy of ownership refers to the prior occupation of the area, and as a result ethnic groups start to revitalize the importance of their migrations and settlements history.

According to the Embaloh of Pulau Manak, the Iban from Menua Sadap flew from a severe war in Malaysia (probably trying to escape the punitive expeditions mentioned above and described by King) some hundred years ago and asked for protection and asylum on the Embaloh lands. On the other side, Iban from Menua Sadap tend to claim that they settled in the area due to the fact that Embaloh requested their help and support during Embaloh's involvement in wars against raiding Malayu tribes, and as compensation provided them with lands for settlement and agriculture upstream the Embaloh river. Both communities use their versions to justify that the other community owes an eternal recognition and should respect their claims. During field research I have always tried not to take party to one or the other side, since probably both versions are reflecting its part of truth. Regardless of these disagreements about the origin of settlement and migration, both communities are proud to mention the peaceful relations they have been established and the mutual respect they have achieved despite cultural and language barriers. But as soon as the topic about potential credit payments from standing forest stock is brought back on the table, tensions starts to arise again. It is common place to hear from Embaloh that Iban are only guests and that they are not the legitimate owner of the land due to their migration history to the area. In the opposite Iban often refers to the fact that Embaloh owe them endless recognition for the support they have provided to them during their quarrels against Malayu.

4.4. Contested forest claims

The commonly contested issue is related to the shared customary forest. According to an *adat* customary agreement (I couldn't come across the exact date) between Iban of Menua Sadap and Embaloh of Pulau Manak, both communities are sharing the upper Embaloh river starting from a spot called *Batu Peti* (upstream Sadap hamlet) until the entrance of the National Park Betung Kerihun. The land, home for a large portion of primary forest, is commonly owned and designated as *hak milik bersama* (common property right). However administratively, most of it is located on Menua Sadap's land. As a result, it is common place to hear from Sadap villagers (especially from Sadap hamlet) that they should be the major credit beneficiaries from a carbon scheme since they are the most suitable for maintaining forest cover.

Sadap people do not always recognize the commonly shared forest and often encroach and appropriate it, since boundaries are often contested.

From Embaloh side, and according to the village head of Pulau Manak, already all kind of jealousies are created concerning REDD credit payments. According to the same informant, this is due to a misunderstanding and misinformation coming directly from a local government source. In the year 2009, during a discussion on REDD held in the district capital Putussibau, the *bupati*, (government representative at district level) mentioned that Sadap would be the main beneficiary of REDD credit due to its strategic position (last settlement before the National Park entrance), and its important forest capital. According to the same informant the hamlet of Sadap has already seen the color of REDD payment in order to renovate its longhouse. This is definitely misinformation and reinterpretation of the reality.

Worries about unfair land recognition and credit attributions are thus common place, as stated by the interview abstracts below from an Embaloh villager and the *adat* head of Pulau Manak.

“We have strong agreements with the Iban and respect them. But if they start to claim the upstream of the Embaloh river from *Batu Peti* as their own land, surely a strong conflict will arise because the land is a share land, *hak milik bersama*. ‘Carbon REDD’ should be very careful about what it will consider in the future. According to local government staff, Sadap will have bigger benefit from REDD because they have the land upstream. But Sadap people are liars, they came here and we gave them lands. They do their own rules without consulting us. But here, it is the land of the Embaloh. There is a document from the Dutch time which clearly defines their land but we don’t have it anymore since it has been burned. Currently Iban from Sadap are claiming two times more land than what they have the right to do. The world can care about our forest, but then we have to clarify that Iban are outsiders and should not be the only beneficiaries”. (Pinjawan, 15/11/2010)

“We have problems with the Iban because often they claim more lands without asking our permission. The Iban elders, the ones with whom we signed agreements are still respecting us, but this is no longer the case with the new generation. They are disrespectful and don’t value *adat* agreement anymore”. (Pinjawan, 15/11/2010)

Besides claims over land legitimacy related to migration and settlement history and contested boundaries, the two communities are also convinced that they are better off for the conservation of the environment. Embaloh often accuse Iban of squatting

on more land than what they are allowed to do and to deplete forest resources due to unorganized farming systems. So in our case dominant groups, socially well structured and established with strong agricultural practices such as the Embaloh reaffirm their superiority over more marginalized groups less structured, more extensive in their practices and less important in population such as the Iban. Oppositely, the Iban see themselves as the most appropriated forest guardians. Below is the response of an Iban villager to the question whether he was aware why the German Cooperation was interested to work in their area:

“GTZ is here because they know that Iban people of Sadap have strong knowledge in maintaining forest cover not like other tribes in the region, such as our neighbor the Embaloh. In the past we used to open *ladang* every year. But now we don’t do it anymore.

We also have the largest portion of *adat* forest in the all Kapuas Hulu district. Therefore we should be the ones benefiting from REDD because we are managing our forest in a good manner”. (Sadap, 2/11/2010)

This is contradicted by the following extract of a discussion with an Embaloh villager I followed to check his wild boar’s traps.

“Look at this hill, it has been completely logged by Iban during illegal logging. Nothing is left. Besides logging their area, they have also encroached on our land without permissions. They came here, we gave them lands, but they don’t respect the agreements. Sometimes they even open new *ladang* without asking for permission”. Bukit Mataso, (11/11/2010)

Using Yasmi’s ‘impairment approach’, the following table summarizes the Iban’s actions and claims which can be seen as disrespect of *adat* agreement by Embaloh.

Conflict case	Actor A	Impairing behavior of Actor A	Actor B	Explanation of why B perceives A's behavior as impairment	Source of impairment
1	Iban Dayak	Claiming the shared forest know as <i>hak milik bersama</i> from <i>Batu Peti</i>	Embaloh Dayak	Non respectful to <i>adat</i> agreement. Fears to lose rights and benefits from REDD	Unclear and contested boundaries of forest zone
2	Iban Dayak	Logging in other's zone	Embaloh Dayak	Non respectful to one's utilization zone, threat to future access	Unclear and contested boundaries of forest zone

Table 4.1: Inter-settlement conflicts between Pulau Manak and Menua Sadap

Source: this thesis

4.5. Resource scarcity

But why do people try to claim more land or disregard *adat* agreements regarding forest boundaries? According to field data, it can be related to the fact that boundaries are unclear and that local government has so far been unable to undertake an effective spatial planning of the area. People have never been invited to discuss the topic before the introduction of the German cooperation activities trying to delineate boundaries through participative mapping.

But it seems that the scarcity of certain resources in the area, and the pressure over land experienced by the people is also a driver of land claims and disputes. It is not unusual to listen to complains from villagers about scarcity experienced, especially for timber used for building material.

During data collection people have sometimes admitted that they have no other choice than going to the National Park especially for hunting activities (since game

have drastically depleted in their utilization forests) but also sometimes for highly valued timber such as agar wood since they can't get it in their area anymore. They justify their behavior by stating that there are absolutely not commercial transactions behind it, but they do it only for their own consumption.

Claiming more land could thus be seen as a strategy in order to secure future stock in a context of scarcity and pressure.

4.6. The case of Kerangan Bunut

An interesting case is the Iban hamlet of Kerangan Bunut (Menua Sadap village). During the Paraku and the communist rebellions in the area (described in the previous chapter), the Iban hamlet that was located the most upstream of the Embaloh river, Kerangan Bunut, was evacuated and transferred by the Indonesian militaries in 1968. Receding Iban inhabitants of the hamlet resettled further downriver, mainly in the hamlet of Madang and in the small town of Mataso. During this exile period, people have remained the owners of the land on which their longhouse was formerly located. Now, forty three years after the evacuation plan and the delocalization, Iban from Kerangan Bunut are returning to their land of origin. Government has approved the resettlement plan and the reconstruction of the longhouse. Clearing and construction activities are currently taking place on the land which has remained unoccupied for almost fifty years.

During field research I came across a document, (*surat pernyataan pemilikan, penguasaan dan pengelolaan wilayah adat kampung Kerangan Bunut*), dating from the 12th of December 2003, which defines ownership, control and management of Kerangan Bunut lands. This document is addressed to the MoF in Jakarta, has been signed in Madang by Iban who originally inhabited the hamlet of Kerangan Bunut, and clarifies the boundaries of utilization zones.

When discussing this document with Embaloh villagers from Pulau Manak (a discussion generously accompanied with palm wine which took place in Belimbis on the 16/11/2010), it gets clear that Embaloh do not agree with the content of the document and the boundaries delineation stated in it. The discussion turned very lively, and I could experience tensions and insults against Iban. According to them,

Iban from Kerangan Bunut are claiming too much land and do not respect the original agreement on *hak milik bersama*.

“This document has no value; it has been written by liars and signed only by Iban without consultation with us. We don’t respect these kinds of documents. They try to appropriate more lands than what they have the right to do. If they use this kind of documents to prove their legitimacy over the forest, strong conflicts may arise”. (Belimbis, 16/11/2010)

Iban legitimate the document stating that boundaries are based on a previous document of evidence, *surat moefakatan*, dating from 1939 and approved by the Dutch authorities.

This resettlement and re-appropriation of the land by Iban villagers almost fifty years after eviction, sometimes even by the descendants of those who were forced to leave the area pushed by the Indonesian army can be seen a strategy to reclaim and re-appropriate land. Iban, are trying to regain their rights as indigenous to the area, to their ancestral land. This idea is in line with Porath case of the Sakai of Riau, Sumatra where indigenous are using strategies to re-appropriate landscapes of dispossession through re-negotiation with the government (Porath 2000).

Concluding remarks and reflection

In this chapter, I explained how the two local groups, Iban and Embaloh are reconstructing and reinventing their history related to migration and settlement in order to justify their present and future legitimacy over forested land.

Through this example of contested forest borders and conflict over unclear territorial boundaries, we can assume that it is seen as a strategy to claim forest in order to secure future access to forest resources motivated by resource scarcity experienced by villagers in the area. In the context of REDD, it can be regarded more broadly as a strategy to appropriate forest stocks which can be potentially rewarding.

The distribution of benefits from a potential REDD scheme before a clear agreement between communities and clarification of boundaries, could generate the same negative impacts experienced in the past from delocalized and local forms of forest

concessions such as the IPPK (*Izin Pemungutan dan Pemanfaatan Kayu*) which have sometimes had positive impacts for communities but have also exacerbated intra and inter-conflicts between villagers and ethnic groups (Levang, Buyse et al. 2005).

Recognizing the rights of one group may infringe on the right of other customary users. As a result it will be necessary for project proponents to understand and adequately address multiple and overlapping claims. Clear rules, fair resource and ways of resolving conflicts need to be established in order to avoid the emergence of problematic conflicts (Sunderlin, Larson et al. 2009). The situation is like a time bomb, where unclear and contested boundaries are used to try to appropriate more land and to justify legitimacy over land. But if these issues are underestimated, or left unattended by government and international donors, they might strongly affect the effectiveness of any future schemes.

CHAPTER 5 - Securing land tenure and access; securing livelihood



Photo 5.1: Access to forest is essential for Embaloh Dayak since the contribution of forest products for consumption is very high, especially wild boar meat

Introduction

The debate over the recognition of traditional forest management and security of land is embedded in a broader struggle for livelihood security. In our focus area the main sources of food are its rice paddies and forest products, the main source of cash income is rubber, *tenkawang* nuts, and occasionally durian and other fruits are obtained from well managed agroforests. Most people in the communities are small landholders and are still practicing shifting and rotation agriculture for their daily needs.

The economic opportunity in the region has drastically decreased especially since the stop of illegal logging and the reinforcement of the forest law. Many male but also sometimes female members from the two communities have to leave the villages to look for wage labor on the other side of the border in Sarawak, in order to provide sufficient cash for their households.

In this chapter I will discuss the importance of forest for people's daily livelihood and food security. Timber is definitively the most valued forest resource for local communities, but the implementation of a REDD scheme can threaten access to other vital forest uses. In the case of traditional forest-based hunting and farming groups, narrow monetary compensation for is never likely to fully compensate for loss of food security and cultural integrity (Griffiths 2008). As a result the struggles over land security and recognition of traditional ways of managing resources are crucial for communities who feel that their livelihood is under threat and might be further threatened by top-down national action plans without clear community participation and consultation. I will show how the previously described struggles and need for recognition are embedded in a broader fight for livelihood, long-term security, and access to resources.

5.1. Economic situation

After the fall of Suharto's regime, and the weak state control that followed (transition period 1998-2004), many communities in West Kalimantan took advantage of the situation to make rapid cash, encouraged by wealthy entrepreneurs. This period was the peak of illegal logging (Yasmi, Schanz et al. 2007). Illegal logging in the area usually followed the same pattern. A hamlet made an agreement with a Malaysian timber company. The company used local entrepreneurs as brokers to convince the communities to enter into logging deals. In return, local communities received fees from the companies and sometimes local infrastructure development assistance. This scheme could also be observed in our research area, where villagers of Menua Sadap and Pulau Manak were actively engaged in illegal logging activities until 2004. Illegal logging has been a significant source of income for villagers, it was a period of rapid cash making and many villagers have seen their situation improved especially those brokers and elites who had tight arrangements with entrepreneurs.

Since the complete ban of illegal logging activities in the area, the economic situation has drastically deteriorated. Villagers often complain that they have no other alternative than looking for wage labor on the other side of the border, in Sarawak. Sawmills, plywood manufactures and oil palm estates are heavily dependent on

Indonesian labor recruited from the region's peasants. Females often work in restaurants and in kitchen of middle-class families in East Malaysia. This flow of workers has been accelerated with the opening of official immigration posts and the construction of road networks in the 1980s and 1990s, directly connecting local villages with Sarawak's economic hubs such as Kucing (Ishikawa and Jong 2008). Villagers often take high risks since many do not have the legal means to work in Malaysia. People regularly complain that they do not have employment opportunities and that local government and National Park management is not doing anything to support them in alternative activities. As stated by an Embaloh villager of Pinjawan hamlet, people are often nostalgic for that period:

"During illegal logging, we had good living conditions. We could buy assets such as boat engines, TV. But since the governmental enforcement on illegal logging, the government didn't support us with other income generating activities. I feel nostalgic about that time. Now most of the projects coming from the National Park, and local government focus on rubber plantations, but it is not enough to compensate from our previous incomes we made from illegal logging. Why is the National Park not providing more employment while its annual budget is as big as for the budget for the all Kapuas Hulu province? It took away from us 900,000 ha of *adat* land, but since the 15 years that the National Park exists none of our children have reached the university level and we remain poor.

We also receive cacao and coffee seeds from local government programs, but we don't know how to growth it efficiently. People from the government just come here, give us the seeds and leave. There is no follow up and training.

There are not enough job opportunities, so with high risk we have to cross the border and go to Malaysia to work in palm oil plantations. If we go the National Park to gather forest products we can be caught and if we go to Malaysia without legal papers we can also be caught. In both cases we are illegal." (Pinjawan, 19/11/2010)

The main cash flow in the villages comes from the tapping of rubber by smallholders with household labor in order to meet part of their households' income requirements. Smallholder rubber cultivation is associated with swidden cultivation of food crops, mainly rice. Rubber trees are usually planted on fallow lands and rubber is traded to the provincial capital Pontianak via local intermediaries who approach the villagers directly.

Consequently, due to this lack of employment opportunities, people are highly dependent on subsistence strategies for their lives, and cash flow remains very limited and sometimes temporary as for the case of *tengkawang* nuts collection which plays an important role as source of income and employment but only every four to five years during flowering of Dipterocarpaceae.

5.2. Forest products

Non timber forest products

Forest and access to forest resources still provides villagers the means for their subsistence and daily needs. Therefore, communities are still highly reliant on forest access for their livelihoods. NTFPs comprise a large range of products obtained from mature natural forests or from managed or secondary forests valued by both villages. The most commonly used products include rattan, dammar, bamboo, palm heart species, fruits, different sorts of medicinal plants, and leaves used as vegetables, condiment and for the production of domestic equipments such as baskets and carpets.

Most of the protein is derived from the rivers through fishing activities. Fishing is a male activity and fish is consumed almost on a daily basis. Most of male villagers spend at least part of the day throwing their fishing nets in the river. Subsidiary and valued protein comes from wild and bush meat. Bearded pig and *sambar* deer are the two forest animals most valued as food, and thus the favorite game. Animals are killed with rifles during hunting expeditions or captured with the help of traps. Expeditions are infrequent since they require logistic and are costly (fuel expenses for the canoe to go further upstream, rich in big game). Meat is then shared among hunters and distributed at household level. Smaller animals considered as rodents, and thus seen as a threat for the swiddens and crops are also appreciated by villagers such as squirrels, pig-tailed and long-tailed macaques (*Macaca nemestrina* and *Macaca fascicularis*) and are shot with pellet guns. Turtles, snakes, monitor lizards, pangolins, palm civets and bats are also frequently seen on villagers' menu. Firewood collection is a vital activity for cooking and is usually undertaken by women and young members and mostly gathered along the river banks.

Important is to notice here that NTFPs are rarely exploited for commercial uses and are mainly used in order to cover and fulfill household's needs and for domestic use. Occasionally certain products can be sold on local markets or internally within the villages such as *pantu* heart palm (Rp 30,000 = €2.5), orchids, bush meat (Rp 35,000 /kg = €3), some highly valued fish species (such as *ikan purawan* Rp 400,000 /kg= €33), and palm wine (Rp 3,500/L = €0.30). The main reason for the poor commercialization is the difficult access to local markets and cities.

Timber

The dryland forests of the area, dominated by Dipterocarps, a large and abundant family of big trees, are valued by the communities for their hard timber such as Bornean ironwood (*Eusideroxylon zwageri*) and those of the meranti group (*Shorea* spp). Since the complete ban and the stop of illegal logging activities in the area, there is no longer commercial use and exploitation of the timber resources. This reduction in logging is also due to the control of the National Park management. Timber is now almost exclusively used internally by villagers as building material mainly for housing, village infrastructures such as churches and the making of canoes, and is very unusually sold to outsiders.

The high demand for timber is leading to shortages of resources. This is particularly experienced through highly wood-consumptive projects such as the current reconstruction of the longhouses of Belimbis (who burned out) and Kerangan Bunut (being rebuilt after nearly 50 years following the eviction). Shortage in bigger trees is experienced especially in Pulau Manak and it is not unusual to hear from villagers that they would be keen on gathering more timber upstream in the National Park.

5.3. Agricultural swidden system

Iban and Embaloh are depending mainly on agriculture for their subsistence. Shifting cultivation is still the common practice. It implies that households move from one plot site to other every one to three years or so, generally returning to previously cultivated sites after a fallow period of variable length. Part of old fields as seen previously may be planted with rubber or other perennial crops such as fruit trees.

Mountain rice (*padi gunung*) is the main crop. There are elaborated rituals involved in the planting and harvesting of the rice.

In Menua Sadap there is no irrigation system for their rice fields. There is only one crop a year and the rice is consumed locally at the household level since there is no surplus. In certain years Iban even experience shortage and need to purchase additional stocks. For a long time the agricultural system was based on a pure shifting agriculture system (*ladang pindah*), meaning that people were opening new forested areas every year. Opening as much forest as possible was also a way for villagers to gain informal (non-constitutional, non-registered) land property rights. This sometimes harmful system has resulted in negative impacts on the environment and degradation of forest. However since the introduction and use of pesticides and fertilizers, households do own few plots of land (in average three until five) that are used in a rotation system (*ladang gulir*). After one or three years of cultivation on the same land, they will move to the next one and so forth. If people do not have enough plots to complete the regeneration process, they can borrow from others. Usually due to shortage in land, many Iban of Menua Sadap borrow lands to the Embaloh from Pulau Manak. Both villages have an *adat* agreement. In exchange of cultivating a plot of land Iban families should provide in exchange manpower whenever needed by Embaloh. Swiddens are often scattered and far away from the longhouse; as a result some members of the household spend sometimes a week or a month in the farmhouse built in or near the swidden.

Due to a shortage in agricultural land nearby the village, people of Menua Sadap still occasionally open new fields in the forest. Within the designated *hutan masyarakat* area, some forest areas are designated for agricultural purposes. It means that people can open new swiddens for cultivation if they get the agreement from the customary authorities. These areas are called in Iban local language *Rimba*. After clearing, the *rimba* becomes what people call *damun*. The *damun* is thus the newly opened forest. Usually the same plot of land will be cultivated two until three years consecutively. After this period of time the land will be left fallow and turns into what is called a fallow or *tenunda*. After regeneration the land which is cultivated again is called *kerukan*. During the opening process of a new field, people do not remove all the trees on the land but keep some as a wood stock.

The Embaloh of Pulau Manak are no longer (or very occasionally) opening new lands in primary forest. For their agriculture, they are using a system of land rotation on fallow land as described above. Usually a household owns more land plots, until five. Since a couple of years some Embaloh are also practicing agroforestry introduced by the local government, for instance coffee mixed with rice, to enhance the fertility of the soil. But this is not optimized yet, and knowledge on how to grow these cash crops remains poor. Some farmers have also turned to wet rice cultivation in permanent paddy fields, but often still in combination with swiddens and rubber gardens.

There is a feeling of land shortage, but people are reluctant to cultivate upstream since it is too far and inhabited by too many macaques. They also prefer to be based next to the road and to schools.

5.4. Securing property right, a discourse over livelihood security

What I have shown above, is that household's livelihood strategy is therefore a combination of agriculture, forest products and off-farm work.

REDD concept emerges out of the experience with payment for environmental services (PES) initiatives and past experiences on forest conservation initiatives. PES are voluntary transaction wherein environmental service buyers compensate environmental service providers (Wunder 2009; Blom, Sunderland et al. 2010). Consequently, REDD is not going to be developed as an instrument to improve livelihood especially knowing that it is a performance-based mechanism aiming at stabilizing or increasing CO₂ sinks and therefore not a development mechanism. As a result, at the local scale REDD may have significant cost for indigenous and rural communities. Their livelihoods will be affected (positively or negatively) by REDD depending on how it is designed and implemented (Gené and Aliadi 2010). For instance restrictions placed on people's access to forest for the sake of carbon conservation may have highly significant livelihood and cultural implications (Blom, Sunderland et al. 2010). Among other worries one of the concern, as developed in the previous chapters is the lack of legal recognition of land claims. As for most of PES schemes and others voluntary emission reduction and forestry-based carbon projects existing worldwide, secure tenure was always a prerequisite to participation

(Jindal, Swallow et al. 2008; Tacconi, Mahanty et al. 2009). Household receiving cash payments were the ones having clear property right recognition.

But what about forest commons, meaning community-owned and managed forests which comprise ten per cent of forest globally and which are crucial to the livelihoods of the communities as in the case of this thesis?

Chhatri and Agrawal in their study about the relationship between carbon storage in common forests and their contributions to livelihoods concludes that when local users perceive insecurity in their rights and access (since central government owns the forestland), they tend to extract high levels of livelihoods benefits from them, and when their tenure rights are safe, they tend to conserve the biomass and therefore the carbon stored in such forests. They also concludes that improvements in livelihood benefits and in carbon storage can be potentially secure if communities gain greater rights locally to make rules about how to govern forests (Chhatri and Agrawal 2009). As a result service providers (carbon sellers) have to be or to become landowners, informal but recognized occupants, or long-term concession or lease holders. If they are not able to protect land against third party intruders or land grabbers (loggers, squatters), or if land rights overlap they would not provide reliable services (Wunder 2009). Having access to the forest and obtaining recognition of traditional use right is, as we have seen along this thesis, one of the main concerns of the villagers especially considering the fact that property rights are unclear to secure their livelihoods.

5.5. Improving and securing livelihood

People's common concern under a REDD scheme, is whether they will still be able to access forests and enjoy forest products. As stated by an Iban resident woman of Sadap:

"I am afraid that with new governmental plans on conservation we cannot use the forest anymore as it has already been the case with the implementation of the National Park Betung Kerihun. Their plans should not restrict us only in firewood gathering otherwise I don't see what we will be eating and how we will feed our children". (Sadap, 3/11/2010)

This suggest that the project will require an arrangement that will not marginalize people from accessing forest resources like it has been in the past with protection models that drove eviction and violation of customary land and territorial rights (e.g National Park). One of the possibilities is therefore to secure access and recognition through a *Hutan Desa* plan. New plans on conservation such as REDD also generates new hopes for villagers to see their current situation improved in the area. I will try to describe it below.

People's participation

In our case, REDD will be implemented in an area occupied by people and for whom forests provide essential building materials, medicine, food and sometimes even additional income. As a result, project proponents cannot stay blind to the needs of people to access forest resources. In the design of future REDD activities, the livelihoods needs of the people will have to be understand and considered as a major part of the project. In the past many conservation initiatives have tried to combine conservation effort with livelihoods improvements such as the well known ICDPs while results have sometimes been contested. This can be changed by encouraging greater levels of community involvement in project planning and monitoring. By taking a bottom-up approach to REDD planning and implementation, the needs of communities will more likely be addressed, understood and consider (Blom, Sunderland et al. 2010; Gené and Aliadi 2010). This concern of transparent participation is also raised by the people themselves as stated in the interview extract below:

“I am worried that there will not be enough socialization about the topic like it uses to be the case during the implementation of the National Park. If it is well designed from the beginning and if people understand well, it can work. But if the program starts and people are not involved in the beginning, it has no sense, people will never trust it and we will not take care of the forest. It should not only be discussed at the governmental level.”
(Sadap, 29/10/2010)

The example of the National Park and the lack of participation always come back in almost every interview I had and the feeling of bitterness is still very much present.

Improving employment situation

In line with the improvement of forest governance the project could also support the creation of more employments for the people for instance in forest monitoring and patrolling. This is even understood by the people themselves who see in REDD a new option to get new employments. As stated by one of the villagers while talking about opportunities he sees from REDD:

“We could create a REDD office in Sadap. We are ready to find a suitable location for it. We should also create ranger patrol troops (wearing tee-shirts stating REDD on it) to do inventory of the forest conditions. The government will pay us for such a job”. (Sadap, 27/10/2010)

This misperception of REDD seen as an institution clearly shows that conservation brings new hopes to get involved and to generate new employments opportunities.

Diversifying livelihood opportunities

Using carbon finance from REDD could also be used in assisting alternative activities such as coffee, cacao plantations, agroforest farms, orchards...This could additionally accelerate tree planting and therefore restoration. As I have shown through an interview extract above, some agricultural programs supported by the local government and the National Park already exist in the area but are not undertaken efficiently due to a lack of training and follow up and could therefore be supported through REDD.

However it is important to notice that developing productive activities for commercial purposes at the community level faces two challenges. The viable marketing channels must exist and the local entrepreneurship (know-how) should be available or developed (Gené and Aliadi 2010). ICDPs in their attends to develop alternative livelihoods have often experienced difficulties in finding niche markets for the products resulting from these alternative livelihoods and have therefore failed to match the rate of development (Akiefnawati, Villamor et al. 2010; Blom, Sunderland et al. 2010). For instance there is no market niche in the area for fruits such as durian

due to an over production during fruiting seasons. Fruits are consumed locally and not worth for selling due to extremely low prices. Important also is to note that the two settlements are the last ones upstream and therefore the most remote. As stated by Levang et al., the remotest settlements in Kalimantan are also the poorest, though they have the best access to natural resources. As a result, according the same author, securing access to the resource is of no use without securing access to the market (Levang, Dounias et al. 2005).

Agricultural intensification could also be undertaken under a REDD scheme to reduce the pressure on forest (from opening new swiddens). The project could also support sustainable community logging activities.

Securing agriculture

In our case people are also depending on swidden cultivation for their subsistence. In the context of REDD discourse, there is a concern that some 'degradation' activities that are crucial for some people such as shifting cultivation may be disrupted by REDD systems without adequate compensation (Peskett, Huberman et al. 2008). Although opening forestlands for new swiddens is not a major concern in the area anymore, REDD could be used to support agricultural efficiency and intensification, in order to lengthen the cultivation duration of a plot and to increase the number of available plots for reforestation.

Furthermore besides delineations of forestland, it would be important to delineate agricultural lands. The majority of the people in the communities do not have official land title certificates for their land plots distributed by the National Land Agency (BPN). The only certificate they sometimes hold is what is called SKT (*Surat Keterangan Tanah*), it is a local form of land document distributed by the village and sub-district authorities. But most of them do not even have any documentation to land that they consider is legitimately their ownership (mainly through kin and inheritance). Agricultural land is thus ruled by the *adat* customary law but is not formally recognized. Delineation and secure tenurial of agricultural lands will make a clear distinction and will therefore avoid encroachment on forestlands.

5.6. Livelihood and sense of place

Now taking a more actor-oriented approach to livelihood, and in line with Long, I will broaden up the scope of livelihood. In that sense, livelihood becomes not only the practices by which individuals and groups strive to make a living and to meet their consumption and economic necessities, but it also includes the responses to new opportunities, the protection of existing and pursue new lifestyle and cultural identifications (Long 2001). Cited by Long on page 54, Wallman defines it as the “identity-constructing processes inherent in the pursuit of livelihood”. Livelihood is therefore a matter of “ownership and circulation of information, the management of skills and relationships, and the affirmation of personal significance and group identity” (ibid). It includes way and style of life and thus also choice, status and a sense of identity.

Using such an approach supports the overall ideas developed along this thesis that claims over access to land and forest resources is nested in the need to secure lifestyle and reinforce the sense of individual and groups identity. Besides the importance of forest for their subsistence strategies and their daily consumption, the forest is also their homes on which they identify and they defend from intrusion of outsiders. This is in line with the concept of sense of place, which reflects the complex web of lifestyles, meanings, beliefs, symbols, values and social relations endemic to a place or resource. It represents the feelings that individuals or groups associate with a particular locality. The values, meanings, and symbols that are hard to identify or know especially for outsiders and the awareness of the cultural, historical, and spatial context within which meanings, values and social interactions are formed (Williams and Stewart 1998). However sense of place is not endemic to one particular group of people and place meanings are constructed and contested between different actors. Senses of place can therefore be invoked by diverse and conflicting groups (ibid). I have shown this along the example of contested boundaries between the two Dayak communities, or even between the local government, National Park and the local people. This implies for the long-time Dayak residents that their identity based on an agricultural and forestry system is being challenged by outsiders’ meanings and uses of the surrounding natural landscape. Now in the context of future REDD activities this identity is further challenged.

Therefore incorporating a discourse about REDD in an early stage, assimilating it and reshaping it, is a way for them to gain new power and legitimacy over place and reassert their sense of place and identity.

Concluding remarks and reflection

What I have tried to show in this chapter is that the fight over land recognition and access to resources developed all along this thesis is further embedded in a broader struggle for livelihood security. Indeed once carbon rights are sold by a third party, it is likely to restrict long-term land use option for the concerned forest area. If the sale of carbon rights limits forest dependent people from utilizing the forest products or harvesting timber it could have significant impacts on their livelihoods and root them further into the poverty trap.

However if forest dwellers become the legitimate holders of such rights, and if their claims are seriously taken into consideration in an early stage of project implementation, there is great chance that REDD could sustain their livelihood and even improve their economic situation and diversify revenue generating activities. As I have shown, cash earning in the area is a major problem. Environmental payment from REDD credits could therefore be considered as a relevant option to preserve the last stand of high forest and to alleviate poverty (Levang, Dounias et al. 2005). To conclude I will cite the same author who states page 229 of his paper that: “forest product collection only appears important to households when other, cheaper forms of consumption smoothing option are not available. With improved economic well-being, low-income households become less dependent on forest” (ibid).

Claim over livelihood security is also strongly linked to the sense of place people have in relation to their environment. Sense of place is not a new land use or a set of rights but a way of expressing a relationship between people and a place and identity.

General conclusions and discussion

Using an actor-oriented approach, what I have tried to show in this thesis is that there are several concerns that should not be ignored by project proponents and stakeholders in the establishment of a future REDD scheme in the upland area of West Kalimantan, Indonesia. The two Dayak communities involved, namely villagers of Menua Sadap and Pulau Manak in the Embaloh Hulu sub-district of Kapuas Hulu in West Kalimantan, appear to know about and tend to generally agree with the global goal and idea of protecting the forest in the long term, because this objective corresponds to their own interest for conserving the forest they depend on for their livelihood.

Using the theory of common pool resources management I have demonstrated that common pool rights as they are locally recognized as *adat* rights, are not recognized by state institutions. *Adat* rights to forest are rather based on informal arrangements between users within a village and between village communities, and therefore vulnerable to state intervention. In Chapter 2 I have tried to show that under a REDD scheme this could have strong implications for local people, when we look at the recognition and the protection of customary or *adat* rights over land and access to natural resources.

Local people have limited understanding of what REDD is, its implication in the short and long term and the benefits they could obtain from it. Misinterpretation of the mechanism is leading to all sorts of imaginations and interpretations sometimes generating commonly accepted myths. However, they clearly understand that they could benefit in one way or another from future bio-conservation activities in the area. The new hopes over potential payment for an environmental service storing CO₂ revitalize an old debate over the recognition of their access and traditional management of resources. Worries over dispossession are legitimate considering the past protection model and zoning of forestland plans that took place in the area together with the establishment of the National Park Betung Kerihun without proper consultation with the local communities. This suggests that the implementation of REDD in this area will require a great deal of political will and negotiation to undo a

number of practices that marginalize local communities and indigenous groups from accessing forest resources. One possibility could be the recognition of their forests as part of a *Hutan Desa* scheme in order to secure the use rights of the village communities. Having the security of such right will stimulate their commitment to develop long-term plans for investing in a common-pool resource in a sustainable way.

However, using the theory of common pool rights as described by Ostrom (1990), where a local community is regarded to be a homogenous social unit with a common interest subject to accepted rules, is not valid in the context of new hopes from a payment for environmental service such as REDD. In Chapter 3, I have tried to show that REDD runs the risk of simplifying compensation and payment distribution by using a single, simplified definition of community. However, communities are not homogenous and do not represent a single interest. People have different access to forest and forest resources, and they therefore have different claims according to their positions and assets within the group. There is also the potential of elite capture. In these Kalimantan uplands, the interests of hamlets are not identical to the interest of the wider village unit to which they belong administratively. Since hamlets represent people who have a common descent from a longhouse to which a very strong feeling of identity is attached which creates its own territory of utilization and ownership. As a result, a simplified and simplistic model for REDD compensation could potentially lead to intra-community conflicts.

In Chapter 4, I question the assumption that property-owning groups are seen as social units with a defined membership and boundaries with common interests. Here I have tried to show that REDD in its implementation should be very attentive not to ignore ethnic complexities. Forests are occupied by various ethnic groups who have learned to live next to each other through customary agreements, but who continuously contest their boundaries, reinventing their identities to assert rights to space, place and livelihood. This is even further strengthened in the context of new hopes generated by potential payment for standing carbon stocks. Unclear and contested forest boundaries delineation, inequitable payment schemes neglecting unresolved claims and disagreements between ethnic communities, could generate serious inter-ethnic and inter-settlements conflicts under a REDD scheme.

Recognizing the rights of one group may infringe on the rights of other customary users. Consultation is a prerequisite in order to clarify customary boundaries and to engage in negotiations about who is eligible for REDD compensations. This means that the project proponent will have to take care to understand and adequately address multiple and overlapping claims. Clear rules, fair recourse and ways of resolving conflict need to be established.

In chapter 5 I have shown that, following the idea that recognized property rights are the guaranty for individuals and groups that their access will be secured and recognized in the future from potential competition, this need is further embedded in the recognition of their withdrawal rights. People are largely dependent on the forest for their subsistence strategies. Therefore secure access, setting up clear boundaries and statutory rights through a *Hutan Desa* scheme is a possible way for them to continue to enjoy forest products for consumption and even potentially improve their living conditions in the forest.

To broaden up the discussion I would like to raise the following issues:

The lack of knowledge and low participation of villagers in project planning results in a limited understanding of their responsibilities in a REDD scheme. This suggests that the criteria of “free prior informed consent” (FPIC) is not implemented yet in an efficiently and transparent way. FPIC is a standard under the current UN-REDD Programme that ensures community engagement. My interviews show that project proponents will have to intensify communication with the local people and governmental representatives to improve community involvement.

International and local NGOs generally tend to see REDD as a broader strategy to improve forest governance and – for the moment - try to avoid talking about the carbon incentive. They usually take the issue of payment very carefully since they see it as a debate which is still ongoing at national and international levels. As a result they prefer not to bring up the topic about carbon payments. More important according to NGOs is the need to secure access rights and legitimate forest dwellers’ use rights.

Forestry services at district level tend to see REDD as a discourse taking place at the national level and feel that they are kept out of current negotiations. Consequently, this feeling of being marginalized is resulting in a lack of motivation to participate in a scheme in which they don't feel involved. The lack of commitment potentially also comes from the fear to loss control over the land and to be ignored in benefit sharing mechanism.

As a last remark, and to close this thesis, I would like to point out that REDD in Kapuas Hulu could indeed deliver new benefits for the communities through employment, livelihood and land security. But if this is not done in a proper manner and if the different claims are not considered adequately, it could also pose new threats such as the loss of access to land and an increase of internal or external conflicts over land and resources. Separating tenure rights from carbon rights could even complicate more the already complex and contested arrangements. The consequence would thus be resistance towards the implementation of REDD project, like it has been the case with the implementation of the National Park Betung Kerihun. The outcomes of this thesis should be taken into consideration by project developers if emissions are to be stabilized and reduced in a way that strengthens the resilience of local communities rather than increase their vulnerability.

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